

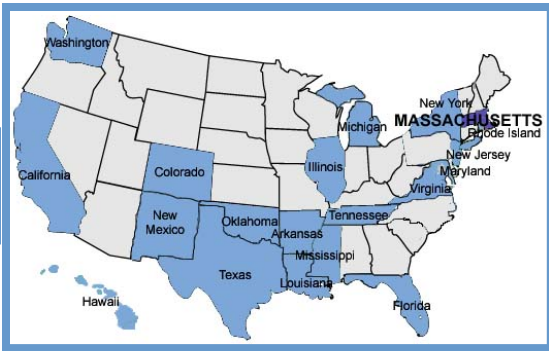
**National Center for
Educational
Accountability**

national sponsor of Just r the Kids

Just for the Kids, Massachusetts Elementary Best Practice Institute, 2005

Crocker Elementary School, Fitchburg Public Schools
Glenwood Elementary School, Springfield Public Schools
Hyannis West Elementary School, Barnstable Public Schools
Richard J. Murphy School, Boston Public Schools

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Just for the Kids, Massachusetts

Elementary Best Practice Institute, 2005

The Institute

The Massachusetts Best Practice Institute was part of a larger national research study to investigate the practices of schools that consistently outperform their peers. Research teams studied schools in 20 states to identify key practices of consistently higher performing schools in a variety of policy contexts.

In Massachusetts, the research team studied four consistently higher performing elementary schools to learn how they had attained and sustained their level of higher performance. Schools were identified through an in-depth analysis of academic achievement developed by the National Center for Educational Accountability (NCEA) using data publicly available from the state.

The 2005 Massachusetts Best Practice Institute was sponsored by Just for the Kids-Massachusetts affiliate (JFTK-MA) and received funding from The Broad Foundation. JFTK-MA is a collaboration of the Massachusetts Business Alliance for Education and the National Center for Educational Accountability.

The Summary

A research team conducted a day-long series of focus groups with teachers, principals, and district administrators to study the classroom-, school-, and district-level practices contributing to each school's success. NCEA's Best Practice Framework provided the structure for each focus group. NCEA analyzed transcripts of the focus group discussions to prepare this summary report. This report presents a brief description of each higher performing school, followed by the Best Practice Findings in Massachusetts.

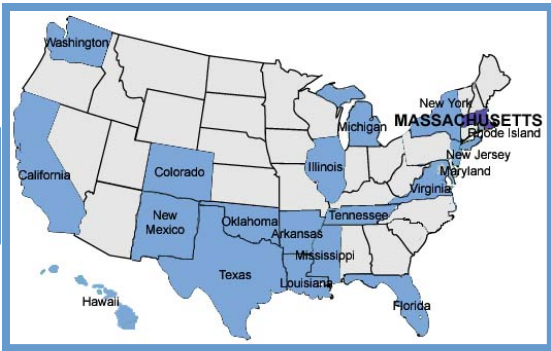
The School Identification Process

NCEA used publicly available student achievement data from the Massachusetts Department of Education to identify schools that consistently outperformed other schools with similar demographics in at least five of seven subject areas in the 2001-02, 2002-03, and 2003-04 school years:¹ mathematics, English Language Arts, and science and technology/engineering. This analysis includes data from the third-, fourth-, fifth-, and sixth-grade Massachusetts Comprehensive Assessment System (MCAS).

To identify the schools, NCEA conducted a separate analysis for each subject (mathematics, English Language Arts, and science and technology/engineering) and year (2002, 2003, and 2004) to learn which schools outperformed their demographic peers on the percentage of students meeting the standard on the state exam.² NCEA used a Weighted Least Squares (WLS) regression analysis to compare each school's percent of students meeting the standard with the percent that would be "predicted" or "typical" for a school in the state with the same demographics. The demographic and other variables used in this analysis were each school's percentage of low-income, English Language Learner (ELL), African American, and Asian students; the size of the school; and the percentage of

¹ Science and Technology/Engineering was first tested in 2003, so the analysis included data from 2002-03 and 2003-04.

² The standard selected for the analysis for third-grade students was "Proficient," while the standard for fourth-, fifth-, and sixth-grade students was "Advanced," a higher performance standard for the MCAS.



Just for the Kids, Massachusetts

Elementary Best Practice Institute, 2005

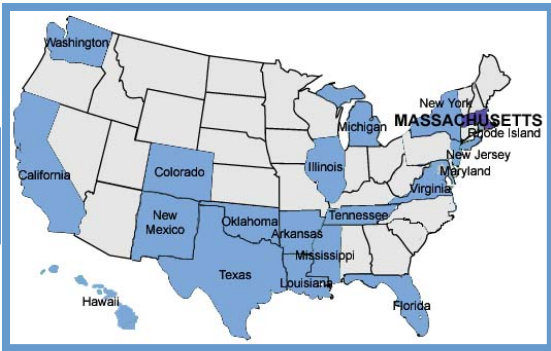
students tested in the subject and year in question. In order to take length of enrollment in the same school into account, NCEA included in the analysis only the scores of continuously enrolled students (i.e., students enrolled at that school for at least three years).

NCEA ranked each school against the elementary schools in the rest of the state based on the extent to which it outperformed its “predicted” percent of students meeting the standard. For example, a school that outperformed 98% of the schools in “performance relative to predicted” in fourth-grade mathematics in 2004 would receive a percentile rank of 98 for that subject and year. These ranks were averaged separately for each subject across the three years to produce an overall average performance rank by subject. To be selected as higher performing for the purposes of this study, schools had to have overall average percentile ranks above 75 in all tested subjects.

The Higher Performing Schools Studied

School	District	2004 Enrollment		2004 School-Wide Demographics						
		Grade Span	No. of Students	African American	Hispanic	White	Asian	Other	Low Income	ELL
Crocker Elementary School	Fitchburg Public Schools	1-4	408	7.4%	43.4%	42.2%	6.9%	0.1%	67.4%	35.1%
Glenwood Elementary School	Springfield Public Schools	PK-5	357	18.2%	49.3%	31.7%	0.6%	0.2%	74.0%	18.5%
Hyannis West Elementary School	Barnstable Public Schools	PK-4	327	12.2%	9.2%	71.0%	3.1%	4.5%	47.1%	8.3%
Richard J. Murphy School	Boston Public Schools	PK-8*	907	41.0%	5.5%	28.7%	23.9%	0.9%	70.7%	9.5%

Student enrollment and most demographic data are taken from the Just for the Kids-MA 2004 website. The Institute was conducted in October 2005. * Although Richard J. Murphy School contains seventh and eighth grades, it was identified as being consistently higher performing based on performance in third through sixth grades.



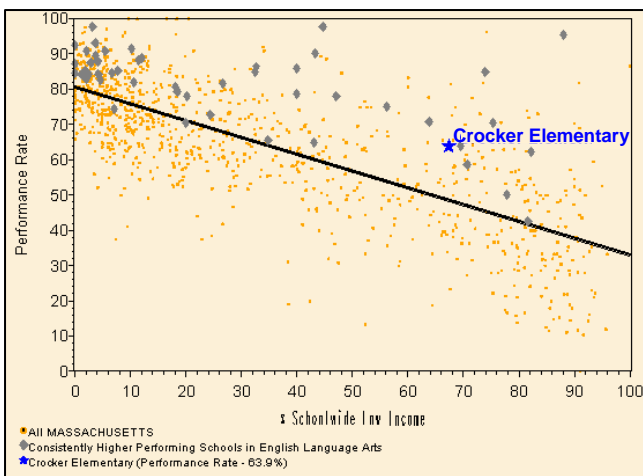
Crocker Elementary School Fitchburg Public Schools

Just for the Kids, Massachusetts NCEA Executive Summary

The School

Crocker Elementary School, which serves 408 first- through fourth-grade students, is one of six elementary schools (including early education centers) in Fitchburg Public Schools (5,760 students). Crocker's population is 43.4% Hispanic, 42.2% White, 7.4% African American, 6.9% Asian, and 0.1% other. Within this student population, 35.1% are English Language Learners, and 67.4% receive free or reduced lunch services.

Example: 2004 3rd Grade English Language Arts



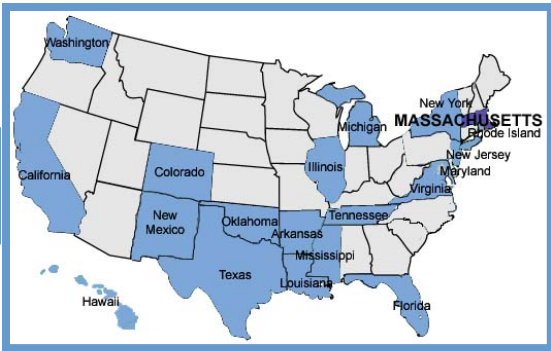
Consistent Higher Performance

Crocker Elementary School is higher performing than demographically similar schools in mathematics and English Language Arts. The analysis included all third- and fourth-grade achievement data from 2002 to 2004. According to Weighted Least Squares (WLS) regression analyses for each grade and year, Crocker Elementary School demonstrated overall average performance ranks of 86.1 in mathematics and 85.0 in English Language Arts.

Schools were identified for study based on 2002-2004 data, with the Institute occurring during the fall of 2005. Differences between the demographics reported in this report and the values shown on the scatter plot reveal demographic changes in the school between 2002 and 2005.

Subject	2002		2003		2004		Overall Avg. Rank* 2002-2004
	Percentile Rank		Percentile Rank		Percentile Rank		
Grade	3	4	3	4	3	4	
Mathematics	N/A	93	N/A	88	N/A	72	86.1
English Language Arts	97	61	92	98	96	68	85.0

*The overall average rank is a weighted average of the separate percentile ranks shown, using the number of tested students in the grade as weights.



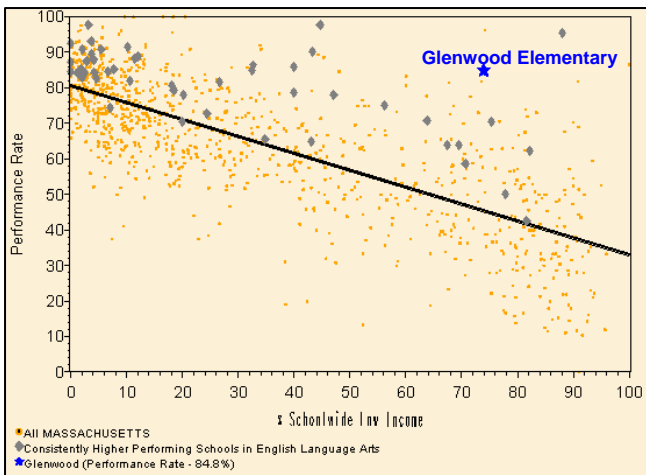
Glenwood Elementary School Springfield Public Schools

Just for the Kids, Massachusetts NCEA Executive Summary

The School

Glenwood Elementary School, which serves 357 pre-kindergarten through fifth-grade students, is 1 of 30 elementary schools in Springfield Public Schools (26,132 students). Glenwood's population is 49.3% Hispanic, 31.7% White, 18.2% African American, 0.6% Asian, and 0.2% other. Within this student population, 18.5% are English Language Learners, and 74.0% receive free or reduced lunch services.

Example: 2004 3rd Grade English Language Arts



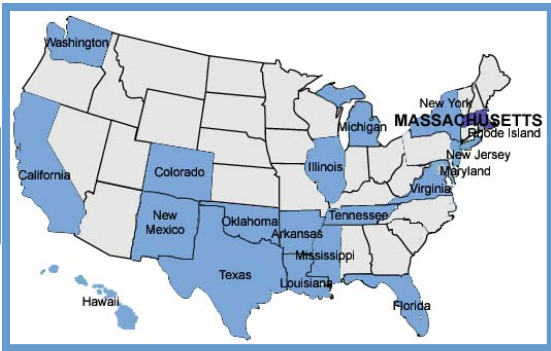
Consistent Higher Performance

Glenwood Elementary School is higher performing than demographically similar schools in mathematics, English Language Arts, and science and technology/engineering. The analysis included all third- through fifth-grade achievement data from 2002 to 2004. According to Weighted Least Squares (WLS) regression analyses for each grade and year, Glenwood Elementary School demonstrated overall average performance ranks of 93.1 in mathematics, 93.6 in English Language Arts, and 96.3 in science and technology/engineering.

Schools were identified for study based on 2002-2004 data, with the Institute occurring during the fall of 2005. Differences between the demographics reported in this report and the values shown on the scatter plot reveal demographic changes in the school between 2002 and 2005.

Subject	2002 Percentile Rank			2003 Percentile Rank			2004 Percentile Rank			Overall Avg. Rank* 2002-2004	
	Grade	3	4	5	3	4	5	3	4		5
Mathematics		N/A	89	N/A	N/A	95	N/A	N/A	98	N/A	93.1
English Language Arts		98	97	N/A	98	69	N/A	97	98	N/A	93.6
Science and Technology/Engineering		N/A	N/A	N/A	N/A	N/A	97	N/A	N/A	95	96.3

*The overall average rank is a weighted average of the separate percentile ranks shown, using the number of tested students in the grade as weights.



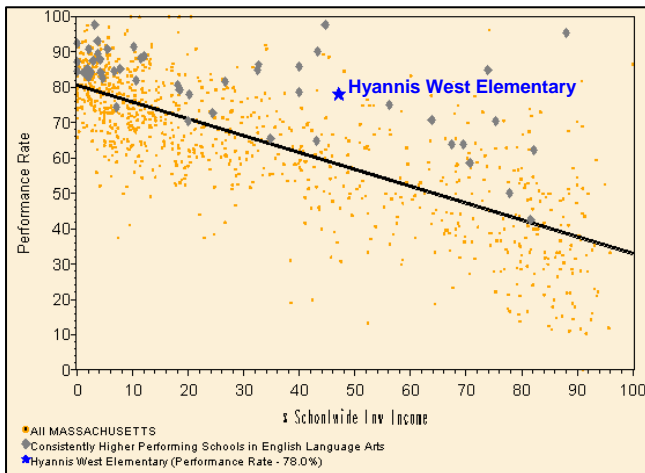
Hyannis West Elementary School Barnstable Public Schools

Just for the Kids, Massachusetts NCEA Executive Summary

The School

Hyannis West Elementary School, which serves 327 pre-kindergarten through fourth-grade students, is one of nine elementary schools (including early education centers) in Barnstable Public Schools (5,586 students). Hyannis West's population is 71.0% White, 12.2% African American, 9.2% Hispanic, 3.1% Asian, and 4.5% other. Within this student population, 8.3% are English Language Learners, and 47.1% receive free or reduced lunch services.

Example: 2004 3rd Grade English Language Arts



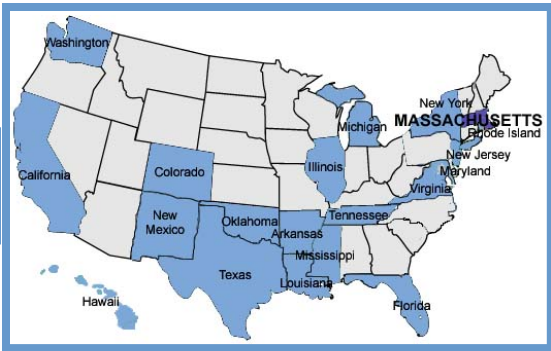
Consistent Higher Performance

Hyannis West Elementary School is higher performing than demographically similar schools in mathematics and English Language Arts. The analysis included all third- and fourth-grade achievement data from 2002 to 2004. According to Weighted Least Squares (WLS) regression analyses for each grade and year, Hyannis West Elementary School demonstrated overall average performance ranks of 95.8 in mathematics and 92.5 in English Language Arts.

Schools were identified for study based on 2002-2004 data, with the Institute occurring during the fall of 2005. Differences between the demographics reported in this report and the values shown on the scatter plot reveal demographic changes in the school between 2002 and 2005.

Subject	2002 Percentile Rank		2003 Percentile Rank		2004 Percentile Rank		Overall Avg. Rank* 2002-2004
	Grade 3	Grade 4	Grade 3	Grade 4	Grade 3	Grade 4	
Mathematics	N/A	94	N/A	98	N/A	96	95.8
English Language Arts	80	98	91	98	91	98	92.5

*The overall average rank is a weighted average of the separate percentile ranks shown, using the number of tested students in the grade as weights.



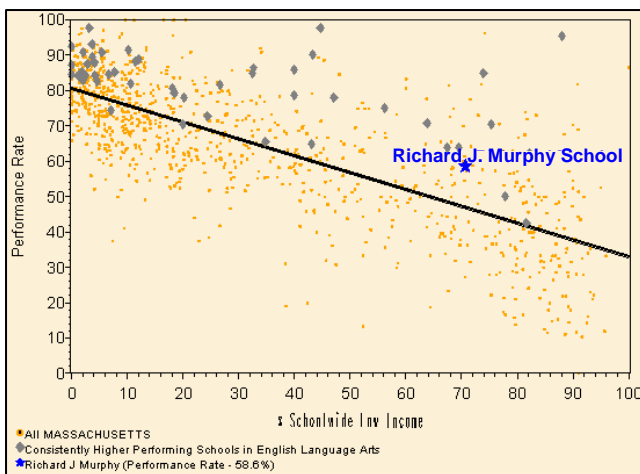
Richard J. Murphy School Boston Public Schools

Just for the Kids, Massachusetts NCEA Executive Summary

The School

Richard J. Murphy School, which serves 907 pre-kindergarten through eighth-grade students, is 1 of 10 K-8 schools in the Boston Public Schools (60,150 students). Richard J. Murphy's population is 41.0% African American, 28.7% White, 23.9% Asian, 5.5% Hispanic, and 0.9% other. Within this student population, 9.5% are English Language Learners, and 70.7% receive free or reduced lunch services.

Example: 2004 3rd Grade English Language Arts



Consistent Higher Performance

Richard J. Murphy School is higher performing than demographically similar schools in mathematics, English Language Arts, and science and technology/engineering. The analysis included all third- through sixth-grade achievement data from 2002 to 2004. According to Weighted Least Squares (WLS) regression analyses for each grade and year, Richard J. Murphy School demonstrated overall average performance ranks of 90.5 in mathematics, 89.6 in English Language Arts, and 83.3 in science and technology/engineering.

Schools were identified for study based on 2002-2004 data, with the Institute occurring during the fall of 2005. Differences between the demographics reported in this report and the values shown on the scatter plot reveal demographic changes in the school between 2002 and 2005.

Subject	2002 Percentile Rank				2003 Percentile Rank				2004 Percentile Rank				Overall Avg. Rank* 2002-2004
	Grade	3	4	5	6	3	4	5	6	3	4	5	
Mathematics	N/A	97	N/A	N/A	N/A	86	N/A	80	N/A	94	N/A	97	90.5
English Language Arts	95	95	N/A	N/A	83	92	N/A	N/A	74	92	N/A	N/A	89.6
Science and Technology/Engineering	N/A	N/A	N/A	N/A	N/A	N/A	88	N/A	N/A	N/A	77	N/A	83.3

*The overall average rank is a weighted average of the separate percentile ranks shown, using the number of tested students in the grade as weights.



Massachusetts Elementary Best Practice Institute: Findings

Based on the Themes of The JFTK Framework

Five organizing themes provided the structure for studying the practices of consistently higher performing schools. The themes are listed below.

1. Curriculum and Academic Goals
2. Staff Selection, Leadership, and Capacity Building
3. Instructional Programs, Practices, and Arrangements
4. Monitoring: Compilation, Analysis, and Use of Data
5. Recognition, Intervention, and Adjustment

These themes are used below to summarize the findings of this study. The themes represent the broad topics that connect best practices across different school system levels—district, school, and classroom. Together, these themes capture the primary instructional activities undertaken by school systems.

The first theme described in The JFTK Best Practice Framework forms the foundation of The Framework. Each of the other four themes rests upon the assumption that there is absolute clarity about what is to be taught and learned by grade level—pre-K-12. Therefore, Curriculum and Academic Goals forms the base of The Framework. Building upon that base, higher performing schools are deliberate about selecting and developing their human resources (Theme Two: Staff Selection, Leadership, and Capacity Building) and equipping all staff with evidence-based tools and strategies to deliver the curriculum (Theme Three: Instructional Programs, Practices, and Arrangements). With people, tools, and strategies in place, higher performing schools regularly monitor student progress (Theme Four: Monitoring: Compilation, Analysis, and Use of Data). Finally, higher performing schools are quick to respond to student achievement data—recognizing success and intervening or adjusting whenever necessary to ensure all students reach the stated standards (Theme Five: Recognition, Intervention, and Adjustment).



Theme One: Curriculum and Academic Goals

"What is Taught and Learned"

This theme focuses on the learning target. What is it that we expect all students to know and be able to do by grade and subject? Consistently higher performing school systems have clear academic targets from kindergarten through twelfth grade. Principals and teachers understand the learning goals and understand that these goals are for all students and are non-negotiable.

Specific Massachusetts Findings: Curriculum and Academic Goals

- **District curriculum materials provide additional detail to the state standards. Materials, such as curriculum maps, pacing guides, lists of aligned instructional resources, and benchmark assessments, clarify the district curriculum.**
 - In Massachusetts, initial curriculum development at the district level supports the higher performing schools. In one district without curriculum coordinators, the assistant superintendent and other district staff work together to create curriculum support materials

for the schools. Curriculum support materials typically include such resources as curriculum frameworks and maps, scope and sequence tables, and curriculum guides. In every case, the districts base their materials on the state standards. One principal explained that his district provides “a list of materials for each of the particular content areas that you can utilize, but the focus is always the standards.”

- With the state standards and with initial guidance from the district, schools further develop curriculum and refine instructional materials by grade level, focusing on their students’ particular needs. In one school, with regard to the curricula for English Language Arts and mathematics, a teacher noted, “We have identified the standards from the state and put them into a pacing chart for the year in the school. Also at the school level, we looked at the district curriculum and articulated the pacing further.”
- Teachers are involved at every level of curriculum development. They work with district curriculum coordinators to develop district-wide curricular documents and are intensely involved in tailoring the materials for use in their own schools. A superintendent from one district explained, “In terms of curriculum development, everything is done through teacher teams. A principal posts positions needed for a [curricular] team, along with a job description [of the task to be completed], in order to attract teachers who want to work on that particular issue.” As an example of how teachers refine the curriculum guides provided by the district, one principal described the work of her school’s Mathematics Department: “[They did] a really nice job because, in their curriculum book or their scope and sequence (which they call the *Mathematical Instructional Guide*), not only does it have the standards, but it also has a variety of materials you can use to incorporate and teach those particular standards.”

- **Academic objectives in the district curriculum are vertically and horizontally aligned by teams of teachers.**

- Interviewees noted the importance of both vertical and horizontal curriculum alignment across the district. From the principals’ perspectives, vertical alignment is a necessary step toward higher achievement scores. One principal stated, “We’re also looking to identify power standards—if a child is proficient in *that* standard, then it’s going to impact the other standards. What do we need to be doing in kindergarten to help strengthen this area that emerges in third grade?”
- Teams of teachers are integral to the curriculum alignment process. A teacher explained, “We took teams from across grade levels and schools, with team leaders and instructional specialists. We looked at the [state] frameworks and developed curriculum maps.” Another teacher recalled, “We aligned the curriculum, and the district has stepped in the last few years and is helping with it.”
- Most districts provide curriculum coordinators to facilitate the curriculum alignment process. Such facilitation helps ensure that campus alignment teams remain focused on the state standards. One district that practices site-based management expects the schools to collaborate with each other for district-wide alignment.
- In addition to improving student achievement, alignment within a district is seen as a way to support students who move to different schools. One teacher said, “We have a highly transient [student population], so we decided we needed to be on the same [curricular] page.”
- Teachers in the focus groups agreed that curriculum alignment efforts are worthwhile. One teacher said, “We have seen continuous improvement, and [students] come in better prepared every year.” Another teacher extolled the results of district-wide alignment, saying that the district “had some restructuring, so we had probably one-third new students coming into our school. I found as a whole that they are much better prepared. We used to find, if they came in from other schools [in our district], they wouldn’t be prepared.”

- **Teachers continually review and refine district curriculum based on student performance data.**
 - For most districts, curriculum revision is a continuous endeavor based on student performance data. Teams of teachers and school leaders meet frequently to revise curriculum. One teacher reported, “We have monthly meetings looking over the data and develop a task plan, and that might involve revising the curriculum as needed.”
 - Another school’s revision process includes meetings for focus groups twice each month. A teacher from that school reported, “We have data analysis teams and school improvement plan teams that are working on the curriculum to see where we need to spend more time. Our focus in the classroom and across the school is always looking at the curriculum.”
 - District leaders explained that much of the curriculum revision and fine-tuning occurs at the school level. One superintendent reported that the district “provides opportunities for teachers to meet to examine data. At the building level is really where a lot of the nitty-gritty stuff happens.” Another district leader agreed that school-level teams are best equipped to revise curriculum based on their specific needs. Acknowledging the diversity of needs within the district, this superintendent remarked, “You have to let go and let them decide how to use the resources. Ideally, they should be used to analyze the data and translate those to curriculum revisions, how to tweak their tools, etc.”



Theme Two: Staff Selection, Leadership, and Capacity Building

“Selecting and Developing Leaders and Teachers”

This second theme focuses on the selection and development of a school system’s most precious commodity—people. Once the academic goals of the system are clear, the leaders and teachers are selected and given professional development opportunities to make these goals a reality for every learner in the system.

Specific Massachusetts Findings: Staff Selection, Leadership, and Capacity Building

- **The knowledge of the powerful effect of strong instructional leadership on student performance drives the selection and professional development of principals for schools, including developing internal candidates for leadership positions.**
 - Districts use a variety of methods to identify pools of potential principal candidates: advertisements in regional periodicals, internal programs to develop potential candidates, and graduate programs of area colleges and universities. Although most of the districts have programs for developing principal candidates within their own ranks, the most successful sources of principal candidates are the area colleges. In addition to providing fresh interns from among their graduate programs, area colleges also provide coursework and programs for preparing principal candidates within the districts.
 - One example of partnering with a local university to develop potential leaders is a Principal Fellows program, for which 10 people per year within the district are awarded paid internships with selected veteran principals. During the internships, Principal Fellows work four days a week with the veteran principals and then, on the fifth day, concentrate on their coursework, thereby earning a Master’s Degree (or Certificate of Advanced Graduate Study) from the sponsoring university. Upon completion of the program, Principal Fellows are eligible for placement as principals within the district.
 - Districts often provide structured support for principals. One district participates in a Wallace Foundation-funded program called Project Lead, which provides mentors for new

principals for two years. Another district provides mentors formally for one year, though principals in that district often work informally with their mentors for longer. The mentor program in another district includes a workshop series, designed for both new principals and experienced principals who are new to the district.

- Regular meetings with district leaders provide additional ongoing support for new principals. According to one superintendent, support activities include regularly scheduled opportunities to discuss problems and semi-formal coursework. “We have had opportunities to work together, to bring up focus groups around specific issues. One year the issue was using data, as a topic akin to a three-hour graduate level course. Another year it was behavioral intervention strategies.”

- **The district aggressively recruits or develops effective teachers from within its ranks.**

- Although nearly all the districts reported challenges to recruiting high-quality teachers, the consistently higher performing school systems have systematic processes in place for meeting these challenges. Teachers and principals in the focus groups reported high morale and, as a result, relatively low turnover rates in their schools. However, district-level staff reported growing challenges to recruitment such as budget cuts and rising housing costs. One district leader explained, “Housing is our number one impediment for attracting [teachers], as well as budget cuts. We are looking at the bottom step [of the salary schedule]. Can you ask a young, dynamic person with good ideas to work when you can’t make that amount of money and live in a lot of the areas surrounding the district? My house doubled in value over the past two years; my wife and I couldn’t do it now.”
- To face the demand for high-quality teachers, many districts and schools are creating programs to develop the skills and credentials of their paraprofessionals. One district has a career ladder for paraprofessionals, allowing those individuals to obtain their degrees and certification. The principal said, “I probably have four people on my staff who started out as paraprofessionals.” A superintendent agreed that paraprofessionals are potentially talented teachers, and that internships are also effective. “We have a huge paraprofessional contingency and affiliations with colleges. Those prospective teachers can receive their credentials from the district. We have a rich amount of interns in schools, and they usually have year-long internships that have proven very effective. At the end of the year they function like third-year teachers, rather than first-year teachers.”
- Most school leaders also look to university teacher preparation programs for new teacher candidates. One principal reported, “We have several special education [student teachers] who came through [teacher preparation programs]. We have fewer regular education student teachers, but I’ve found that also to be valuable. I make a point of going in and watching them in action.”
- Another principal described what the school staff calls a “farm team.” A local graduate program is preparing teachers who have come to education from different professional fields. The program produces teachers who are dual certified in regular and special education. “It’s a 14-month program, so they start in the summer with coursework, and during the year, they are paired with an experienced teacher at the school. So they work side-by-side in the classroom five days a week, and then take the rest of their courses on weekends and after school. ... By the end of the 14 months, ... they’ve worked with a teacher [at my school]; they know the instructional program we use; they know our approach to behavior management. So that’s created a farm team for us for additional hiring. And I would encourage schools to do that because ... you know the candidates. You’ve seen them in action right within your school.”

- **Although principals have final authority for selecting teachers, most principals of higher performing schools employ collaborative processes to ensure new teachers are well-matched to the school.**
 - Many of the consistently higher performing schools participating in the Massachusetts Best Practice Institute experience relatively low rates of teacher turnover. As a result, a time-intensive consensus approach to hiring new teachers is possible. One principal summarized a common hiring scenario among the higher performing schools, “If I’m hiring a third-grade teacher, I will bring in two of my third-grade teachers to sit on a panel. My assistant principal and guidance counselor often sit in as well. And that can vary depending on who is available, because sometimes it’s the week before school starts, and we’re looking for people. But we’ll hold an interview, and it’s usually about six people on the panel. But, I ultimately have the final decision.”
 - Some school-level interview teams ask teacher candidates to teach a demonstration lesson. One principal explained that the demonstration helps the interview teams make better decisions: “It made such a difference in terms of the quality of the staffing.”
 - Other schools extend the inclusive nature of the hiring process to final selection as well. As one principal explained, “All of our hiring is done at the school site. We always have a screening team comprised of teachers and parents and me, as principal. After interviews and reference checks, we make a decision—a consensus-based decision.” Another principal agreed that the consensus approach is most effective: “Having more people involved than just the principal in the selection process is great. The person coming in has a support group right off the bat, a group of people who want him or her to succeed, and it just makes the likelihood of success higher.”
- **Educators select professional development activities based on needs identified through student performance data and embed those activities in classrooms. Professional development activities focus on deepening teachers’ content knowledge and enhancing their teaching skills.**
 - District and school leaders set their professional development priorities using Massachusetts Comprehensive Assessment System (MCAS) results and other assessment data.
 - At one school, teachers augment the district’s standard mentoring program with teacher-developed modules and additional mentors for each new teacher. The modules address the school’s special way of teaching mathematics, science, and reading; managing student behavior; and including children with special needs in the regular classroom. The principal provides substitute teachers, which allows new teachers to observe and to be observed by experienced teachers. The principal noted that, since the school’s mentorship program deviates from the district’s contract mentor program, “We obtained a waiver. They said, ‘You can try it, but you have to show results.’”
- **Educators value and nurture a collaborative environment focused on curricular and instructional issues.**
 - At the school level, principals and teachers institute policies that support collaborative curriculum alignment. One school requires teachers to meet once a week for an hour after school to work on curriculum alignment. In all the districts, teachers in grade-level teams meet frequently on an informal basis to discuss curriculum.
 - The teachers attributed their schools’ successes to the pervasive environment of collaboration in their schools, where support for new teachers is a family affair. One teacher noted, “At the school level, it is more about collaboration. We are a small school, so we are fortunate to have that common planning time.” Yet another teacher said that, because of the school’s reputation for being supportive, “Teachers are asking to transfer to our school.”



Theme Three: Instructional Programs, Practices, and Arrangements

"The Right Stuff—Time and Tools"

This theme focuses on the "things" that higher performing school systems use—the arrangement of time, the instructional resources and materials, technology, etc. Strong instructional leaders and highly qualified teachers need evidence-based tools and resources to reach high standards with every learner.

Specific Massachusetts Findings: Instructional Programs, Practices, and Arrangements

- **Districts select instructional programs based on evidence of effectiveness, including evidence collected through internal piloting of programs. Districts grant flexibility in selecting programs to high-achieving schools; schools lose that flexibility if student performance data indicate a need for more direction from the district level.**
 - Some districts choose the instructional programs for all their schools, whereas others identify a list of acceptable programs and allow schools to choose the program or programs that best fit the needs of their students. Potential instructional programs are identified carefully, often after considerable investigation: collecting effectiveness research, observing the program in use in other schools, and piloting within the district itself.
 - Because commercial instructional programs are long-term investments, higher performing schools and their districts are particularly careful to ensure program effectiveness. One principal explained, "I know about every 10 years we buy a different reading program, math program, or take a look at what we're doing and see if we need to tweak it, just because it's so expensive district wide to revamp the entire curriculum. So usually there will be a piloting process. The district will research different instructional materials and pilot a few in a couple of different schools and then, after they pilot, they will get together with a group of teachers to figure out what the quirks and some of the benefits are. Then they'll adopt that particular program and have it for about 8 to 10 years."
 - Some schools enjoy flexibility in selecting instructional programs. For one district, central office leaders select the mathematics program but allow schools to select the literacy program of their choice. A team of teachers researches different programs and, based on the school's needs identified through MCAS data, targets programs that merit further study.
 - Another school reported a similar arrangement. A teacher pointed out that, though the district chose the reading and mathematics series, "The [literature block arrangement] was a school decision. We wanted to use our staff so kids could be reading at their instructional levels and working in smaller groups. It looks a little different from the district's [approach], and the data bears out that our model is working." Piloting innovations like this leads to sharing successes across the district. One principal reported, "We just held a summit meeting yesterday of our administrators and that was a goal, to look at our curriculum and make a concerted effort to share the wealth and bring programs that are working in one building into other buildings."
- **Educators do not mistake instructional programs and materials for the curriculum but see them as tools for successfully delivering the curriculum.**
 - Higher performing schools reported using a number of commercial instructional programs, and some districts permit different programs for different schools. Though emphasis was placed on fidelity of implementation of the selected program, one principal articulated the focus group's viewpoint: "[The district] always focuses on the fact that we're not teaching a book; we're teaching the standards. There's no particular text or basal, whether it's math or reading, that can hit all those particular standards or strands."

- Another principal explained how instructional materials are selected to meet curricular objectives: “We train teachers to use those materials so they are targeting all those [curricular] strands, not just going page-by-page in a book.”
- **Educators closely examine the implementation and impact of the selected instructional programs.**
 - The higher performing schools and districts evaluate their instructional programs and practices using data from the state’s standardized tests, school-wide benchmarks, and both formal and informal classroom assessments.
 - All principals pointed to the data as their most effective measure of the efficacy of their instructional programs and practices. One principal said, “We measure effectiveness in terms of student achievement by looking at the data over a period of time. Our superintendent recently rolled out our scores as a district in English Language Arts and math and showed the wonderful progress that we’d been making at the time as a district. ... The biggest challenge for us is making sure things are being implemented properly and not being compromised because of money or time or what-have-you.”
 - Another principal enumerated the types of questions the district and school staff ask to determine not only whether a program is effective, but why it is or is not. The principal explained, “At the school level, we evaluate our programs by looking at student learning results. Did they learn? What’s the evidence? That’s the first question. But before that, we do what we call ‘implementation measures.’ Is it being used in all classrooms? How faithfully is it being implemented? We don’t want to confuse lack of implementation with effectiveness. The third is the qualitative area: what’s the effect on what we call ‘teacher confidence’ with their teaching of literacy and their teaching of math?”



Theme Four: Monitoring: Compilation, Analysis, and Use of Data

"Knowing the Learners and the Numbers"

After clearly identifying what is to be taught and learned by grade and subject and ensuring that the schools are equipped with the staff and the tools to successfully deliver the curriculum, the school system then asks and answers an important question: "How are we going to know if students learned what we said they would learn?"

Specific Massachusetts Findings: Monitoring: Compilation, Analysis, and Use of Data

- **Educators embrace accountability as an integral part of the teaching and learning process. Teachers share collective responsibility for student learning.**
 - Teachers participating in the focus groups unanimously embraced accountability and the useful data that come out of the testing program. One teacher said, “[MCAS] absolutely has had an impact on instruction, because of the accountability issue.” A different teacher added that testing has a “tremendous impact in a positive way. No excuses anymore.” From another school, a teacher said, “I second that. It is a positive impact. We have always made our AYP [adequate yearly progress], and we strive for that every year. It has really helped us to bring up that focus on our instruction and refining our work. It helps us measure how we are progressing with our curriculum and our kids. Very positive impact. The only down side is that we spend all our downtime thinking about this.”
 - One teacher explained the effect state testing has on promoting collective responsibility for student learning. “Newer teachers understand the frameworks and tests better. They

share what they know with us. Also, they are testing in the other grades now. It was difficult when the other grades weren't tested. ... It's helped with accountability across the board."

- **Data from district and state assessments form the foundation for all decision making.**
 - Teachers in the consistently higher performing schools provided a lengthy list of assessments used to monitor student performance. In addition to the MCAS, schools administer CBM (curriculum-based measurement) three times during the year to chart the students' academic growth. Teachers added that they also use the following classroom assessments: DIBELS (the *Dynamic Indicators of Basic Early Literacy Skills*), phonics screening, and unit and chapter assessments.
 - Although levels of access to data and the sophistication of data systems vary among the higher performing schools and their districts, all participating district leaders, principals, and teachers provided examples of applications for that data. When accumulated, the interviewees' responses revealed a strong orientation toward decision making based on the analysis of data (e.g., curriculum development and revision, staff selection, professional development activities, intervention needs, and selection of instructional programs).
 - The principal of one school enumerated the uses of data at that school, saying that data are used in four distinct ways. "One is to again look at, to check on the curriculum alignment. ... The second way we use it is to identify individual students. ... The third way we use it is to align professional development with the areas of teacher need. ... And the fourth way is to identify those teachers who are teaching it well and to try to identify a body of best practices that are currently being used within the school."
 - A district leader offered these additional uses for data. "Clinical data helps measure the efficacy of instructional programs, as well as an entire combination of activities. When you consider both qualitative and quantitative data, that works well with special education requirements, because you have graphs for meetings and documented interventions. Then you can write data-based IEPs [Individualized Education Programs]. This increases the flow [of information] between special and regular education."



Theme Five: Recognition, Intervention, and Adjustment

"Ensuring All Children Learn"

The most important question of all follows the monitoring of student performance: "What are we going to do if students do not learn the knowledge and skills we said they would learn?" Higher performing school systems have *pyramids of intervention* that provide immediate and intense intervention at multiple levels when learning is interrupted.

Specific Massachusetts Findings: Recognition, Intervention, and Adjustment

- **Classroom teachers provide the first level of intervention to address student learning needs. Schools provide additional resources, staff, and programs to address student needs.**
 - One district leader said, "I'm trying to teach standard decision-making rules. You are clinicians, primary care physicians for your students. How are they responding to the treatment?" Another pointed out that, "Teachers know intuitively who is struggling. Now we have data to confirm it. The issue is what are we going to do about it?"

- Each of the participating schools had large numbers of students who needed extra support in order to progress academically. These schools, however, offered a catalog of programs, individualized interventions, and help in dealing with emotional and other health concerns to address the needs.
- According to one principal, teachers in the school find it useful to increase academic rigor for low-performing students. “With the at-risk students, we have some mentoring students who we’re calling high performers. ... We use Bloom’s Taxonomy, and what we’re finding is that we’ve made that transition from the knowledge and comprehension [levels], and now we’re in the upper levels of the taxonomy; so kids who are at risk, who were never going to be exposed to analysis or application, were going to be at further disadvantage. So basically we’re putting them in a gifted program.”
- **District and school leaders adjust staffing allocations to address school-wide student needs.**
 - Some districts strategically redistribute experienced staff to schools in greater need. For example, one superintendent observed that some schools had large numbers of very experienced teachers, while others had large numbers of new teachers. The district proposed moving more experienced teachers to under-performing schools to help those schools improve their curriculum alignment and their student performance. The superintendent explained, “[We will] have those teachers be instructional curriculum leaders and ... get other people on board in terms of where they are supposed to be and what they are supposed to be doing.”
 - Given limited resources, one principal outlined the use of all available staff to provide intervention support for students. “For after-school tutoring, we have to use school funds for busing, which draws money away from other services. ... No one has additional time in their schedules. Every minute of the day is booked, and that includes my gym teacher, if he has an extra period.” With five classes in each of four grades, teachers of special areas like gym teach four periods a day. With the additional periods, those teachers are “in classrooms supporting students.”



Massachusetts Elementary Best Practice Institute: Conclusion

Based on the Themes of The JFTK Framework

The NCEA analysis identified four consistently higher performing elementary schools in Massachusetts. District, school, and classroom representatives from each school participated in a series of five focus groups organized by the themes of The JFTK Best Practice Framework. Summaries of the findings of those focus groups are presented below by theme.

The Findings

Curriculum and Academic Goals

The four higher performing schools at the Massachusetts Best Practice Institute described an integrated, systemic approach to increasing student achievement. This approach involved developing well-articulated and well-aligned academic goals that they presented through a written and detailed curriculum based on the state standards. Teacher teams ensured the vertical and horizontal alignment of the academic objectives. Educators regularly revised and adjusted the curriculum to address student learning needs.

Staff Selection, Leadership, and Capacity Building

Districts accessed pools of teacher and principal candidates who enrolled in professional development courses through local universities. Interviewees cited the importance of their internal development programs for equipping instructional leaders and advancing the skills of classroom paraprofessionals. These programs proved to be useful in producing educators well-suited to individual schools. Professional development was grounded in classroom practice and based on identified needs discovered in the analysis of student performance data. Schools valued collaboration among teachers, including mentoring from experienced teachers.

Instructional Programs, Practices, and Arrangements

Districts selected instructional programs and practices through thoughtful, purposeful processes. Many of the districts represented in the Best Practice Institute included internal pilots of potential programs in the selection process. Teachers and leaders alike were aware of the importance of faithful implementation of the programs, although neither group confused a textbook or program for the curricular goals and standards. Higher performing schools regularly examined the implementation and impact of the selected instructional resources.

Monitoring: Compilation, Analysis, and Use of Data

While the sophistication of the systems used to store and share data varied widely, the use of the data did not. One principal enumerated how pervasive data use was in the school for aligning curriculum, identifying students with instructional needs, aligning professional development to identified needs, and highlighting the practices of effective teachers. Interviewees described student assessment as being ongoing and continuous, with educators regularly reviewing data to determine both learning needs and the strategies to address them.

Recognition, Intervention, and Adjustment

Although budgets for student interventions were tight, the higher performing schools in the Massachusetts Best Practice Institute found creative ways to provide extra instructional support for students and to build a culture of collective responsibility for student learning. The schools used all available educators to address student learning needs. In one case, gym teachers were assigned a tutorial role in academic subjects during open periods in their schedules.

Next Steps

NCEA's state-study protocol assumes that the state framework of best practices will be built based on a three-year study of consistently higher performing and average-performing schools at the elementary-school level (Year One), middle-school level (Year Two), and high-school level (Year Three). Based on this protocol, JFTK-MA's next step will be to leverage the results of this Elementary Best Practice Institute to conduct a full study of higher performing elementary schools in Massachusetts, including a comparison with average-performing schools, in order to distinguish unique practices of the higher performing schools. Then, JFTK-MA should continue to build upon those findings by conducting the study of consistently higher and average-performing middle and high schools using the same framework of best practices.

One of the dangers of studying consistently higher performing schools is drawing conclusions based on a single school example. To avoid this danger, the conclusions for the JFTK-Massachusetts Elementary Best Practice Institute, 2005, focus on a description of the practices that are most consistent across the higher performing schools in this study. Without a comparison group of average-performing schools, we cannot highlight only those practices that were found to be systemically different in the higher performing schools as a group. Therefore, the conclusions from the JFTK-Massachusetts Elementary Best Practice Institute have also been informed by the findings from a much larger body of schools studied (300+ across five years and twenty states), which included average-performing comparison schools, to help determine meaning in the context of Massachusetts.