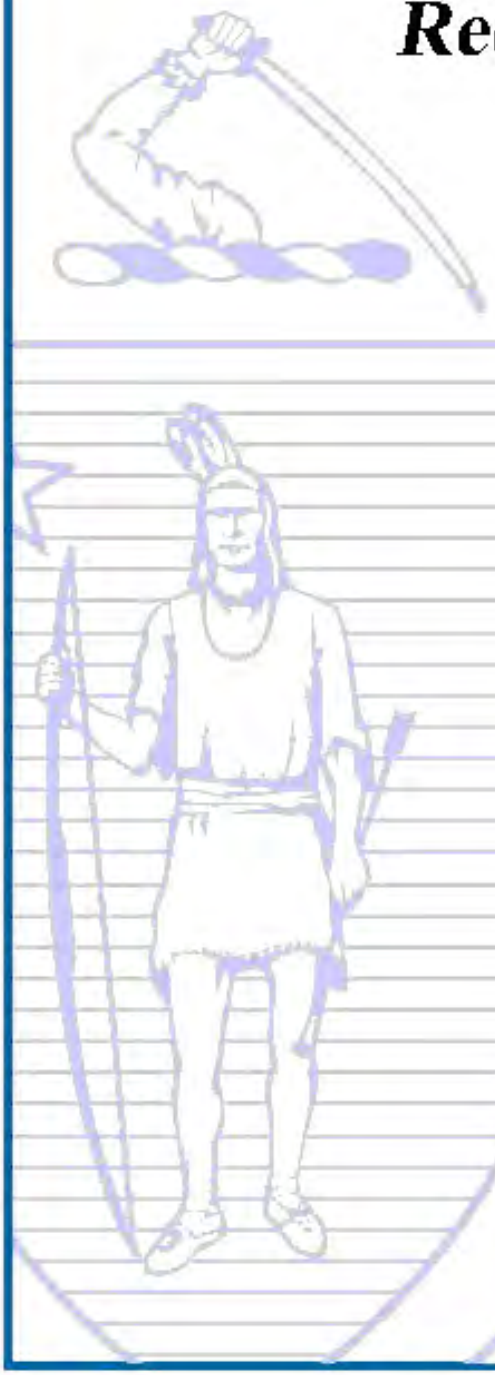
The Commonwealth of Massachusetts

School District *Reexamination Report:*

Lowell
Public Schools
Technical Report

data driven
standards based
learner centered



The Education Management Audit Council
The Office for Educational Quality and Accountability
2005 - 2007

The Commonwealth of Massachusetts
Office of Educational Quality and Accountability

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The Educational Management Audit Council accepted this report at their meeting of April 11, 2008, and issued a management letter to the district expressing commendations and concerns based on the findings contained herein. Although EMAC voted to remove the district from 'Watch' status, the Council would have preferred to Keep Lowell High School, as a separate entity, in the 'Watch' status. However, the current decree does not allow such action by EMAC.

The Office of Educational Quality and Accountability would like to acknowledge the professional cooperation extended to the audit team by the Department of Education; the Superintendent of the Lowell Public Schools, Karla Brooks Baehr; the school department staff of the Lowell Public Schools; and the town officials in Lowell.

Table of Contents

Executive Summary

The Office of Educational Quality and Accountability (EQA) conducted a reexamination of the Lowell Public Schools in December 2007. With an English language arts (ELA) proficiency index of 73 proficiency index (PI) points and a math proficiency index of 60 PI points based on the 2007 MCAS test results, the district is considered a 'Low' performing school system based on the Department of Education's rating system (found in Appendix A of this report), with achievement below the state average. On the 2007 MCAS tests, 44 percent of Lowell's students scored at or above the proficiency standard in ELA and 33 percent did so in math.

District Overview

The city of Lowell is located in Middlesex County in northeastern Massachusetts along the Merrimack River. The city became an industrial center for textiles, and suffered with the decline of manufacturing in New England. Both Middlesex Community College and the University of Massachusetts at Lowell are located in the city. The largest sources of employment within the community are educational, health, and social services, and manufacturing. The city is governed by a Council-Manager/City Manager.

According to the Massachusetts Department of Revenue (DOR), Lowell had a median family income of $45,901 in 1999, compared to the statewide median family income of $63,706, ranking it 326 out of the 351 cities and towns in the commonwealth. According to the 2000 U.S. Census, the city had a total population of 105,167, with a population of 22,362 school-age children, or 21 percent of the total. Of the total households in Lowell, 37 percent were households with children under 18 years of age. Eighteen percent of the population age 25 years or older held a bachelor's degree or higher, compared to 33 percent statewide.

According to the Massachusetts Department of Education (DOE), in 2006-2007 the Lowell Public Schools had a total enrollment of 13,902. The demographic composition in the district was: 41.9 percent White, 28.9 percent Asian, 22.4 percent Hispanic, 6.2 percent African-American, 0.1 Native Hawaiian/Pacific Islander, and 0.6 percent multi-race, non-Hispanic; 29.6 percent limited English proficient (LEP), 67.7 percent low income, and 15.2 percent special education. Ninety percent of school-age children in Lowell attended public schools. The district does not participate in school choice. A total of 2,656 Lowell students attended public schools

outside the district, including 1,524 students who attended Greater Lowell Technical High School, 97 students who attended other technical high schools, and 976 students who attended charter schools.

The district has 23 schools serving grades pre-kindergarten through 12, including 13 elementary schools serving pre-kindergarten or kindergarten through grade 4, seven middle schools serving grades 5 through 8, two schools serving grades PK through 8, and one high school serving grades 9 through 12. The administrative team includes a superintendent; an assistant superintendent of finance and operations; a deputy superintendent for curriculum, instruction, and assessment; an assistant superintendent for personnel; an assistant superintendent for student services; and a director of special education. Each elementary and middle school with more than 250 students has a principal, and an assistant principal. The high school has a headmaster. The district has a seven-member school committee chaired by a mayor who is elected from among the city councilors.

In FY 2007, Lowell's per pupil expenditure (preliminary), based on appropriations from all funds, was $11,873, compared to $11,789 statewide, ranking it 115 out of the 302 of 328 school districts reporting data. The district did not exceed the state net school spending requirement in any year of the review period. From FY 2005 to FY 2007, net school spending increased from $135,234,587 to $146,246,641; Chapter 70 aid increased from $107,640,518 to $111,660,607; the required local contribution increased from $33,602,991 to $34,937,955; and the foundation enrollment decreased from 15,650 to 14,704. Chapter 70 aid as a percentage of actual net school spending decreased from 80 to 76 percent over this period. From FY 2005 to FY 2006, total curriculum and instruction expenditures as a percentage of total net school spending decreased from 65 to 62 percent.

Context

School districts examined by the Massachusetts Office of Educational Quality and Accountability (EQA) are placed in 'Watch' status if the EQA examination reveals several areas of poor or unsatisfactory performance. The EQA and its staff monitor all 'Watch' districts. For the next one to two years, an experienced and trained senior EQA examiner monitors a district in 'Watch' status. After a reexamination by the EQA, either the district is removed from 'Watch'

status or an EQA report is forwarded to the Board of Education with a recommendation to declare the district underperforming. Underperforming districts receive additional support and services from the state to improve student achievement.

The EQA previously examined the Lowell Public Schools in the spring of 2002 and the winter of 2005, and the district was subsequently placed in 'Watch' status in July 2005. The district was monitored by the EQA deputy director, Dr. Albert Argenziano, and reexamined by a team of EQA examiners in December 2007. This reexamination report is the conclusion of the 'Watch' process, the purpose of which is to assess the progress the district has made since the prior examination.

Weaknesses identified in the prior 2005 EQA review became the focus of the reexamination; the team inquired only about the indicators rated as 'Poor' or 'Unsatisfactory' in the initial review, plus new indicators added to all 2007 reviews. Overall, the reexamination shows broad-based planning and implementation of improvement initiatives to address priority areas of weakness. In total, the district improved on 44 of 51 indicators reexamined. Six of the indicators were not substantially improved, and the change from 'Poor' to 'Needs Improvement' was only reflective of the agency's change in ratings in 2006 which replaced the designation of 'Poor' with 'Needs Improvement' to reflect the state's rating scale for MAC. This rate of 44 of 51 indicates an improvement rate on almost 90 percent of the items under 'Watch'.

Since the last EQA visit, Lowell Public Schools intensified its provisioning of professional development for administrators though National Institute of School Leadership (NISL) or other leadership training such as the "DNA of School Leadership", and training and for teachers through the Lowell Teachers Academy, in the third year of implementation in 2007-2008. Besides using professional development to build capacity, the district focused on bolstering standards-based English language arts (ELA) and math instruction with increased time and supports, and with strategies that engage students and differentiate levels of learning using data. The use of student achievement data in planning and evaluation has been refined through an integrated database that aligns district record keeping systems useful for analyses. Creating an effective environment for all learners has remained a district priority, and the school system has worked to provide a welcoming and inclusive environment for students and parents, facilitate

better communication with parents through new home-school communication systems, and partner with local institutions to support families. Lowell has been refining its educational programs for student subgroups, securing in 2006-2007 its status as a supplemental service provider and implementing school-based clinical teams to strengthen identification of and support for special education students.

The district was able to continue its areas of strength noted in the previous review and strengthened other priority areas by focusing on identified and shared goals, paying attention to a broad array of district data, strengthening the district's capacity, and using collaborative approaches to problem-solving. Lowell Public Schools strengthened curriculum delivery by increasing instructional time in ELA and math, further revising and aligning its curricula, and providing clear expectations for instructional format and student engagement. The district strengthened support for students by providing a small student-teacher ratio with full engagement of adults on the learning task, and by providing interventions within the school day by students' regular classroom instructors. Lowell encouraged building-wide ownership in K-8 schools of the responsibility to address student needs using data, so that staff increasingly used the district's improved database to evaluate programs and improve upon practices. Lowell has a group of staff members with the capacity to continue the improvements, since the district has refined its professional development program to progressively build the skills of teachers at different levels of their careers. Furthermore, the superintendent provided K through 8 principals with NISL training, all principals with clear expectations for them as instructional leaders, and the authority and resources to implement improvement plans.

As a result of cohesive improvement efforts, 17 schools made adequate yearly progress (AYP) in ELA in 2007 compared to five in 2006, and 19 schools made AYP in math in 2007 compared to six in 2006. Performance at most grade levels (except grades 3 and 7) on the MCAS tests improved at a greater rate than the state. The performance of limited English proficient (LEP) students continued to exceed the state average. The district also lowered rates of suspension for all subgroups, and in classroom observations the EQA team observed strengths in classroom management and climate. By creating pathways for professional growth, the district maintained high levels of teacher certification (93.4 percent) and staff retention (87 percent of first-year and 92 percent of second-year teachers) for an urban district.

Three areas remained a challenge for the district during the reexamination period: articulation between the middle schools and the high school, special education student achievement, and an inadequate budget. Forging greater articulation between grades 8 and 9 was a challenge that the district worked to address. One initiative in this effort was the establishment of the Freshman Academy, which used the middle schools' team-based model. The district better aligned the math program with high school expectations by adding 30 additional minutes to grade 7 and 8 math for instruction in pre-algebra and algebra. The district provided more support for literacy with an additional reading program for students performing below expectations through grade 10.

Lowell also worked to improve upon special education service delivery, but student achievement of this subgroup did not improve at a rate comparable to that of the entire district or of special education students statewide. Interviewees noted that the district was moving away from a less than effective model of special education inclusion—the extensive use of paraprofessionals in classrooms to address specific Individualized Education Programs (IEPs). To replace the old model, the district implemented a special education study, established new professional special education positions, and implemented a team-based model to improve IEP determination and implementation. The special education service delivery model was still a work in progress at the time of the site visit. Lowell had a higher rate of inclusion than the state, but regular education teachers indicated that their current levels of support and professional knowledge did not promote optimal instruction to students with special needs.

The third area of challenge was an inadequate budget, falling below minimum net school spending requirements since 1998. The superintendent identified several areas that would likely increase student achievement and provide more support to at-risk students if the district had more funding. One is to strengthen the early education program by expanding pre-kindergarten options and providing a full school day and transportation for pre-kindergarten students. Currently the half-day program services all special education students, but only approximately 30 percent of children who are eligible. The superintendent also would recommend increasing targeted intervention staff in math and ELA at all levels, and providing more English as a second language (ESL) certified staff members. Targeted technology, currently underfunded, would become another district priority. The superintendent would also like to provide greater support to

at-risk students by providing full-time social workers to all schools, with two additional social workers at the high school, and by expanding the summer partnership with community-based organizations.

To secure the resources needed to address weaknesses and continue and strengthen its initiatives and provisions, the district established creative ways to operate within a limited budget environment. The district focused on improving the effectiveness of the largest budget category—personnel—by investing in external, internal, and embedded professional development to improve instructional leadership capacity and instructional skills for teachers at different experience/career levels. The district ran an efficient business operation that saved over $1.5 million through transportation changes and operated a thinly staffed grants office that was able to manage 27 grants totaling approximately $19 million. The district used a combination of local and grant funding to sustain important key initiatives and to improve upon services. The superintendent helped the school committee make prudent funding allocation decisions by supporting budget recommendations with student achievement data and by presenting trade-off scenarios to ensure that budget cuts did not interfere with the accomplishment of district goals. To promote effective budget decisions at the school level, the superintendent provided principals both with parameters for decision-making and flexibility within the given parameters in order to allow them to meet the particular needs of their students. Further, the district established partnerships with colleges and social services agencies to expand its capacity to implement its initiatives.

The EQA reexamination team developed four findings. The first finding is that use of data was at the center of the identification of priorities and improvement planning in the Lowell Public Schools. The district's sophistication in using data to drive decisions at different levels was growing, and the EQA team saw growth in professional capacity as well. Second, the district is a learning organization. The district is focused on improving instruction through collaborative and informed decision-making, embedded professional development, a formal professional development program that nurtures vertical growth and encourages retention, and empowering leadership at different levels. Third, as the district has strengthened building capacity, it has shifted over time from a more centralized management model to a responsive site-based model.

Fourth, through these processes the district has created consistency in the implementation of district priorities for grades K-8, but to a much lesser extent at the high school level.

Many factors indicated that Lowell has improved operationally and shows promise for improved student achievement. Levels of staff ownership, professional capacity, and key initiatives embedded within district operations and staffing structures pointed to sustained efforts in a positive direction. However, the district's reliance on external funding, and next year's new leadership of the school system, both create uncertainties. Staff members voiced concerns about the departure of the current superintendent and hope that her successor would continue the initiatives and build upon the district's foundation. The concerns were often repeated, as the team visited the district shortly after the announcement of the superintendent's decision to leave after eight years as the leader of Lowell Public Schools.

Recommendations

As a result of its reexamination, the EQA arrived at recommendations for the district, which were presented to the superintendent subsequent to the reexamination. They are as follows.

- Promote and support consistency of implementation of K-12 district priorities at all levels of the system, particularly the high school level.
- Continue and complete the shift from a centralized management-centered leadership model to a site-based instructional leadership model.
- Develop a preventative maintenance plan to complement the recently developed capital improvement plan to ensure coordination of improvement and maintenance.

The EQA Reexamination Process

The Massachusetts Legislature created the Office of Educational Quality and Accountability in July 2000 to provide independent and objective programmatic and financial audits of the 350-plus school districts that serve the cities and towns of the commonwealth. The agency is the accountability component of the Education Reform Act of 1993, and was envisioned in that legislation. The EQA works under the direction of a five-person citizen council, appointed by the governor, known as the Educational Management Audit Council (EMAC).

From December 10 to December13, 2007, the EQA conducted an independent reexamination of the Lowell Public Schools for the period 2005-2007, with a primary focus on 2007. This reexamination was based on the EQA's six major standards of inquiry that address the quality of educational management, which are: 1) Leadership, Governance, and Communication; 2) Curriculum and Instruction; 3) Assessment and Program Evaluation; 4) Human Resource Management and Professional Development; 5) Access, Participation, and Student Academic Support; and 6) Financial and Asset Management Effectiveness and Efficiency. The report is based on the source documents, correspondence sent prior to the on-site visit, interviews with the representatives from the school committee, the district leadership team, school administrators, and teachers, and additional documents submitted while in the district. The report does not consider documents, revised data, or comments that may have surfaced after the on-site visit.

For the period under reexamination, 2005-2007, Lowell Pubic Schools is considered to be a 'Low' performing school district, marked by student achievement that was 'Moderate' in English language arts (ELA) and 'Low' in math on the 2007 MCAS tests. Over the reexamination period, student performance improved by three PI points in ELA and 10 PI points in math, which narrowed the district's proficiency gaps by 11 percent in ELA and 21 percent in math.

The following provides a summary of the district's performance on the 2007 Massachusetts Comprehensive Assessment System (MCAS) tests and the findings of the EQA reexamination.

Summary of Analysis of MCAS Student Achievement Data

Are all eligible students participating in required state assessments?

On the 2007 MCAS tests in ELA, math, and STE, eligible students in Lowell participated at levels that met or exceeded the state's 95 percent requirement.

Are the district's students reaching proficiency levels on the MCAS examination?

On average, more than two-fifths of the students in Lowell Public Schools attained proficiency in English language arts (ELA) on the 2007 MCAS tests, one-third of Lowell students attained proficiency in math, and slightly less than one-fifth attained proficiency in science and technology/engineering (STE). Ninety-three percent of the Class of 2007 attained a Competency Determination.

- Lowell's ELA proficiency index on the 2007 MCAS tests was 73 proficiency index (PI) points. This resulted in a proficiency gap, the difference between its proficiency index and the target of 100, of 27 PI points, 13 points wider than the state's average proficiency gap in ELA. This gap would require an average improvement in performance of nearly four PI points annually to achieve adequate yearly progress (AYP).
- In 2007, Lowell's math proficiency index on the MCAS tests was 60 PI points, resulting in a proficiency gap of 40 PI points, 16 points wider than the state's average proficiency gap in math. This gap would require an average improvement of nearly six PI points per year to achieve AYP.
- Lowell's STE proficiency index in 2007 was 56 PI points, resulting in a proficiency gap of 44 PI points, 16 points wider than that statewide.

Has the district's MCAS test performance improved over time?

Between 2004 and 2007, Lowell's MCAS performance showed improvement in English language arts, more improvement in math, and improvement in science and technology/engineering.

- Over the three-year period 2004-2007, ELA performance in Lowell improved at an average of approximately one PI point annually. This resulted in an improvement rate, or a closing of the proficiency gap, of nine percent, a rate lower than that required to achieve AYP. The percentage of students attaining proficiency in ELA increased from 39 percent in 2004 to 43 percent in 2007.
- Math performance in Lowell showed more improvement over this period, at an average of more than three PI points annually. This resulted in an improvement rate of 21 percent, also a rate lower than that required to achieve AYP. The percentage of students attaining proficiency in math rose from 22 percent in 2004 to 36 percent in 2007.
- Between 2004 and 2007, Lowell had an improvement in STE performance of slightly less than one PI point annually over the three-year period, resulting in a narrowing of the proficiency gap by five percent. The percentage of students attaining proficiency in STE decreased from 22 percent in 2004 to 19 percent in 2007.

Do MCAS test results vary among subgroups of students?

MCAS performance in 2007 varied considerably among subgroups of Lowell students. Of the nine measurable subgroups in Lowell, the gap in performance between the highest- and lowest-performing subgroups was 40 PI points in ELA (regular education students, students with disabilities, respectively) and 39 PI points in math (non low-income students, students with disabilities, respectively).

- The proficiency gaps in Lowell in 2007 in both ELA and math were wider than the district average for students with disabilities, limited English proficient (LEP) students, Hispanic students, African-American students, and low-income students (those participating in the free or reduced-cost lunch program).
- The proficiency gaps in ELA and math were narrower than the district average for regular education students, White students, and non low-income students.
- For Asian students, the proficiency gap in ELA was wider than the district average and in math it was narrower than the district average.

Has the equity of MCAS test performance among the district's student subgroups improved over time?

In Lowell, the performance gap between the highest- and lowest-performing subgroups in ELA widened from 38 PI points in 2004 to 42 PI points in 2007, and the performance gap between the highest- and lowest-performing subgroups in math widened from 35 to 41 PI points over this period.

- All student subgroups in Lowell with the exception of students with disabilities and African-American students had improved performance in ELA between 2004 and 2007. The most improved subgroup in ELA was Asian students.
- In math, the performance of all student subgroups in Lowell improved between 2004 and 2007. The most improved subgroup in math also was Asian students.

Fidelity of Implementation

A characteristic of effective educational organizations (schools and districts) is the strong alignment of goals, plans, processes, and actions—from the policymakers to the classroom.

Therefore, the EQA has developed a protocol for assessing the alignment of these elements. The *fidelity of implementation* is an indicator of the consistency of execution of a district's expectations: its stated goals, plans, curricula, and various processes, down to the level of instruction. When these various components are consistent and highly aligned, a high level of fidelity of implementation exists. When these are inconsistent and poorly aligned, a low or poor level of fidelity of implementation exists. The classroom observation protocol is designed to collect evidence of district and school goals, plans, and expectations in the instructional setting.

Generally, the evidence for fidelity of implementation was mixed in Lowell: extremely high in grades K-8, and poor in grades 9-12. Documents, interviews, and classroom observations revealed a bifurcated curriculum articulation and a notably lesser degree of implementation of district priorities at the high school level. In many ways, the school system operated as two separate entities for grades K-8 and 9-12. Interviewees indicated that this situation preceded the reexamination period and the current superintendent, and some indicated that high school staff believed that alignment between the middle and high schools was neither necessary nor desirable.

The district led highly organized and aligned efforts between the central office and all elementary and middle schools. The EQA team found a high degree of fidelity of implementation from the superintendent's level to the school building level to the classroom level in grades K-8. Lowell Public Schools focused the entire K-8 system on its goals with supportive planning documents that were created in collaboration with those responsible for carrying out the action steps and tasks, with embedded professional development, and with the staff and material resources that were determined to be key in carrying out the priorities.

Lowell Public Schools had district goals with measurable outcomes and benchmarks to indicate responsibility for implementation K-12. In the fall of 2007, the district included the substantiating data to report on the status of the achievement of each one of its goals, and introduced the 2007-2008 goals that were aligned to the previous year's goals and updated to reflect goal accomplishment, changes to outcome measurements, and changes to district plans. The first set of goals were highly detailed, indicating that each building was responsible for the success of the key district initiatives at each instructional level and the central office.

District goals were aligned to the Unified School Improvement Plans. Written planning documents were clear and specific, measurable, updated annually, assigned responsibility, and were focused on attainable priority improvements when considering data. The team found ample evidence that district priorities were internalized and personalized for staff members with different roles in the district. The team saw evidence that instructional documents, program materials, staffing structures, budget allocations, professional development program, identification of grants, use of instructional time, and other decisions supported implementation of the district goals. The team found fidelity between district documents (such as the curriculum and the lesson design template based on "Lowell's principles of learning") and actual implementation. The team found that this was true even in cases when interviewees were not necessarily familiar with a particular document (such as the District Curriculum Accommodation Plan). Central office administrators, principals, and teachers understood their roles and responsibilities in carrying out key initiatives. A high level of external and embedded professional development and frequent formal team planning supported effective implementation.

There was a high degree of consistency in the descriptions of instructional priorities between the superintendent, K-8 principals, and K-8 teachers. (See Appendix C: Instructional Inventory.) There was also a high correlation between the descriptions and observed classroom practices. For example, the superintendent, K-8 principals, K-8 teachers, and K-8 classrooms all emphasized a focus on literacy and math, the launch-explore-summary model, effective use of the adopted instructional program materials, flexible grouping to target instruction to specific student weaknesses, and student engagement. Additionally, a positive classroom climate was a stated district priority that was an evident priority in the classroom. Some strategies were not fully implemented in the classroom but were gaining recognition, such as sheltered English strategies. At the same time, the team saw little evidence in interviews and observations of elements that were not stated district priorities, such as the use of technology in instruction.

Standard Summaries

Leadership, Governance, and Communication

Since the last EQA review, the district's ratings improved on seven of the nine indicators in this standard previously rated 'Poor' or 'Unsatisfactory' in the 2005 report. The only indicators in the

standard of Leadership, Governance, and Communication receiving ratings below 'Satisfactory' in the 2005 report concerned the budget and provisioning for students. Specific issues involved budget adequacy, development, allocation, decision-making, and effective controls. In the reexamination period, the leadership of Lowell Public Schools worked within a strained budget environment to strengthen instructional leadership, improve classroom instruction, use student achievement data more effectively, provide supports and safety nets for students, and increase the district's capacity through creative measures.

District leaders described key initiatives implemented during the 'Watch' period. Initiatives in the 2005-2006 school year included opening the Freshman Academy, the purchasing of new text book-based programs for all English courses and several science courses at the high school, beginning the Lowell Teacher Academy, fully implementing the completed units of the Investigations Math program and the Connected Math Program (grades K-8), and starting the math seminars for pre-algebra and algebra (grades 7-8). Additionally, the district piloted benchmark and formative (Galileo) assessments at the middle schools (sponsored by the Department of Education), established the (initial) position of district math specialist at the middle level, and opened the Bartlett Community Partnership School. To strengthen the district's capacity for continuous improvement, the district continued its Leadership Academy, which completed the second year of ""DNA of School Leadership" for K-12 and K-8 administrators."

Programs and services introduced in the 2006-2007 school year included the special education school-based teams, the restoration of science and special education department chair positions at the high school, the READ 180 program at the Freshman Academy, the Scott Foresman and Reading Streets series at the elementary schools, the Power Up reading intervention program for middle school students who need assistance with reading, and math courses for elementary and middle school teachers taught by a consultant. In addition, the district implemented the Connect-ED communication system, instituted X2, a new web-based student database system, initiated an on-line standards-based report card at the elementary and middle schools, began a two-year Leadership Apprentice Program, and developed a five-year capital plan. The district began NISL training for all system-wide and K-8 administrators and introduced the course the "DNA of School Leadership" for the high school administrators.

Even though district leadership was able to target funding to support key initiatives, the adequacy of the budget was still an issue. Interviewees repeatedly mentioned that during the past two years the budget did not meet the district's level of needs. Unmet needs included preschool transportation, additional full-time social workers at each school, more special education and ELA and math intervention staff, more certified ESL teachers, technology to address district goals, and expansion of the summer partnership programs for at-risk youngsters.

The district established ways to better provision for its students in spite of cutbacks. The district established a Grants Management Office, headed by a grants manager and four clerks who monitored the more than $40 million in federal and state grants that the school department received in FY 2006 and FY 2007. The city manager and the city auditor spoke favorably about the monitoring of the grants by the personnel in the Grants Management Office. In addition, the district established partnerships to strengthen its ability to provide professional development, to provide services to at-risk students and families, and to ensure safety and security.

Curriculum and Instruction

Since the last EQA review, the district's ratings improved on seven of the 11 indicators in this standard previously rated 'Poor or Unsatisfactory' in the 2005 report. The EQA also reviewed the district on two additional indicators in the 2007 reexamination. Of the total 13 indicators in the reexamination, the district performed at a satisfactory level on five. The indicators for which the district received a rating below 'Satisfactory' concerned provisioning, alignment between grades K-8 and 9-12, and sufficient improvement in achievement and performance, particularly for students with special needs.

However, Lowell Public Schools made substantial progress in the area of curriculum development and support for instructional improvement for grades K-8 since the prior review. The district had a curriculum development process for the elementary and middle schools that involved teachers in the construction at the district level of the mandated curriculum in the tested content areas. Principals and instructional specialists then brought the mandated curriculum to the teachers in the schools. At the same time, they provided teachers with assessment data on their students. Instructional specialists then supported teachers in implementing the mandated curriculum along with the differentiation through interventions that addressed individual

students' assessed needs. The mandated curriculum brought horizontal and vertical alignment of the curriculum in most content areas. Additionally, District Curriculum Accommodation Plan (DCAP) objectives were essentially implemented in grades K-8.

At the high school, teachers in departments, under the direction of their department heads, had begun to address the horizontal and vertical alignment of their curricula by writing syllabi which listed the content to be addressed in a particular course as well as the alignment of that content with the state learning objectives. These department heads, with as many as 40-members in their departments and four instructional specialists serving the entire high school, did not bring the same focus and support to high school teachers as they developed and implemented their curricula as did the principals and instructional specialists in place in grades K-8.

The curriculum work brought modest gains in student achievement to most subgroup populations. In fact, limited English proficient (LEP) students scored above the state average for all LEP students. However, the gap between the achievement of special education students and that of all students widened during the period under reexamination. Insufficient staffing contributed to this, as well as only recent access to all aspects of the curriculum by special education students.

The district increased time on learning in ELA to a minimum of 120 minutes at the elementary schools. Thirty minutes of the ELA blocks were used for targeted flexible group instruction. Middle schools had 60 minutes for ELA, and provided remedial students with an additional 30 minutes of targeted instruction. The district increased time on learning in math to 100 minutes at the elementary level and 90 minutes at the middle level. Thirty minutes of the math instructional time were used for targeted flexible group instruction, or for grade 7 pre-algebra and grade 8 algebra courses. Instructional periods at the high school were 50 minutes, and the high school provided additional courses for remedial students, including a READ 180 program for grade 9 students.

Educational technology continued to be an issue in the district since many of the large number of computers available were antiquated and could not support the software for the recently revised programs in place in the district.

Assessment and Program Evaluation

Lowell Public Schools improved on all the indicators in this standard included in the reexamination, to a level of 'Satisfactory' for each. During the reexamination period, Lowell enhanced its capacity to generate and interpret data, set goals, measure progress, and evaluate outcomes. The district adopted and created curriculum-based measures in literacy and mathematics in grades K-9 to supplement the MCAS tests, and used them systematically to inform instruction and to monitor students' progress toward the achievement of standards. Lowell purchased an electronic data management system and used this database to analyze individual student, class, whole school, and subgroup performance and needs. The district used data effectively to plan instruction, target struggling students, and evaluate the effectiveness of programs and services.

Since the last examination, Lowell strengthened the relationship between assessment and instruction. Lowell expected K-8 teachers to use current assessment information to plan instruction. Literacy and mathematics specialists assigned to each school and district specialists provided teachers with job-embedded professional development on the interpretation and use of test results to form flexible instructional groups in reading and mathematics. Such data-driven instruction was less evident at the high school level.

Lowell administrators periodically reported to the school committee on the effectiveness and efficiency of instructional and support programs and services, including the K-8 literacy and mathematics programs, extended day and after-school programs, the ELL program, and district transportation services. Administrators used data from assessments and other sources to measure student achievement and the accomplishment of district and school goals. They also used data to justify changes in programs and services and budget requests.

Lowell increased instructional time for literacy and mathematics in grades K-8 to provide targeted instruction in flexible groups for all students, including those functioning at or above grade-level expectations. Over the last two years, proficiency rates increased for the aggregate student population in Lowell as measured by the MCAS tests, especially in mathematics, where the gains were significant although proficiency levels were still below statewide averages.

The district kept accurate records on teacher attendance. Teachers were informed annually of their use of sick and personal leave for the prior year, and principals received monthly updates on the attendance of teachers in their schools. Principals actively monitored teachers' attendance to detect patterns of possible abuse, and used progressive discipline with abusers.

Lowell fully included special education students in regular education classrooms, especially at the elementary level, but the district did not provide the staff serving these included students with adequate and systemic resources, support and training. This was viewed as a reason that the achievement and graduation rates for Lowell special education students were lower and the dropout rate was higher than the statewide averages for similar students.

Human Resource Management and Professional Development

Lowell Pubic Schools improved on eight of the nine indicators in this standard that were previously rated as 'Poor' or 'Unsatisfactory' in the prior EQA review. On seven of the 10 indicators reviewed in this standard (including one additional 2007 indicator), the district performed at or above the 'Satisfactory' level. The team rated the district's provision of professional development as 'Excellent,' a model both exemplary and replicable. In general, the district established strongly enabling conditions to place, retain, and develop a skilled and capable staff.

To fill openings for professional positions, the district prepared a list of eligible teachers monthly for approval by the school committee and for use by principals when hiring. Through litigation in the late 1990's the district had shifted acceptance of transfers to principals rather than assigning transfers based on seniority alone. The school system increased the percentage of Lowell's teachers certified in their teaching area to 93.8 percent. Where certified teachers were not available, the district obtained waivers from the Department of Education, and enrolled them in a district-based licensure program including an in-house practicum and Lowell Teachers Academy courses.

The district's induction program for new teachers was unusually comprehensive. The Teachers Academy offered coursework for new teachers to help prepare them for Lowell's unique educational characteristics, especially in sheltered English immersion and other local curriculum issues. In addition the district provided paid mentors to coach and support new teachers in their

home schools and teacher support teams of school professionals to monitor and support them, as well as frequent classroom visits by principals with two classroom observations, conferences, and evaluations annually. The induction program increased the retention of new teachers to 87 percent of first-year teachers and 92 percent of second-year teachers.

Lowell established an extensive professional development program to strengthen the use of data, literacy and math instruction, professional qualifications, and instructional leadership. The district made professional development courses available to all teachers and provided teachers with credit on the salary scale as an incentive. At the time of the reexamination visit, the district had intensified and expanded its Lowell Program, an on-site, customized master's/CAGS equivalent program in urban teaching operating in collaboration with Fitchburg State College. These district-wide offerings were supplemented by job-embedded professional development at the school level, which was especially effective in grades K-8. Most of this professional development took place during teachers' common planning time, when they met with math, literacy, and ELL specialists collaboratively to review achievement data, adjust curriculum to meet student needs, discuss ELL and other teaching strategies, plan and model lessons, and observe and critique each other's work. On occasion, consultants offered workshops at the school level and participated in collaborative discussions of curriculum adjustments and teaching strategies.

The district cooperated with local colleges and universities to offer a Career Ladder program for its paraprofessionals to complete a bachelor's degree and teacher certification; 26 of the 33 who completed the program were employed by the district as teachers. It offered teleconferencing courses and math and science courses for teachers. It provided National Institute of School Leadership (NISL) training for K-8 and central office administrators and "DNA of School Leadership" training for high school administrators.

The district evaluated its professional development programs through teacher surveys, retention rates of new teachers, and the success of paraprofessionals who became qualified teachers. It engaged outside evaluations of some professional development offerings funded by grants, including an outside evaluation of its mathematics content offerings which indicated success in improving both teacher and student achievement in mathematics.

Evaluation procedures for both administrators and teachers satisfied legal and DOE requirements. Examiners reviewed random personnel files of 105 teachers, three central office administrators, 20 principals, and 25 Unit B administrators. Evaluations were timely, informative, and in many cases instructive, with the exception of a few central office and Unit B administrators whose files did not contain evaluations. The superintendent evaluated all principals and held them accountable for their professional and school goals. Their contracts, as well as those of central office administrators, included a stipend to be based on performance. Half of the principals' evaluations and three of the teachers' evaluations cited student achievement. The district has established a task force to study the evaluation process for teachers.

Access, Participation, and Student Academic Support

In this standard, Lowell Public Schools improved on all 16 of the indicators receiving ratings of 'Poor' and 'Unsatisfactory' in the prior EQA examination (excluding one indicator that was not applicable in the reexamination). Of the 19 indicators reviewed in the reexamination (including three additional 2007 indicators), the district achieved a level of 'Satisfactory' on 16, or 84 percent. The district made efforts to improve support for at-risk students and subgroups, although the district still had areas in need of improvement.

District staff members explained that regular classroom teacher training in Sheltered Instruction Observation Protocol (SIOP) practices contributed to the improved achievement of LEP students. Lowell LEP students performed at or above the state averages on the 2007 MCAS ELA and math tests.

Interviewees reported that regular classroom teachers needed training and classroom support in special education inclusion practices, which the district special education staff began to address in 2007-2008. Special education staff members acknowledged that they provided this additional classroom teacher support because of concern about the low performance of special education students on the MCAS tests. During the reexamination period, Lowell special education students underperformed their peers in the state, and their achievement was substantially below that of all students in Lowell.

High school efforts such as “Operation Attendance” and the Freshman Academy showed promise for improving attendance rates, although since the last EQA review student average attendance rates remained unchanged at just below 93 percent. Chronic absence rates continued at high levels in the high school, and average attendance rates at the high school level were substantially below those for grades K-8. Student participation rates in MCAS testing improved during the reexamination period. For the aggregate student population in Lowell, MCAS test participation rates in 2007 were no lower than 99 percent at any grade level. Participation rates were 97 percent or higher for most student subgroups, except for students with disabilities in grade 10 ELA, whose participation rate was 92 percent.

Student suspension, retention, dropout, and graduation rates improved since the last EQA review. In-school and out-of-school suspension rates dropped below state averages over the last two years. Retention and dropout rates were lower in 2006 than in 2005. The EQA team found no suspension, retention, or dropout issues for any minority subpopulations during the period reexamined. Grade 9 students had the highest suspension, retention, and dropout rates during the last two years. LEP, special education, and Hispanic students had lower graduation rates than the aggregate population. Yet, the 2006 graduation rate for Lowell Public Schools exceeded the Massachusetts urban district graduation rate.

Financial and Asset Management Effectiveness and Efficiency

Rather than reexamine the district only on those 2005 indicators on which the district was rated ‘Poor’ or ‘Unsatisfactory,’ the EQA conducted a full examination of the district on Standard VI covering the period 2005-2007. The EQA examiners gave the Lowell Public Schools an overall rating of ‘Satisfactory’ on this standard. They rated the district as ‘Satisfactory’ on ten and ‘Needs Improvement’ on three of the thirteen performance indicators in this standard.

Generally, the EQA team determined that the district had a sound budget development process and fiscal management procedures. However, the district had limited local funds to provide for student needs and improve its facilities. The district had a timeline for development of the budget process, but ultimate decisions were heavily dependent on final revenue determinations from the state legislature. The process began in January and the superintendent involved all administrators and other staff members in the preparation. Interviewees acknowledged that the analysis of

student assessment data was an integral part of the process, and when the superintendent met with the budget subcommittee of the school committee, that subcommittee expected to receive assessment data along with financial data. The superintendent developed the budget using a three-phase process: a trade off budget which consisted of programmatic changes with no net cost increase; an essential needs budget, which consisted of mandates the district was required to do such as the special education program; and a critical needs budget, which consisted of items that should be put in place to enable the district to move in the right direction. Members of the school committee supported this process. The full school committee held public hearings after receiving the budget and voted a recommended budget after deliberations. City officials made the final determination concerning the school committee budget.

With a high level of need and limited local funding, the school district was heavily dependent on Chapter 70 aid and on federal and state entitlement and competitive grants. The district did not meet net school spending requirements for the period under review and for a number of prior years, but always met the 95 percent spending requirement. When federal and state entitlement grants began to be cut, the district did not have adequate local funding to absorb these reductions and therefore had to reduce programs, services, and personnel. Most school administrators, and school committee members, in interviews, expressed concerns about an inadequate school budget. School personnel articulated the need for more up to date technology and general supplies. Some city personnel felt that the building program of schools in the district had been a benefit to the schools but that it was consuming a large part of available city and school funds.

The district was in the process of developing a capital improvement plan. The city was also adopting a capital maintenance plan, which would incorporate the school district's plan. A preventative maintenance plan was not in place and the routine maintenance of the schools was the responsibility of the city. The city had a number of licensed tradespeople, but principals commented in interviews that response time to repair requests was not timely. The city did attempt to address its needs relative to new construction and rehabilitation of school buildings. A review of the Massachusetts School Building Authority's audit of the district's school buildings conducted in 2006 indicated that in the past decade the city had an ambitious building and rehabilitation program, which continued to the time of the reexamination, with new construction

and rehabilitation projects in process. The district's schools were clean and secure with all buildings having security equipment in place and access to exterior doors monitored.

Analysis of MCAS Student Achievement Data

The EQA's analysis of student achievement data focuses on the MCAS test results for 2004-2007, with primary attention paid to the 2007 MCAS tests. This analysis is framed by the following five essential questions:

1. **Achievement: Are the district's students reaching proficiency levels on the MCAS examination?**
2. **Equity of Achievement: Do MCAS test results vary among subgroups of students?**
3. **Improvement: Has the district's MCAS test performance improved over time?**
4. **Equity of Improvement: Has the equity of MCAS test performance among the district's student subgroups improved over time?**
5. **Participation: Are all eligible students participating in required state assessments?**

In order to respond accurately to these questions, the EQA subjected the most current state and district MCAS test results to a series of analyses to determine whether there were differences between the mean results of district students and those of students statewide or among student subgroups within the district. Descriptive analyses of the 2007 MCAS test results revealed differences between the achievement of students in Lowell and the average scores of students in Massachusetts.

To highlight those differences, the data were then summarized in several ways: a performance-level based summary of student achievement in Lowell; and comparative analyses of district wide, subject-area, grade, school, and subgroup achievement in relation to that of students statewide, in relation to the district averages, and in relation to other subject areas, grades, and subgroups.

The EQA then subjected the data to gap analysis, a statistical method that describes the relationship between student aggregate and subgroup performance and the state standard or target of 100 percent proficiency on the MCAS tests. Gap analysis also describes the relative achievement of different entities at a specific point in time, as well as how those relationships change over time. Gap analysis consists of several separate indicators, each of which builds on the others, and can be applied to a district, school, or subgroup of students.

The basis for gap analysis is the *proficiency index*, which is a measure of student performance that shows whether students have attained or are making progress toward proficiency, or meeting the state standard. The unit of measure is proficiency index (PI) points, and a score of 100 indicates that all students in the aggregate or in a subgroup are proficient. It can be calculated for overall achievement as well as achievement in an individual subject. Please see Appendix A for more detailed information about the proficiency index

The *proficiency gap* is a measure of the number of proficiency index points by which student achievement must improve to meet the goal of proficiency for all students. It is the gap or difference between the current level of proficiency as measured by the proficiency index and the target of 100. A gap of zero indicates that all students in the aggregate or in a subgroup are proficient.

The *performance gap* is a measure of the range of, or variance in, achievement among different student subgroups within a district or school at a specific point in time. It measures the differences between the proficiency index of the highest-performing subgroup and those of the other subgroups. It also measures the difference in performance between any two subgroups.

Achievement

Are the district's students reaching proficiency levels on the MCAS examination?

Findings:

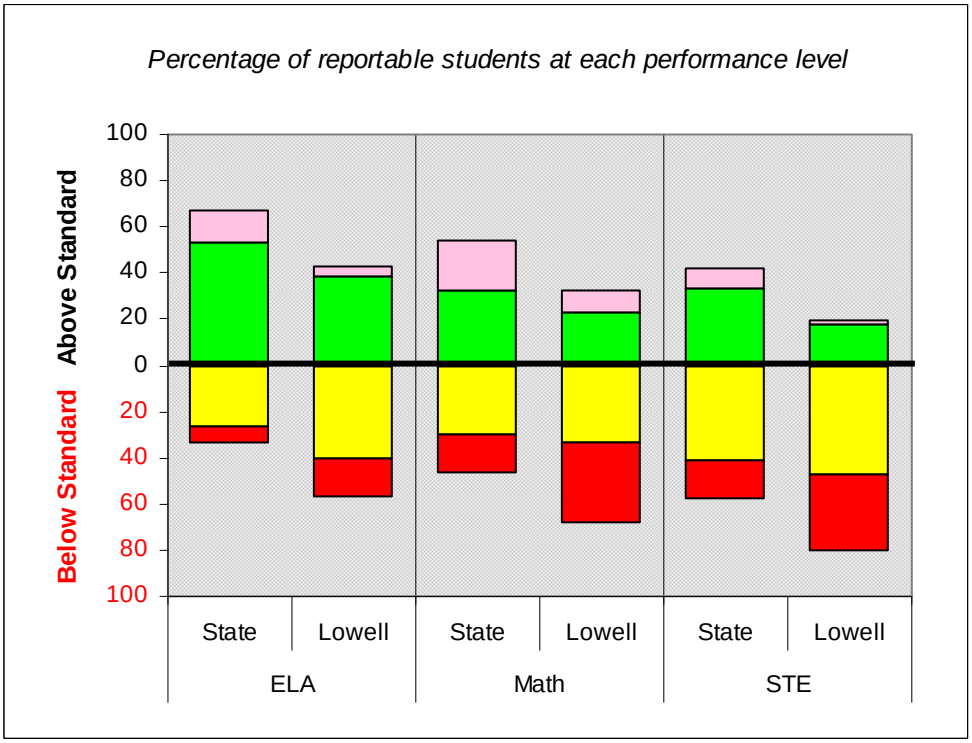
- On average, more than two-fifths of the students in Lowell Public Schools attained proficiency in English language arts (ELA) on the 2007 MCAS tests, one-third of Lowell students attained proficiency in math, and slightly less than one-fifth attained proficiency in science and technology/engineering (STE). Ninety-three percent of the Class of 2007 attained a Competency Determination.

- Lowell's ELA proficiency index on the 2007 MCAS tests was 73 proficiency index (PI) points. This resulted in a proficiency gap, the difference between its proficiency index and the target of 100, of 27 PI points, 13 points wider than the state's average proficiency gap in ELA. This gap would require an average improvement in performance of nearly four PI points annually to achieve adequate yearly progress (AYP).

- In 2007, Lowell's math proficiency index on the MCAS tests was 60 PI points, resulting in a proficiency gap of 40 PI points, 16 points wider than the state's average proficiency gap in math. This gap would require an average improvement of nearly six PI points per year to achieve AYP.

- Lowell's STE proficiency index in 2007 was 56 PI points, resulting in a proficiency gap of 44 PI points, 16 points wider than that statewide.

Figure/Table 1: MCAS Test Performance by Subject, 2007



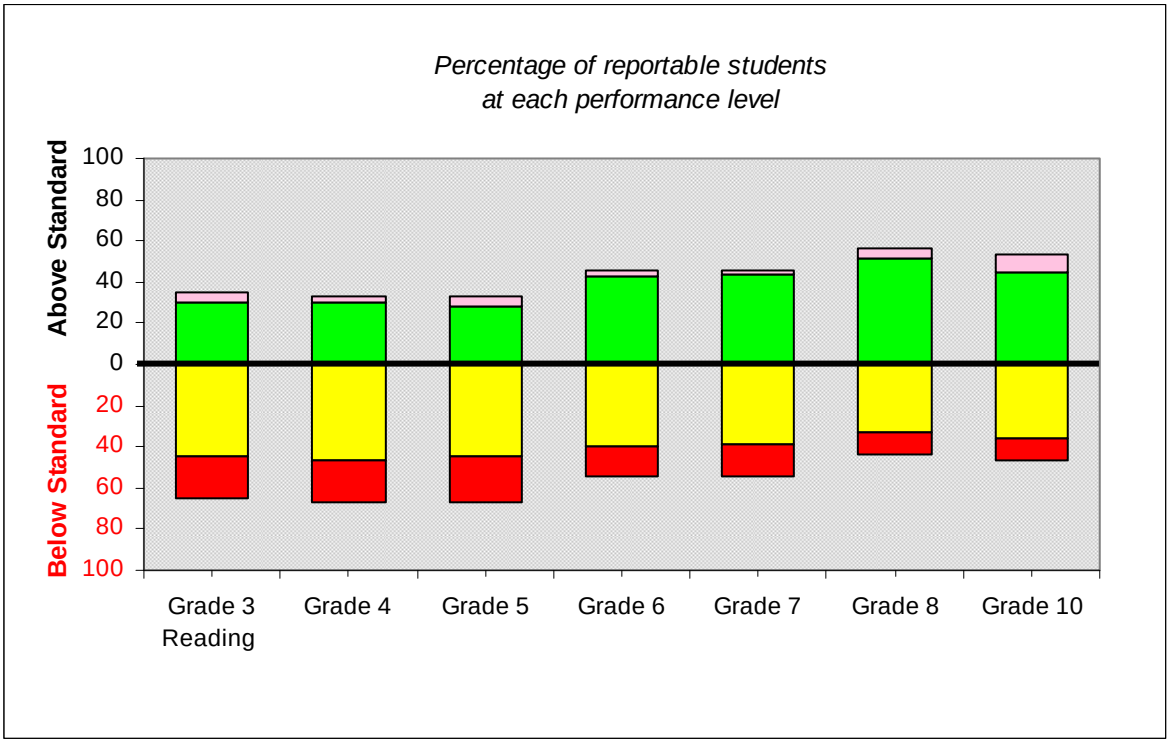
	ELA		Math		STE	
	State	Lowell	State	Lowell	State	Lowell
Advanced	13	5	22	10	9	2
Proficient	53	39	32	23	34	17
Needs Improvement	27	40	30	33	41	47
Warning/Failing	7	16	17	34	17	33
Percent Attaining Proficiency	66	44	54	33	43	19
Proficiency Index (PI)	85.7	72.6	76.1	60.4	72.1	56.3

In 2007, achievement in English language arts (ELA), math, and science and technology/engineering (STE) was lower in Lowell than statewide. In Lowell, 44 percent of students attained proficiency in ELA, compared to 66 percent statewide; 33 percent attained proficiency in math, compared to 54 percent statewide; and 19 percent attained proficiency in STE, compared to 43 percent statewide.

The 2007 proficiency index for Lowell students in ELA was 73 PI points, compared to 86 PI points statewide; in math it was 60 PI points, compared to 76 points statewide; and in STE it was 56 PI points, compared to 72 points statewide.

The ELA proficiency gap for Lowell students in 2007 was 27 PI points, compared to 14 PI points statewide, and would require an average improvement of nearly four PI points annually to make AYP. Lowell's math proficiency gap in 2007 was 40 PI points, compared to 24 PI points statewide, and would require an average improvement of nearly six PI points per year to make AYP. Lowell's STE proficiency gap was 44 PI points, compared to 28 PI points statewide.

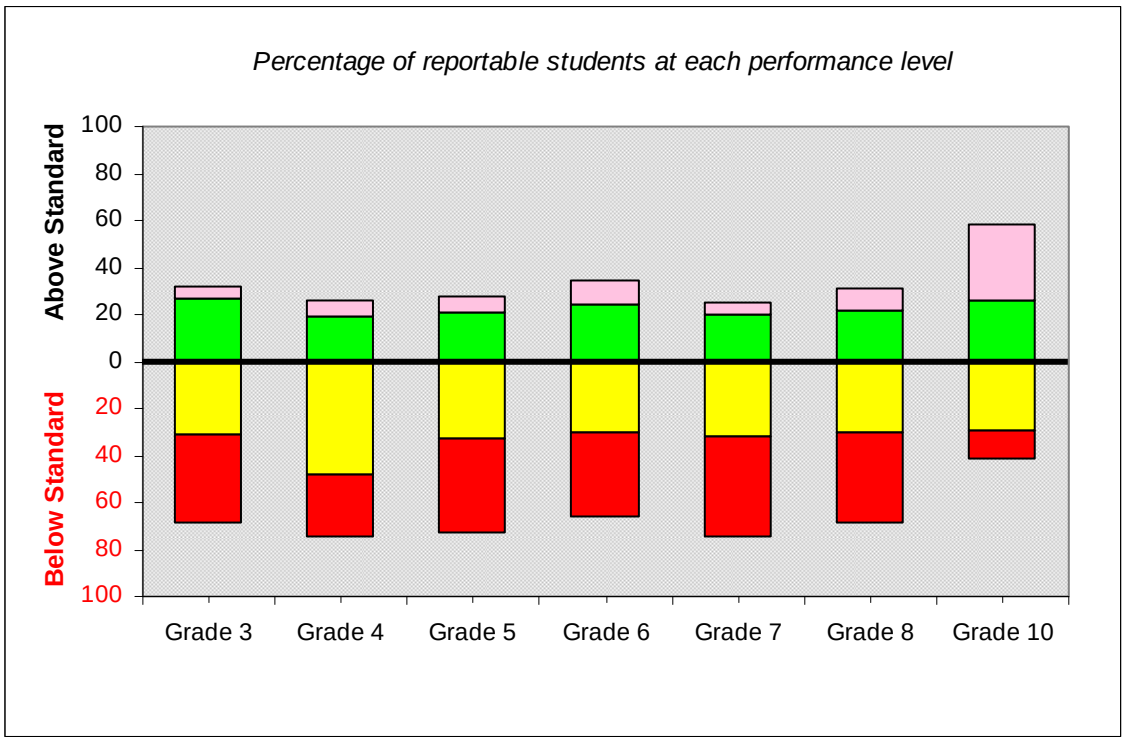
Figure/Table 2: MCAS English Language Arts (ELA) Test Performance by Grade, 2007



	Grade 3 Reading	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10
Advanced	5	4	5	3	2	5	9
Proficient	30	30	28	43	44	51	45
Needs Improvement	44	46	45	40	38	33	36
Warning/Failing	21	20	22	14	16	10	10
Percent Attaining Proficiency	35	34	33	46	46	56	54

The percentage of Lowell students attaining proficiency in ELA in 2007 varied by grade level, ranging from a low of 33 percent at grade 5 to a high of 56 percent at grade 8.

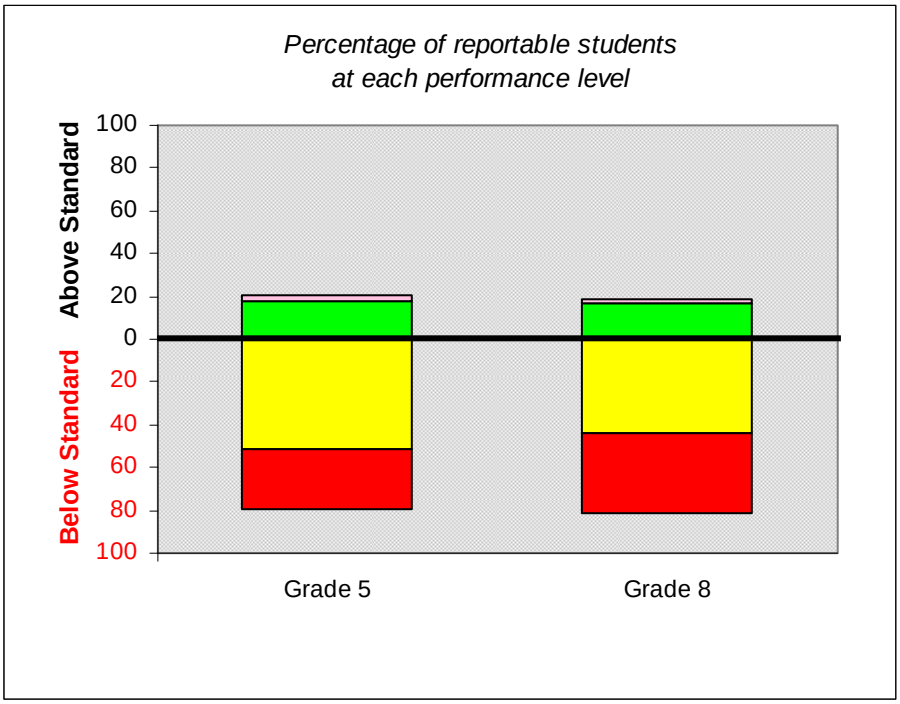
Figure/Table 3: MCAS Math Test Performance by Grade, 2007



	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10
Advanced	4	6	6	10	5	10	32
Proficient	27	19	21	25	20	21	26
Needs Improvement	31	48	33	31	32	30	29
Warning/Failing	38	27	39	35	43	38	13
Percent Attaining Proficiency	31	25	27	35	25	31	58

The percentage of Lowell students attaining proficiency in math in 2007 also varied by grade level, ranging from a low of 25 percent at grades 4 and 7 to a high of 58 percent at grade 10.

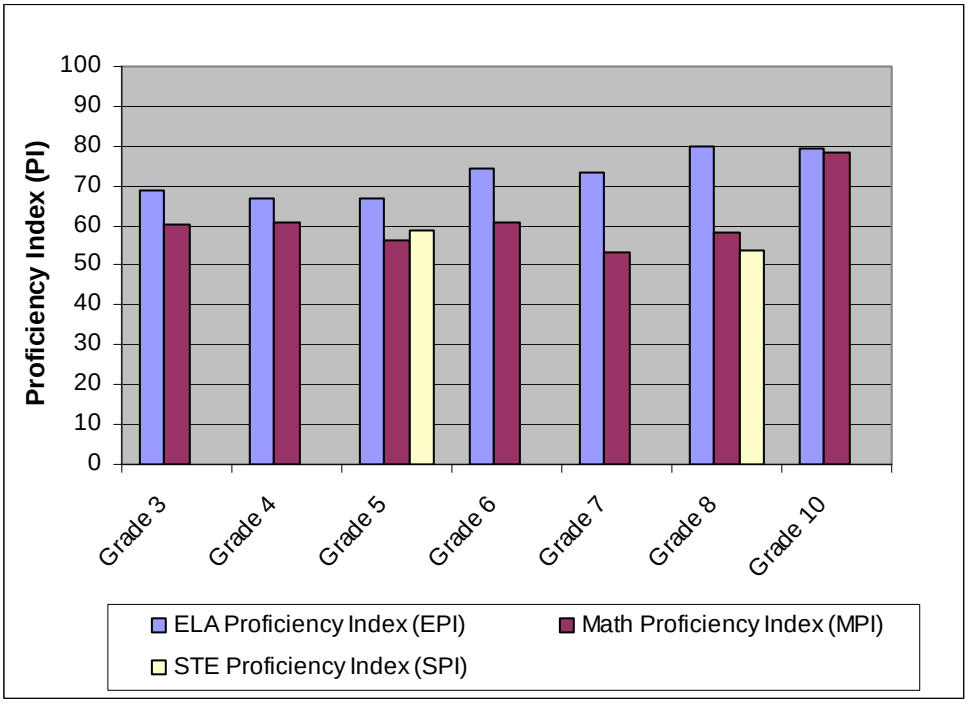
Figure/Table 4: MCAS Science and Technology/Engineering (STE) Test Performance by Grade, 2007



	Grade 5	Grade 8
Advanced	2	2
Proficient	18	17
Needs Improvement	52	44
Warning/Failing	28	38
Percent Attaining Proficiency	20	19

In Lowell in 2007, 20 percent of grade 5 students attained proficiency in STE, and 19 percent of grade 8 students did so.

Figure/Table 5: MCAS Proficiency Indices by Grade and Subject, 2007

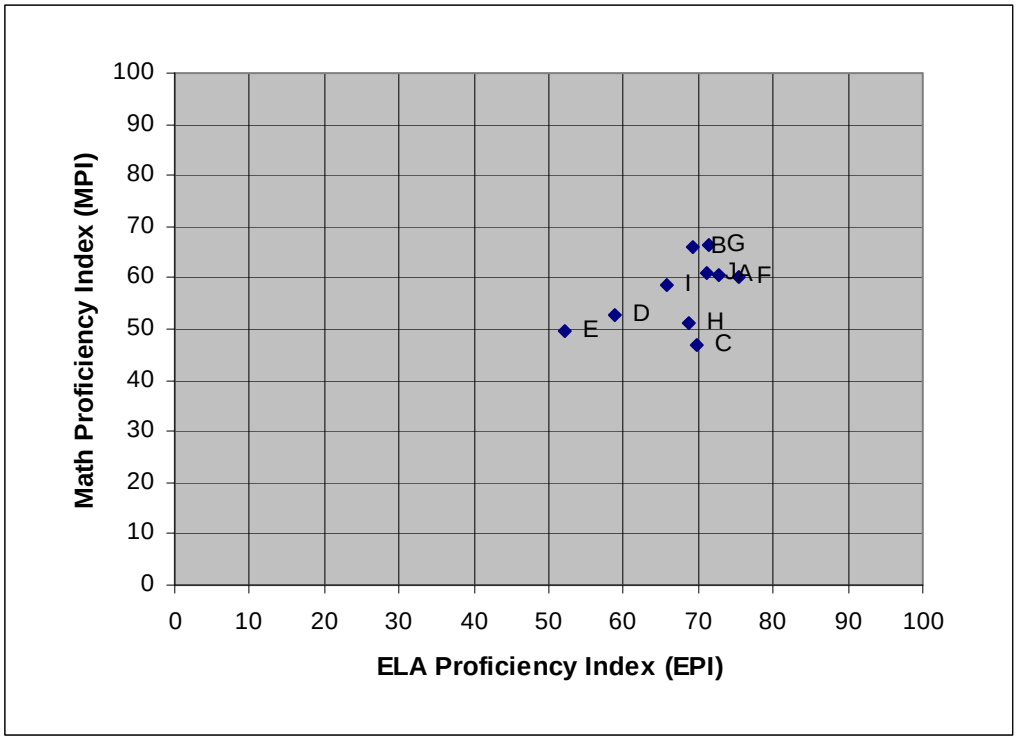


	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10
ELA Proficiency Index (EPI)	68.7	67.0	66.6	74.4	73.3	80.1	79.2
Math Proficiency Index (MPI)	60.4	60.8	56.1	60.8	53.5	58.5	78.4
STE Proficiency Index (SPI)			58.7			54.0	

At every grade level, the performance of Lowell students on the 2007 MCAS tests was strongest in ELA. Lowell's ELA proficiency gap in 2007 ranged from a low of 20 PI points at grade 8 to a high of 33 PI points at grades 4 and 5. Lowell's math proficiency gap ranged from a low of 22 PI points at grade 10 to a high of 46 PI points at grade 7. Lowell's STE proficiency gap was 41 PI points at grade 5 and 46 PI points at grade 8.

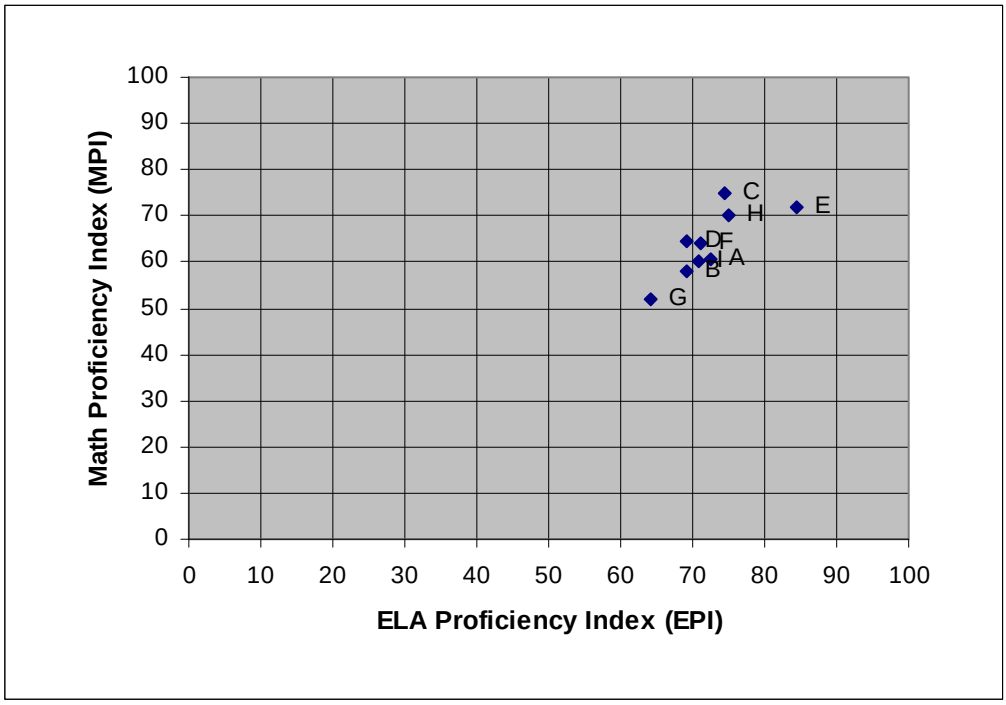
Figures 6 A-C/Table 6: MCAS ELA Proficiency Index (EPI) vs. Math Proficiency Index (MPI) by School, 2007

A. Elementary Schools



		ELA PI	Math PI	Number of Tests
A	LOWELL DISTRICT AVERAGE	72.6	60.4	13,848
B	ABRAHAM LINCOLN	69.3	66.2	313
C	BARTLETT COMMUNITY PARTNERSHIP	69.7	47.0	511
D	CHARLES W. MOREY	58.9	52.7	325
E	CHARLOTTE M. MURKLAND	52.2	49.8	303
F	DR. AN WANG	75.5	60.0	1,181
G	DR. GERTRUDE BAILEY	71.3	66.4	348
H	E. N. ROGERS	68.8	51.3	1,115
I	GREENHALGE	65.9	58.5	285
J	JOHN J. SHAUGHNESSY	71.0	60.8	310

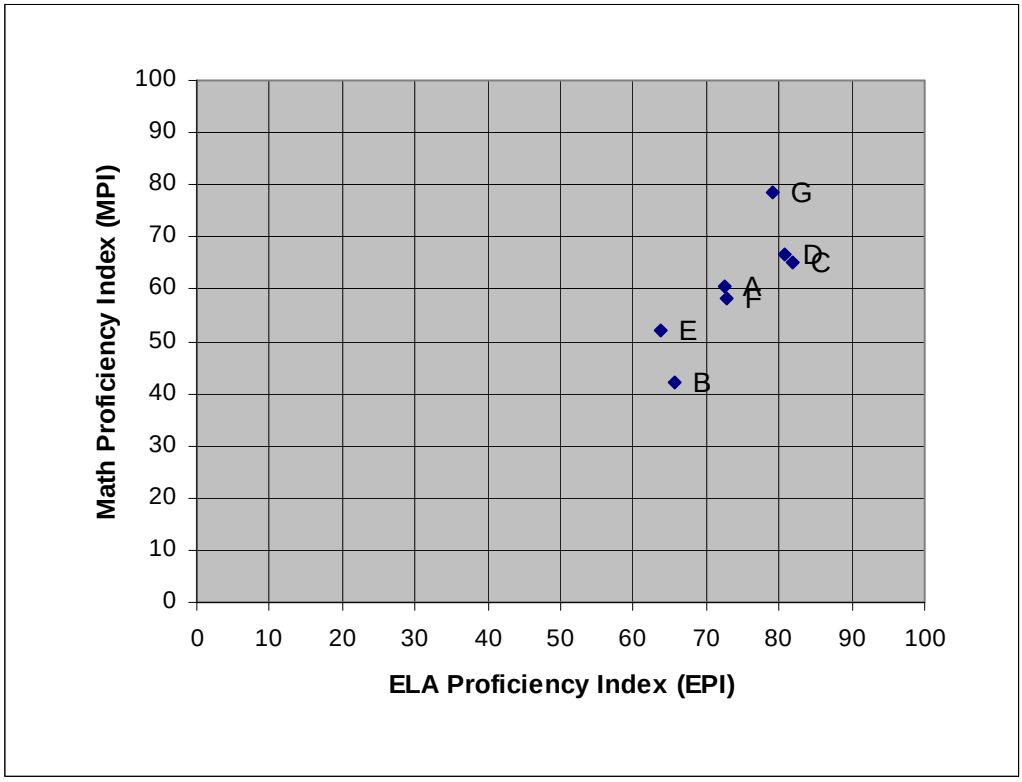
B. Elementary Schools, continued



		ELA PI	Math PI	Number of Tests
A	LOWELL DISTRICT AVERAGE	72.6	60.4	13,848
B	JOSEPH MCAVINNUE	69.2	58.2	336
C	MOODY	74.4	74.7	160
D	PETER W. REILLY	69.1	64.7	396
E	PYNE ARTS	84.4	71.7	554
F	S. CHRISTA MCAULIFFE	71.2	64.2	263
G	VARNUM ARTS	64.1	52.0	152
H	WASHINGTON	75.0	70.1	122
I	PAWTUCKETVILLE MEMORIAL	70.9	60.1	327

Among Lowell's elementary schools, the ELA proficiency gap in 2007 ranged from a low of 16 PI points at Pyne Arts Elementary to a high of 48 PI points at Charlotte Murkland Elementary. Lowell's math proficiency gap ranged from a low of 25 PI points at Moody Elementary to a high of 53 PI points at Bartlett Community Partnership.

C. Middle and High Schools



		ELA PI	Math PI	Number of Tests
A	LOWELL DISTRICT AVERAGE	72.6	60.4	13,848
B	HENRY J. ROBINSON MIDDLE	65.6	42.0	1,042
C	JAMES S. DALEY MIDDLE	81.8	65.3	1,283
D	JAMES SULLIVAN MIDDLE	80.7	66.5	1,126
E	KATHRYN P. STOKLOSA MIDDLE	63.7	52.0	1,032
F	B.F. BUTLER MIDDLE	72.8	58.3	866
G	LOWELL HIGH	79.2	78.4	1,498

Among Lowell's middle and high schools, the ELA proficiency gap in 2007 ranged from a low of 18 PI points at Daley Middle to a high of 36 PI points at Stoklosa Middle. Lowell's math proficiency gap ranged from a low of 22 PI points at Lowell High to a high of 58 PI points at Robinson Middle.

Equity of Achievement

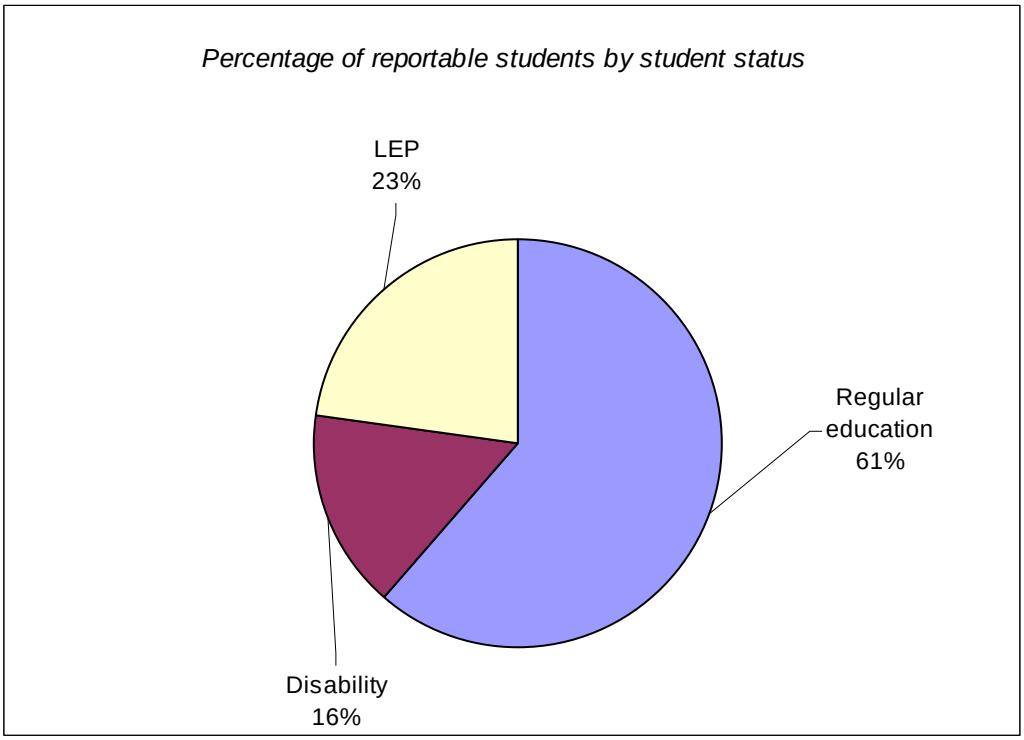
Do MCAS test results vary among subgroups of students?

Findings:

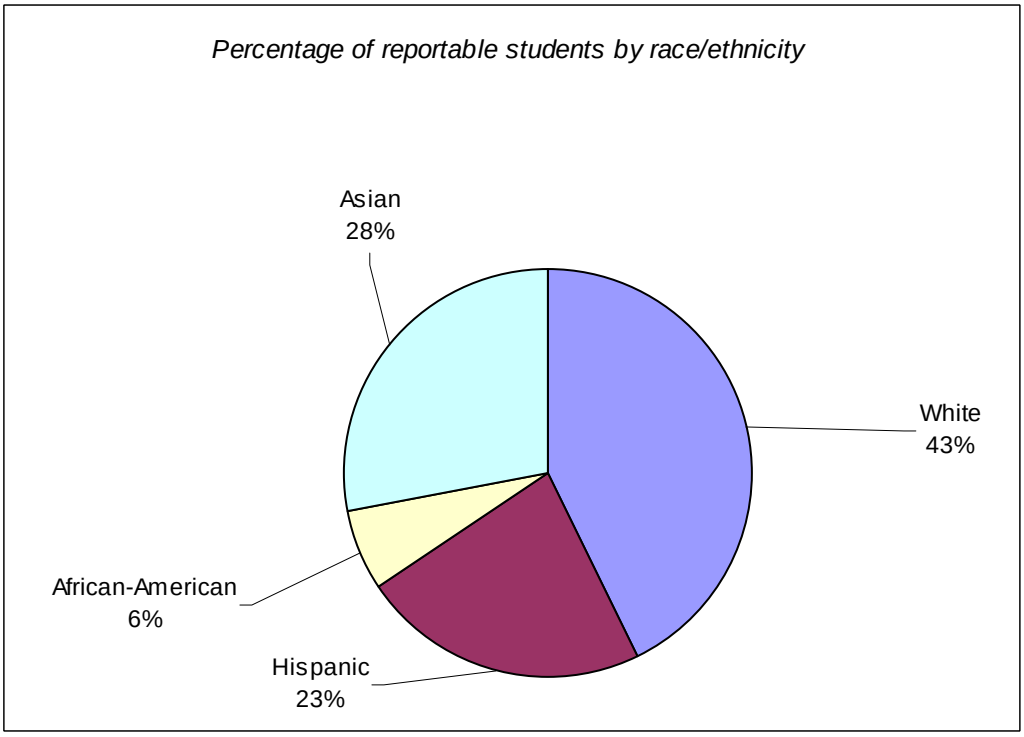
- MCAS performance in 2007 varied considerably among subgroups of Lowell students. Of the nine measurable subgroups in Lowell, the gap in performance between the highest- and lowest-performing subgroups was 40 PI points in ELA (regular education students, students with disabilities, respectively) and 39 PI points in math (non low-income students, students with disabilities, respectively).
- The proficiency gaps in Lowell in 2007 in both ELA and math were wider than the district average for students with disabilities, limited English proficient (LEP) students, Hispanic students, African-American students, and low-income students (those participating in the free or reduced-cost lunch program).
- The proficiency gaps in ELA and math were narrower than the district average for regular education students, White students, and non low-income students.
- For Asian students, the proficiency gap in ELA was wider than the district average and in math it was narrower than the district average.

Figures 7 A-C/Table 7: Student Population by Reportable Subgroups, 2007

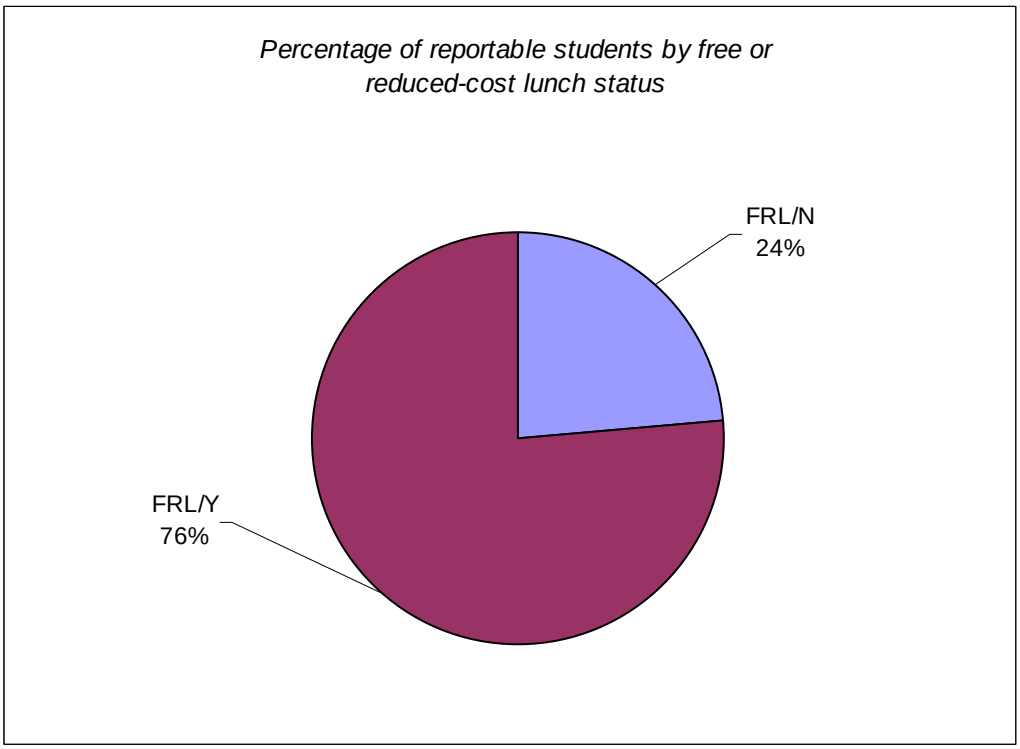
A.



B.



C.

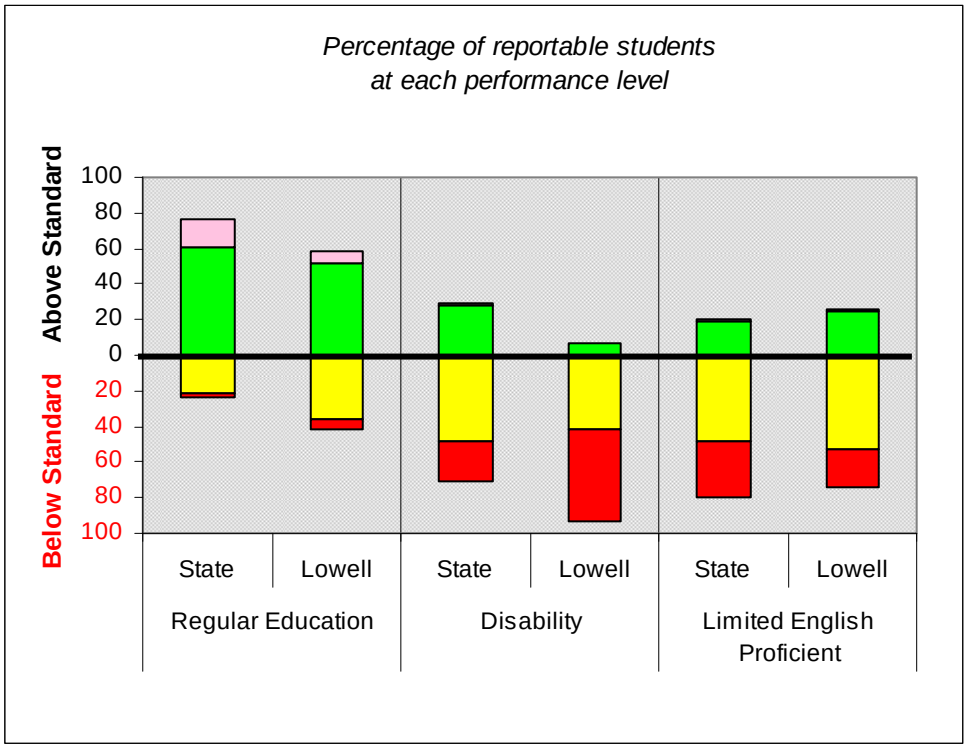


	Subgroup	Number of Students
Student status	Regular education	4,323
	Disability	1,103
	LEP	1,602
Race/ethnicity	White	2,991
	Hispanic	1,578
	African-American	442
	Asian	1,965
Free or reduced-cost lunch status	FRL/N	1,655
	FRL/Y	5,373

Note: Data include students in tested grades levels only.

In Lowell in 2007, 16 percent of the students tested were students with disabilities and 23 percent were limited English proficient (LEP) students. The majority of the students tested were non-White, including 23 percent Hispanic, six percent African-American, and 28 percent Asian. Seventy-six percent of the tested students participated in the free or reduced-cost lunch program.

Figure/Table 8: MCAS English Language Arts (ELA) Test Performance by Student Status Subgroup, 2007

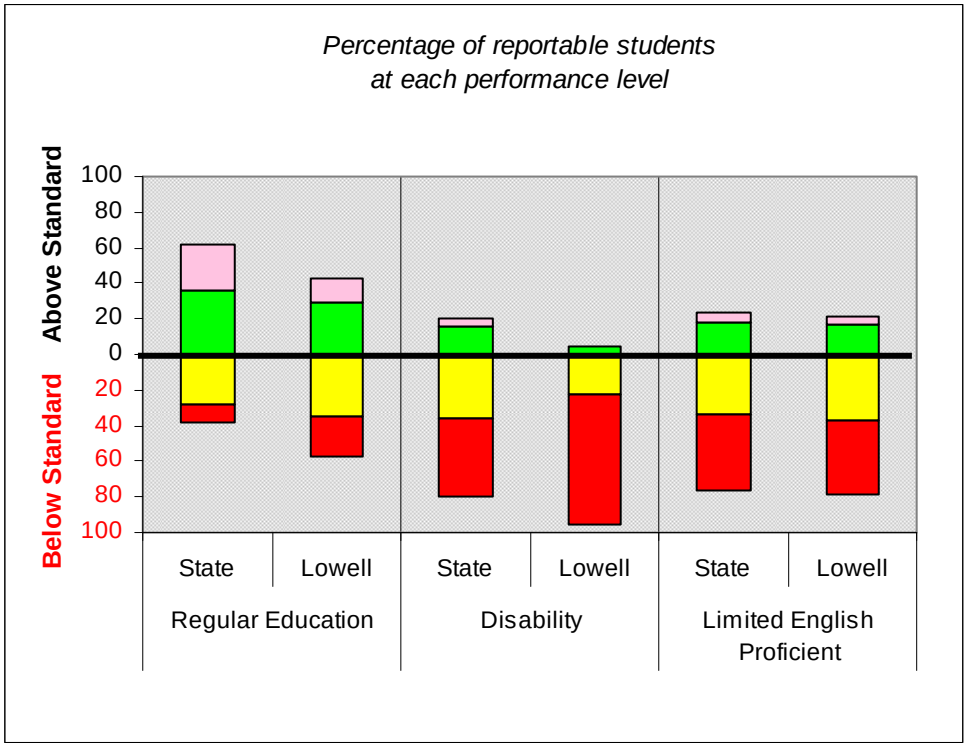


	Regular Education		Disability		Limited English Proficient	
	State	Lowell	State	Lowell	State	Lowell
Advanced	16	7	2	0	1	1
Proficient	60	51	28	7	19	24
Needs Improvement	21	36	48	41	48	53
Warning/Failing	2	6	22	52	31	21
Percent Attaining Proficiency	76	58	30	7	20	25
Proficiency Index (EPI)	91.3	82.9	64.8	42.6	57.3	63.5

In Lowell in 2007, the proficiency rate in ELA of regular education students was over eight times greater than that of students with disabilities and more than two times greater than that of limited English proficient students. Fifty-eight percent of regular education students, seven percent of students with disabilities, and 25 percent of LEP students attained proficiency in ELA on the 2007 MCAS tests.

Lowell's ELA proficiency gap in 2007 was 17 PI points for regular education students, compared to nine PI points statewide; 57 PI points for students with disabilities, compared to 35 PI points statewide; and 36 PI points for LEP students, compared to 43 PI points statewide. The performance gap in ELA between Lowell's regular education students and students with disabilities was 40 PI points, and between regular education students and LEP students it was 19 PI points.

Figure/Table 9: MCAS Math Test Performance by Student Status Subgroup, 2007

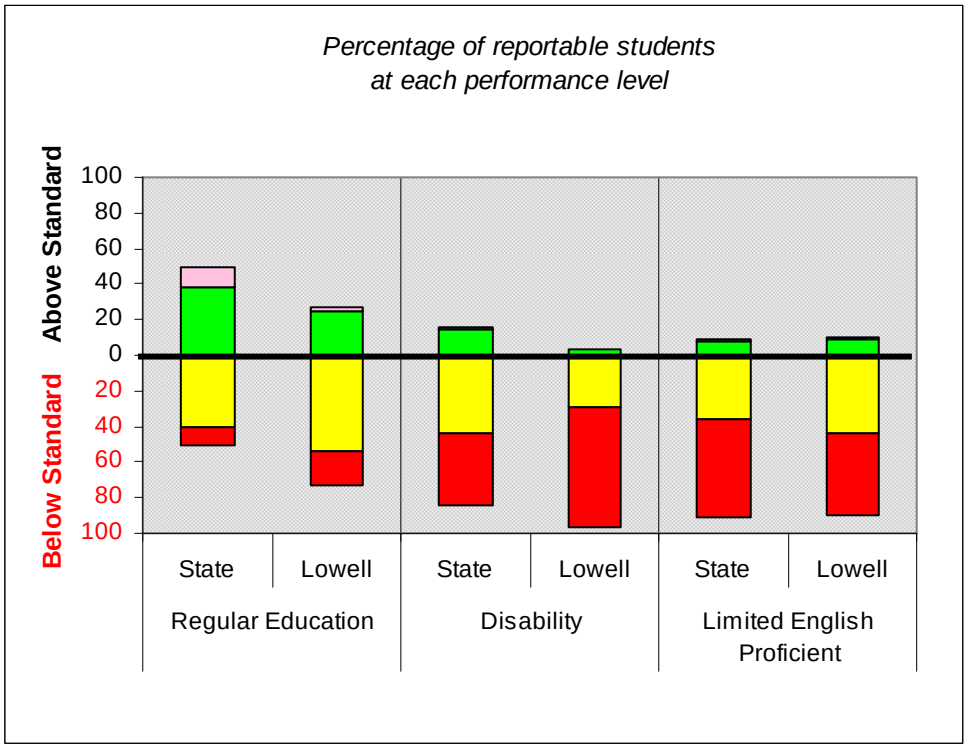


	Regular Education		Disability		Limited English Proficient	
	State	Lowell	State	Lowell	State	Lowell
Advanced	26	14	4	1	6	4
Proficient	36	29	16	4	18	17
Needs Improvement	28	35	36	23	34	37
Warning/Failing	10	23	44	73	43	42
Percent Attaining Proficiency	62	43	20	5	24	21
Proficiency Index (MPI)	82.2	69.7	51.0	32.8	53.0	52.7

In Lowell in 2007, the proficiency rate in math of regular education students was over eight times greater than that of students with disabilities and two times greater than that of limited English proficient students. Forty-three percent of regular education students, five percent of students with disabilities, and 21 percent of LEP students attained proficiency in math on the MCAS tests in 2007.

Lowell's math proficiency gap in 2007 was 30 PI points for regular education students, compared to 18 PI points statewide; 67 PI points for students with disabilities, compared to 49 PI points statewide; and 47 PI points for LEP students, the same as that statewide. The performance gap in math between Lowell's regular education students and students with disabilities was 37 PI points, and between regular education students and LEP students it was 17 PI points.

Figure/Table 10: MCAS Science and Technology/Engineering (STE) Test Performance by Student Status Subgroup, 2007

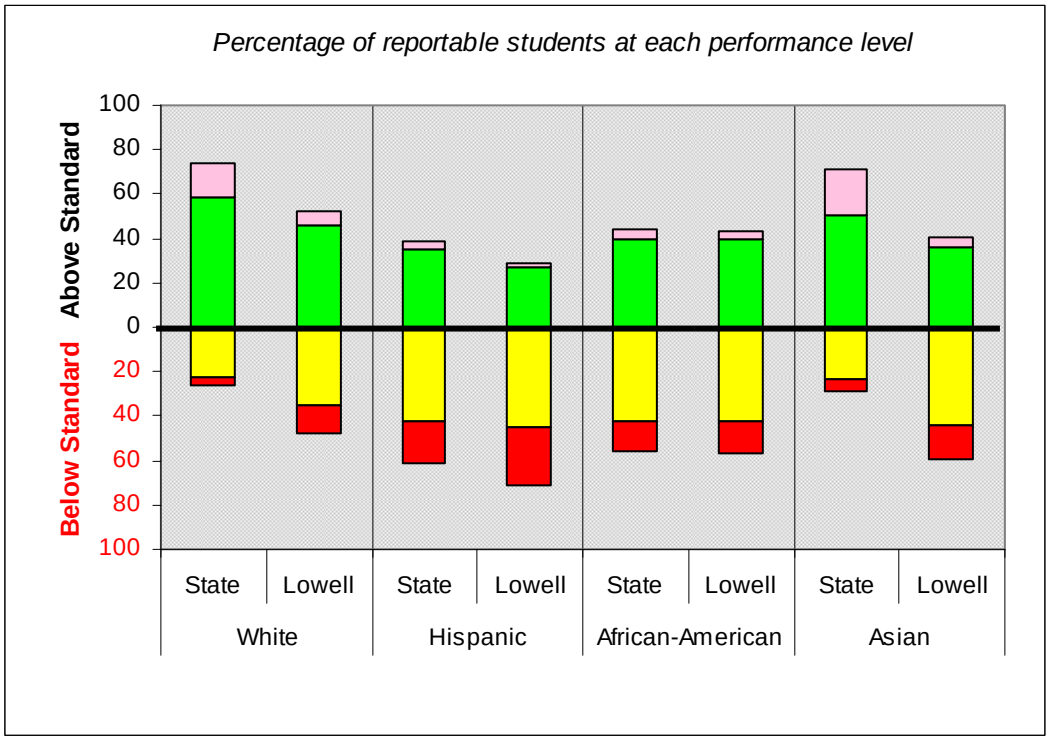


	Regular Education		Disability		Limited English Proficient	
	State	Lowell	State	Lowell	State	Lowell
Advanced	10	3	2	0	1	1
Proficient	39	24	14	3	8	9
Needs Improvement	41	53	44	29	36	44
Warning/Failing	10	19	40	68	55	46
Percent Attaining Proficiency	49	27	16	3	9	10
Proficiency Index (SPI)	77.5	65.4	51.8	35.6	42.2	46.5

In Lowell in 2007, the proficiency rate in science and technology/engineering of regular education students was nine times greater than that of students with disabilities and nearly three times greater than that of LEP students. Twenty-seven percent of regular education students, three percent of students with disabilities, and 10 percent of LEP students attained proficiency in STE on the 2007 MCAS tests.

Lowell's STE proficiency gap in 2007 was 35 PI points for regular education students, compared to 23 PI points statewide; 64 PI points for students with disabilities, compared to 48 PI points statewide; and 54 PI points for LEP students, compared to 58 PI points statewide. The performance gap in STE between Lowell's regular education students and students with disabilities was 30 PI points, and between regular education students and LEP students it was 19 PI points.

Figure/Table 11: MCAS English Language Arts (ELA) Test Performance by Race/Ethnicity Subgroup, 2007

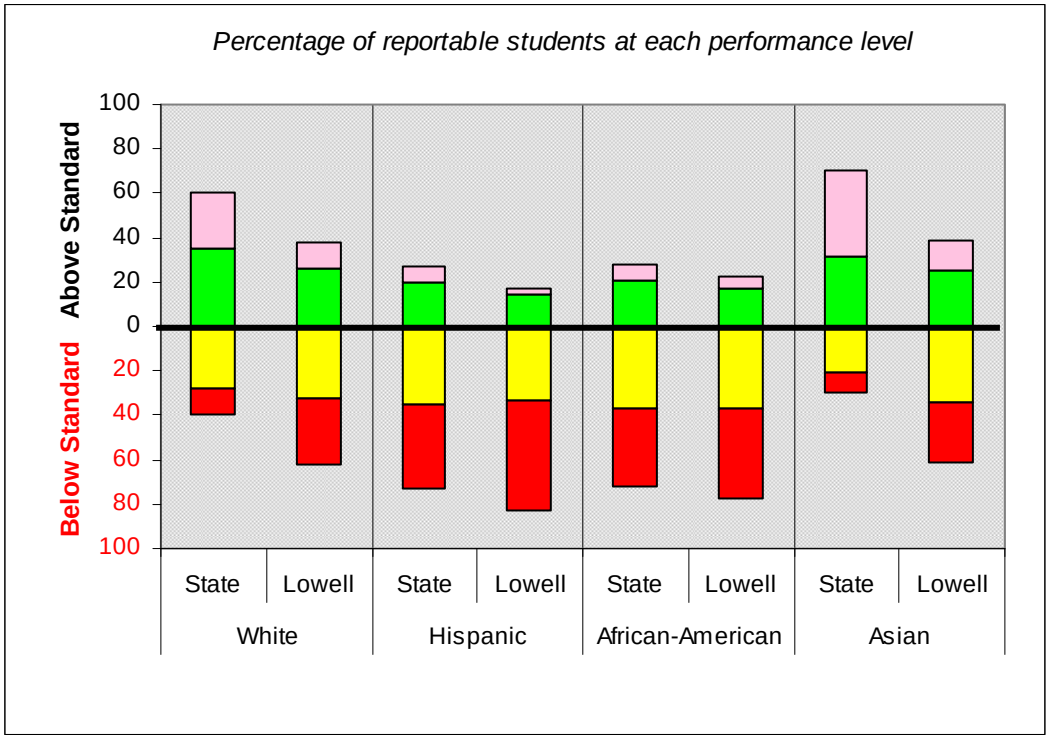


	White		Hispanic		African-American		Asian	
	State	Lowell	State	Lowell	State	Lowell	State	Lowell
Advanced	16	6	3	1	4	4	21	5
Proficient	58	46	35	27	40	40	50	36
Needs Improvement	22	35	43	45	42	42	23	45
Warning/Failing	4	12	19	27	14	14	5	15
Percent Attaining Proficiency	74	52	38	28	44	44	71	41
Proficiency Index (EPI)	89.8	78.1	69.8	62.1	73.9	73.5	87.7	72.5

In Lowell in 2007, performance on the MCAS ELA tests varied widely by race/ethnicity, as 52 percent of White students, 44 percent of African-American students, 41 percent of Asian students, and 28 percent of Hispanic students attained proficiency in ELA on the 2007 MCAS tests.

Lowell's ELA proficiency gap in 2007 was 22 PI points for White students, compared to 10 PI points statewide; 27 PI points for African-American students, compared to 26 PI points statewide; 28 PI points for Asian students, compared to 12 PI points statewide; and 38 PI points for Hispanic students, compared to 30 PI points statewide. The performance gap in ELA between Lowell's White and African-American students was five PI points, between White and Asian students it was six PI points, and between White and Hispanic students it was 16 PI points.

Figure/Table 12: MCAS Math Test Performance by Race/Ethnicity Subgroup, 2007

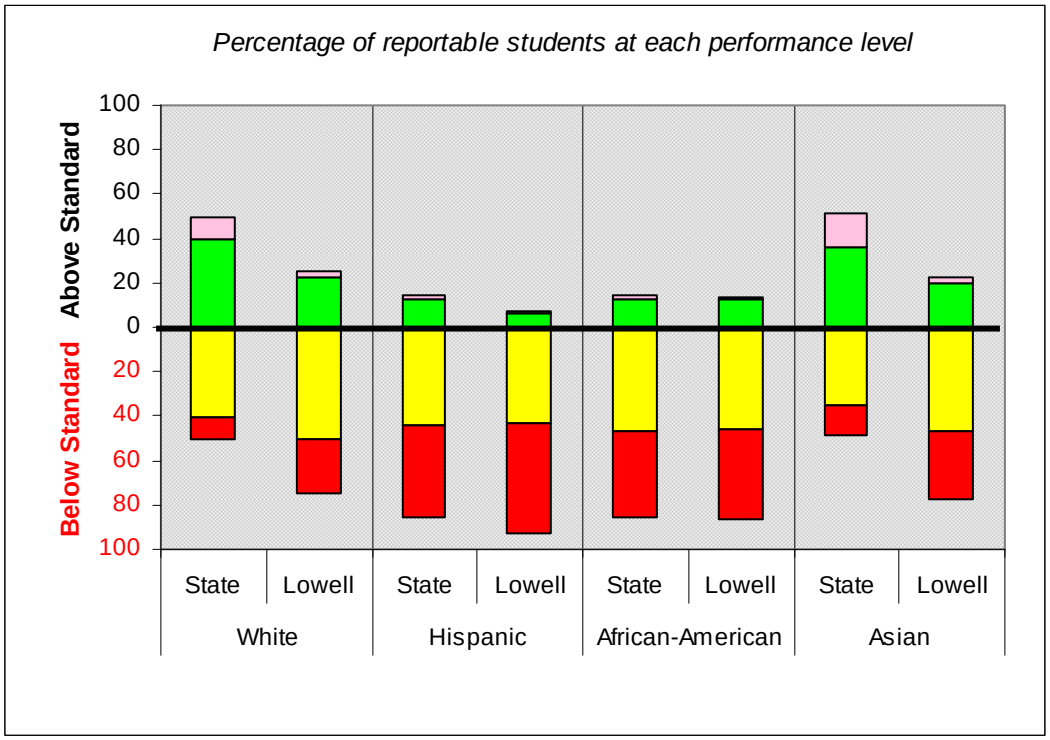


	White		Hispanic		African-American		Asian	
	State	Lowell	State	Lowell	State	Lowell	State	Lowell
Advanced	25	12	7	2	7	5	39	13
Proficient	35	26	20	14	21	17	31	26
Needs Improvement	28	32	35	33	37	37	21	34
Warning/Failing	11	30	37	50	35	41	9	27
Percent Attaining Proficiency	60	38	27	16	28	22	70	39
Proficiency Index (MPI)	80.9	64.6	56.9	47.8	58.4	53.3	85.4	65.9

In Lowell in 2007, performance on the MCAS math tests also varied widely by race/ethnicity, as 39 percent of Asian students, 38 percent of White students, 22 percent of African-American students, and 16 percent of Hispanic students attained proficiency in math on the MCAS tests in 2007.

Lowell's math proficiency gap in 2007 was 34 PI points for Asian students, compared to 15 PI points statewide; 35 PI points for White students, compared to 19 PI points statewide; 47 PI points for African-American students, compared to 42 PI points statewide; and 52 PI points for Hispanic students, compared to 43 PI points statewide. The performance gap in math between Lowell's Asian and White students was one PI point, between Asian and African-American students it was 13 PI points, between Asian and Hispanic students it was 18 PI points.

Figure/Table 13: MCAS Science and Technology/Engineering (STE) Test Performance by Race/Ethnicity Subgroup, 2007

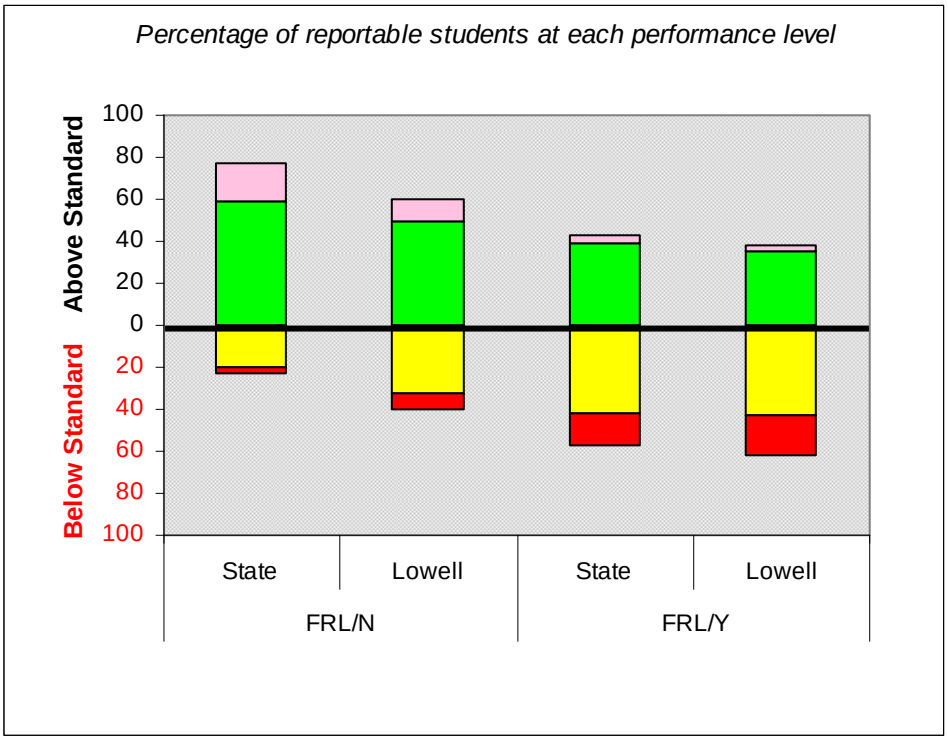


	White		Hispanic		African-American		Asian	
	State	Lowell	State	Lowell	State	Lowell	State	Lowell
Advanced	10	3	2	1	1	1	15	2
Proficient	39	23	13	6	13	13	36	20
Needs Improvement	40	50	44	43	47	46	35	47
Warning/Failing	10	24	41	50	39	41	14	31
Percent Attaining Proficiency	49	26	15	7	14	14	51	22
Proficiency Index (SPI)	78.0	62.3	50.6	43.8	51.3	51.5	76.8	58.0

In Lowell in 2007, performance on the MCAS STE tests likewise varied widely by race/ethnicity, as 26 percent of White students, 22 percent of Asian students, 14 percent of African-American students, and seven percent of Hispanic students attained proficiency in STE on the 2007 MCAS tests.

Lowell's STE proficiency gap in 2007 was 38 PI points for White students, compared to 22 PI points statewide; 42 PI points for Asian students, compared to 23 PI points statewide; 49 PI points for African-American students, the same as that statewide; and 56 PI points for Hispanic students, compared to 49 PI points statewide. The performance gap in STE between Lowell's White and Asian students was four PI points, between White and African-American students it was 11 PI points, and between White and Hispanic students it was 19 PI points.

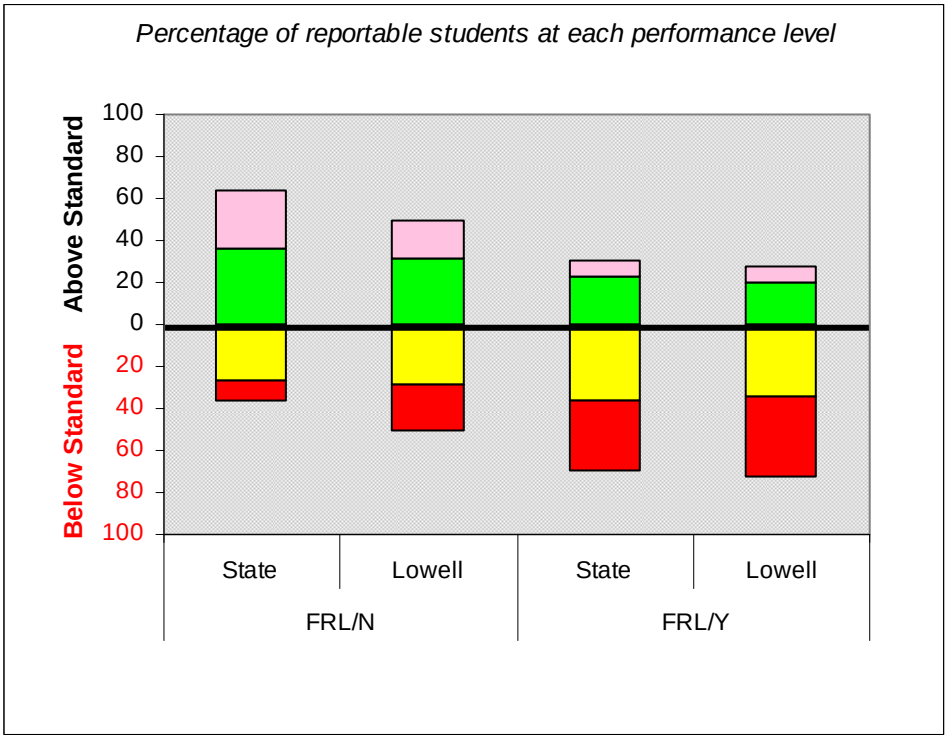
Figure/Table 14: MCAS English Language Arts (ELA) Test Performance by Socioeconomic Status Subgroup, 2007



	FRL/N		FRL/Y	
	State	Lowell	State	Lowell
Advanced	17	10	4	3
Proficient	59	50	39	35
Needs Improvement	20	32	42	43
Warning/Failing	3	8	15	19
Percent Attaining Proficiency	76	60	43	38
Proficiency Index (EPI)	91.0	82.6	73.4	69.6

In Lowell in 2007, 38 percent of low-income (FRL/Y) students attained proficiency in ELA on the MCAS tests, compared to 60 percent of non low-income (FRL/N) students. The ELA proficiency gap was 30 PI points for low-income students, compared to 27 PI points statewide; and 17 PI points for non low-income students, compared to nine PI points statewide. Lowell's performance gap in ELA between the two subgroups was 13 PI points.

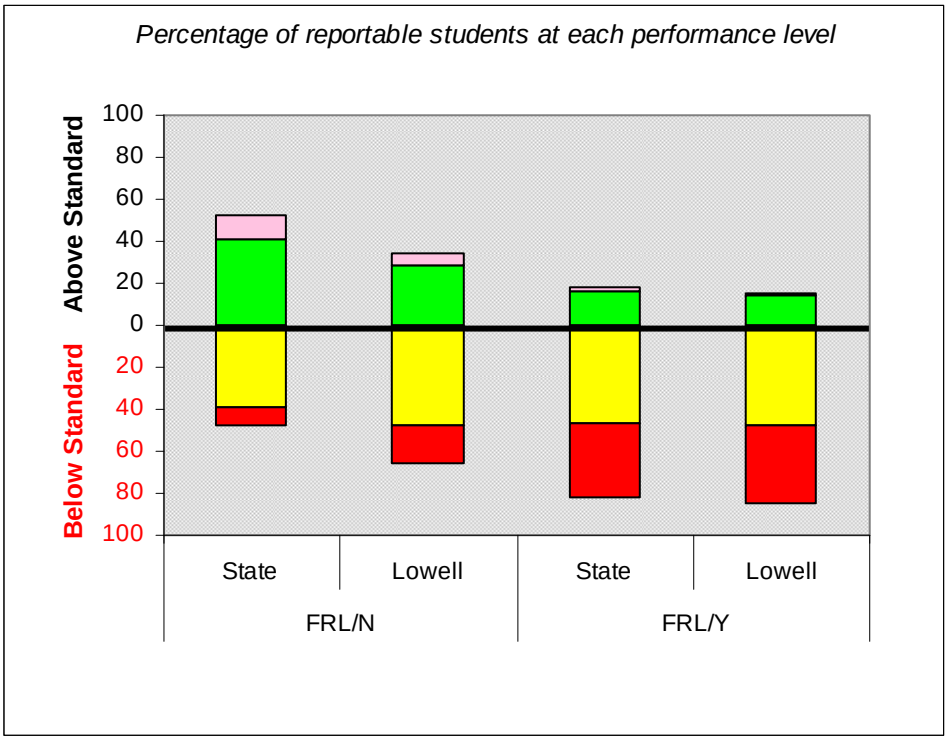
Figure/Table 15: MCAS Math Test Performance by Socioeconomic Status Subgroup, 2007



	FRL/N		FRL/Y	
	State	Lowell	State	Lowell
Advanced	27	18	8	7
Proficient	36	32	23	20
Needs Improvement	27	29	37	35
Warning/Failing	10	22	33	38
Percent Attaining Proficiency	63	50	31	27
Proficiency Index (MPI)	82.7	72.2	60.3	56.9

In Lowell in 2007, 27 percent of low-income (FRL/Y) students attained proficiency in math on the MCAS tests, compared to 50 percent of non low-income (FRL/N) students. The proficiency gap in math was 43 PI points for low-income students, compared to 40 PI points statewide; and 28 PI points for non low-income students, compared to 17 PI points statewide. The performance gap in math between the two subgroups in Lowell was 15 PI points.

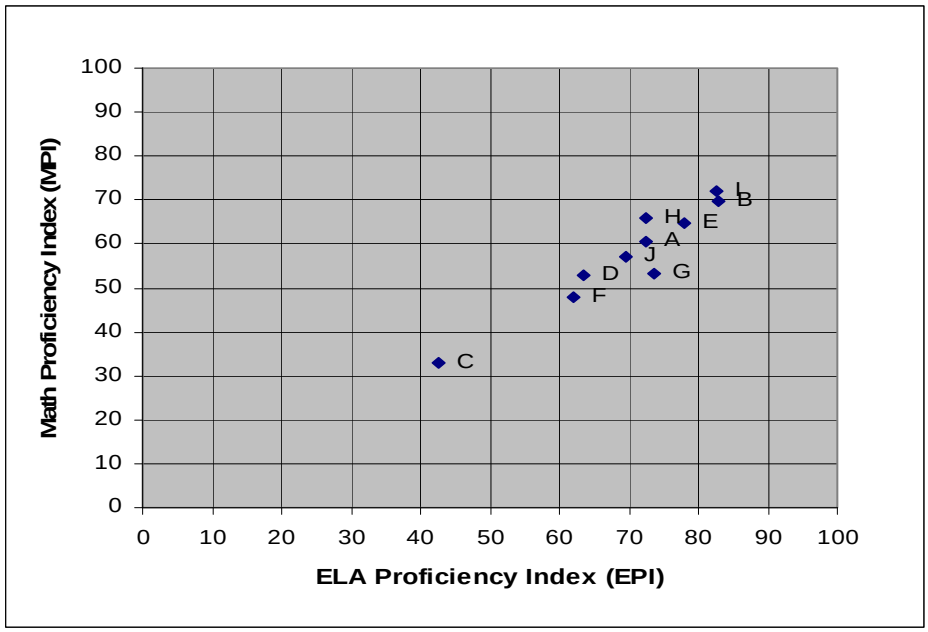
Figure/Table 16: MCAS Science and Technology/Engineering (STE) Test Performance by Socioeconomic Status Subgroup, 2007



	FRL/N		FRL/Y	
	State	Lowell	State	Lowell
Advanced	11	5	2	1
Proficient	41	29	17	14
Needs Improvement	39	48	47	47
Warning/Failing	9	18	34	37
Percent Attaining Proficiency	52	34	19	15
Proficiency Index (SPI)	79.4	68.9	55.2	52.7

In Lowell in 2007, 15 percent of low-income (FRL/Y) students attained proficiency in STE on the MCAS tests, compared to 34 percent of non low-income (FRL/N) students. The proficiency gap in STE was 47 PI points for low-income students, compared to 45 PI points statewide; and 31 PI points for non low-income students, compared to 21 PI points statewide. Lowell's performance gap in STE between the two subgroups was 16 PI points.

Figure/Table 17: MCAS ELA Proficiency Index vs. Math Proficiency Index by Subgroup, 2007



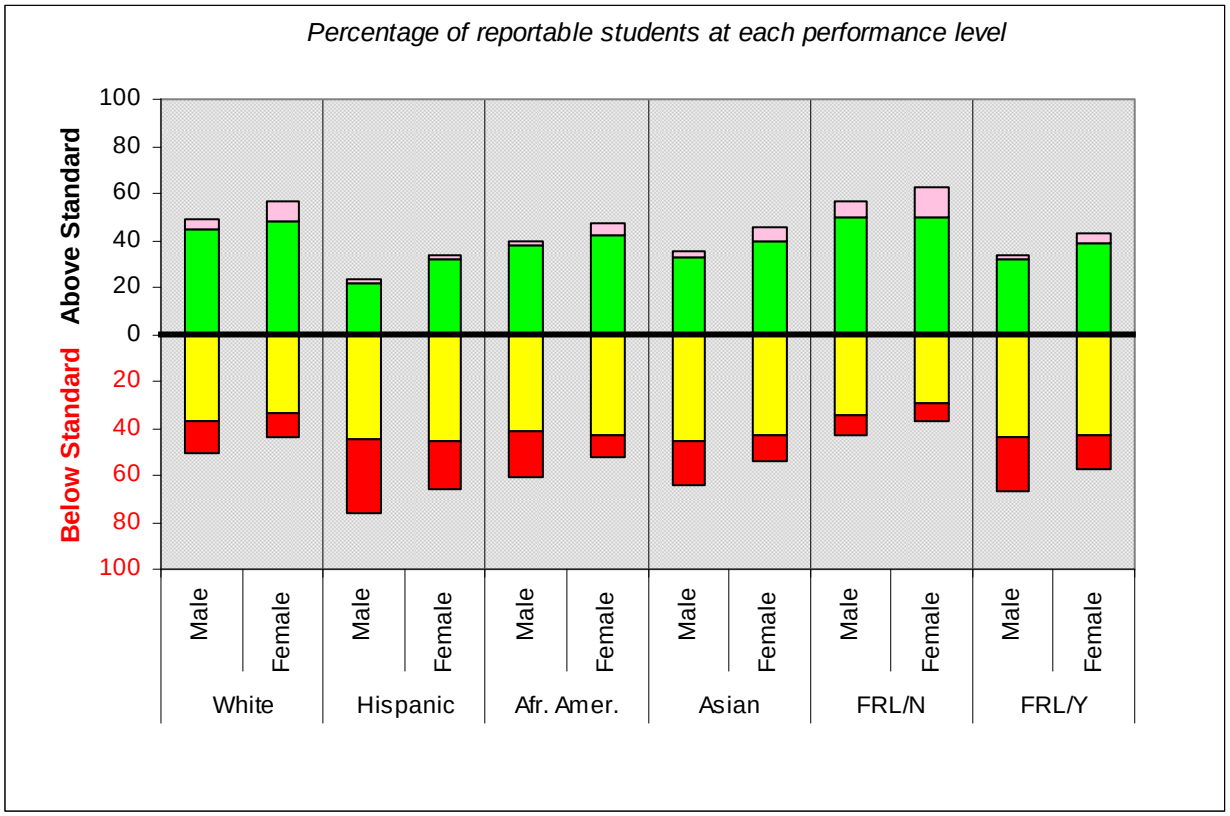
		ELA PI	Math PI	Number of Tests
A	Lowell	72.6	60.4	13,848
B	Regular Education	82.9	69.7	8,650
C	Disability	42.6	32.8	1,999
D	LEP	63.5	52.7	3,199
E	White	78.1	64.6	5,909
F	Hispanic	62.1	47.8	3,098
G	African-American	73.5	53.3	855
H	Asian	72.5	65.9	3,882
I	FRL/N	82.6	72.2	3,243
J	FRL/Y	69.6	56.9	10,579

The gap in performance between the highest- and lowest-performing subgroups in Lowell in 2007 was 40 PI points in ELA (regular education students, students with disabilities, respectively) and 39 PI points in math (non low-income students, students with disabilities, respectively).

Regular education students, White students, and non low-income students in Lowell performed above the district average in both ELA and math in 2007, while students with disabilities, LEP students, Hispanic students, African-American students, and low-income students performed below the district average in both subjects. Asian students performed below the district average in ELA and above the district average in math.

Each subgroup in Lowell had stronger performance in ELA than in math on the 2007 MCAS tests. While the gap between performance in ELA and math for most subgroups in Lowell was between 10 and 14 PI points, this gap was 20 PI points for African-American students and seven PI points for Asian students.

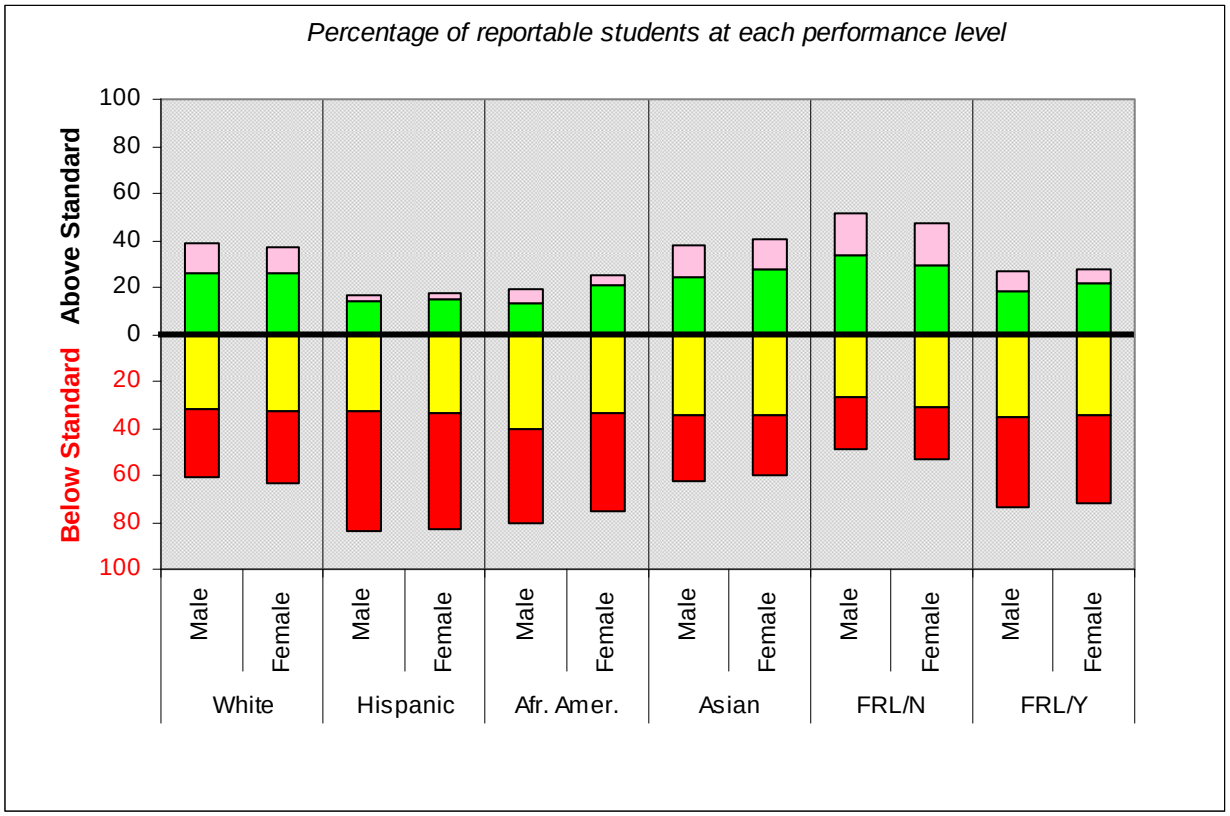
Figure/Table 18: MCAS English Language Arts (ELA) Test Performance by Race/Ethnicity and Socioeconomic Status by Gender, 2007



	White		Hispanic		Afr. Amer.		Asian		FRL/N		FRL/Y	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Advanced	5	8	2	1	1	6	3	6	7	13	2	4
Proficient	45	48	22	32	38	42	32	39	50	50	32	39
Needs Improvement	37	33	44	45	42	43	46	43	34	30	44	43
Warning/ Failing	14	10	32	21	19	10	19	11	9	8	23	15
Percent Attaining Proficiency	50	56	24	33	39	48	35	45	57	63	34	43
Proficiency Index (EPI)	76.1	80.2	58.0	66.4	69.9	77.1	68.8	76.2	81.2	84.2	66.1	73.1
Number of Tests	1,551	1,409	790	766	216	210	987	963	843	785	2,716	2,587

On the 2007 MCAS tests in ELA, Lowell's female students outperformed male students in all racial/ethnic and socioeconomic subgroups. The performance gap in ELA between female and male students was narrowest for non low-income students (three PI points) and widest for Hispanic students (eight PI points).

Figure/Table 19: MCAS Math Test Performance by Race/Ethnicity and Socioeconomic Status by Gender, 2007



	White		Hispanic		Afr. Amer.		Asian		FRL/N		FRL/Y	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Advanced	13	11	3	2	6	4	14	13	17	18	8	6
Proficient	26	26	14	15	13	21	24	28	34	29	18	22
Needs Improvement	32	33	33	34	40	34	34	34	27	31	35	34
Warning/ Failing	29	31	50	49	40	42	28	26	22	22	38	38
Percent Attaining Proficiency	39	37	17	17	19	25	38	41	51	47	26	28
Proficiency Index (MPI)	65.4	63.8	47.3	48.4	52.0	54.7	64.7	67.1	73.1	71.2	56.5	57.4
Number of Tests	1,545	1,404	779	763	215	214	980	952	831	784	2,703	2,573

On the 2007 MCAS tests in math, Lowell's female students outperformed male students in the Hispanic, African-American, Asian, and low-income subgroups, and male students outperformed female students in the White and non low-income subgroups. The performance gap in math between female and male students was narrowest for low-income students (slightly less than one PI point) and widest for African-American students (nearly three PI points), both in favor of females.

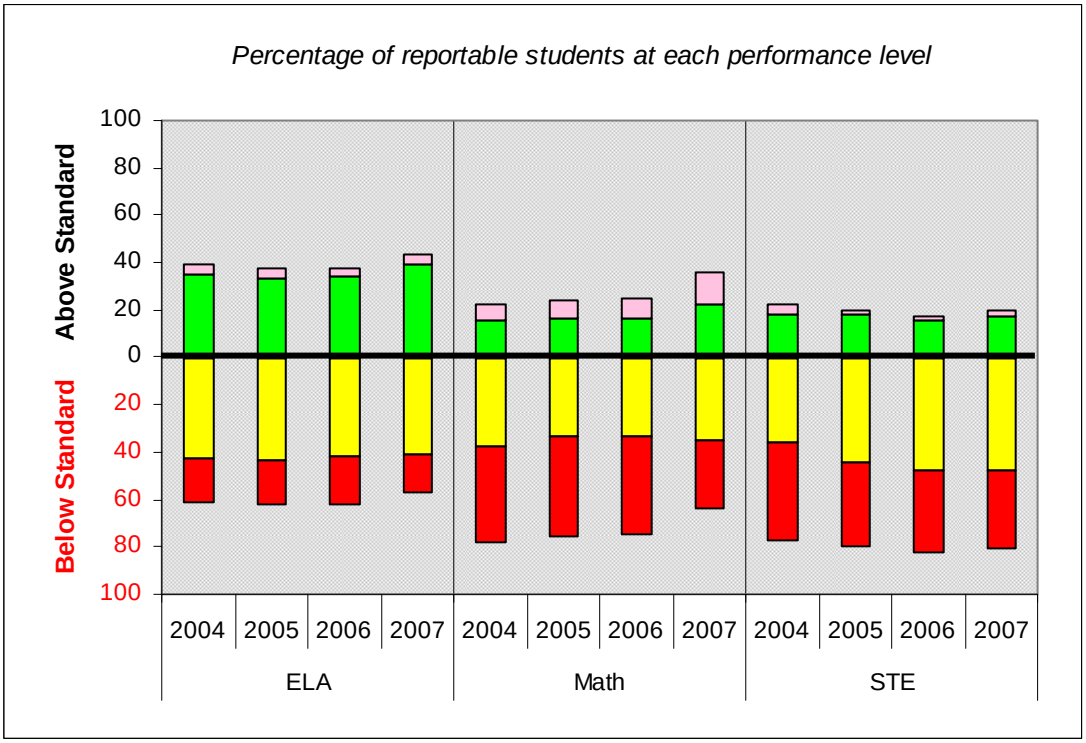
Improvement

Has the district's MCAS test performance improved over time?

Findings:

- Between 2004 and 2007, Lowell's MCAS performance showed improvement in English language arts, more improvement in math, and improvement in science and technology/engineering.
- Over the three-year period 2004-2007, ELA performance in Lowell improved at an average of approximately one PI point annually. This resulted in an improvement rate, or a closing of the proficiency gap, of nine percent, a rate lower than that required to achieve AYP. The percentage of students attaining proficiency in ELA increased from 39 percent in 2004 to 43 percent in 2007.
- Math performance in Lowell showed more improvement over this period, at an average of more than three PI points annually. This resulted in an improvement rate of 21 percent, also a rate lower than that required to achieve AYP. The percentage of students attaining proficiency in math rose from 22 percent in 2004 to 36 percent in 2007.
- Between 2004 and 2007, Lowell had an improvement in STE performance of slightly less than one PI point annually over the three-year period, resulting in a narrowing of the proficiency gap by five percent. The percentage of students attaining proficiency in STE decreased from 22 percent in 2004 to 19 percent in 2007.

Figure/Table 20: MCAS Test Performance by Subject, 2004-2007



	ELA				Math				STE			
	2004	2005	2006	2007	2004	2005	2006	2007	2004	2005	2006	2007
Advanced	4	4	4	4	6	8	9	13	4	2	2	2
Proficient	35	34	34	39	16	16	16	23	18	18	15	17
Needs Improvement	42	43	42	41	38	33	33	35	36	44	47	47
Warning/ Failing	19	19	21	16	40	43	42	29	42	36	35	33
Percent Attaining Proficiency	39	38	38	43	22	24	25	36	22	20	17	19
Proficiency Index (PI)	69.9	69.4	68.5	72.7	53.6	53.7	54.4	63.5	53.8	54.4	54.3	56.3

Note: Trend data include grades at which testing was administered in each subject in all four years; therefore, the 2007 ELA and math data may differ from those reported in Figure/Table 1.

The percentage of Lowell students attaining proficiency in ELA increased from 39 percent in 2004 to 43 percent in 2007. The proficiency gap in ELA narrowed from 30 to 27 PI points over this period, resulting in an improvement rate of nine percent, a rate lower than that required to make AYP.

The percentage of Lowell students attaining proficiency in math increased from 22 percent in 2004 to 36 percent in 2007. The proficiency gap in math narrowed from 46 to 37 PI points over this period, resulting in an improvement rate of 21 percent, also a rate lower than that required to make AYP.

The percentage of Lowell students attaining proficiency in STE decreased from 22 percent in 2004 to 19 percent in 2007. The proficiency gap in STE narrowed from 46 to 44 PI points over this period, an improvement rate of five percent.

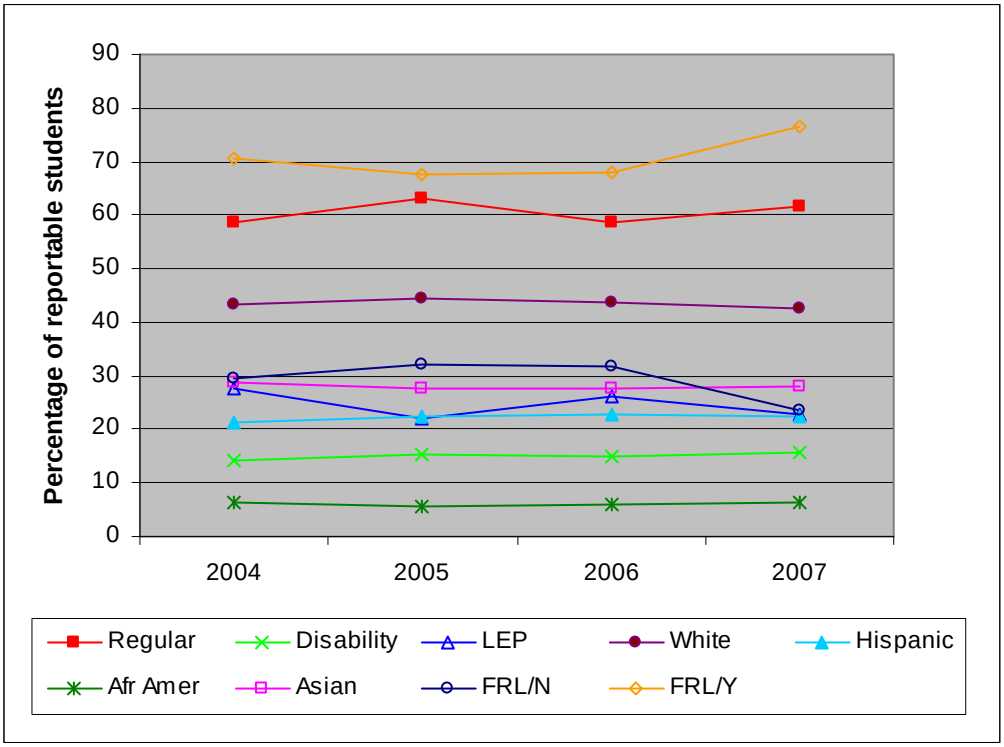
Equity of Improvement

Has the equity of MCAS test performance among the district's student subgroups improved over time?

Findings:

- In Lowell, the performance gap between the highest- and lowest-performing subgroups in ELA widened from 38 PI points in 2004 to 42 PI points in 2007, and the performance gap between the highest- and lowest-performing subgroups in math widened from 35 to 41 PI points over this period.
- All student subgroups in Lowell with the exception of students with disabilities and African-American students had improved performance in ELA between 2004 and 2007. The most improved subgroup in ELA was Asian students.
- In math, the performance of all student subgroups in Lowell improved between 2004 and 2007. The most improved subgroup in math also was Asian students.

Figure/Table 21: Student Population by Reportable Subgroups, 2004-2007



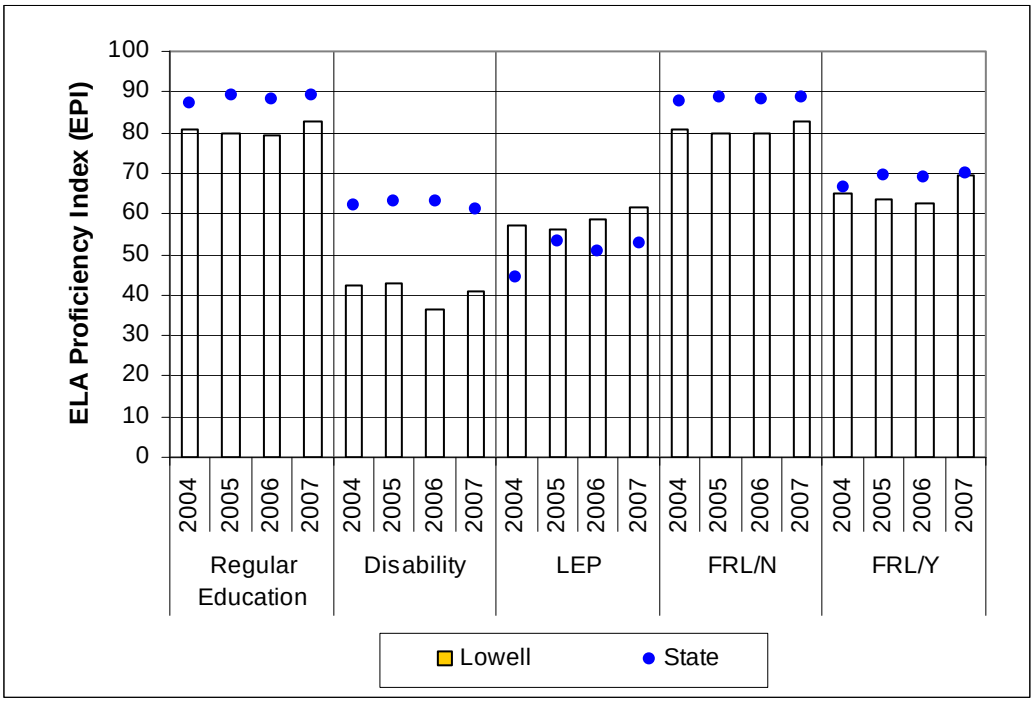
	Number of Students				Percentage of students			
	2004	**2005**	**2006**	**2007**	**2004**	**2005**	**2006**	**2007**
Lowell	6,676	6,424	7,344	7,028	100.0	100.0	100.0	100.0
Regular	3,906	4,046	4,314	4,323	58.5	63.0	58.7	61.5
Disability	935	972	1,101	1,103	14.0	15.1	15.0	15.7
LEP	1,835	1,406	1,929	1,602	27.5	21.9	26.3	22.8
White	2,902	2,852	3,203	2,991	43.5	44.4	43.6	42.6
Hispanic	1,412	1,434	1,665	1,578	21.2	22.3	22.7	22.5
Afr. Amer.	414	364	447	442	6.2	5.7	6.1	6.3
Asian	1,930	1,767	2,019	1,965	28.9	27.5	27.5	28.0
FRL/N	1,961	2,072	2,341	1,655	29.4	32.3	31.9	23.5
FRL/Y	4,715	4,352	5,003	5,373	70.6	67.7	68.1	76.5

Note: The 2007 percentages of students reported here may differ from those reported in Figure/Table 7; the percentages shown here are based on the total number of students in the district, whereas the percentages shown in Figure 7 are based on the number of students in reportable subgroups. Data include students in tested grades only: ELA Grades 3, 4, 7 and 10 and for math, grades 4, 6, 8, and 10.

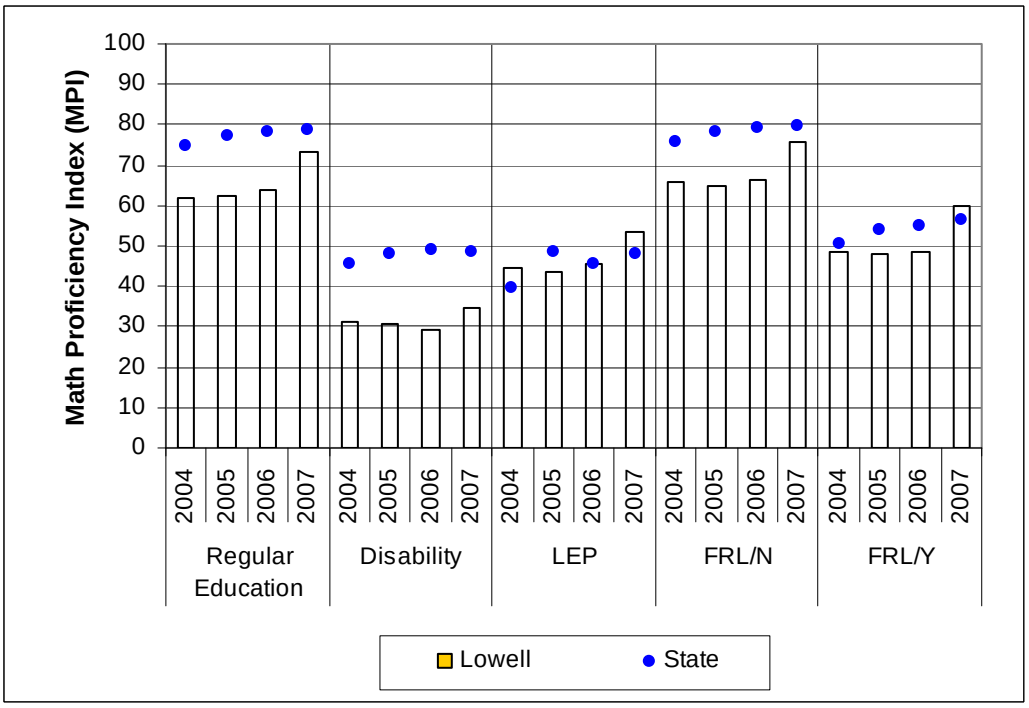
Between 2004 and 2007 in Lowell, the proportion of regular education students increased by three percentage points, that of students with disabilities increased by nearly two percentage points, and LEP students decreased by nearly five percentage points. The proportion of White students decreased by nearly one percentage point, that of Hispanic students increased by more than one percentage point, African-American students remained approximately the same, and Asian students decreased by nearly one percentage point. The proportion of low-income students increased by nearly six percentage points.

Figures 22 A-D/Table 22: MCAS Proficiency Indices by Subgroup, 2004-2007

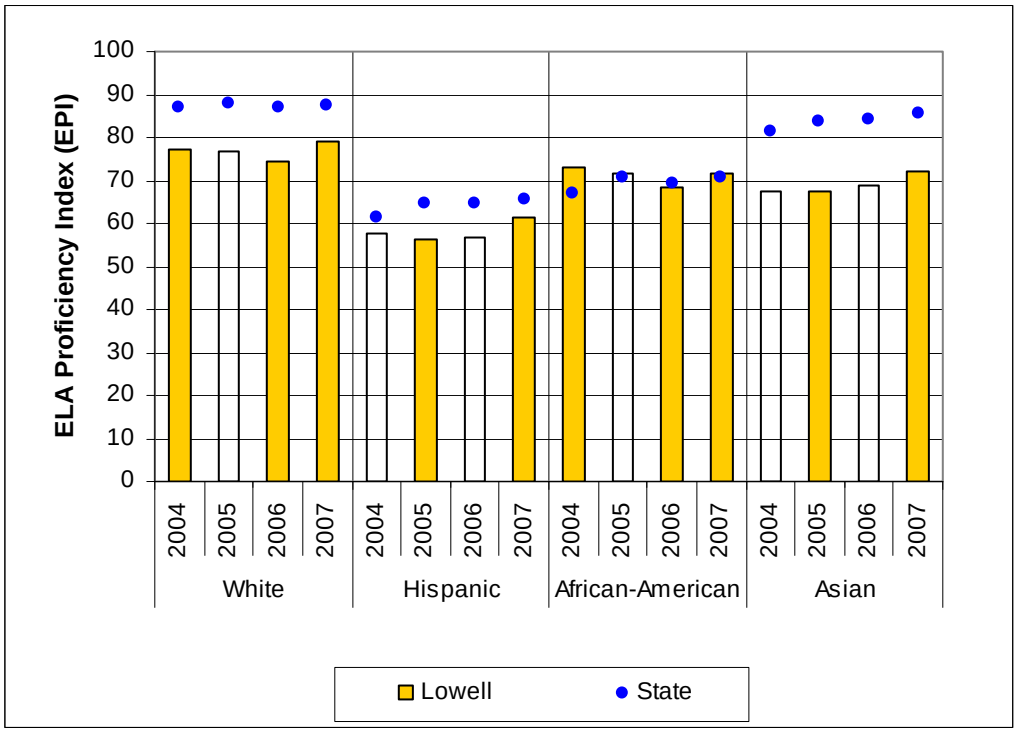
A. ELA Proficiency Index (EPI) by Student Status and Free or Reduced-Cost Lunch Subgroups



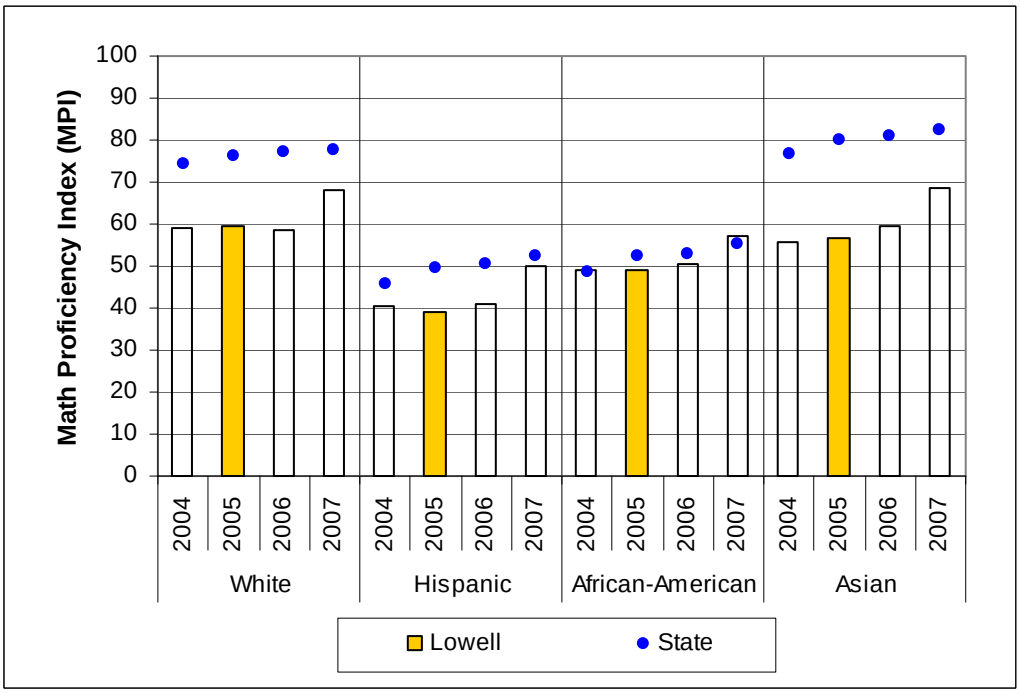
B. Math Proficiency Index (MPI) by Student Status and Free or Reduced-Cost Lunch Subgroups



C. ELA Proficiency Index (EPI) by Race/Ethnicity Subgroup



D. Math Proficiency Index (MPI) by Race/Ethnicity Subgroup



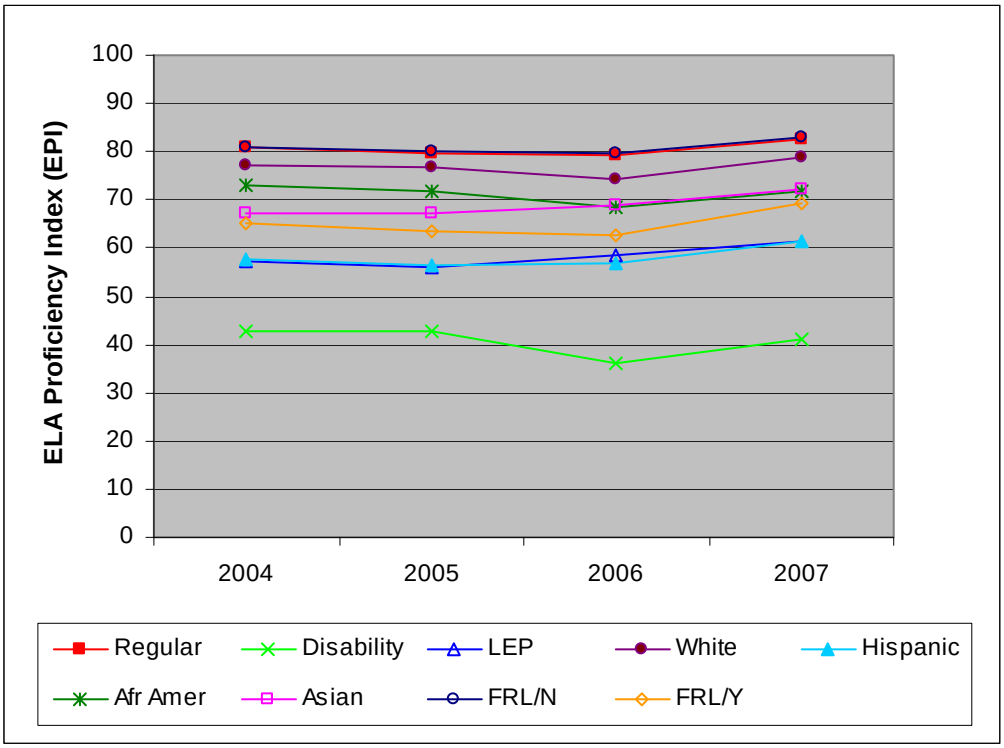
State				Lowell			
Subgroup	**Year**	**EPI**	**MPI**	**Subgroup**	**Year**	**EPI**	**MPI**
Regular Education	2004	87.3	74.7	Regular Education	2004	81.0	62.0
	2005	89.2	77.4		2005	79.6	62.6
	2006	88.3	78.2		2006	79.2	63.7
	2007	89.0	78.9		2007	82.7	73.2
Disability	2004	62.1	45.3	Disability	2004	42.6	31.2
	2005	63.3	47.9		2005	42.7	30.6
	2006	62.9	49.0		2006	36.3	29.0
	2007	61.2	48.4		2007	41.1	34.6
LEP	2004	44.4	39.6	LEP	2004	57.3	44.5
	2005	53.4	48.4		2005	56.0	43.5
	2006	50.9	45.6		2006	58.6	45.3
	2007	52.9	47.9		2007	61.5	53.4
FRL/N	2004	87.9	75.9	FRL/N	2004	81.0	65.8
	2005	88.9	78.1		2005	80.0	64.9
	2006	88.3	79.0		2006	79.6	66.1
	2007	88.6	79.7		2007	82.8	75.8
FRL/Y	2004	66.6	50.7	FRL/Y	2004	65.1	48.4
	2005	69.7	53.9		2005	63.6	47.9
	2006	68.8	55.0		2006	62.8	48.5
	2007	70.0	56.3		2007	69.3	59.8
White	2004	86.9	74.4	White	2004	77.1	59.0
	2005	87.7	76.2		2005	76.6	59.6
	2006	87.1	77.2		2006	74.3	58.6
	2007	87.4	77.8		2007	79.0	67.9
Hispanic	2004	61.4	45.7	Hispanic	2004	57.5	40.6
	2005	64.8	49.3		2005	56.4	39.2
	2006	64.6	50.6		2006	56.7	40.9
	2007	65.8	52.2		2007	61.3	50.0
African-American	2004	67.1	48.4	African-American	2004	73.2	49.2
	2005	70.5	52.3		2005	71.6	49.2
	2006	69.4	52.8		2006	68.3	50.5
	2007	70.9	55.2		2007	71.6	57.2
Asian	2004	81.2	76.6	Asian	2004	67.3	55.8
	2005	83.7	80.2		2005	67.3	56.6
	2006	84.3	81.0		2006	68.9	59.3
	2007	85.5	82.5		2007	72.2	68.8

Note: Trend data include grades at which testing was administered in each subject in all four years; therefore, 2007 data may differ from those reported in Figure/Tables 8, 9, 11, 12, 14, and 15.

In Lowell, all student subgroups had greater improvement in math than in ELA between 2004 and 2007. Over this period, the performance of regular education students improved by two PI points in ELA and by 11 PI points in math. The performance of students with disabilities declined by one and one-half PI points in ELA and improved by three points in math. The performance of LEP students improved by four PI points in ELA and by nine points in math. The performance of non low-income students improved by two PI points in ELA and by 10 PI points in math, and the performance of low-income students improved by four PI points in ELA and by 11 points in math.

Also during this period, the performance of White students improved by two PI point in ELA and by nine points in math. The performance of Hispanic students improved by four PI points in ELA and by nine points in math. The performance of African-American students declined by two PI points in ELA and improved by eight points in math. The performance of Asian students improved by five PI points in ELA and by 13 points in math.

Figure/Table 23: MCAS English Language Arts Proficiency Index (EPI) by Subgroup, 2004-2007



	ELA Proficiency Index (EPI)				Percent Attaining Proficiency			
	2004	2005	2006	2007	2004	2005	2006	2007
Lowell	69.9	69.4	68.5	72.7	39	38	38	43
Regular	81.0	79.6	79.2	82.7	54	52	52	58
Disability	42.6	42.7	36.3	41.1	10	9	3	6
LEP	57.3	56.0	58.6	61.5	18	15	20	23
White	77.1	76.6	74.3	79.0	50	49	47	54
Hispanic	57.5	56.4	56.7	61.3	20	20	23	28
Afr. Amer.	73.2	71.6	68.3	71.6	42	39	34	42
Asian	67.3	67.3	68.9	72.2	35	34	37	40
FRL/N	81.0	80.0	79.6	82.8	57	53	54	60
FRL/Y	65.1	63.6	62.8	69.3	31	29	29	38

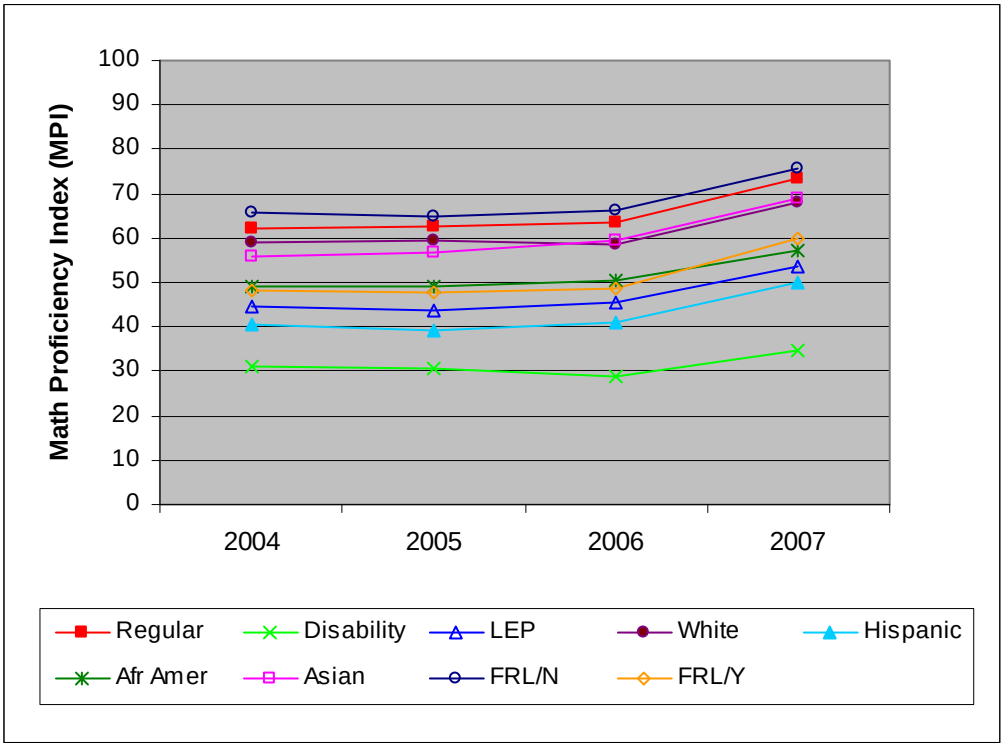
Note: Trend data include grades at which testing was administered in each subject in all four years; therefore, 2007 data may differ from those reported in Figure/Tables 8, 11, and 14.

All student subgroups in Lowell with the exception of students with disabilities and African-American students had improved performance in ELA between 2004 and 2007. The ELA proficiency gap for Lowell's regular education students narrowed from 19 to 17 PI points over this period, resulting in an improvement rate of nine percent; for students with disabilities it widened by three percent from 57 to 59 PI points; and for LEP students it narrowed from 43 to 39 PI points, an improvement rate of 10 percent. The proficiency gap in ELA for White students narrowed from 23 to 21 PI points, an improvement rate of eight percent; for Hispanic students it narrowed from 43 to 39 PI points, an improvement rate of nine percent; for African-American students the gap widened by six percent from 27 to 28 PI points; and for

Asian students it narrowed from 33 to 28 PI points, an improvement rate of 15 percent. The ELA proficiency gap for non low-income students narrowed from 19 to 17 PI points, an improvement rate of 10 percent; and for low-income students it narrowed from 35 to 31 PI points, an improvement rate of 12 percent.

Between 2004 and 2007, the performance gap in ELA between regular education students and students with disabilities widened by three PI points, and between regular education students and LEP students it narrowed by three points. The ELA performance gap between White and Hispanic students narrowed by two PI points, between White and African-American students it widened by four points, and between White and Asian students it narrowed by three points. The performance gap in ELA between non low-income and low-income students narrowed by two PI points over this period.

Figure/Table 24: MCAS Math Proficiency Index (MPI) by Subgroup, 2004-2007



	Math Proficiency Index (MPI)				Percent Attaining Proficiency			
	2004	2005	2006	2007	2004	2005	2006	2007
Lowell	53.6	53.7	54.4	63.5	22	24	25	36
Regular	62.0	62.6	63.7	73.2	30	33	34	48
Disability	31.2	30.6	29.0	34.6	3	4	3	5
LEP	44.5	43.5	45.3	53.4	12	12	15	21
White	59.0	59.6	58.6	67.9	27	31	29	42
Hispanic	40.6	39.2	40.9	50.0	10	9	12	18
Afr. Amer.	49.2	49.2	50.5	57.2	18	18	20	27
Asian	55.8	56.6	59.3	68.8	25	27	30	42
FRL/N	65.8	64.9	66.1	75.8	37	38	39	54
FRL/Y	48.4	47.9	48.5	59.8	16	17	18	30

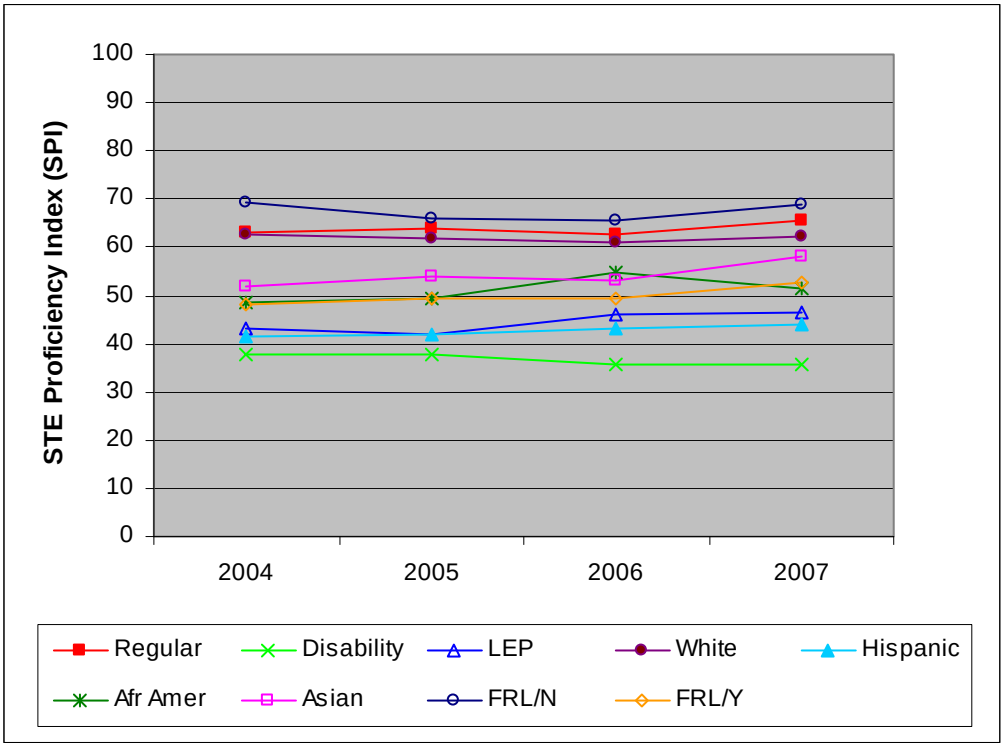
Note: Trend data include grades at which testing was administered in each subject in all four years; therefore, 2007 data may differ from those reported in Figure/Tables 9, 12, and 15.

In math, the performance of all student subgroups in Lowell improved between 2004 and 2007. The math proficiency gap for Lowell's regular education students narrowed from 38 to 27 PI points over this period, resulting in an improvement rate of 30 percent; for students with disabilities it narrowed from 69 to 65 PI points, an improvement rate of five percent; and for LEP students it narrowed from 56 to 47 PI points, an improvement rate of 16 percent. The proficiency gap in math for White students narrowed from 41 to 32 PI points, resulting in an improvement rate of 22 percent; for Hispanic students it narrowed from 59 to 50 PI points, an improvement rate of 16 percent; for African-American students the gap narrowed from 51 to 43 PI points, also an improvement rate of 16 percent; and for Asian students it narrowed from 44 to 31 PI points, an improvement rate of 29 percent. The math proficiency gap for non low-income

students narrowed from 34 to 24 PI points, an improvement rate of 29 percent; and for low-income students it narrowed from 52 to 40 PI points, in an improvement rate of 22 percent.

Between 2004 and 2007, the performance gap in math between regular education students and students with disabilities widened by eight PI points, and between regular education students and LEP students it widened by two points. The math performance gap between White and Hispanic students narrowed by one-half PI point, between White and African-American students it widened by one point, and between White and Asian students it narrowed by four points. The performance gap in math between non low-income and low-income students narrowed by one PI point over this period.

Figure/Table 25: MCAS STE Proficiency Index (SPI) by Subgroup, 2004-2007



	STE Proficiency Index (SPI)				Percent Attaining Proficiency			
	2004	2005	2006	2007	2004	2005	2006	2007
Lowell	53.8	54.4	54.3	56.3	22	20	17	20
Regular	62.9	63.7	62.8	65.4	32	28	25	27
Disability	37.8	37.7	35.7	35.6	8	5	3	3
LEP	43.2	41.8	46.2	46.5	10	8	8	10
White	62.5	61.7	60.8	62.3	32	26	24	25
Hispanic	41.5	42.0	43.0	43.8	10	8	8	7
Afr. Amer.	48.5	49.4	54.8	51.5	18	16	18	14
Asian	52.0	54.0	53.2	58.0	18	20	14	22
FRL/N	69.4	65.9	65.6	68.9	41	32	30	34
FRL/Y	48.3	49.3	49.3	52.7	16	14	12	15

In science and technology/engineering, all student subgroups in Lowell with the exception of students with disabilities, White students, and non low-income students had improved performance between 2004 and 2007. The STE proficiency gap for Lowell's regular education students narrowed from 37 to 35 PI points over this period, resulting in an improvement rate of seven percent; for students with disabilities it widened by four percent from 62 to 64 PI points; and for LEP students it narrowed from 57 to 54 PI points, an improvement rate of six percent. The proficiency gap in STE for White students remained at 38 PI points; for Hispanic students it narrowed from 59 to 56 PI points, an improvement rate of four percent; for African-American students the gap narrowed from 52 to 49 PI points, an improvement rate of six percent; and for Asian students it narrowed from 48 to 42 PI points, an improvement rate of 12 percent. The STE proficiency gap for non low-income students remained at 31 PI points; and for low-income students it narrowed from 52 to 47 PI points, an improvement rate of nine percent.

Between 2004 and 2007, the performance gap in STE between regular education students and students with disabilities widened by five PI points, and between regular education students and LEP students it narrowed by one point. The STE performance gap between White and Hispanic students narrowed by three PI points, between White and African-American students it also narrowed by three points, and between White and Asian students it narrowed by six points. The performance gap in STE between non low-income and low-income students narrowed by five PI points over this period.

Participation

Are all eligible students participating in required state assessments?

Finding:

- On the 2007 MCAS tests in ELA, math, and STE, eligible students in Lowell participated at levels that met or exceeded the state's 95 percent requirement.

n-Values by Subgroup and Performance Level, 2007

Subgroup	Performance Level	ELA	Math	STE
Lowell	ALL LEVELS	**6,939**	**6,909**	**2,106**
	Advanced	316	674	43
	Proficient	2,677	1,563	368
	Needs Improvement	2,810	2,308	1,000
	Warning/Failing	1,136	2,364	695
Regular Education	Advanced	295	601	40
	Proficient	2,221	1,248	310
	Needs Improvement	1,544	1,494	684
	Warning/Failing	275	972	245
Disability	Advanced	0	5	0
	Proficient	68	40	11
	Needs Improvement	413	228	95
	Warning/Failing	521	724	221
Limited English Proficient	Advanced	21	68	3
	Proficient	388	275	47
	Needs Improvement	853	586	221
	Warning/Failing	340	668	229
White	Advanced	186	357	25
	Proficient	1,370	761	206
	Needs Improvement	1,043	955	460
	Warning/Failing	361	876	223
Hispanic	Advanced	23	36	3
	Proficient	420	223	30
	Needs Improvement	697	516	211
	Warning/Failing	416	767	244
African-American	Advanced	15	21	1
	Proficient	170	74	15
	Needs Improvement	180	158	54
	Warning/Failing	61	176	48
Asian	Advanced	91	254	14
	Proficient	698	496	114
	Needs Improvement	869	660	272
	Warning/Failing	292	522	178
Free or Reduced-Cost Lunch/No	Advanced	162	284	24
	Proficient	810	509	133
	Needs Improvement	520	469	222
	Warning/Failing	136	353	84
Free or Reduced-Cost Lunch/Yes	Advanced	154	390	19
	Proficient	1,865	1,052	234
	Needs Improvement	2,286	1,832	778
	Warning/Failing	998	2,002	611
Male	Advanced	115	374	24
	Proficient	1,274	774	209
	Needs Improvement	1,472	1,176	521
	Warning/Failing	698	1,210	319
Female	Advanced	201	300	19
	Proficient	1,401	787	158
	Needs Improvement	1,334	1,125	479
	Warning/Failing	436	1,145	376

n-Values by Grade and Year, 2004-2007

Grade	Year	ELA	Math	STE
Grade 3	2004	1,130	0	0
	2005	1,083	0	0
	2006	1,000	1,007	0
	2007	987	988	0
Grade 4	2004	1,106	1,110	0
	2005	1,092	1,085	0
	2006	1,047	1,049	0
	2007	995	996	0
Grade 5	2004	0	0	1,157
	2005	0	0	1,054
	2006	1,067	1,066	1,066
	2007	1,036	1,041	1,031
Grade 6	2004	0	1,266	0
	2005	0	1,155	0
	2006	1,048	1,049	0
	2007	1,026	1,027	0
Grade 7	2004	1,271	0	0
	2005	1,246	0	0
	2006	1,105	1,102	0
	2007	1,047	1,047	0
Grade 8	2004	0	1,248	1,251
	2005	0	1,181	1,178
	2006	1,216	1,217	1,218
	2007	1,084	1,076	1,075
Grade 10	2004	734	734	0
	2005	808	801	0
	2006	773	762	0
	2007	764	734	0
All Grades	2004	4,241	4,358	2,408
	2005	4,229	4,222	2,232
	2006	7,256	7,252	2,284
	2007	6,939	6,909	2,106

Notes

Trend data include grades for which testing was administered for each subject in all four years. The following grades are included in the trend data for 2004-2007 reported in Figure/Tables 20-25 and in the table of n-values by grade and year:
English language arts (ELA): 3, 4, 7, 10
Math: 4, 6, 8, 10
Science and technology/engineering (STE): 5, 8

The highest performance level for grade 3 reading in 2006 and 2007 was Advanced/Above Proficient; this level did not exist in prior years, when the highest level was Proficient.

Subgroup inclusion is based on the number of students and the number of schools in the district. To be included as reportable, a subgroup must have at least 10 times the number of schools in the district. Subgroup inclusion for all years of the trend data is based on the 2007 data.

N-values represent the number of tests taken unless otherwise specified.

Rounded values may result in slight apparent discrepancies.

Reexamination Findings

This section summarizes the conclusions of the EQA team's reexamination of the Lowell Public Schools. It reports on only those 2005 indicators that received a 'Poor' or 'Unsatisfactory' rating and that the EQA team reassessed. The table below displays the prior 2005 ratings and the 2007 reassessments. The narrative that follows presents the relevant 2005 indicators, followed by the ratings from 2005 and 2007 and corresponding evidence for the ratings. Because of the changes in the EQA standards and indicators, the 2005 indicators are organized according to the 2007 standards. In addition, the district was examined and rated on selected 2007 indicators that were not part of the prior examination.

Standard I: Leadership, Governance, and Communication											
	2005 Indicators									2007 Indicators	
Ratings▼ Indicators►	**13.2**	**13.7**	**13.8**	**13.9**	**14.2**	**15.2**	**15.3**	**15.7**	**15.9**	**13**	**14**
Excellent											
Satisfactory	**2007**				**2007**	**2007**		**2007**	**2007**	**2007**	**2007**
Needs Improvement		**2007**	**2007**	**2007**			**2007**				
Poor	**2005**			**2005**	**2005**	**2005**	**2005**	**2005**	**2005**		
Unsatisfactory		**2005**	**2005**								

I. Leadership, Governance, and Communication

School committee, district leadership, and school leadership established, implemented, and continuously evaluated the cost effectiveness and efficiency of policies and procedures that were standards-based, focused on student achievement data and designed to promote continuous improvement of instructional practice and high achievement for all students. Leadership actions and decisions related to the attainment of district and school goals were routinely communicated to the community and promoted public confidence, financial commitment and community support needed to achieve high student and staff performance.

Findings:

- The district utilized student assessment data to implement initiatives to improve student achievement, especially in grades K-8.

- According to central office administrators, three key initiatives implemented to improve student achievement were: the Lowell Teacher Academy and its pathway to the Lowell Program; the special education school-based team model; and the change from management to institutional leadership.
- The superintendent developed budget proposals that included incremental categories such as essential needs and critical needs.
- During the period under reexamination, the district established a small Grants Management Office, which oversaw more than $19 million from 27 federal and state grants in FY 2007.
- Interviewees expressed the opinion that the last two budgets were not adequate and did not meet the needs of all the students in the district.
- The district continued not to meet net school spending (NSS) requirements through the FY 2007 budget year, and the budgeted amount for FY 2008 also was below its required amount.
- Central office administrators stated that the district saved over $1.5 million since the last EQA review through two transportation initiatives.
- The district was proactive in establishing partnerships with organizations, companies, agencies, and institutions of higher learning to assist at-risk students and families in Lowell.
- Lowell had district and school safety plans along with emergency management teams at each school site. Also, the high school had a security system that included approximately 100 interior and exterior cameras with monitors located in a security office, plus nine security officers and three resource officers.

Summary

Since the last EQA review, the district's ratings improved on seven of the nine indicators in this standard previously rated 'Poor' or 'Unsatisfactory' in the 2005 report. The only indicators in the standard of Leadership, Governance, and Communication receiving ratings below 'Satisfactory' in the 2005 report concerned the budget and provisioning for students. Specific issues involved budget adequacy, development, allocation, decision-making, and effective controls. In the reexamination period, the leadership of Lowell Public Schools worked within a strained budget environment to strengthen instructional leadership, improve classroom instruction, use student

achievement data more effectively, provide supports and safety nets for students, and increase the district's capacity through creative measures.

District leaders described key initiatives implemented during the 'Watch' period. Initiatives in the 2005-2006 school year included opening the Freshman Academy, the purchasing of new text book-based programs for all English courses and several science courses at the high school, beginning the Lowell Teacher Academy, fully implementing the completed units of the Investigations Math program and the Connected Math Program (grades K-8), and starting the math seminars for pre-algebra and algebra (grades 7-8). Additionally, the district piloted benchmark and formative (Galileo) assessments at the middle schools (sponsored by the Department of Education), established the (initial) position of district math specialist at the middle level, and opened the Bartlett Community Partnership School. To strengthen the district's capacity for continuous improvement, the district continued its Leadership Academy, which, for K-8 and K-12 administrators, completed the second year of ""DNA of School Leadership"."

Programs and services introduced in the 2006-2007 school year included the special education school-based teams, the restoration of science and special education department chair positions at the high school, the READ 180 program at the Freshman Academy, the Scott Foresman and Reading Streets series at the elementary schools, the Power Up reading intervention program for middle school students who need assistance with reading, and math courses for elementary and middle school teachers taught by a consultant. In addition, the district implemented the Connect-ED communication system, instituted X2, a new web-based student database system, initiated an on-line standards-based report card at the elementary and middle schools, began a two-year Leadership Apprentice Program, and developed a five-year capital plan. The district began NISL training for all system-wide and K-8 administrators and introduced the course the "DNA of School Leadership" for the high school administrators.

Even though district leadership was able to target funding to support key initiatives, the adequacy of the budget was still an issue. Interviewees repeatedly mentioned that during the past two years the budget did not meet the district's level of needs. Unmet needs included preschool transportation, additional full-time social workers at each school, more special education and

ELA and math intervention staff, more certified ESL teachers, technology to address district goals, and expansion of the summer partnership programs for at-risk youngsters.

The district established ways to better provision for its students in spite of cutbacks. The district established a Grants Management Office, headed by a grants manager and four clerks who monitored the more than $40 million in federal and state grants that the school department received in FY 2006 and FY 2007. The city manager and the city auditor spoke favorably about the monitoring of the grants by the personnel in the Grants Management Office. In addition, the district established partnerships to strengthen its ability to provide professional development, to provide services to at-risk students and families, and to ensure safety and security.

2005 Indicators

13.2. Relevant budget development decisions were premised on a clear, documented systemic analysis of student performance data as well as other pertinent information.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review (2001-2004), the use of student data in budget development decisions was not systemic, although the district allocated funds on a per pupil basis with consideration of target class sizes and considered some student needs when planning the budget. Some budget decisions that considered student achievement data included the adoption of the John Collins Writing Across the Curriculum model, the $800,000 purchase of the Connected Math series, the provision of professional development in the new Connected Math series for middle school level teachers, a new districtwide math initiative based on the MCAS test results, and hiring of ELA and math MCAS tutors for all three levels. The district allocated more paraprofessionals to specialty schools and for grades 1-2 to support balanced literacy. The district reduced arts classes at the middle school level, and programs at the high school. The provision of literacy specialists depended on Title I and Title II funding.

During the reexamination period under review (2005-2007), the district did make relevant budget decisions based upon a clear, documented systemic analysis of student performance data and

other pertinent information. Interviewees explained that the school system had adopted a variety of tests to gather and analyze assessment data in order to improve student performance. Assessments considered included: the Massachusetts Comprehensive Assessment System (MCAS); the Dynamic Indicators of Basic Early Literacy Skills (DIBELS), grades K-3; the Scholastic Reading Inventory (SRI), grades 4-9; the Group Reading Assessment and Diagnostic Evaluation (GRADE), grades 5-8; math benchmark assessments for grades K-4; the Galileo math test for grades 5-8; common quarterly exams at the high school; and the Read 180 Assessments for some students in grades 9 and 10.

District analysis of assessment data resulted in purchasing and allocation decisions to increase English language arts achievement in grades K-9. For grades K-5, Lowell Public Schools purchased and implemented the revised Scott Foresman reading textbook series complemented by My Sidewalks intervention materials. The district also increased the literacy block to 120 minutes daily which included 30 minutes for at-risk students at the elementary level. At the middle schools, the district increased the ELA block to 90 minutes daily, which included 30 minutes for students who performed poorly on the ELA/reading tests. In addition, the district supplemented the Scott Foresman series with Power Up, a technology-assisted instructional support program designed to help middle school students performing below grade level in reading. At the high school, the district introduced READ 180 to assist students whose reading performances needed improvement. According to administrators, 240 at-risk grade 9 students were using READ 180, a technology-assisted program, at the time of the reexamination. The high school administration also piloted “linked” courses in English for sophomores who had failed freshman English.

In order to improve math student achievement in grades K-8, the district made several key decisions. Administrators reported that data analysis resulted in the district’s decision to purchase the improved 2009 edition of Investigations Math for grades K-5 and the Connected Math Program (CMP) for grades 6-8. At the middle schools, the district increased the math instructional time to 90 minutes daily, with 30 of those minutes used for either intervention or enrichment purposes. For enrichment, the district offered a grade 7 pre-algebra program and a grade 8 algebra program for selected students. The district administered the same end of year assessment to grade 8 algebra students as grade 9, and found favorable results at the middle

level. To improve K- 8 math instruction, the district established the grant-funded positions of math resource teachers, as well as district math specialists. Interviewees mentioned that the individuals in these positions provided support and offered suggestions to the teachers in addition to teaching demonstration classes throughout the year; mentors also provided job-integrated professional development. Additionally, the district also implemented a collaborative approach to improve math performance, having teachers work with math resource teachers and math specialists to analyze test results and to develop strategies to assist students.

Interviewees repeatedly cited three additional initiatives undertaken by the district to improve student achievement by strengthening instruction. Central office administrators, building principals, and teachers enthusiastically discussed the first initiative, the Teacher Academy pathway to the Lowell Program. This program is an on-site master's degree program in Urban teaching, offered at no cost to teachers, that is a culture change strategy focused on content and pedagogy, cultural diversity, second language acquisition, accommodations, and differentiation. This program, affiliated with Fitchburg State College, has benefited the district, especially with the retention of teachers.

A second initiative, according to district leadership, was Lowell's newly implemented K-8 school-based team model for special education. At the high school level, the district had restored the special education department head position, added a team chairperson, and implemented a student services model during the period under review. The K-8 team model consisted of an evaluation team chairperson paired with a psychologist and a social worker providing services to the same two (or more) schools. The superintendent commented that the teams prevented unnecessary referrals and strengthened instructional programs. In addition, these teams helped new special education teachers and assisted with the District Curriculum Accommodation Plan (DCAP).

The third initiative involved the shift from management to instructional leadership. Central office administrators remarked that the shift led to greater empowerment and accountability for principals, as the shift allowed them to make decisions pertaining to the specific needs of the students in their buildings. Building administrators commented about the flexibility they had to

fill vacant staff positions and to implement supplementary support programs and services for students.

13.7. The budget and district's expenditures were adequate to provide for appropriate levels of staffing, professional development, materials, supplies, and equipment.

EQA Rating from 2005: Unsatisfactory

EQA Rating from 2007: Needs Improvement

Evidence

During the prior period of EQA review, the district did not have adequate funding for instructional materials and technology, faced budget reductions that resulted in staffing cuts, and did not meet foundation requirements for professional development in one year. The district needed new elementary level ELA texts and new high school math and science texts, and technology was beginning to deteriorate. Budget reductions resulted in fewer staff for intervention programs. Although the district exceeded the state's foundation requirement for professional development in FY 2001 and FY 2002, the district did not meet the state foundation requirement for professional development in FY 2003; the requirement was waived in FY 2004. The New England Association of Schools and Colleges (NEASC) report in 2004 had concluded that "the community has not been successful in ensuring an adequate and dependable source of revenue to meet the schools needs. Budget cuts have handicapped a dedicated team of educators…" and "more money, more staff members and more planning are required to maintain program quality."

During the reexamination period under review, the district's budget and supplemental funding remained inadequate to provide for adequate operational resources and updated technology. The budget has not restored losses to a district with a history of inadequate provisions. Like most school districts, Lowell Public Schools experienced significant cost increases in health insurance and energy costs. Although special education budget percentages remained constant at 11.3 percent over the three years, out-of-district tuitions increased. According to Department of Education (DOE) data, district enrollment decreased from 2005 to 2007 by 701 pupils.

Grant funds have declined, further straining the budget. The superintendent stated in the FY 2007 Budget Request letter to the school committee, "We have made dramatic reductions in programs

and services in recent years. Over the past five years – we have eliminated nearly 300 local and grant funded positions. Primarily due to grant cutbacks, more positions have been eliminated in this year's budget plan." While many districts experienced a reduction in grant funding, the impact to Lowell Public Schools was notable. In the FY 2007 Budget Request letter, the superintendent remarked how the district's budget had been "complicated" by the heaviest losses in federal entitlement grants in recent memory. The anticipated reduction was $1,348,009. In addition, two competitive grants totaling $600,000 were ending.

In the FY 2008 Budget Request letter the superintendent noted that the budgets for capital improvements and equipment replacement have been level funded for five years. District personnel told the EQA team that classroom-based technology was inadequate. Administrators at all levels stated new schools were equipped with updated technology, and older hardware in other schools was gradually being replaced, but that the purchasing of technology was not a general district priority. Some teachers stated that the district had a lot of dated computer hardware that could not run current software programs. Due to hardware limitations, some teachers could not access assessment information available for each student. Science teachers talked about lack of science equipment such as probes, and staff members also reported that the budget for supplies had not increased for a number of years.

District administrators stated that the budget is a combination of the superintendent's request and the city manager's assessment of funds. They stated that Lowell Public Schools has a bare bones budget with the capacity to address additional needs only if money is available. Some personnel expressed that school committee members were not aggressive advocates for the school budget. School committee members stated in interviews that they did not have an adequate budget in 2007, but worked to ensure that necessary funds were appropriated for the district, citing their challenge last year of the city council's recommendation.

13.8. <u>The community provided financial resources to ensure an educational program of quality, as evidenced by a sufficient district revenue levy.</u>

EQA Rating from 2005: Unsatisfactory

EQA Rating from 2007: Needs Improvement

Evidence

During the prior period of EQA review, the Lowell Public Schools did not meet the required minimum net school spending. In FY 2001, it was under the requirement by $1,992,486; in FY 2002 by $4,390,455; in FY 2003 by $6,822,046; and in FY 2004 by $4,230,612. The City of Lowell had consistently funded the district below the required local contribution for each year under review.

During the reexamination period under review, the community did not annually provide sufficient financial resources to ensure educationally sound programs and facilities of quality, as evidenced by a sufficient district revenue levy and level of local spending for education.

The combination of Chapter 70 aid, local revenues, and indirect charges did not meet the net school spending (NSS) requirements of the education reform formula from the previous period under review through the FY 2008 budget year. In FY 2006, the district was under its NSS requirement by $3,864,231. In FY 2007, the district was under its NSS requirement by $440,854. The district spent less than its NSS requirement in every year since at least 1998, although never more than 4.9 percent under. In FY 2008, the amount budgeted by the district was under its NSS requirement by $305,812.

According to Department of Education data, the district received $20,221,448 in federal and state grants in FY 2006 and $19,066,675 in FY 2007, which was a reduction of $1,154,813. Major federal grant awards were for Title I, SPED 94-142, Teacher Quality, and 21st Century Learning. Major state grants consisted of Adult Education Learning Center and Kindergarten Enrichment.

A review of information from the Department of Revenue (DOR) website indicated that in July 2006 the city had negative free cash of $2,220,766, no stabilization fund, and a $975,484 overlay reserve for FY 2007. The city had excess levy capacity of $5,055,488; excess levy capacity is the difference between the levy limit and the actual levy, an additional amount the city could collect by legal authority but chose not to levy. The override capacity was $87,853,472; override capacity is the difference between the city’s levy ceiling and its levy limit, or the maximum amount the city may impose to override its levy limit. State aid to the city represented 56.38 percent of revenue, tax levy represented 28.87 percent, and local receipts represented 14.13

percent. The residential tax rate was $10.61. The school department's percentage of total expenditures in the city for FY 2006 was 49.54 percent and for FY 2007 was 48.16 percent.

13.9. The school committee:

a. reviewed and approved a budget for education in the district according to the process and timeline developed with the superintendent,

b. worked to ensure that necessary funds were appropriated for the district, and

c. maintained the balance between needs and resources in the distribution of monies, and oversaw the operation of the annual school budget.

EQA Rating from 2005: Poor

EQA Rating from 2007: Needs Improvement

Evidence

During the prior period of EQA review, the school committee was aware that the city was funding the district below the required minimum local contribution and deemed it acceptable. The school committee's finance subcommittee gave the superintendent budget guidelines of either a dollar amount or level service. The district did have a process that gave the superintendent authority for budget calendar development, but did not have a formal school committee approval process of payrolls and warrants.

During the reexamination period under review, the school committee did not ensure the district had adequate funding. School committee members indicated that they worked to ensure that necessary funds were appropriated for the district. However, according to school committee members, the district did not have adequate funding for FY 2007 and challenged the city manager's recommendation on the budget and sought supplementary funding (new Chapter 70 aid). The superintendent remarked that the school department received $800,000 less than all the new Chapter 70 aid. Also, leadership personnel remarked that the city kept all Medicaid monies. The superintendent stated that "the circuit breaker has been an asset to us." Interviewees reported that school committee members overall were not aggressive advocates for the school department's budget. Furthermore, a few interviewees commented that the district did not meet its net school spending requirements since the last EQA review.

Interviewees by and large indicated that the school department's budget was not adequate. Items mentioned that the district needs included preschool transportation (approximately 30 percent of eligible age four preschoolers attend the half-day program), a full-time social worker at each elementary and middle school and two social workers at the high school, and more staffing for targeted interventions in ELA, math, and special education in grades K-12. Also, the superintendent mentioned the need for additional English as a second language (ESL) certified staff members, more targeted technology to support the goals of the district, and resources to expand the summer partnerships with community-based organizations to assist at-risk students.

School committee members indicated that they maintained a balance between needs and resources in the distribution of the monies, and oversaw the operation of the annual school budget. The school committee members stated that they relied on the superintendent to balance the needs and distribution of funds in the budget. The school committee members and the superintendent commented that the principals had much discretion in spending the monies in their budgets as long as they stayed within their bottom lines and program/instructional guidelines. Principals concurred with the statement of the school committee members and the superintendent about school budget decisions. One principal remarked, "We have a lot of latitude with our budgets."

Interviewees expressed differences of opinion as to who oversaw the operation of the school department's budget. School committee members stated that they relied on its finance subcommittee to oversee the operations of the budget. On the one hand, central office administrators indicated that the superintendent and the assistant superintendent for finance submitted the school department's payroll and warrants to city hall without school committee review. On the other hand, central office administrators mentioned that the assistant superintendent for finance prepared a quarterly report on the budget for review by the school committee. The school committee members mentioned receiving the quarterly budget reports.

The district did have an appropriate budget development process, having noted that funding was insufficient. The school committee members and the superintendent stated that the school committee reviewed and approved a budget for education in the district according to the process and timeline developed by the superintendent. The superintendent mentioned that the proposed

budget focused on the district goals divided as follows: a) all schools; b) high school; c) middle schools; d) elementary schools; and e) central office. Also, the superintendent made a statement that she prepared a yearly budget calendar to which the school committee members and administrators agreed.

Both the school committee members and the superintendent indicated that the budget development process began in late winter/early spring when the city had a good estimate of its Chapter 70 aid. Administrators mentioned that they had an opportunity to review their budget proposals with the superintendent prior to her presentation of the budget to the school committee's finance subcommittee and later to the entire school committee. School committee members commented favorably about the incremental approach that the superintendent used in the development of the budget. They mentioned three incremental categories: 1) budget trade offs, or "programmatic changes with no net costs"; 2) essential needs, or "things that we have to do such as special education programs"; and 3) critical needs, or "items we should have—matters of opinion/discussion." Furthermore, the school committee members and the administrators stated that the school committee conducted open budget review sessions covered by the *Lowell Sun* and by local cable television. According to interviewees, the budget received approval in June, first by the school committee, then by the city council.

14.2. <u>The district exercised appropriate controls to ensure accuracy of local, state, and federal financial reports.</u>

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, the district did not exercise appropriate controls to ensure accuracy of local, state, and federal financial reports. The district and the city did not have a formal written agreement regarding the expenditures the city paid on the district's behalf, and had disagreements regarding the charges. Interviewees reported inconsistent grant management and record keeping when grants were managed by individuals, prior to the hiring of the grants manager. The departments had kept a separate ledger for grant expenditures by school, and the accounting system did not allow for expenditures or requisitions to accounts with no balance or

to accounts that would have become over-expended as a result of the transaction. The district's compliance review of the End of Year Pupil and Financial Report for FY 2001, FY 2002, and FY 2003 cited the district for inaccurate reporting.

During the reexamination period under review, the district corrected the prior problems in this area, and continued to exercise appropriate controls to ensure accuracy of local, state, and federal financial reports. Financial reports were accurate and filed on time. Reports were generated from the MUNIS software financial and payroll program. The administration also presented a report on additional teaching positions required in the district. Regular, timely, accurate, and complete financial reports were made to the school committee, appropriate administrators and staff, and the public. Examiners reviewed minutes of a finance subcommittee meeting of the school committee which stated that the FY 2007 2nd Quarter Financial Report was presented by the school administration, the Fluency Case Cost Estimate was presented by the administration, and the FY 2006 Per Diem Pay Report was also presented. The finance subcommittee has the responsibility to make a report to the full school committee relative to these reports from the school administration.

Examiners reviewed a copy of the Quarterly Financial Report and observed that it contained detailed categories of personnel salaries and expenses. The report displayed the approved budget, the amount expended and encumbered to date, and the available balance.

In addition, the finance administration prepared budget status reports for the principals. The city chief financial officer also prepared a quarterly report that contains a summary report of expenditures of the school committee budget.

The district used efficient accounting technology that integrated the district-level financial information of each school and program. The district and the city used the MUNIS software program for accounting and payroll. This software allowed the city auditor to monitor all transactions entered into the computer system. School principals had terminals at their schools that allowed them to monitor their budget and track expenditures on a "read only" basis.

The district used forecast mechanisms and control procedures to ensure that spending was within fiscal budget limits. The administration forecasted expenditures through the MUNIS software

and district-developed Excel software programs. Salaries were forecasted by using the actual salaries expended through specific periods during the budget year plus adjusting for the changes in personnel during the year to estimate the costs for the balance of the year.

The district had a system in place to pursue, acquire, monitor, and coordinate all grants to ensure they were managed efficiently. The district hired a person to manage the financial aspect of grants. This area was then staffed with the manager plus four clerks. Central administration met with the grants manager and staff regularly to review unexpended grant funds as the year progressed. The June 2006 independent audit of Reports on Federal Award Programs, for which prior audits stated in some of their findings that "the school finance department needed to amend their policies so that the financial reporting is in compliance with local and state and federal laws," concluded that "based on our audit of the major educational grant programs it appears that the city has implemented necessary elements to ensure a continuity of the financial management of programs funded with federal funds."

15.2. <u>The district had a long-term capital plan that was reviewed regularly and revised as needed with input from all appropriate stakeholders.</u>

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, most capital planning focused on new construction and renovation of existing buildings. There was no formal capital plan internally; capital planning was the responsibility of the city.

During the reexamination period under review, the district and the city have recently developed a long-term capital plan that clearly and accurately reflected the future capital development and improvement needs, including educational and program facilities of adequate size. The district had contracted with an engineering firm for a comprehensive evaluation of the HVAC systems of all 28 schools. The inspections included the recording and cataloging of information of each piece of equipment and were completed in June 2007. According to interviews with district personnel, they began to develop the Lowell Public Schools Five Year Plan two years ago, which was approved by the school committee last year. Examiners reviewed a December 2007 letter

from the superintendent of schools to the city manager emphasizing the importance of the development of a capital plan for all the district and city buildings.

In interviews with city administrators, they stated they are presently completing a 10-year capital plan to present to the city council, which will include the needs of the school district. City officials stated that the plan includes the HVAC, roofing, and window needs of the district's schools. They said that after the final plan is approved by the city council it would be reviewed every year.

The district had a new elementary school under construction next to an existing school, which will be demolished upon completion of the new school. The district had a plan to combine and rehabilitate other schools. The city's Department of Public Works monitors school construction on behalf of the school district.

15.3. The district implemented formal preventive maintenance programs for buildings and equipment.

EQA Rating from 2005: Poor

EQA Rating from 2007: Needs Improvement

Evidence

During the prior period of EQA review, there was no formal preventive maintenance program. The city was responsible for the maintenance of the schools, and the school department was responsible for the custodial department.

During the reexamination period under review, the district continued to lack a formal preventative maintenance program to maximize and prolong the effective use of the district's capital and major facility assets. Both school district and city administrators stated there was not a formal preventative maintenance program in place. The maintenance personnel who serviced the schools were city rather than school department employees, and school administrators stated in interviews that response to maintenance requests was often not in a timely manner even though there was a work order system in place. The city's Department of Public Works managed the maintenance program and the school department did not have a budget to institute or maintain a preventative maintenance program. Although the city maintenance personnel included

licensed electricians and plumbers, as well as carpenters, painters, and roofers, there was no program to have these employees inspect building systems on a routine and systematic basis.

Examiners who visited the district's schools reported that the buildings were clean, well lit, and the environment promoted student learning and achievement, although there were occasional conditions of roof leaks and buildings "showing their age."

15.7. The district implemented a critical review process to assess the effectiveness and appropriateness of supplemental expenditures to ensure that they were used for the purpose intended and to improve student achievement.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, Title I and the special education 94-142 grants were evaluated yearly. The district's grants were reviewed by the city's independent unified audits from a financial management perspective.

During the reexamination period under review, the district implemented a critical review process to assess the effectiveness and appropriateness of supplemental expenditures to ensure that they were used for the purpose intended and to improve student achievement.

The superintendent indicated that she had established a communication process with personnel in the district who wrote the various grants. According to the superintendent, the district did not have one person assigned as a grant writer, but rather had appropriate supervisory personnel prepare the grants such as the Title I coordinator and special education administrator. The appropriate deputy or assistant superintendent reviewed all grant proposals prior to submittal. Also, the recently established Grants Management Office monitored the application and expenditures associated with each grant. The EQA team saw evidence that the district had a process to comply with federal and state requirements concerning the evaluation of the grants.

Administrators commented that at times the district combined grant funds to provide additional personnel and services to students. Some examples cited included the hiring of instructional specialists, ESL tutors, and the supervisors of the Teacher Academy and the Lowell Program.

Interviewees expressed concern about the continued decrease in grant funds and the impact it could have on the district. In addition, interviewees commented about the uncertainty of implementing an extended day program from approved state grant funds since some issues still needed to be resolved between the school committee and the teachers' association.

Central office administrators stated that since the last EQA review the district undertook two transportation initiatives that saved the district a substantial amount of money in operations services. The first initiative involved the realignment of bus routes and the change of school starting and closing times to maximize three bus runs. The assistant superintendent for finance indicated that the first initiative resulted in "a cutback of 14 buses at a savings of $55,000 per bus."

The second initiative involved the bidding of the special education transportation contract. The assistant superintendent for finance reported that the successful bidder provided new equipment and agreed to a five-year contract with rate changes as follows: a) year 1, three percent decrease; b) year 2, three percent increase; c) year 3, two percent increase; d) year 4, no increase; and e) year 5, no increase. According to the assistant superintendent for finance, the district saved approximately $1 million through this initiative.

15.9. <u>The district coordinated the management and use of grants in an efficient manner.</u>

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, the district's grants were reviewed by the city's independent auditors from a financial management perspective. According to the administration, program audits were "weak" until 2004, when the district hired a grants manager.

During the reexamination period under review, the district coordinated the management and use of grants in an efficient manner. A Massachusetts Department of Education document indicated that in FY 2006 Lowell received $18,159,025 from federal grants and $2,062,463 from state grants. Also, in FY 2007 the district received $17,038,584 from 25 federal grants and $2,028,091 from seven state grants. Federal grant awards over $1 million to the district in FY 2007 consisted

of Title I, $7,791,728; SPED 94-142, $3,944,082; Teacher Quality, $1,466,590; and 21st Century Community Learning, $1,074,938. The two largest state grants that the district received in FY 2007 were the Adult Education Learning Center grant, $918,975 and the Kindergarten Enrichment Program grant, $774,800.

Leadership personnel indicated that since the last EQA review, the district established a Grants Management Office headed by a grants manager and staffed with four clerks. Central office administrators indicated that the grants manager knows every grant written by personnel in the district and the status of each of the grants. The superintendent stated, "We have to figure out how to spend the funds in the grants so that we get the maximum for our students." Also, the superintendent mentioned that leadership personnel met regularly with the individuals in the Grants Management Office to discuss issues pertaining to grants such as staffing, amendments, expenditures, and evaluations. Furthermore, the assistant superintendent for finance and the business officials at city hall indicated that as a result of the establishment of the Grants Management Office, the school department had a system in place to monitor all its grants.

2007 Indicators

13. The district formed partnerships with community human service agencies and benefactors, such as corporate and civic sponsors, to provide at-risk students and families access to health, social, recreational, and supplemental educational services.

EQA Rating from 2007: Satisfactory

Evidence

The district formed partnerships with community human service agencies and benefactors, such as corporate and civic sponsors, to provide at-risk students and families with health, social, recreational, and supplemental services. Leadership personnel cited a number of partnerships for early childhood youngsters such as the Ann Sullivan Early Intervention Center, the Community Teamwork Inc. (Division of Child and Family Services), the Child Care Search, the Family Foundations Network, the Lowell YMCA Child Care, the Massachusetts Society for the Prevention of Cruelty to Children, ONE Lowell, and the South Bay Early Intervention. A partnership repeatedly mentioned by interviewees was the Community Partnership for Children. This year-round early childhood program partnered schools with child care providers. It

identified at-risk families and made city services available to them. Some other partnerships mentioned included Tufts Dental (a mobile dental clinic), Lowell Community Health, United Teen Equality Center, the Alternative High School Diploma program, and the private tutoring provided to students on long-term suspensions.

Also, interviewees commented about the Lowell Adult Education program that provided second language classes and GED courses for parents. The superintendent stated that this program was the largest adult GED and ESL education program in Massachusetts. In addition, the superintendent commented that some programs were held in homeless shelters.

Administrators spoke about the partnerships that the district had with institutions of higher learning. They cited the partnership with UMass Lowell that included projects and activities such as the Bartlett Community Public School (preK-8 professional development school), a district-based initial licensure program for middle and high school teachers, Lowell High School Academies, the New England Network of Science, Technology, Engineering, and Math (STEM), Gear Up, and the Teaching American History grant in collaboration with the Tsongas Industrial History Center.

The Lowell Public Schools also partnered with Middlesex Community College on a variety of initiatives. Interviewees mentioned initiatives such as Kids to College, the Academic Pathways for Paraprofessionals, Student Connections, Two Plus Two, the Educational Talent Search, and the Lowell Early Awareness Program.

Also, leadership personnel commented about the collaboration between the Lowell Public Schools and Fitchburg State College on the Lowell Program. As a pathway from the Teacher Academy Induction Program, teachers received transfer credit for up to three courses that counted in the Lowell Program toward a master's degree or certificate of advanced graduate studies. In addition, the district partnered with Fitchburg State College, the Massachusetts Institute of Technology (MIT), and EduTron Corporation to prepare the 2006-2007 MMSP Local Report on Intensive Immersion Institutes in Mathematics for Grade 4-8 Teachers.

14. The superintendent created and disseminated a comprehensive safety plan in collaboration with the community and plans were reviewed annually with the police and fire departments prior to each school year. School and district safety plans were aligned.

EQA Rating from 2007: Satisfactory

Evidence

The superintendent created and disseminated a comprehensive safety plan, the Lowell Public Schools Emergency Preparedness Plan (LPSEPP), in collaboration with the City of Lowell. The LPSEPP, contained in an orange three-ring binder, had on its cover page the telephone numbers of the police, ambulance, and fire departments along with the telephone numbers of the superintendent's office, the transportation office, operations and maintenance, and the school health coordinator. In addition, the preparedness plan included the superintendent's message to staff and procedures for lockdowns, bomb threats, fires, assaults, medical issues, gang incidents, operational crisis, and community resource emergency telephone numbers. The appendices of the plan consisted of a telephone bomb threat checklist, emergency procedures to be followed in the event that there is no heat (or other situation) at a school and it is too late to cancel school, and school crisis intervention tips. According to the superintendent, the assistant superintendent for student support services had the responsibility for reviewing the plan annually with the assistance of appropriate city department heads such as police and fire and aligning the school safety plans with the district plan. Also, the superintendent commented that there was a district-level crisis management team and that the assistant superintendent for student support services served as the school department's representative on the Citywide Tier II Emergency Team.

The assistant superintendent for student support services agreed with the statements of the superintendent about the LPSEPP, the city emergency management team, and the alignment of school safety plans. Also, the assistant superintendent for student support services mentioned that she distributed and discussed the contents of the LPSEPP with each principal.

Upon request, principals produced the LPSEPP for EQA team members. In addition, principals stated that they had safety plans for their schools. Two safety plans made available on inquiry by a member of the EQA team were the Peter W. Reilly Elementary School Evacuation Protocol and the Varnum Elementary School Crisis Management Manual. These manuals contained the

names of crisis management team members, emergency telephone numbers, procedures such as lockdowns and evacuations, as well as maps of the buildings. Principals stated that each year the assistant superintendent for student support services reviewed the school emergency plans in late August/early September. Once approved, the principals said that they distributed and discussed the school emergency plans with their staffs. However, a few interviewed teachers said that they did not have a copy of their school safety plan.

The superintendent indicated that the district had 10 security officers, nine at the high school and one at the alternative high school. In addition to a supervisor, there were also four resource officers for the middle schools and three resource officers for the high school. Furthermore, the superintendent stated that from grant funds the high school purchased and installed approximately 100 security cameras for both inside and outside the high school. In a security office at the high school, monitors displayed the pictures from the various security cameras. EQA team members had the opportunity to visit the security office at the high school and to receive a demonstration on the capabilities of the system.

Standard II: Curriculum and Instruction													
	2005 Indicators											2007 Indicators	
Ratings▼ Indicators►	**5.3**	**5.4**	**5.5**	**5.6**	**5.7**	**5.8**	**6.2**	**6.4**	**6.5**	**6.6**	**6.8**	**9**	**11**
Excellent													
Satisfactory	**2007**	**2007**						**2007**	**2007**	**2007**			
Needs Improvement			**2007**	**2007**	**2007**	**2007**	**2007**						**2007**
Poor	**2005**	**2005**	**2005**			**2005**	**2005**	**2005**	**2005**	**2005**			
Unsatisfactory				**2005**	**2005**						**2007 2005**	**2007**	

II. Curriculum and Instruction

The curricula and instructional practices in the district were developed and implemented to attain high levels of achievement for all students. They were aligned with components of the state curriculum frameworks and revised to promote higher levels of student achievement.

Findings:

- The district prioritized the development of instructional leadership by providing the relevant training to principals and instructional specialists and overseeing the implementation of National Institute of School Leadership (NISL) expectations.
- The district made literacy and math the primary focus by providing increased levels of staffing, professional development, program materials, assessments, and time on learning to improve performance in these two content areas.
- Overall coordination of the K-12 district curriculum had not been resolved.
- Teachers were involved with curriculum writing from the district to the classroom level.
- With some exceptions, the district had processes in place to ensure the scope and sequence of curriculum objectives.
- Horizontal and vertical alignment of curricula was in place K-8 with the exception of elementary science and middle school English language arts. The high school science departments had recently begun to address alignment of curricula. The high school math alignment efforts through a vertical team are currently in its fifth year.

- Instructional or literacy specialists played an important role in ensuring the implementation of curriculum in grades K-8.
- Grades 9-12 may have an inadequate number of instructional specialists to implement the K-8 model. The high school practices of collaboration by 'teacher request' only did not support the high school's implementation of the district model.
- Implementation of the goals and objectives in the DCAP was in place in grades K-8. With the exception of the grade 9 reading intervention, the DCAP was not in place at the high school.
- The EQA examiners learned that K-8 teachers understood how to create flexible grouping to target instruction in their classrooms, and they observed this practice in many classrooms.
- The district focused on improving teacher attendance by establishing expectations and providing data to principals. Schools with high rates of teacher absenteeism in the prior examination period improved above the district average during the reexamination period.
- The student-teacher ratio in classrooms observed by examiners was low at each level and averaged 11.5; although the average class size was 17.7 students, the observed classrooms had an average of 1.5 instructional staff members.
- Additional teachers and paraprofessionals in the classroom were exceptionally well used to support instruction and enabled many classrooms to make use of multiple strategies for learners with different needs.
- Instruction was strongest at the middle level, followed by the elementary level. Instruction at the high school was the weakest on all measures assessed by the EQA team.
- Up to date instructional technology was not available to teachers or students. This situation was not likely to improve since provisioning for technology was a low priority in Lowell.

Summary

Since the last EQA review, the district's ratings improved on seven of the 11 indicators in this standard previously rated 'Poor or Unsatisfactory' in the 2005 report. The EQA also reviewed the district on two additional indicators in the 2007 reexamination. Of the total 13 indicators in the reexamination, the district performed at a satisfactory level on five. The indicators for which

the district received a rating below 'Satisfactory' concerned provisioning, alignment between grades K-8 and 9-12, and sufficient improvement in achievement and performance, particularly for students with special needs.

However, Lowell Public Schools made substantial progress in the area of curriculum development and support for instructional improvement for grades K-8 since the prior review. The district had a curriculum development process for the elementary and middle schools that involved teachers in the construction at the district level of the mandated curriculum in the tested content areas. Principals and instructional specialists then brought the mandated curriculum to the teachers in the schools. At the same time, they provided teachers with assessment data on their students. Instructional specialists then supported teachers in implementing the mandated curriculum along with the differentiation through interventions that addressed individual students' assessed needs. The mandated curriculum brought horizontal and vertical alignment of the curriculum in most content areas. Additionally, District Curriculum Accommodation Plan (DCAP) objectives were essentially implemented in grades K-8.

At the high school, teachers in departments, under the direction of their department heads, had begun to address the horizontal and vertical alignment of their curricula by writing syllabi which listed the content to be addressed in a particular course as well as the alignment of that content with the state learning objectives. However, department heads, with up to 40-member departments and four instructional specialists serving the entire high school, did not bring the same focus and support to high school teachers as they developed and implemented their curricula as did the principals and instructional specialists in place in grades K-8.

The curriculum work brought modest gains in student achievement to most subgroup populations. In fact, limited English proficient (LEP) students scored above the state average for all LEP students. However, the gap between the achievement of special education students and that of all students widened during the period under reexamination. Insufficient staffing contributed to this, as well as only recent access to all aspects of the curriculum by special education students.

The district increased time on learning in ELA to a minimum of 120 minutes at the elementary schools. Thirty minutes of the ELA blocks were used for targeted flexible group instruction.

Middle schools had 60 minutes for ELA, and provided remedial students with an additional 30 minutes of targeted instruction. The district increased time on learning in math to 100 minutes at the elementary level and 90 minutes at the middle level. Thirty minutes of the math instructional time were used for targeted flexible group instruction, or for grade 7 pre-algebra and grade 8 algebra courses. Instructional periods at the high school were 50 minutes, and the high school provided additional courses for remedial students, including a READ 180 program for grade 9 students.

Educational technology continued to be an issue in the district since many of the large number of computers available were antiquated and could not support the software for the recently revised programs in place in the district.

2005 Indicators

5.3. The district had an established, documented process that involved teachers in the annual review and/or revision of curricula based on the analyses of results of standardized tests.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review (2001-2004), curriculum revision at all three levels was driven more by adoption of new curriculum programs or textbooks than by standardized test results. The introduction of the Investigations math program in the elementary schools led to revisions in the elementary math curriculum guides. Similarly, the middle school's adoption of Connected Math resulted in math curriculum adjustments. At the high school, the purchase of new ELA textbooks also led to curriculum revisions. In a general sense, these program and textbook adoptions were driven by the fact that student achievement in math and ELA in the Lowell Public Schools was not improving. On those occasions when the curriculum was revised, teachers were involved. However, administrators at all levels indicated that there was no procedure or practice in place for the annual teacher review of standardized test results which would have prompted curriculum revisions.

During the reexamination period under review (2005-2007), the district's review and revision of curricula involved teachers and linked the analysis of the MCAS test standards to student

achievement results. Teachers were involved in curriculum revision at both the district and the school levels. For the most part, elementary and middle level curriculum revision occurred at the district level when a new text or program was adopted or when a state framework changed substantively. For example, when Lowell Public Schools adopted the 2009 version of the Investigations program for the 2007-2008 school year, the central office gathered teachers in the summer of 2007 to document the alignment of the revised program with the Massachusetts mathematics curriculum framework. In 2005-2006, teachers worked with administrators to design the curriculum maps for elementary English language arts for grades K-6. Then, when the district moved to the revised Scott Foresman series in 2006-2007, teachers again worked with administrators to document the expansion of the three-tier intervention model to all schools. As another example, in response to changes in the state science framework, middle and high school science teachers rearranged the sequence and content of middle and high school science instruction to properly prepare students for the grade 10 MCAS biology test. In summer 2007, a district committee had produced a science curriculum for grades 5-8 to provide substantial guidance for implementation of the new curricula.

Concurrently, because the district followed a model of distributed leadership, a great deal of curriculum review and adjustment took place at the school level in response to analysis of assessment data. Principals and instructional assistants led the way for grade-level teams to closely analyze assessment data such as those from the MCAS tests, Dynamic Indicators of Basic Early Literacy (DIBELS), unit tests, Scholastic Reading Inventory (SRI), Group Reading Assessment and Diagnostic Evaluation (GRADE), and math benchmark assessments. They worked to provide students with interventions that addressed the particular needs which the assessments uncovered. This represented curriculum refinement at the level of the child.

Almost all high school curriculum development took place at the school level. Department heads assumed responsibility for leading teachers to align and document curricula. The English department had completed the alignment of its curriculum and developed syllabi and common

quarterly exams. The math department had recently produced syllabi for each course and had exams that were 75 percent common.

5.4a. (In academic districts) The results of student assessment data (i.e., longitudinal, demographic, disaggregated, diagnostic, and/or surveys) indicated that the district implemented an established process to ensure the scope, sequence, and alignment of learning goals, competencies, and expectations from one grade to the next in grades K-12 in ELA, math, science and technology (and other tested core academic subjects as added).

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, analysis of both longitudinal and disaggregated student assessment data did not support the assertion that sequencing and alignment of learning goals led to improved student achievement. MCAS test performance data for all students on all tests in the Lowell Public Schools indicated little improvement between 2001 and 2004. The Proficiency Index (PI) for student subgroups revealed that subgroup performance changed little between 2002 and 2004. Limited English proficient (LEP) students were the only subgroup to improve noticeably in both ELA and math. Over the same time period, however, scores for Hispanic students, low-income students, and students with disabilities changed minimally in ELA and math. Students in the aggregate did not make adequate yearly progress (AYP) in either ELA or math in 2004. Also, only White students made AYP in ELA in 2004, and no student subgroups made AYP in math.

During the reexamination period under review, inadequate subgroup performance and improvement continued to plague the district, especially the special education subgroup which did not make AYP in ELA or math at any grade level. However, in 2007 the district made AYP for the aggregate student population in ELA and math, and the LEP subgroup outperformed the state average in grades 6 and 7 in ELA and on all tests in grades 8 and 10. While the district's work had not yet resulted in improved student achievement, the district did implement an established process to establish the scope, sequence, and alignment of learning goals, competencies, and expectations from one grade to the next across grades K-12.

The district's established process for the development of a complete aligned curriculum began in the central office. District-level curriculum work initiated the process when state framework changes occurred or when the district adopted new programs or textbooks. The documents which resulted, such as curriculum maps and syllabi, were mandated across the district. The next stage in the development of the curriculum occurred at the school level. Individual schools had the responsibility to expand or adjust the curriculum to address the identified needs of their students overall and of individual students in particular. To support teachers in this work, the district was developing a database through which teachers could access a profile of the available assessment data for each child. At the time of the site visit, most teachers received student assessment information from their principals or instructional specialists. Individual schools and teachers then had the responsibility to select interventions and to group students for support according to their assessed needs. The district had mandated lengthy literacy and numeracy blocks so that time was allotted for program instruction as well as additional time for interventions.

To address the sequencing of learning goals, the district had adopted the Investigations and Connected Math programs which brought a meaningful sequence of learning objectives in math. To address the need for sequencing of ELA instruction, the district in 2005 had developed curriculum maps for students in grades K-6. These detailed all aspects of unit lessons. While middle school ELA did not have the same uniformity as at the elementary level, each middle school had produced a curriculum map that sequenced that school's learning objectives. Finally, the district had produced a detailed science curriculum for grades 5-8 that ensured sequencing of student learning toward competence on the grade 10 science assessment.

The district was beginning to bridge the gap between the middle and high schools in ELA, math, and science. Vertical teams were in place for math and had been initiated for science in 2006-2007. However, challenges remained with regard to the overall vertical coordination of the curriculum across grades K-12. Coordinators who carried the title K-12 Reading ELA and K-12 Math focused their attention on grades K-8 and played limited roles regarding curriculum at the high school.

5.5. The district's curricula in all tested content areas were aligned horizontally to ensure that all teachers of a common grade level addressed specific subject matter following the same time line, and vertically to ensure complete coverage, eliminate redundancies, and close any gaps.

EQA Rating from 2005: Poor

EQA Rating from 2007: Needs Improvement

Evidence

The district's curricula were not well aligned horizontally and vertically in the initial review period, a time in which the district was still working toward alignment by creating new responsibilities and roles, purchasing common materials, delivering common training, and developing standard benchmarks and assessments. A key start for the district in this work was in 2001 when Lowell Public Schools added the positions of math coordinator and coordinator of reading/ELA and strengthened the district's communication and work in curriculum, with the support of the literacy specialists, instructional specialists, and math lead teachers who assumed growing responsibility for monitoring horizontal curriculum alignment in the schools. In the 2003-2004 school year, the district began to align its K-8 assessments and programs for math and ELA. The district adopted grade-level benchmarks for grades K-4, introduced two Investigations units for use across the district, and had teachers begin to develop unit tests in math for grades K-8. Prior to that, elementary and middle schools used up to four different math textbooks and lacked common assessments. The district also adopted ELA benchmarks for grades K-6 in 2003-2004, and individual schools introduced or piloted various reading programs, and John Collins Writing was introduced to students, but at different times because of a staggered training schedule. The monitoring of high school alignment was weak, although courses were all described in detailed curriculum guides, because high school department chairmen with teaching responsibilities had to monitor the alignment across multiple sections of courses, and the multiple sections of courses were not required to give a common exam to align outcome expectations. The district worked to align grades 8 and 9 through curriculum committee work, but the high school's practice of writing its own curricula with little connection to curriculum development in grades K-8 resulted in minimal vertical alignment between the middle and high schools.

At the time of the reexamination, the EQA learned that the district had succeeded, for the most part, in aligning its curriculum horizontally and vertically. In elementary ELA, curriculum maps governed horizontal and vertical curriculum delivery. The selection and sequencing of math objectives at both the elementary and middle schools had been completed. The middle school science curriculum, as of the 2007-2008 school year, thoroughly documented both horizontal and vertical alignment. The high school English department had produced and was following a highly developed curriculum which included common quarterly assessments. Science and math departments had produced syllabi for each course and had plans to add more elements to their curricula.

The district had some areas that were still a work in progress. Science at the elementary level was to be taught through reading selections in the ELA program; this plan did not ensure coverage of the state learning objectives or even coverage of common selections from the program. At the middle school, the ELA curriculum was based upon the use of trade books, and each middle school produced its own unique ELA curriculum map. While improvement in coordination between grades 8 and 9 was evident, a gap still existed with regard to overall coordination.

Although the district had alignment work left to complete, the district had established some strong practices to align curriculum delivery. The John Collins Writing Program had been in place at all levels for several years, which brought a common vocabulary and common instructional strategies across all curricula. For at least one half-day each month, the instructional specialists in math and ELA gathered at the district level to refocus their energies on the delivery of the curriculum. Another practice was the need-based decisions to organize "brigades" of teachers from individual schools, who were released from their classroom duties to work together for a day on curriculum refinement and coordination. In addition, the English Language Proficiency Benchmark Objectives (ELPBO) curriculum in grades 5-8 clarified for teachers the expected performance of ELL students.

5.6. <u>Modifications to the curriculum resulted in improved, equitable achievement for all student populations.</u>

EQA Rating from 2005: Unsatisfactory

EQA Rating from 2007: Needs Improvement

Evidence

The district made curriculum modifications during the prior period under review, but assessment data indicated small improvements in achievement for student subgroups, with the exception of gains achieved by limited English proficient (LEP) students. Therefore, the EQA team concluded that equitable achievement of all student populations did not result from the district's curriculum modifications. Three examples of modifications were the addition of nonfiction reading at all levels, increased writing opportunities for students, and a grade 9 study skills course requirement.

During the reexamination period under review, curriculum revisions brought modest achievement gains. The district pointed in particular to the increased aggregate student achievement on the grade 6 and 8 MCAS math tests. Teachers reported growth on other assessments such as benchmark, Galileo, and unit tests. A district study of cohort achievement also indicated individual student growth across years.

With regard to equitable achievement of all student populations, the achievement of special education students lagged behind that of limited English proficient students and other subgroups. In fact, the proficiency gap between special education students and all students in the district was growing, while the gap between all other subgroups and the aggregate population was narrowing. Interviewees suggested possible reasons, one of which involved lack of access to the curriculum. During the period under review, special education teachers had begun to receive content area training alongside regular education teachers. However, until recently special education teachers had not been trained in intervention strategies, and special education students had not been receiving interventions. Teachers could point to professional development opportunities such as Sheltered Instruction Observation Protocol (SIOP) training which supported them as teachers of English language learners. They could recall no such training for mainstream teachers of special education students. The team learned from state documents that special education received only 10 percent of the district's professional development budget while the students represented almost 17 percent of the school population. Furthermore, special education teachers represented a disproportionately high number of the total of the teachers on waiver.

5.7. Staffing levels were adequate to deliver the district's curriculum to all students, as indicated by equitable rates of improvement for all student populations.

EQA Rating from 2005: Unsatisfactory

EQA Rating from 2007: Needs Improvement

Evidence

During the last two years of the prior review period, the Lowell Public Schools experienced budget cuts and had to terminate staff. The district made every effort to mitigate the impact at the classroom teacher level, but eliminated positions that supported students and teachers. At the high school, Lowell eliminated three administrative positions and three department chairmen. At the middle and elementary levels, library media specialists and technology specialists began to split their time between two schools rather than one. Elementary teachers reported that staffing cuts hampered their ability to deliver the curriculum, particularly because they lost the teacher and paraprofessional classroom support that assisted them in working with small groups and individual students. Based on this evidence and the fact that the percentage of students scoring at the 'Proficient' level or above on the MCAS tests indicated minimal improvement for most student subgroups, the team determined that staffing levels were not adequate to deliver the curriculum to all students.

During the reexamination period under review, the superintendent presented most staff cuts at the teacher level as trade-offs in the attempt to mitigate the impact on the instruction of the core curriculum. With a restrictive budget, some personnel cuts needed to be made. The superintendent suggested and principals agreed to protect the district's focus on ELA and math instruction when having to make difficult personnel decisions. As an example, a principal could choose to replace a music teacher position with a position for a teacher certified in English as a second language (ESL). In 2007-2008, the district converted math lead teacher positions to math resource teachers at the elementary and middle schools. Also, Title I continued to fund instructional specialists at all levels. To strengthen ESL instruction, the district added an ESL teacher to the staffs of the five schools with newcomers. However, the team determined that staffing for special education was insufficient. Interviewees also reported that special education staffing was inadequate at the middle and high schools.

5.8. The district established practices that adequately provisioned for and supported the curriculum and its overall effectiveness in all assessed subject areas and all levels.

EQA Rating from 2005: Poor

EQA Rating from 2007: Needs Improvement

Evidence

During the prior period of EQA review, the school district had established practices for delivering curriculum to students in grades K-8. However, the high school participated minimally in this districtwide coordination of curriculum. District K-12 content coordinators had supervisory responsibilities only for grades K-8. Grades 9-12 coordination originated within the high school, and K-8 coordination originated in the district office. Coordinators in math and reading/ELA at the district office had effective practices to oversee selection of programs and the establishment of curriculum priorities for the elementary and middle schools. Literacy and instructional specialists met monthly with the district's ELA coordinator to receive direction and training, which they brought back to the principal and teachers in their buildings. Grade-level teams met with one another frequently and met weekly with the instructional specialist. Math resource specialists met as often with the district coordinator. Following that meeting, they brought curriculum direction back to the elementary and middle school principals and teachers. In addition, each content area had its own monthly curriculum steering committee meetings which reported its activities to the district's monthly curriculum steering committee meetings.

During the reexamination period under review, the district continued to support the implementation of the curriculum through the use of literacy or instructional specialists to cover all levels and the addition of a math resource teacher in each elementary and middle school. At the time of the site review, these specialists met with grade-level teams and departments and worked with individual teachers in classrooms to promote and support the system of interventions to address the assessed needs of students, although not those of special education students. They also met regularly with district administrative staff for training and discussion and brought districtwide direction back to the schools. Interviewees confirmed that the improvement of individual schools was attributable at least in part to the effectiveness of these specialists in overseeing and directing the implementation of interventions.

The allocation of instructional specialists at the elementary and middle schools was sufficient to make a real difference in student achievement. The model in place at these levels involved specialists working closely with teachers both in and out of their classrooms. By contrast, the model and possibly the number of specialists at the high school was inadequate to impact student achievement. The high school had only four instructional specialists for the entire school of 3,900 students. Interviewees reported that high school specialists did not have the same ready access to classroom teachers as did specialists in the elementary and middle schools. High school specialists were in classrooms only at the invitation of the teachers; it is unclear whether more specialists would have made an impact given this model.

6.2. The district expected that teachers used current assessment information to plan instruction and provided teachers with support and training in this process. MCAS and other trend data indicated that the district's practices, provisioning, and support for the instructional program were sufficient, as indicated in student achievement that consistently equaled or surpassed the state averages across grade levels.

EQA Rating from 2005: Poor

EQA Rating from 2007: Needs Improvement

Evidence

During the prior period of EQA review, the team determined that the district did not support and clarify expectations for how teachers were to use data effectively to impact classroom instruction. Although the district provided teachers with data analysis training and with aggregate student achievement data for their schools and the district, subgroup performance data did not reach all teachers, and teachers did not report having assessment data for each student they taught.

During the reexamination period under review, Lowell clarified expectations and provided support for teachers to use current assessment information to plan instruction for grades K-8. Literacy and mathematics specialists assigned to schools and other district specialists provided teachers with job-embedded professional development on the interpretation and use of test results. Teachers used the data to form flexible instructional groups in reading and mathematics.

This was the model of instruction in Lowell classrooms, and grouping by instructional needs was highly evident in classroom observations conducted by the EQA examiners in grades 1-8.

In interviews with the EQA examiners, teachers stated that they had been trained to use recent data from unit and benchmark assessments and other progress monitoring tools to provide appropriate instruction for students. For example, during the literacy block teachers formed advanced, grade-level, and strategic groups. Instruction for the strategic group was highly individualized and reading specialists and special educators usually assisted classroom teachers in meeting the divergent needs of these students.

Teachers reassessed their students periodically and reorganized the instructional groups based on progress and needs. Teachers told the EQA team that principals expected them to use this model of instruction. They added that they were well supported by building specialists who provided direction and helped them to increase their repertoire of instructional techniques. In interviews, principals confirmed that the district had developed and refined this tiered model of instruction over the last two years, and it was now fully implemented.

The district did not meet the student achievement criteria for this indicator, as students continued to perform below prevailing statewide averages. However, Lowell students made incremental gains in MCAS test achievement during the reexamination period. Preliminary results from district cohort analysis suggested that individual students made significant progress on successive administrations of the MCAS tests. District schools improved in meeting AYP targets both in aggregate and for all subgroups, and many of the schools on accountability status were one year from removal.

District subgroup performance was mixed. District ELL students scored above and special education students scored well below the statewide averages for these subgroups. All racial/ethnic subgroups in Lowell performed below the statewide averages for their peers. While district White and Asian students performed well below the statewide averages for these subgroups, district Hispanic and African-American students performed closer to the statewide averages.

6.4. The district provided instructional leadership and support for strategies, techniques, and methods that resulted in improved student achievement.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, the district provided instructional leadership by creating district-level coordinators for ELA and math in 2001. These coordinators worked directly with elementary and middle school-based literacy and instructional specialists and math resource teachers, who then provided instructional leadership within the buildings by meeting with grade-level teams at the elementary level and with interdisciplinary teams at the middle school level. In addition, the district provided training for teachers, as it introduced several new programs. Elementary teachers stated that the training for the Investigations program in 2003-2004 had been thorough. During the prior review period, 1,000 teachers received Sheltered Instruction Observation Protocol (SIOP) training that was geared to English language learners but which promoted good instruction for all learners. The district also provided training for teachers in the use of the DIBELS, the Massachusetts English Language Assessment-Oral (MELA-O), and the Developmental Reading Assessment (DRA). However, student achievement did not improve during the prior review period.

During the reexamination period under review, the district took a two-pronged approach to the development of instructional leadership. First, it continued the training and use of instructional specialists to support and model effective instruction for teachers. This training had become more in-depth during the reexamination period as a result of bringing in a consultant to work with these specialists on the subtleties of working teacher-to-teacher to bring about instructional improvement. Simultaneously, the district was working to improve teachers' content knowledge. For this purpose a consultant offered math content courses to elementary, middle, and high school teachers. This same consultant was beginning to offer science content courses. The district had conducted a study and found that students of teachers who had participated in the math content courses were more successful on the MCAS tests than students of teachers who had not.

Another key approach to improving the quality of instructional leadership capacity began in the 2006-2007 school year. The district provided National Institute of School Leadership (NISL) training to administrators in the central office, elementary schools, and middle schools. The purpose of the training was to better equip them to be leaders in learning communities. High school NISL training was scheduled for 2008-2009, after high school administrators complete the three-year course in "The DNA of School Leadership".

Improvements in student achievement had at the time of the reexamination been modest. However, instructional specialists reported seeing growth based on other assessments in use in the district. They expressed the conviction that the use of instructional specialists to refine and support instructional interventions at the level of students' need was working.

6.5. The district analyzed student achievement data and allocated instructional time in the tested core content areas that resulted in improved rates of proficiency for all students.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, the district reallocated instructional time in ELA and math. In 2002-2003 Lowell elementary and middle schools increased instructional time in ELA to 90 minutes per day and in math to 60 minutes per day for all students in grades 3-8. The high school added math and ELA MCAS test support classes to complement other content courses for students who failed or were at risk of failure on an MCAS test. However, these increases in instructional time in ELA and math across all levels did not result in improved rates of proficiency for all students.

During the reexamination period under review, Lowell increased instructional time for literacy and mathematics in grades K-8 to provide targeted instruction in flexible groups for all students, including those functioning at or above grade-level expectations. Over the last two years, proficiency rates increased in Lowell as measured by the MCAS tests, especially in middle school mathematics where the gains were significant, although proficiency levels were still below statewide averages. Lowell students also made measurable progress according to local measures, including unit and end of year assessments from the district literacy and mathematics

programs, district mathematics benchmark tests, and standardized assessments of reading comprehension.

Lowell increased time for literacy instruction in the elementary grades to at least 120 minutes. Thirty of the 120 minutes were devoted to small group instruction for readers at or above, near, and below expectations. At the middle school, the literacy block was increased to 90 minutes, with 30 of the 90 minutes for intervention groups in grades 5 and 6. In grades 7 and 8, the literacy block was 60 minutes, with 30 additional minutes only for students with identified needs.

Lowell increased time for mathematics at the elementary level to at least 100 minutes, with 30 of the 100 minutes for targeted interventions in flexible groups. At the middle school, instructional time in math was increased to 90 minutes, with an additional 30 minutes for intervention or enrichment. Grade-level and accelerated students took pre-algebra or algebra courses in grades 7 and 8. This put them on a track to take upper level mathematics courses in high school.

At the high school, the academic period was 50 minutes. Students with remedial needs were enrolled in both regular academic classes in ELA and mathematics and supplemental programs such as Math Support and READ 180. Students who failed a grade 9 course in ELA or mathematics were dually enrolled the next year, taking the grade 9 and 10 courses simultaneously. This was not an intervention but a way to secure course requirements for graduation.

The district embedded science and social studies content in the elementary literacy block. Leveled classroom libraries included many nonfiction titles including historical biographies and books on scientific topics. Administrators told the EQA team that while they would have liked to restore time for science and social studies in the elementary schedule, it was currently impossible without extension of the school day.

6.6. <u>The district recognized the importance of instructional stability by not only maintaining accurate information on staff attendance but also by evaluating the effects of staff attendance on student achievement.</u>

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

At the time of the prior EQA review, the Lowell Public Schools suffered from excessive teacher absences in some schools. Excluding days absent for long-term illness and for professional development, the average teacher absence was above 10 per year in over half the schools. In the 2003-2004 school year, the district began to provide principals with a detailed analysis of teachers' attendance and expected administrators to address patterns of chronic absenteeism. Principals did not take the additional step of analyzing the effects of chronic teacher absenteeism on student achievement.

During the reexamination period under review, Lowell kept accurate records of teacher attendance in its new database. Principals received monthly updates on the attendance of teachers in their schools, actively monitored teachers' attendance to detect patterns of possible abuse, and used progressive discipline with abusers. Actions ranging from conferences to suspensions had reduced the occurrences of abuse. The district also engaged highly qualified replacements for teachers on long-term medical leave, except in certain critical shortage areas.

An analysis of data provided to the EQA team by the district indicated that while the teacher absence average increased marginally from 9.3 days in 2004-2005 to 10.5 days in 2006-2007 (excluding professional days and long-term medical leave), schools with absenteeism rates above the district average in 2004-2005 were now below the district average in 2006-2007, with only one exception. Administrators stated that this was because the principals of these schools had monitored attendance more closely.

Article IX of The Collective Bargaining Agreement between the Unified Teachers of Lowell and the Lowell School Committee, dated July 1, 2006 to June 30 2009, allowed teachers 15 days of sick leave annually, with unlimited accumulation. The principal, master, supervisor, or assistant superintendent might request a physician's statement after five consecutive days of teacher absence. Teachers were allowed two days of personal leave annually without the need to furnish a reason. These days could not be taken before and after holidays and vacations. The agreement contained a buy-back provision ranging from up to five days for each year of perfect attendance, to one day for a year with four absences. The days were redeemed upon retirement at the

prevailing rate for substitute teachers. Teachers were informed annually of their use of sick and personal leave for the prior year.

While Lowell did not formally analyze the effects of teacher absenteeism on student performance, administrators noted that anecdotal evidence indicated that it was highly detrimental, and made reducing unnecessary absenteeism a priority. One central office administrator told the EQA examiners that principals reminded teachers of the importance of attending school in newsletters and other communications and at faculty meetings. District handbooks for both teachers and students contained statements encouraging regular attendance and related it to higher achievement.

Lowell administrators told the EQA team that there were fewer problems with chronic teacher absenteeism because they were now "paying attention to the data" and holding teachers accountable. They added that teachers were issued a record of their absences for the prior year in September, including a record of the frequency by day. They stated that this accounting reduced absences on Mondays and Fridays because teachers were aware that "somebody was keeping track." Principals stated that they always discussed teachers' requests for personal leave on Mondays and Fridays, even though the contract allowed it. One said he would "risk the grievance to make the point."

6.8. Educational technology was available and used as an integral part of the instructional program.

EQA Rating from 2005: Unsatisfactory

EQA Rating from 2007: Unsatisfactory

Evidence

During the prior period of EQA review, the 2002-2003 DOE data indicated that the ratio of students to computers in Lowell was 5 to 1. Schedule 1 of the End of Year Pupil and Financial Report listed no expenditures for classroom instructional technology in 2002-2004. The math coordinator reported that teachers were unable to take advantage of the technology support that came with the Investigations program because available hardware was outdated. Teachers and principals indicated that schools were insufficiently staffed to maintain hardware. Budget cuts forced the district to assign technology specialists to two schools rather than one.

During the reexamination period under review, administrators at all levels indicated that in the tight budget environment purchasing instructional technology was not a district priority. Educational technology did not appear on the list of 18 goals in the Lowell School Department District Goals 2007-2008. New schools were equipped with updated technology, but dated hardware in other schools was being replaced very gradually. The deputy superintendent, in an interview, said that an accurate current ratio of computers to students was 9 to 1. Teachers reported that the district had a great deal of computer hardware, but most of it was so antiquated that teachers could not run the software that accompanied their revised Investigations and Scott Foresman programs. Interviewees also indicated that students had to take Galileo assessments with paper and pencil since the appropriate hardware was unavailable. All teachers could not readily access the assessment information available for each student due to hardware limitations, so a number of teachers were using their home computers for this purpose. The district had only five technical assistants supporting school technology across the district. Additionally, science teachers lacked instruments such as probes.

Results from the EQA random classroom observations indicated that teachers used technology appropriately in 24 percent of the observed classrooms and the students used available technology appropriately in 17 percent of the observed classrooms. Technology use included some use of computers, overhead projectors, calculators, novels on tape recorders, and mechanical telephones that helped students interact with the text.

2007 Indicators

9. The district created inclusive classrooms or programs for student populations, through an integrated services model, minimizing separation from the mainstream.

EQA Rating from 2007: Unsatisfactory

Evidence

Lowell fully included special education students in regular education classrooms, especially at the elementary level, but did not provide included students appropriate support with trained personnel. According to Department of Education statistics for 2006, Lowell had a higher rate of special education students enrolled in full inclusion programs (63.7 percent) than the state average (49.1 percent). However, the graduation rate for Lowell special education students (38.1

percent) was lower than the state average (61.1 percent), and the dropout rate for Lowell special education students was higher (9.7 percent versus 5.1 percent). According to the 2007 MCAS test results, Lowell special education students performed below the state average for special education students in all content areas tested. The proficiency gap between Lowell's special education and aggregate student populations was significant at every grade level subject to assessment in all content areas tested. Since 2005, the gap had increased in all three tested core content areas, and significantly in both ELA and mathematics.

In interviews with the EQA team, central office administrators acknowledged that Lowell fully included students at the elementary level at a much higher rate than the statewide average. They also acknowledged that although these students had access to a curriculum based on the standards in the curriculum frameworks, they did not have comparable access to the district interventions in literacy and mathematics. This was because the district did not provide training in interventions for special educators until 2005-2006, and they did not attend grade-level and departmental meetings where the interventions were discussed and refined until recently. Another administrator stated that while inclusion was supported by adequate numbers of personnel at the elementary level, paraprofessionals who rendered services to students were often not highly qualified.

Administrators cited other reasons for the low and worsening performance of district special education students, including the assignment of entering special education students to schools with open seats without sufficient regard for the number or proportion of special learners previously enrolled. This practice heavily burdened the service providers in some schools. Administrators added that while the creation of in-district substantially separate programs for students on the autism spectrum and students with cognitive limitations had retained these students in their community schools, these highly expensive and staff-rich programs had diminished the district capacity in personnel and resources to support inclusion. Administrators told the EQA team that teachers of substantially separate classes had to manage more than one grade level simultaneously until a looping design was recently instituted. Under this design the special educator taught only one grade level and moved up with the students to the next grade level in the following year.

Administrators stated that the district intended to address the problems by engaging certified and highly qualified staff, providing training in inclusion for regular educators, developing consistent co-teaching partnerships of regular and special educators, and ensuring that students with severe reading disabilities were identified early and received specially designed reading instruction. Furthermore, the superintendent stated that the district was beginning to implement school-based special education teams with the expertise to better support special education service delivery in the schools.

11. Random observations of classrooms revealed that teachers used a variety of effective techniques and strategies to address differences in learning style, and that instruction was student-focused, reflected high expectations, and called for engaged learning and participation on the part of students.

EQA Rating from 2007: Needs Improvement

Evidence

During the site visit, the EQA examiners observed a total of 154 randomly selected classrooms and recorded the presence or absence of 33 attributes reflected in the Principles of Effective Teaching, grouped into five categories: classroom management; instructional practice; expectations; student activity, work, and behavior; and classroom climate for learning. Examiners recorded the attributes observed in each of the five categories during their time spent in the classroom. In calculating the presence of observed practices, where appropriate, the practices that would not be applicable were noted and were removed from the total to obtain a proper basis for determining the percentage.

Observations were conducted at 18 of the district's 23 schools as follows: 46 at the elementary level, 77 at the middle school level (grades 5-8), and 31 at the high school level. In total, the EQA examiners observed 71 ELA classrooms, 69 math classrooms, and 14 science classrooms or classrooms of other subjects. The EQA conducted classroom observations at the following elementary schools: Dr. Gertrude M. Bailey Elementary School, Greenhalge Elementary School, Abraham Lincoln Elementary School, S. Christa McAuliffe Elementary School, Moody Elementary School, C. W. Morey Elementary School, Pawtucketville Memorial Elementary School, John J. Shaughnessy Elementary School, Washington Elementary School, Bartlett

Community Partnership School (K-8), and J. G. Pyne Arts Magnet School (K-8). The team conducted classroom observations at the following middle schools: Benjamin F. Butler Middle School, James S. Daley Middle School, H. J. Robinson Middle School, E. N. Rogers Middle School, Katherine P. Stoklosa Middle School, James Sullivan Middle School, and Dr. An Wang Middle School. EQA examiners also observed 31 classes at Lowell High School, including those at the Lowell Academy, focusing heavily on grades 9 and 10.

Through the random classroom observations in the 2007 reexamination, the team found that Lowell Public Schools had actualized many of its priorities for instruction at the elementary and middle school levels. The average student-teacher ratio of 11.5 in the observed classrooms demonstrated the district's commitment to provide ample adults within the classroom environment to support instruction; the average classroom had 17.7 students and 1.5 instructors. The team saw evidence that the instructional staff had internalized professional development and coaching to actively tailor instruction to meet student needs—approximately 90 percent of observed classrooms with two or more teaching staff members had all adults engaged with students to support the learning process. Other than the employment of adults to actively support instruction within the classroom, the most consistent classroom elements were those that set the stage for learning: teachers promoted respectful behavior and safety (95 percent of observed classrooms), classroom rules and routines were established and internalized (92 percent), and the teacher created an inclusive environment (90 percent). The team collected evidence that the district had embedded practices resulting in students taking responsibility for work with or without teacher direction (88 percent), teachers using instructional time effectively (85 percent), and teachers checking for understanding and correcting misunderstanding (88 percent).

In general, the middle level demonstrated the strongest performance on all measures: classroom management, instructional practices, the highest expectations, purposeful student activity and behavior, and a supportive climate for learning. The elementary level demonstrated strengths, although in a comparison with the middle level, observations demonstrated somewhat less embedded effective practices for classroom management, instructional practices, and climate. Practices in the high school were the least consistent with the research for better teaching, and instruction at the high school revealed less connection with district priorities and with the elements of effective teaching compared to the other levels.

Thus, the most notable shortfall was the difference between K-8 and 9-12 instruction. Only 65 percent of the observed instruction at the high school reflected district or school priorities, compared to 91 percent at the elementary schools and 87 percent at the middle schools. Only 32 percent of observed classes at the high school employed a variety of instructional techniques to increase the level of learning, compared to 65 percent at the elementary schools and 68 percent at the middle schools. Both the elementary and middle levels demonstrated greater efficacy than the high school in using techniques and strategies to address differences in learning style, to focus instruction on students, to reflect high expectations, and to call for engaged learning and participation on the part of students.

Another notable weakness across the district at all levels was the limited amount of appropriate use of technology to deliver instruction (24 percent) and students using technology for learning (17 percent).

Classroom management refers to the maintenance of order and structure within the classroom. Classroom rules and routines are established and internalized, and students take responsibility for their work with or without teacher direction. The teacher models and promotes respectful behavior and maintains safety in the classroom. Instructional time is maximized due to smooth transitions between activities. Other adults working in the classroom have an active instructional role. Positive indicators of classroom management were evident in 85 percent of the classrooms observed districtwide, with 86 percent at the elementary level, 88 percent at the middle school level, and 75 percent at the high school level.

At the K-8 level, classroom management practices encouraged responsibility for and attention to learning. Many elementary teachers used the “thumbs-up, thumbs-down” technique to check for understanding. Teachers gave time warnings: “in one minute, we will…”; “stop, look, listen”; “I’ll know you’re ready when….” As a result, little time was wasted during transitions. Classroom management practices changed dramatically as students moved from the middle schools to the high school. Eighty-seven percent of grade 7 and 8 classrooms had smooth transitions between activities, while at Lowell High School and Freshman Academy these transitions occurred efficiently only in 70 percent of classrooms. Grade 7 and 8 students took responsibility for their own work in 82 percent of observed classrooms. The percentage of

classrooms with older high school students who took responsibility for their work was lower at 77 percent. Observers noted some visible lethargy among high school students who had their head on the desk or did not cooperate to make smooth transitions to the next instructional activity.

An exemplary classroom management practice observed throughout the district (mostly in grades K-8) was the widespread use of multiple adults in the classroom to support learners. Over a third (59 of 154) of the classrooms had two or more adults to support learning in the classroom, so the average number adults in the classroom was 1.5 (a teacher plus one or more other teachers or paraprofessionals). So, although the average observed class size (not accounting for student absences) was 17.7, the average student teacher ratio was 11.5. Remarkably, in almost every case observed by the team, the additional adults demonstrated an understanding of their instructional role. The team observed that in 90 percent (53 of 59) of the classrooms with extra adults, they were actively and purposefully involved in the learning support process when the examiner was present. This demonstrated powerful use of human resources to support the district's primary focus on the instructional task.

Instructional practice was the largest category reviewed by the examiners. Effective instructional practice is considered evident when the teacher implements instructional strategies that reflect school and/or district priorities. The teacher makes learning goals clear to students, and students understand their relevance. The teacher increases the level of learning by using a variety of instructional techniques. Instructional time is allocated and used effectively, and the pace of instruction is appropriate to students' varied rates of learning. The teacher elicits student contributions and uses a variety of questioning techniques that encourage elaboration, thought, and broad involvement. The teacher checks for student understanding and corrects misunderstandings, and provides clear and explicit directions that are understood by students. English language acquisition and language development are embedded in all subject areas. The teacher uses available technology appropriately to deliver instruction. Positive indicators of instructional practice were evident in 75 percent of the classrooms observed districtwide, with 75 percent at the elementary level, 80 percent at the middle school level, and 63 percent at the high school level.

The practice of focusing classroom time on instruction was demonstrated across the district. The teacher allocated and used instructional time effectively in 85 percent of the observed classrooms (especially at the middle level, with 90 percent), and matched the pace of instruction to students' learning rates and benchmark expectations in 80 percent of the classrooms (especially at the middle level, with 84 percent). For the most part, teachers provided clear directions (89 percent), checked for understanding (88 percent), elicited student contributions and questions (84 percent), and implemented district instructional priorities (84 percent).

District priorities such as the posting of an agenda, flexible grouping, and the basic lesson plan format (Launch, Explore, Summary) were observed most frequently at the middle level, where the observation rate was 87 percent. At the high school, where traditional, teacher-centered, whole group instruction prevailed, district priorities were observed in approximately 65 percent of classrooms. Even in high school classrooms with noticeable populations of students whose first language was not English, examiners noted a lack of visuals, incomplete explanations, and language objectives lacking elements for English learners, indicating that SIOP strategies were not always fully implemented.

Examples of effective instructional practices in elementary and middle schools abounded, while the high school fell short. When students demonstrated difficulty some teachers re-taught to the group. Students often worked in pairs and partner-read while teachers circulated about the room. Students were often asked to explain their answers and were encouraged to participate in discussions through leading questions posed by teachers. Objectives were posted in many rooms and most classrooms contained word walls and math vocabulary charts. Fewer examples of effective instruction were found at the high school level. There were great variances in the practices between levels to use questioning techniques that encourage thought and elaboration, with 88 percent at the middle level, 65 percent at the elementary level, and 61 percent at the high school level. Another area of variation was in using a variety of instructional techniques, with 68 percent at the middle level, 65 percent at the elementary level, and 32 percent at the high school level.

Use of technology in instruction was low at all levels. The teacher appropriately used some form of technology in 11 percent of elementary, 23 percent of middle, and 26 percent of high school

classrooms. Students appropriately used technology in zero percent of elementary, 23 percent of middle, and 13 percent of high school classrooms. Technology figures reflect the use of other technologies such as graphing calculators or overhead projectors, not just computer use. Overall, EQA observers saw a limited number of computers available for teacher and student use. It should be noted, however, that at the elementary level a few classrooms had rolling carts with computers or other technology to enhance the reading program, and some middle schools and the high school located computers in a computer lab or library. Almost all classrooms had at least one computer for teacher or student use; however, computers were not frequently used to deliver instruction.

Expectations refers to the maintenance of high standards for students by teachers. The teacher communicates and enforces expectations and guidelines for student work and behavior, and the teacher encourages students and expresses confidence in their ability to do challenging work. Instructional time focuses on having students produce high quality work, and the teacher provides models and rubrics to exemplify such work. High quality student work is shown to be valued through activities such as celebration, citation, exhibition, and publication. Positive indicators of expectations for students were evident in 65 percent of the classrooms observed districtwide, with 61 percent at the elementary level, 72 percent at the middle school level, and 54 percent at the high school level.

In most classrooms at all levels, teachers promoted their expectations primarily through the communication of standards or guidelines (84 percent), the use of instructional time (73 percent), and encouragement (66 percent). The middle level was the only level in which most teachers demonstrated high expectations for student work through the use of models and/or rubrics (69 percent at the middle schools compared to 37 percent at the elementary schools and 42 percent at the high school), or through the celebration or exhibition of high quality student products (65 percent compared to 30 percent at the elementary and 33 percent at the high school levels).

Positive *student activity, work, and behavior* are considered evident when students are actively engaged in the learning process. They show an understanding of the lesson's objective, and they demonstrate ownership of learning by asking their own questions. Students are able to recall information from prior learning and make connections to new learning. They make appropriate

use of technology in the classroom. The interaction between students is respectful, and they are purposefully and productively engaged in learning. Student work reflects quality, complexity, and care. Positive indicators of student activity, work, and behavior were evident in 69 percent of the classrooms districtwide, with 68 percent at the elementary level, 75 percent at the middle school level, and 58 percent at the high school level.

Although lacking the use of technology, middle school classrooms were fairly active learning centers. The middle school had the highest ratings on all the indicators in this category, except for productive student interaction, which was present in 88 percent of observed classrooms compared to 93 percent of classrooms at the elementary level (and present in 68 percent of classrooms at the high school). The largest variances among the indicators were students showing an understanding of the learning goals (90 percent at the middle level compared to 80 percent at the elementary and 71 percent at the high school levels), students demonstrating their learning by asking their own questions (75 percent at the middle level compared to 39 percent at the elementary level and 45 percent at the high school), and students' work reflecting quality, complexity, and care (68 percent at the middle level compared to 46 percent at the elementary and high school levels). Rare at the high school were classrooms where students' involvement in their own learning was demonstrated by asking their own questions. Examiners frequently noted instances in which less than half the class paid attention.

Finally, indicators of positive *classroom climate for learning* are considered evident when the teacher creates an inclusive environment where all students are accepted and where the space is used to accommodate a range of learning activities. The teacher uses positive reinforcement to enhance students' self-esteem and self-confidence, and appeals to students' interests or curiosity to motivate them. The classroom is well provisioned and includes multiple resources that address different learning styles. Positive indicators of classroom climate for learning were evident in 76 percent of the classrooms observed districtwide, with 77 percent at the elementary school level, 82 percent at the middle school level, and 59 percent at the high school level.

Only at the middle level did the team observe a substantial percentage of teachers appealing to the curiosity or interest of students in order to motivate them (71 percent compared to 46 percent at the elementary and 58 percent at the high school level). Unlike the other levels, the high

school classrooms did not use space flexibly to incorporate learning activities (39 percent compared to over 89 percent at the other levels) or include multiple resources for different learning styles (45 percent compared to over 83 percent at the other levels).

As EQA examiners went from class to class, it was common to see a variety of instructional styles so that some indicators in the instructional survey were observed and others were not. In Lowell, there were a notable number of classrooms where almost all of the indicators were observed, and others where almost none of the indicators were observed. The quality of instruction varied greatly, even within each building. This suggests that teachers in Lowell had the opportunity to become very skillful in their craft, and that instructional leaders had the opportunity to impact teacher skills. Another uncommon phenomenon was that instruction was strongest at the middle level, a level in which instruction is often rated the weakest or middling. While there was a gap between instructional strengths between the upper elementary and lower middle levels, the gap between K-8 and 9-12 was the most notable. In many ways, observers noted that the high school had not kept pace with districtwide improvements.

Summary of Classroom Observations

	Number of Classrooms				Average Class Size	Average Adults per Class	Computers		
	ELA	Math	Other	Total			Total Number	Total for Student Use	Average Students/ Computer
Elementary	30	16	0	46	17.0	1.6	127	115	6.8
Middle	31	36	10	77	19.0	1.7	185	149	9.8
High	10	17	4	31	15.9	1.1	36	10	49.3
Total	71	69	14	154	17.7	1.5	348	274	10.0

	Classroom Management	Instructional Practice	Expectations	Student Activity & Behavior	Classroom Climate
Elementary					
Total observations	189	369	140	187	176
Maximum possible	219	495	230	310	230
Avg. percent of observations	86	75	61	60	77
Middle					
Total observations	311	663	268	386	314
Maximum possible	354	824	370	522	383
Avg. percent of observations	88	80	72	74	82
High					
Total observations	104	215	81	117	92
Maximum possible	138	340	151	215	155
Avg. percent of observations	75	63	54	54	59
Total					
Total observations	604	1247	489	690	582
Maximum possible	711	1659	751	1047	768
Avg. percent of observations	85	75	65	66	76

Standard III: Assessment and Program Evaluation						
	2005 Indicators					
Ratings▼ Indicators►	**1.2**	**1.7**	**4.1**	**4.2**	**4.3**	**4.5**
Excellent						
Satisfactory	**2007**	**2007**	**2007**	**2007**	**2007**	**2007**
Needs Improvement						
Poor		**2005**	**2005**	**2005**	**2005**	**2005**
Unsatisfactory	**2005**					

III. Assessment and Program Evaluation

The district and school leadership used student assessment results, local benchmarks, and other pertinent data to improve student achievement and inform all aspects of its decision-making including: policy development and implementation, instructional programs, assessment practices, procedures, and supervision.

Findings:

- During the reexamination period, school and district leaders made increasingly effective use of the district database for research, evaluation, and decision-making,
- The district regularly communicated student needs and achievement results and the outcomes of programs and services to the school committee, funding providers, and other constituencies.
- Instruction was planned and evaluated using student achievement and performance data at the K-8 level. There was less evidence of data-driven and evaluated instruction at the high school level, especially in grades 10-12.
- At the elementary and middle school levels, administrators and teachers expressed a common understanding of instructional priorities, and instruction was based on these priorities in classroom observations conducted by the EQA examiners. Instructional priorities were less clear, common, and evident at the high school level.
- The district special education inclusion model was not effective at improving student achievement. This was evidenced by the fact that the performance gap between special

education students and all students in Lowell was increasing. The district had identified some root causes through data analysis and was developing and beginning to implement improvement strategies.

- The goals set forth in district and school improvement plans were based on root cause analysis and evaluated through outcome analysis in an established continuous cycle.
- The district monitored teacher attendance, identified teachers abusing leave, and intervened with proportionate corrective measures. Teacher attendance improved in the schools where teacher absenteeism exceeded the district average during the prior review period.

Summary

Lowell Public Schools improved on all the indicators in this standard included in the reexamination, to a level of 'Satisfactory' for each. During the reexamination period, Lowell enhanced its capacity to generate and interpret data, set goals, measure progress, and evaluate outcomes. The district adopted and created curriculum-based measures in literacy and mathematics in grades K-9 to supplement the MCAS tests, and used them systematically to inform instruction and to monitor students' progress toward the achievement of standards. Lowell purchased an electronic data management system and used this database to analyze individual student, class, whole school, and subgroup performance and needs. The district used data effectively to plan instruction, target struggling students, and evaluate the effectiveness of programs and services.

Since the last examination, Lowell strengthened the relationship between assessment and instruction. Lowell expected K-8 teachers to use current assessment information to plan instruction. Literacy and mathematics specialists assigned to each school and district specialists provided teachers with job-embedded professional development on the interpretation and use of test results to form flexible instructional groups in reading and mathematics. Such data-driven instruction was less evident at the high school level.

Lowell administrators periodically reported to the school committee on the effectiveness and efficiency of instructional and support programs and services, including the K-8 literacy and mathematics programs, extended day and after-school programs, the ELL program, and district transportation services. Administrators used data from assessments and other sources to measure

student achievement and the accomplishment of district and school goals. They also used data to justify changes in programs and services and budget requests.

Lowell increased instructional time for literacy and mathematics in grades K-8 to provide targeted instruction in flexible groups for all students, including those functioning at or above grade-level expectations. Over the last two years, proficiency rates increased for the aggregate student population in Lowell as measured by the MCAS tests, especially in mathematics, where the gains were significant although proficiency levels were still below statewide averages.

The district kept accurate records on teacher attendance. Teachers were informed annually of their use of sick and personal leave for the prior year, and principals received monthly updates on the attendance of teachers in their schools. Principals actively monitored teachers' attendance to detect patterns of possible abuse, and used progressive discipline with abusers.

Lowell fully included special education students in regular education classrooms, especially at the elementary level. However, this desirable end was not achieved because the district did not provide staff responsible for providing services to these mainstreamed students with adequate support, resources or training to make the model effective. Achievement and graduation rates for Lowell special education students were lower and the dropout rate was higher than the statewide averages for special education students.

2005 Indicators

1.2. <u>In order to improve achievement for all students, the district used aggregated and disaggregated assessment scores to assess student progress for all populations.</u>

EQA Rating from 2005: Unsatisfactory

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review (2001-2004), the district used both aggregated and disaggregated MCAS test data to assess student progress for all populations. After the assessment data reached the district's central office, they were disseminated to all the schools, where a team of educators analyzed the data. The members of these teams, headed by the principal in all schools except the high school, had professional development training in data

analysis. The team was made up of the building administrators, the literacy or instructional specialist, the math lead teacher, and other teachers. The middle school also used guidance personnel. At the high school, the curriculum coordinator and ELA and math department heads, as well as the guidance director, analyzed the data. After they completed the analysis, team members disseminated the information to the teachers in their buildings. Administrators and teachers indicated that the district benchmarks were a guide to what they needed to address, achieve, and assess at each grade level. However, there was no evidence that any system-wide tool was used to evaluate the effectiveness of the benchmarks. An analysis of the assessment trend data for the prior period under review showed very little improvement in the scores of the district's regular education students and almost all subgroups. Only the LEP subgroup showed improved performance during the review period, and surpassed the state average of all LEP students.

During the reexamination period under review (2005-2007), Lowell enhanced its internal capacity to generate and interpret data, set goals, measure progress, and evaluate outcomes. The district adopted and created formative and summative curriculum-based measures in literacy and mathematics to supplement the MCAS tests. These measures were used systematically to inform instruction for students in grades K-9 in literacy and in K-8 in mathematics, and to monitor students' progress toward the achievement of standards. In 2006-2007, the district purchased an electronic data management system for student and staff information. This system housed student data and allowed users to request groups of records matching certain criteria. Administrators and specialists used the database to track student progress and mastery on formative and summative assessments and to analyze individual student, class, whole school, and subgroup performance and needs.

During the reexamination period, Lowell students made incremental gains in achievement in most content areas as measured by the MCAS tests, although they continued to perform below prevailing statewide averages. In the aggregate, Lowell students improved in every content area in each grade subject to assessment, with the exception of grade 5 science and grade 3 reading, All district subgroups improved, with the exception of the special education subgroup in ELA. The LEP subgroup continued to exceed the statewide average in ELA.

District schools improved in meeting AYP targets for the aggregate population and for subgroups. In 2007, 17 of 23 district schools made AYP for the aggregate population in mathematics, compared to five in 2006, and 19 of 23 district schools made AYP in ELA, compared to six in 2006. Seventeen elementary schools made AYP for all subgroups in ELA and mathematics in 2007, making them eligible for removal from accountability status if they achieved comparable results in 2008.

In interviews with the EQA examiners, administrators described a comprehensive K-9 student assessment program in literacy and mathematics. In grades K-4, unit tests from the Scott Foresman Reading Street series were administered three times each year to guide the formation of instructional groups and to monitor student progress. The Reading Street end of year tests were used as summative measures. The Dynamic Indicators of Basic Early Literacy Skills (DIBELS) and Group Reading and Diagnostic Assessment (GRADE) were used in addition to the reading series assessments in the five district elementary schools operating under the provisions of John Silber or Reading First grants.

In grades 4-9, the Scholastic Reading Inventory (SRI) was administered three times each year as a measure of comprehension. Students reading two lexiles below grade level in grades 4-8 were assessed with the GRADE to diagnose their difficulties, and assigned to intervention groups for remediation. The GRADE was re-administered to these students at the end of the year as a summative measure. Beginning in 2006-2007, grade 9 students scoring two lexiles below grade level on the SRI were assigned to the READ 180 program for self-paced, deficit-centered instruction. These students were reassessed with the SRI at the end of the year. Beginning in 2007-2008, those students needing further remediation continued with READ 180 in grade10.

In mathematics, students in grades K-5 were administered unit tests from the Investigations in Number, Data, and Space program. Beginning in 2006-2007, students in grades 1-8 were administered district-constructed benchmark assessments three times each year to determine their mastery of mathematics power standards. Teachers used the results of the benchmark and unit tests to form flexible instructional groups based on skills and needs. At the middle school level, students' mastery and needs were assessed through Connected Math Program (CMP) unit tests

and Galileo on-line mathematics tests based on district and state standards. The Galileo assessments were administered four times annually.

In interviews with the EQA team, principals and teachers made constant reference to the use of data to plan instruction and measure student progress. Teachers told the EQA examiners that they interpreted student assessment results with the guidance of the principal and the literacy and mathematics specialists assigned to each school. Teachers stated that they kept records of each child's progress, and that administrators reviewed these records and looked for gains. In classroom observations, the EQA team saw flexible intervention groups in literacy and mathematics, and lessons based on the standards.

1.7. Assessment trend data indicated that classroom assessment standards, practices, and expectations for students were consistently linked with the learning standards articulated in the State Curriculum Frameworks.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

Assessment trend data available for the prior period under review indicated that linkages existed between classroom assessment standards, practices, and expectations for students and the Lowell benchmarks, the District Improvement Plan (DIP), and the individual School Improvement Plans (SIPs). Principals said that it was their responsibility to monitor the link between planning instruction and assessment within their buildings. They also said it was their responsibility to monitor the alignment of classroom instruction to the state curriculum frameworks. Interviews with district administrators and teacher focus groups indicated that teachers were expected to reflect this linkage between classroom instruction and district and school goals in their lesson plans and align their lessons with the state frameworks. Examiners learned, through the teacher focus groups at all three levels, that building administrators checked lesson plan books on a regular basis, and that a critical element in the submittals was alignment of those plans with the frameworks. Despite some evidence that the district had aligned their classroom instruction with the state frameworks, an analysis of the assessment trend data showed only slight improvement during the period under review.

During the reexamination period under review, district curriculum guides and maps in the tested core content areas in Lowell were based on the state frameworks, and instructional programs embodied the learning standards in the frameworks. Student mastery was assessed formatively and summatively with curriculum-based measures adopted or developed by the district. Since the last examination, Lowell strengthened the link between assessment and instruction by tracking student performance more regularly and systematically. Principals continued to monitor teachers' instruction to ensure that it was based on the curriculum standards, but the district had added instructional specialists at each school to provide teachers with content-based expertise and hands-on instructional support, sometimes in the moment. The specialists modeled techniques and methods through demonstration lessons, and helped teachers interpret the instructional implications of student assessment results. This active consultation increased fidelity of implementation of district instructional priorities. The EQA examiners observed instruction based on district priorities in 84 percent of the 154 district classrooms they visited in Lowell. Instruction based on district priorities was highest at the K-5 grade span (94 percent) and lowest at the 9-12 grade span (65 percent). The EQA examiners observed instruction based on district priorities in 83 percent of district classes at the grade 6-8 grade span.

MCAS trend data showed that Lowell students were making constant incremental progress toward mastery of standards, although not yet at a rate to raise aggregate proficiency to the statewide average. The district had begun to use its new database to track cohorts, and the preliminary data showed gains by individual students on successive administrations of the MCAS tests. These data indicated that the interventions developed by the district in literacy and mathematics, based on diagnostic assessment and progress monitoring, might result in more significant improvement in student performance over time.

In interviews, administrators and teachers told the EQA examiners that district curriculum guides and maps were aligned to the state frameworks. This was confirmed in a review of these documents by the EQA team. They added that curriculum revisions were reviewed for alignment with the frameworks. For example, the guides in mathematics were recently reviewed when the latest edition of Investigations in Number, Data, and Space was adopted for grades K-5. The district had adopted research-based programs aligned with the standards, including the Reading Street program, Investigations, and the Connected Math Program.

The district administered unit tests from the adopted programs in literacy skills and mathematics as well as the Galileo assessments in mathematics and the SRI assessments in reading. These measures were based on the standards. The district also defined power standards in mathematics for grades K-5 and developed benchmark assessments directly based on these standards.

4.1. The district and each of its schools implemented a data-driven system for the evaluation of programs and services, and resource acquisition that was linked to student achievement data.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, the district established a team of central office staff members whose duties included the systematic collection and analysis of student achievement data and their dissemination to schools in the district. This team began its work in the 2001-2002 school year, but was not fully functional until the 2003-2004 school year. Evidence from interviews and documents indicated that the team collected, analyzed, and disseminated student achievement data to schools; however, no evidence indicated that these data influenced individual classroom practice.

During the reexamination period under review, Lowell created a management system for student assessment data through an electronic database, and provided specialists to help principals and teachers interpret and use relevant data to plan instruction, increase overall student achievement, target struggling students, and evaluate the effectiveness of programs and services. Central office administrators stated that their role was to make district schools independent and authoritative in the use of data. One central office administrator told the EQA team that direct central office involvement was diminishing as principals and teachers were becoming more data proficient, and added that the superintendent believed that the central office was a resource "to help the schools realize the goals they set for their students."

The district and its K-8 schools developed unified improvement plans based on the state Performance Improvement Mapping (PIM) process. This process was informed by student achievement data. The goals set forth in these plans were based on student needs as revealed by

performance data, and the outcomes were to be evaluated by student achievement results in a continuous loop. For example, a five percent reduction in 'Warning/Failing' scores on the grade 4 MCAS ELA test based on refinements in targeted reading interventions was a district goal for the current year at the elementary level.

District elementary schools coordinated their goals with the district goals. For example, a correlated literacy goal in the Murkland SIP was to increase the percentage of students moving from 'At Risk' to 'Some Risk' and from 'Risk' to 'Benchmark' by using data from a variety of reading assessments to monitor progress and plan instruction. Teachers and administrators stated that district and school goals for the next year were based on the degree of accomplishment of the goals for the prior year as part of a continuous cycle.

Administrators stated that they justified proposed expenditures with student data and made reports to the school committee about the effectiveness of these expenditures. For example, low student performance in mathematics was the rationale for the purchase of the latest edition of Investigations. This edition included supplemental interventions. The district previously increased the number of mathematics specialists through position conversions, and administrators informed the school committee about resulting gains in mathematics proficiency and corresponding declines in 'Warning/Failing' scores in a report on the 2007 MCAS results for grades 6 and 8.

Administrators added that that they had presented a variety of other reports to the school committee over the past two years based on analysis of student performance data. For example, they reported data on the effectiveness of elementary reading program interventions according to Reading Street unit test results in 2006-2007, and would be reporting on middle school interventions in 2007-2008 based on SRI scores. They also reported data on student performance by racial subgroup in the Reading First schools in 2006-2007 to demonstrate the effectiveness of the Safety Nets. The frequency of reporting to the school committee was at least biannual, and administrators stated that the reports were "leverage for funding." One administrator told the EQA examiners that the school committee requested data before making decisions, and that data helped them to justify school expenditures to other members of the community.

4.2. District and school administrators used student assessment and other pertinent data to measure the effectiveness of the district's instructional, supplemental, and support programs and services.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, the district had a policy that set out guidelines for review of instructional programs that included student achievement data. A number of changes to the curriculum were made in the areas of math and ELA. In addition, an evaluation of the ESL program led to the release of 30 bilingual teachers who scored low on English language proficiency examinations. Replacing these teachers with those who held a higher level of English mastery led to higher MCAS test scores among the students. The newly formed central office data team also provided information that reflected the influence of student achievement data on School Improvement Plans and the educational decisions implicit in their development and evaluation of their effects. However, there was no master plan for systematic program review other than the efforts of the school committee's curriculum subcommittees.

During the reexamination period under review, Lowell had developed and begun to use a formal, continuous process for reviewing the effectiveness and efficiency of its support and supplemental programs and services. The district had a well established process for setting instructional priorities and reviewing the effectiveness of literacy and mathematics instruction in its K-8 schools. The process for setting and evaluating instructional priorities was less formal and systematic at the high school level.

During the last two years, Lowell focused on improving literacy and mathematics instruction, especially in grades K-8. The elementary and middle schools were encouraged to set their own priorities consistent with the needs of their students, but there were also some common priorities set by the district. In interviews with the EQA team, elementary and middle school principals and teachers consistently cited implementation of the interventions in reading and mathematics as the district instructional priority for their schools in the current year. Many also cited the district instructional priorities for subgroups, such as helping English language learners build

background and vocabulary. In classroom observations at grades K-8, the EQA examiners saw teachers implementing these priorities through such practices as flexible grouping, vocabulary development, and "accountable talk." There was generally a high correspondence in these grades between statements of intention and fulfillment.

The district and its K-8 schools used formative and summative assessments systematically to measure and report on the effectiveness of teachers' instruction. These measures included unit and end of year tests from the district reading and mathematics series, local benchmark assessments in mathematics, and standardized reading comprehension assessments such as the GRADE and SRI. Principals and teachers reviewed student assessment results with the consultation of building-based instructional specialists. In interviews, principals and teachers gave examples of instructional modifications for groups of students based on assessment results. These included modifications in content, emphasis, methodology, and grouping.

Administrators stated that instruction was "data-driven and evaluated" in all of the district K-8 schools. Certain schools were further along than others in the use of data to improve the effectiveness of instruction. For example, some principals created data walls to make student gains more public and evident, and investigated the deeper implications of the results from multiple measures. Administrators also stated and teachers confirmed that lack of up to date hardware in the schools reduced access to the assessment data, especially in some schools with very few computers. Teachers were able to enter the district database from their home computers by using a security code.

Use of data to evaluate the effectiveness of instruction was less evident at the high school level. Administrators stated that quarterly assessments were common in ELA and mostly common in the other disciplines. They added that department heads, teachers, and instructional specialists reviewed the results of these assessments to improve instruction. The review process, however, was informal and ad hoc, and administrators could give few examples of any instructional improvements resulting directly from reviews of common assessment results.

At the grade 9 level, the SRI was administered as a screening test in 2006-2007 to identify skill-deficient readers. These students were subsequently assigned to the READ 180 program for remediation. The SRI was re-administered at the end of the year to measure their progress.

Administrators stated that they reported the highly successful results of the READ 180 program to the school committee in the spring of 2007. Based on these results, the committee approved a plan to extend READ 180 to grade 10 in 2007-2008 for those students with chronic needs.

The district attempted to make the best and highest use of its local and grant funds. Administrators told the EQA team that they wanted to develop strong programs and services that "will make children successful." They added that there was now a close working relationship in the district between "the data gatherers and the decision-makers," and that program planning and revisions were based on "facts rather than perceptions."

In interviews, administrators told the EQA examiners that the district went well beyond the minimal requirements for continuing receipt of funding to evaluate grant-based supplemental programs. The EQA examiners reviewed comprehensive district evaluations of programs for disadvantaged and special education students containing teacher and parent surveys, student performance data, findings, and recommendations for program improvement.

The district engaged a special programs coordinator to improve the design, results, and cost-effectiveness of supplemental extended day and year programs. Administrators told the EQA team that programs were sometimes combined to increase the impact and efficiency, and gave the example of a middle school level before- and after-school tutorial program underwritten with local, 21st Century, and Title I funds. The special programs coordinator was also making changes intended to increase the attendance of certain summer programs based on the results of program evaluations conducted during the prior year.

4.3. <u>The evaluation results of the district's instructional, supplemental, and support programs and services were used to inform decision making and resulted in sustained or continued improvements in the quality of teaching and learning.</u>

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, the district made efforts to use student achievement data to inform the DIP, SIPs, and some initiatives and programs, but not necessarily instruction. For

example, the district completed a systematic review of services of consultants who provided professional development activities and decided to utilize only those consultants whose services had some measurable effect on attainment of the district's five goals. In another example, the district dropped two reading programs because they did not favorably influence student reading abilities. It replaced them with Reading First, which was piloted in three schools and later expanded to seven schools. However, examiners saw no discernible difference between the written texts of teacher performance evaluations in the old curriculum and those in the new curriculum.

During the reexamination period under review, Lowell used evaluation results to inform decision-making, and clearly recognized the primacy of instruction in increasing student learning. The district attempted to improve the quality of instruction through professional development, coaching, and modeling. The district was also beginning to form instructional leadership teams in each school to increase the consistency of instruction by providing teachers with resources and support. Lowell had also improved the effectiveness and results of its English language learner program by providing Category 1 and 2 training to all staff members and engaging certified, high quality ELL teachers. Achievement of Lowell ELL students exceeded the statewide average for ELL students.

One administrator told the EQA team, and others agreed, that the mathematics curriculum was the first "indicator of cohesion" in the district. According to both local and MCAS test results, district students were weak in mathematics knowledge and skills. The district adopted Investigations in grades K-5 and Connected Math in grades 6-8 to improve student achievement. These adoptions were supported with professional development and the provision of math specialists, and resource teachers in each school to improve teachers' instruction. Teachers and administrators stated that the content-based sessions in mathematics provided by a consultant had made a difference in teachers' instruction. The EQA team noted the evaluations of these sessions by the participants were uniformly positive.

Teachers new to the district also received instruction in district initiatives, including the mathematics program through core courses at the Lowell Teachers Academy. Many teachers stated that the Academy course had been helpful. One said that the learning curve was reduced,

and she was “on the right track from the first day.” Administrators told the EQA team that students had made measurable gains on the unit, benchmark, and on-line tests in mathematics over the last three years. In 2007, 14 percent more grade 6 students and 10 percent more grade 8 students in Lowell achieved proficiency on the MCAS mathematics tests than in the prior year.

Central office administrators told the EQA team that their goal was to build an instructional leadership team in each K-8 school, consisting of the principal, mathematics and literacy specialists, ELL teachers and special educators, and grade-level teacher representatives. These teams were already functioning in some schools. The principal of one school with a strong instructional leadership team told the EQA examiners that it was a “powerful force for improving instruction.” The team helped teachers interpret the instructional implications of student achievement results, and provided direction on grouping, methodology, and content. Another principal stated that instruction was a critical focus for the district, adding that now that teachers had valid and reliable data on each student’s strengths and needs and research-based programs, improving the quality of the instruction would make the greatest difference in increasing student achievement.

4.5. The results of the district’s evaluation of acquired resources, including capital improvements and projects, equipment, materials, and supplies, were used to inform decision making and resulted in sustained or continued improvements in the quality of teaching and learning.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, no direct correlation was found between district decision-making regarding its evaluation of resources, capital improvements, and purchases and the sustained and measurable improvements in the quality of teaching and learning at the student subgroup level. The aggregate MCAS test scores remained unchanged over time.

During the reexamination period under review, Lowell routinely evaluated the utility and effectiveness of resources, projects, supplies, and materials, and made periodic reports to the

school committee. These reports were used to assess progress, make modifications, and justify additional requests.

Over the last two years, administrators reported on the effectiveness of the district K-8 mathematics and literacy programs and interventions and the READ 180 program in grade 9. READ 180 was extended to grade 10 based on the measurable gains in grade 9.

The district also reported on supplemental extended day and year programs, and made appropriate modifications to increase participation and results. Lowell conducted a review of transportation services and subsequently revised routes and staggered school opening times to create cost efficiencies. This work was expedited by the use of a transportation software package to analyze the data.

Central office administrators stated, and principals confirmed, that they were expected to construct budget requests based on data. The principals added that superintendent gave them guidelines and some autonomy in determining the budget requests for their schools. They also had discretion to shift funds categorically, provided they did not exceed the overall allocation for the school.

During the reexamination period, Lowell students made incremental gains in achievement as measured by the MCAS tests, but continued to perform below prevailing statewide averages. Subgroup performance was mixed with district ELL students scoring above and special education students below the statewide ELL and special education averages District schools improved in meeting AYP targets both for the aggregate population and for all subgroups, and many of the schools on accountability status were one year from removal. The preliminary results from district cohort analysis indicated that individual students made significant progress on successive administrations of the MCAS tests.

Standard IV: Human Resource Management and Professional Development										
	2005 Indicators									2007 Indicator
Ratings▼ Indicators►	3.1	3.2	3.3	3.4	3.6	3.7	8.2	8.3	8.5	13
Excellent							2007			
Satisfactory		2007	2007		2007			2007	2007	2007
Needs Improvement	2007			2007		2007				
Poor		2005	2005	2005			2005	2005	2005	
Unsatisfactory	2005				2005	2005				

IV. Human Resource Management and Professional Development

The district identified, attracted and recruited effective personnel, and structured its environment to support, develop, improve, promote and retain qualified and effective professional staff who were successful in advancing achievement for all students.

Findings:

- The district's evaluation procedures for administrators and teachers were brought into alignment with state requirements, and evaluations were for the most part timely, informative, and instructive.
- The evaluations of half the principals and a few teachers held them accountable for student achievement.
- Evaluations of non-professional status teachers were generally linked to professional development activities and opportunities.
- To fill positions with suitable candidates, the district prepared lists of eligible teachers to fill open positions, gave the principals the authority to hire the best candidate, ensured that waivers were obtained for uncertified teachers, and provided them the necessary training to become certified.
- The district's professional development program combined districtwide course offerings with school-based and job-embedded collaborative professional development for grades K-8.
- The district partnered with local colleges and universities to offer additional professional training for paraprofessionals and practicing teachers.

- The induction program for new teachers was comprehensive, including districtwide courses and on-site mentoring, support, and supervision.
- The district evaluated its professional development courses and activities by surveying teachers, by monitoring retention and success rates of participants, and by outside evaluations of certain offerings and resulting achievement.
- The district was able to retain 87 percent of first-year teachers and 92 percent of second-year teachers. Interviewees mostly attributed the success in retention to the professional development program.

Summary

Lowell Pubic Schools improved on eight of the nine indicators in this standard that were previously rated as 'Poor' or 'Unsatisfactory' in the prior EQA review. On seven of the 10 indicators reviewed in this standard (including one additional 2007 indicator), the district performed at or above the 'Satisfactory' level. The team rated the district's provision of professional development as 'Excellent,' a model both exemplary and replicable. In general, the district established strongly enabling conditions to place, retain, and develop a skilled and capable staff.

To fill openings for professional positions, the district prepared a list of eligible teachers monthly for approval by the school committee and for use by principals when hiring. Through litigation begun in the late 1990;s the district had shifted acceptance of transfers to principals rather than assigning transfers based on seniority alone. The school system increased the percentage of Lowell's teachers certified in their teaching area to 93.8 percent. Where certified teachers were not available, the district obtained waivers from the Department of Education, and enrolled them in a district-based licensure program including an in-house practicum and Lowell Teachers Academy courses.

The district's induction program for new teachers was unusually comprehensive. The Teachers Academy offered coursework for new teachers to help prepare them for Lowell's unique educational characteristics, especially in sheltered English immersion and other local curriculum issues. In addition the district provided paid mentors to coach and support new teachers in their home schools and teacher support teams of school professionals to monitor and support them, as

well as frequent classroom visits by principals with two classroom observations, conferences, and evaluations annually. The induction program increased the retention of new teachers to 87 percent of first-year teachers and 92 percent of second-year teachers.

Lowell established an extensive professional development program to strengthen the use of data, literacy and math instruction, professional qualifications, and instructional leadership. The district made professional development courses available to all teachers through the Teachers Academy and provided teachers with credit on the salary scale as an incentive. These districtwide offerings were supplemented by job-embedded professional development at the school level, which was especially effective in grades K-8. Most of this professional development took place during teachers' common planning time, when they met with math, literacy, and ELL specialists collaboratively to review achievement data, adjust curriculum to meet student needs, discuss ELL and other teaching strategies, plan and model lessons, and observe and critique each other's work. On occasion, consultants offered workshops at the school level and participated in collaborative discussions of curriculum adjustments and teaching strategies.

The district cooperated with local colleges and universities to offer a Career Ladder program for its paraprofessionals to complete a bachelor's degree and teacher certification; 26 of the 33 who completed the program were employed by the district as teachers. It offered teleconferencing courses and math and science courses for teachers. It provided National Institute of School Leadership (NISL) training for K-8 and central office administrators and "DNA of School Leadership" ""DNA of School Leadership"" training for high school administrators.

The district evaluated its professional development programs through teacher surveys, retention rates of new teachers, and the success of paraprofessionals who became qualified teachers. It engaged outside evaluations of some professional development offerings funded by grants, including an outside evaluation of its mathematics content offerings which indicated success in improving both teacher and student achievement in mathematics.

Evaluation procedures for both administrators and teachers satisfied legal and DOE requirements. Examiners reviewed random personnel files of 105 teachers, three central office administrators, 20 principals, and 25 Unit B administrators. Evaluations were timely,

informative, and in many cases instructive, with the exception of a few central office and Unit B administrators whose files did not contain evaluations. The superintendent evaluated all principals and held them accountable for their professional and school goals. Their contracts, as well as those of central office administrators, included a stipend to be based on performance. Half of the principals' evaluations and three of the teachers' evaluations cited student achievement. The district has established a task force to study the evaluation process for teachers.

2005 Indicators

3.1. The district and each of its schools implemented systems for the evaluation of personnel performance that were linked to student achievement data and resulted in sustained or continued improvements in the quality of teaching and learning.

EQA Rating from 2005: Unsatisfactory

EQA Rating from 2007: Needs Improvement

Evidence

During the prior period of EQA review (2001-2004), the district had performance evaluation systems for administrators and teachers, but examiners found no written evidence that student achievement was linked to either teaching or administrator performance. The superintendent meticulously weaved School Improvement Plan results and student achievement information into her evaluations of staff performance. However, that level of detail stopped at the principal level. Therefore, with the exception of personnel who reported directly to the superintendent, there was no written evidence that the performance of administrators, teachers, or paraprofessionals was linked to or resulted in sustained or continuous improvement in the quality of teaching and learning.

During the reexamination period under review (2005-2007), half of the principals' evaluations were linked to student achievement data, but this was not the case for other administrators or teachers. In general, the evaluation process better supported improved teaching than it did in the prior examination period. District and teachers' union conversations concerning the teacher evaluation form have been ongoing.

According to administrators, the district evaluated administrators and teachers but not paraprofessionals. Examiners reviewed personnel files of 105 teachers, 20 principals, the superintendent, three central office administrators, and 25 Unit B administrators (those with supervisory responsibility, other than central office administrators and principals). In interviews, the EQA team learned that the personnel office reviewed all completed evaluations from an administrative perspective of compliance, but that no central review of evaluations took place from a qualitative view as to their significance with content and their internal ratings with respect to district or school goals.

The superintendent evaluated all the principals, and in their evaluations she referenced last year's goals, incidents and events during the year, and goals for next year. Half the principals' evaluations examined were linked to an MCAS or AYP goal. The school committee evaluated the superintendent. None of the three central office administrators had been evaluated. Twenty-one (84 percent) of the Unit B administrators' files contained evaluations. In the evaluations of high school Unit B administrators reviewed, there was no mention of student achievement nor of the MCAS tests. In the middle school evaluations, one mentioned the administrator's connection to school goals for improving student achievement.

Student achievement was not one of the criteria on the evaluation form for teachers, and only two of the teacher's evaluations examined contained a reference to student achievement. Administrators and union officials reported that a task force has been formed to revise the evaluation process for teachers. They also reported that principals did informal walk-throughs, although they were not a factor in evaluations; the union has grieved the walk-throughs and the matter has been referred to arbitration.

The impact of this practice was evident in evaluations of non-professional status teachers which were linked to impact of the Lowell Teacher Academy, the in-processing unit of the district which provided coaching, mentoring, and formal coursework to all first-, second-, and third-year Lowell teachers. The Academy has created a rich source of "just-in-time" training for new teachers to receive content and pedagogical advice and modeling in their discipline areas while in the classroom. In interviews, the EQA team learned that the academy's support was noted in the documentation of the evaluations of non-professional status teachers, which in turn was noted

by examiners in their written evaluations. There were more instructive comments in their evaluations and in their personnel files than in professional status teachers' files. In addition, there was communication in non-professional status teachers' files about teaching progress, sent annually from the director of the Teacher Academy. In interviews, many teachers reported that the evaluation process, especially conferences and observations, was helpful and that it gave constructive criticism they could learn from; only two stated evaluations were not helpful.

Administrators reported that they received two years of training in supervision and evaluation, and that the district has prepared a handbook outlining principles and procedures for evaluations. Central office administrators reported they did an administrative review of evaluations, checking them for proper signatures and timeliness.

3.2. The district utilized evaluation procedures for administrators that were aligned with the requirements of the MGL Chapter 71, §38 and 603 CMR 35.00.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, while the Unit B contract with administrators showed that it was in compliance with CMR 35:00 regulations, a review of personnel files indicated that these regulations were not necessarily followed; all Unit B administrators' performance was not evaluated every two years. Also, evaluations of principals' performance did not adhere to the outline required by CMR 35:00. The superintendent indicated that she referred to the CMR 35:00 outline, but the completed written evaluations did not follow that format. Nevertheless, the superintendent evaluations of staff performance were comprehensive, detailed, informative, and instructive.

During the reexamination period under review, the superintendent prepared narrative evaluations of all principals, referencing their goals for the past year, incidents and events during the year, and future goals. Examiners reviewed 20 principals' evaluations, of eight retired or separated principals and 12 current principals. All were timely and signed. The CMR 35:00 form was not used, but examiners found many of the Principles of Effective Leadership were included in the superintendent's written evaluations along with career and school specific issues. All principals

were properly licensed. There were no evaluations in the three central office administrators' files examined. All were licensed.

The school committee completed written evaluations of the superintendent. Each evaluation was comprised of multiple criteria and multiple indicators within each criterion. Each committee member completed his/her evaluation of the superintendent independent of other committee members, but an aggregate was constructed for presentation to the superintendent. The superintendent was properly licensed.

Most Unit B files reviewed by the EQA team were from the high school and the middle schools. The CMR form was in use in all evaluations reviewed and all CMR indicators in all criteria were satisfactory. Although procedures were in place and generally followed, four of the 25 files did not contain evaluations for the period under review. All Unit B files reviewed contained current licenses.

3.3. <u>The form and content of the district's evaluation process for administrators was informative, instructive, and used to promote individual professional growth and overall effectiveness.</u>

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, with the exception of the superintendent's evaluations, other administrative evaluations, including 30 percent of those of Unit B staff members, were neither informative nor instructive. Many Unit B evaluations were unclear. Only 20 percent contained recommendations for improved performance. By contrast, 100 percent of personnel evaluations completed by the superintendent contained recommendations for improved performance. During the review period, annual written evaluations were required for administrators. However, most files contained only one evaluation for the four-year period of 2000-2004.

During the reexamination period under review, the team found that the form and content of the district's evaluation process for administrators was informative, instructive, and used to promote

individual professional growth and overall effectiveness. The EQA team reviewed 49 administrator personnel files. These consisted of the superintendent's file, eight retired/separated principals, 12 current principals, three central office administrators, and 25 Unit B administrators. All but the superintendent's file were randomly chosen. There were no evaluations in the three central office personnel files. All school committee members evaluated the superintendent and the chairman prepared a composite; examiners found her evaluation to be informative and instructive.

Administrators reported that they prepared SMART goals (Specific, Measurable, Action-required, Realistic yet challenging, Timetable) jointly with the superintendent, and that it was likely a principal had an achievement goal. The superintendent's evaluations of principals referenced these goals. Examiners found that all 20 principals' files contained evaluations conducted by the superintendent. Evaluations of principals were timely and both informative and instructive at very high levels of specificity. They were specific about goal attainment and alignment with subsequent years' goals, and about school specific issues. A great deal of attention was devoted to ensuring that the developmental needs of the principal were integrated into the various evaluations. All contained reference to successes and expected improvements.

Four of the 25 Unit B files reviewed by the EQA team did not contain evaluations for the period under review. Of the remaining 21 files, 13 were informative (61 percent) and eight were instructive (38 percent), in that they contained recommendations for improved performance at some level. In one school the CMR form was used universally as a boilerplate evaluation with a stapled cover sheet signed by the evaluator. The cover sheet contained bullets with highlights of the administrator's performance.

3.4. Administrators in the district were held accountable for student assessment results in their yearly evaluations.

EQA Rating from 2005: Poor

EQA Rating from 2007: Needs Improvement

Evidence

At the time of the prior EQA review, a review of Unit B administrator performance evaluations indicated no written information connecting performance to student achievement. However, the

evaluations of principals' performance contained reference to AYP data. Administrators below the level of principal were not held accountable for student assessment results in their yearly evaluations.

During the reexamination period under review, 50 percent of the principals' evaluations and one assistant principal's evaluation reviewed by the EQA team made reference to student achievement results. No high school Unit B administrator's evaluation made reference to student assessment results, and one middle school Unit B administrator's evaluation referenced student achievement. Contracts for principals and the superintendent included a provision for a performance stipend. Administrators reported that the stipend was generally awarded for successful completion of their goals, and that those goals for principals were likely to include student assessment results.

3.6. <u>The form and content of the district's evaluation process for teachers was informative, instructive, and used to provide professional development offerings that promoted individual growth and effectiveness.</u>

EQA Rating from 2005: Unsatisfactory

EQA Rating from 2007: Satisfactory

Evidence

At the time of the prior EQA review, the EQA examiners reviewed 102 teacher personnel files containing 129 evaluations. Only 63 percent of the evaluations were timely and 18 percent contained any recommendations for improved performance. The vast majority of teacher evaluations contained little information other than congratulatory language. A few evaluations were expansive in their description of observed teacher behavior and connected to the Research for Better Teaching (RBT) training and protocols. Many contained only a rating. There were three possible ratings: 'S' for satisfactory, 'U' for unsatisfactory, or 'N' for no information. No file of a current teacher who was on a "support plan" was provided to the examining team, although the files of eight teachers who had been on support plans but were later dismissed were provided as part of the document review. Of the 129 performance evaluations reviewed, 100 percent were rated satisfactory.

The EQA team found that during the reexamination period under review, the district strengthened its evaluation process for teachers so that they were timely. Evaluations were more informative, instructive, and promoting of individual growth and effectiveness than in the prior period, particularly for non-professional status teachers.

The EQA team reviewed 105 teacher personnel files. Of these, 56 were for professional status teachers, 39 for non-professional status teachers, and 10 for teachers under licensing waivers. According to the contract, professional status teachers were evaluated every other year. Eleven of the files examined contained evaluations for periods prior to the 2005-2007 period under review. Of the remaining 45 files, all (100 percent) were timely, all (100 percent) were signed, and 66 percent were informative, although at varying levels of information. Some were detailed and contained multiple written observations, with end of the year summaries, some contained cryptic details, and some contained just summaries. Three of the 105 teachers evaluations reviewed were rated unsatisfactory, and 98 percent were rated satisfactory. In total, 33 percent of the professional status evaluations were instructive. Many of those in this category simply included "continue to do" as an instructive recommendation. Within the 15 evaluations determined to be instructive in a way that promoted professional growth, there were 27 instructive comments, with several having four or more comments. One evaluation reviewed had several unsatisfactory ratings within the "Instructional Criteria," but it yielded no instructive comments from the evaluator. It did, however, elicit a six-page rebuttal, which in turn elicited a multi-page positive review of the previously unsatisfactory ratings.

A significant percentage of non-professional status teachers' evaluations were informative (85 percent) and instructive (70 percent). Non-professional status teachers were evaluated twice a year, in December and March. Thirty-nine non-professional status teachers' files were reviewed. Sixteen contained no records of evaluations because the teachers were hired in 2007. All others were timely and signed. All files contained written evaluations for each year of non-professional status employment. Some evaluations contained multiple instructive comments related to improved instruction and included specific information about the value of the teachers' participation in the Lowell Teacher Academy, the entry level administrative and training program for the district. In addition, each file contained a specific letter outlining the teacher's progress in the Teacher Academy. It was obvious to examiners that the detail contained in the

non-professional status teachers evaluations and in the Teacher Academy verification of progress for the entry level teacher was substantial and valued by both evaluator and evaluatee. The district's job-embedded professional development conducted by coaches, collaborating teachers, and mentors as well as principals at a point closest to the students was reflected in evaluations of participating teachers. If hired for a full year, every teacher, including long-term substitutes, was assigned to the Teacher Academy for coursework and mentoring, and was evaluated. Administrators reported that any teacher or long-term substitute who was to be retained but whose performance had been rated at any level as unsatisfactory, was given an an action plan including intense observations.

3.7. Teachers in the district were held accountable for student assessment results in their respective schools and classrooms. These results were cited in the evaluation process.

EQA Rating from 2005: Unsatisfactory

EQA Rating from 2007: Needs Improvement

Evidence

At the time of the prior EQA review, examiners found no reference in any teacher evaluation document to student assessment results, other than an occasional citation in a written evaluation document of teachers' efforts to implement the new reading, math, and ELA curriculum initiatives. Few MCAS test results appeared in any performance evaluation documents that the examining team reviewed.

For the reexamination period under review, K-8 teachers and principals stated they felt accountable for the assessment results of their students and made the improvement of their achievement a priority. They reported that the improvement of proficiency in mathematics and ELA was a priority for their schools, particularly for the special education and ELL subgroups. Two teacher files of 105 reviewed contained specific mention of MCAS scores, and none of the criteria in the evaluation form referenced student assessment results. Administrators reported that they expected the task force on the teacher evaluation process to address this issue.

8.2. The district's plan met or exceeded state requirements for resources committed to professional development, and the plan was evaluated for its effectiveness in advancing student performance.

EQA Rating from 2005: Poor

EQA Rating from 2007: Excellent

Evidence

At the time of the prior EQA review, upon examination of the End of Year Pupil and Financial Report, examiners found that the district met or exceeded the state requirements for resources committed to professional development in 2002, but not in 2003. In 2004, the DOE waived the requirements. Interviewees indicated some professional development was evaluated for its effectiveness in advancing student performance, including reviews of MCAS test scores and review of SIPs in order to coordinate professional development and avoid duplication. However, examiners found no data or evidence regarding the evaluation of the professional development program. Additionally, teachers cited problems with the professional development program: inadequate time to implement initiatives, inadequate consistency between program development and new initiatives, and erratic implementation at the building level. Teachers offered opinions that professional development was driven by grant and district opportunities, instead of by student and teacher needs. Finally, teachers expressed concerns about how to implement the professional development to impact classroom instruction because of inadequate support after implementation. In 2003-2004, the district reorganized the central office to address data analysis and system-wide instructional programs and services. Professional development and new instructional initiatives became an integral part of district and school planning.

During the reexamination period under review, Lowell's professional development program set a standard for effective use of resources to accomplish district goals, and the evaluation of the program demonstrated its effectiveness in teacher retention and qualifications. The district engaged in districtwide professional development courses supplemented by in-school activities. In 2005, the district instituted the Lowell Teachers Academy, funded by a private grant, to provide courses and mentoring for new teachers. Paid mentors were connected to new teachers as partners. Principals who were interviewed confirmed both the advantage of face-to-face interaction with mentors as a powerful professional development tool, and the importance of the

Academy's connection in supporting instructional competence with new teachers; the Academy program promoted their individual growth and effectiveness.

Administrators reported that Academy courses were made available to all Lowell teachers as well, and they were eligible to receive credit for these courses on the salary scale as an incentive. In addition to these district-wide courses, interviewees described embedded professional development activities in each school, focusing on coaching and model lessons by instructional specialists, release time for teachers to work together or with a consultant or specialist, and common planning time for teachers to collaborate. The district has managed to integrate job-embedded professional development at a point closest to the students to an extent rarely observed across school districts. Topics for in-school embedded professional development included assessment analysis and curriculum adjustments, collaborative lesson planning and critiques, sheltered English instruction, literacy across the curriculum, and special education regulations and policies. In grades K-8, most of these activities took place in common planning time and were led by instructional specialists for math, ELA, and ELL; at the high school, department heads and other administrators led weekly meetings after school.

To create other district opportunities for professional development, the district partnered with colleges and universities and contracted with select external programs. Other professional development opportunities included a Career Ladder program with Fitchburg State College leading to 'highly qualified' teacher status for paraprofessionals, teleconferencing courses with the University of Massachusetts at Lowell, math and science courses with the Hampshire Education Collaborative, and NISL and RBT's ""DNA of School Leadership"" training for administrators. Contracts showed that the district reimbursed administrators, teachers, and paraprofessionals for a portion of tuition expenses.

The DOE had eliminated state requirements for expenditures on professional development in 2004. According to DOE figures, the district reported spending less than the state average on professional development: $1,061,250 in FY 2006, an average of $75.65 per pupil compared to $192.70 for the state. However, these figures do not represent some expenditures on professional development such as expenditures from some grants on professional development or the curriculum leadership and instructional specialists who devoted considerable energy to

supporting the collaborative and embedded professional development activities taking place in the schools. The district was able to run the Academy and other professional development programs with two administrators. Interviewees cited the fact that the potential loss of grant funds in FY 2009 could result in reductions of professional development personnel and activities.

The team learned that the district evaluated some of its professional development programs, particularly those funded by grants. The district evaluated Reading First grant activities, including training, and Title I activities. EduTron conducted an outside evaluation of the Intensive Immersion Institutes in Mathematics courses offered through the Lowell Teachers Academy, showing gains in both teacher and student achievement in mathematics for teachers who participated. A review of the implementation of READ 180 in grade 9 was used to justify its expansion to grade 10. The district evaluated its Lowell Teachers Academy by surveying participants and by looking at new teacher retention rates; the superintendent reported that in 2007, 87 percent of first-year teachers and 92 percent of second-year teachers were retained. An in-house evaluation of the Step Up program for paraprofessionals showed that as of 2007, 33 participating paraprofessionals were expected to graduate with a bachelor's degree, of whom 26 were hired as teachers for the Lowell Public Schools.

The superintendent reported that all central office and K-8 administrators were enrolled in the NISL administrator training program, and administrators spoke of its value to their work. High school administrators were enrolled in the RBT ""DNA of School Leadership"" course.

8.3. <u>The district's Professional Development program was informed by all of the following: evaluation results of personnel, programs, and services (i.e., teacher evaluations, curriculum alignment, instruction, assessment results, MCAS remediation needs), student assessment data by student subgroups, and district and school improvement plans and goals.</u>

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

In reviewing the district's personnel files at the time of the prior EQA review, examiners noted that teacher evaluations did not address instructional issues as they pertained to improved student

achievement and the development of professional development programs. The district had limited evaluations of programs and services, with the exception of Title I and special education. Some professional development programs were developed from Title I and special education evaluations, and some individual professional development plans informed some district and schoolwide professional development. The district reviewed MCAS data at all levels, and these data were disaggregated and weaknesses identified. However, no evidence was found that disaggregation of the MCAS test subgroup data informed professional development. The No Child Left Behind professional development goals and the superintendent's district goals drove professional development for the district. Professional development programs were aligned with the DIP and SIPs. At the time of the prior review, building-based professional development was in place. Professional development had more continuity system-wide, in that there was better coordination of ELA and math professional development goals and objectives.

During the reexamination period under review, documents showed that the professional development plan was informed by district goals: increasing the retention of new teachers, improving sheltered English instruction, improving instruction and achievement in K-12 ELA and K-8 mathematics, and leadership training for administrators. In interviews, principals and teachers confirmed that the professional development in their buildings reflected district priorities, specifically new curricula (Investigations, Scott Foresman), SIOP and MELA-O for ELL students, and writing across the curriculum.

Evaluation of programs and personnel shaped the professional development program. Outside evaluations led to professional development offerings including training for special educators on IEP requirements and instruction for English language learners (ELL) following recommendations in the Coordinated Program Review. The NEASC evaluation recommended similar professional development on assessment and on the inclusion of special education and ELL students. Administrators reported using teacher surveys to help identify professional development needs and to evaluate their offerings, and specialists chose topics based in part on their discussions with teachers during common planning time. Although interviewees did not cite examples of professional development offerings chosen on the basis of personnel evaluations, they did describe cases in which a teacher was encouraged to participate in a course such as the mathematics content course.

Administrators and instructional specialists reported that assessment results also informed professional development at the school level, where they used common planning time and department meeting time to study common exam (including benchmark, unit, and quarterly tests) and pre-test results, Galileo and READ 180 formative assessments, and MCAS data. These data resulted in an emphasis by specialists on training for teachers in reading across the curriculum, writing, open-response questions, sheltered immersion, and differentiated instruction. Teachers and principals did not cite examples of how professional development was informed specifically by special education subgroup results; rather, the focus was on the ELL subgroup. The superintendent reported that poor achievement of ELL students led to several efforts to improve instruction for that subgroup: 258 teachers took coursework on second language acquisition, sheltering English, and using the ELPBO Roadmap; math and literacy instructional specialists took professional development seminars including strategies related to ELL; teachers collaborated with specialists and instructional specialists on sheltered English instructional strategies during common planning time; and courses in sheltered English instruction were offered in the Lowell Teachers Academy. In order to improve math achievement, the district extended the ELA instructional specialist model to include K-8 mathematics in 2005.

8.5. The district's programs included: data analysis skills for staff, the use of item analysis, and disaggregated data to address all students' achievement, accommodations for diverse styles of learning, and skill building in curriculum development, delivery, and instructional techniques.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior EQA review, the interview process and teacher focus groups indicated there was a low level of staff understanding in the use of data analysis to improve instruction. There were few professional development opportunities for the K-12 staff on the use of data analyses to accommodate diverse styles of learning. Review of the district's documents produced two District Curriculum Accommodation Plans. The grade K-8 DCAP was complete, with all the necessary components and professional development follow-up. The second DCAP for the high

school had none of the components required for a DCAP; hence, no professional development was provided in the critical components of the DCAP.

During the reexamination period under review, Teachers Academy course descriptions indicated that several courses included an assessment and data analysis component. The professional development plan indicated that all central office administrators and K-8 principals were required to participate in NISL training and high school administrators in DNA training, and that data analysis was a focus of their training.

District data analysts generated aggregated and disaggregated data reports as well as student profiles for dissemination to the school committee, administrators, principals, and teachers. Teachers reported that detailed data were available for their students on-line, but that their computers were so old most could not access them. Rather, K-8 principals and specialists reported preparing data reports and reviewing them with the teachers. Specialists used the results to adjust curriculum and lesson plans in their discussions with teachers during common planning time. In addition to MCAS data, they reported using assessment results from DIBELS, SRI, Galileo, MELA-O (for ELL students), Reading Street, READ 180, and GRADE, as well as common exams and unit tests. They cited item analyses and subgroup data as particularly useful in discussions about adjustments to curricula and lesson plans. High school teachers by department reviewed the results of common quarterly course assessments.

2007 Indicator

13. The district provided ongoing and regular training in dealing with crises and emergencies to all staff, provided procedures for substitutes, student-teachers, and volunteers responsible for students, and provided opportunities to practice emergency procedures with all students.

EQA Rating from 2007: Satisfactory

Evidence

Administrators reported that the district had developed a binder covering procedures for crises and evacuations, and each school had a crisis team. Teachers reported that they had a copy of the safety plan in a prominent place in their classrooms. Administrators and teachers also reported that safety plans were reviewed with the staff at the beginning of the year, led by a school

resource officer when available. They also reported holding practice lockdowns (both hard and soft) and fire drills annually, sometimes with police and fire officials present.

Standard V: Access, Participation, and Student Academic Support																				
	2005 Indicators																	2007 Indicators		
Indicators► Ratings▼	2.1	2.4	2.5	2.6	6.7	7.1	7.3	7.4	7.8	9.2	9.4	9.5	10.1	10.2	10.3	10.4	10.5	4	5	6
Excellent																				
Satisfactory	2007	2007	2007	2007	2007			2007	2007	2007	2007		2007	2007	N/A	2007	2007	2007	2007	2007
Needs Impr.						2007	2007					2007								
Poor	2005	2005	2005		2005			2005	2005	2005	2005		2005	2005	2005	2005	2005			
Unsatisfactory				2005		2005	2005					2005								

V. Access, Participation, and Student Academic Support

The district provided quality programs for all students that were comprehensive, accessible and rigorous. Student academic support services and district discipline and behavior practices addressed the needs of all students. The district was effective in maintaining high rates of attendance for students and staff and retained the participation of students through graduation.

Findings:

- The district provided a number of support programs to support students at risk of academic and school failure. With cuts in grants, the district worked to sustain programs through local funding, applying for other grants, integrating support services for students in the regular classroom and school environment, and establishing partnerships.
- Chronic absence rates in Lowell increased since the last EQA review while the average attendance rate remained close to 93 percent. The high school had the highest chronic absence rates and the lowest average attendance rates in the district.
- Lowell High School initiated "Operation Attendance" in 2006 to address low average attendance rates. The program provided incentives for good attendance and began a more aggressive enforcement of the high school attendance policy.
- Attendance, suspension, exclusion, retention, and dropout data showed no disproportionate representation of any student subgroups during the reexamination period.
- The 2006 Lowell Public Schools graduation rate exceeded the graduation rate for urban districts in the state. The graduation rates of Lowell special education, LEP, and Hispanic students were lower than that of all Lowell students.

- A review of grade 3 MCAS reading scores in Lowell showed that the percentage of students scoring 'Proficient' or higher remained static from 2005 to 2007.
- Overall, the district moved students from 'Needs Improvement' or 'Warning/Failing' to 'Advanced' or 'Proficient' in ELA and math between 2004 and 2007. The percentages of special education and LEP students attaining proficiency in ELA and math were lower than that of all Lowell students.
- Lowell LEP students equaled or outperformed their statewide peers on the MCAS tests, while Lowell special education students underperformed their statewide peers.
- The district's Competency Determination (CD) attainment rates have remained unchanged at 93.4 percent, lower than that statewide. Subgroups with the lowest CD attainment rates were special education, LEP, Hispanic, and African-American students.
- With a high rate of homelessness (152 students) and large populations of low-income students (68 percent) and students whose first language is not English (49 percent), district staff members provided and arranged many services for affected students and their families, including free transportation, childcare, translation, and health services.
- The district made family engagement a priority, providing detailed analyses, recommendations, and support for increasing the involvement of families, particularly those whose first language is not English.
- The provision of special education services was a noted weakness that the district planned to address through a program evaluation beginning in the 2004-2005 school year and the implementation of a revised model for special education service support and delivery.

Summary

In this standard, Lowell Public Schools improved on all 16 of the indicators receiving ratings of 'Poor' and 'Unsatisfactory' in the prior EQA examination (excluding one indicator that was not applicable in the reexamination). Of the 19 indicators reviewed in the reexamination (including three additional 2007 indicators), the district achieved a level of 'Satisfactory' on 16, or 84 percent. The district made efforts to improve support for at-risk students and subgroups, although the district still had areas in need of improvement.

District staff members explained that regular classroom teacher training in Sheltered Instruction Observation Protocol (SIOP) practices contributed to the improved achievement of LEP students. Lowell LEP students performed at or above the state averages on the 2007 MCAS ELA and math tests.

Interviewees reported that regular classroom teachers needed training and classroom support in special education inclusion practices, which the district special education staff began to address in 2007-2008. Special education staff members acknowledged that they provided this additional classroom teacher support because of concern about the low performance of special education students on the MCAS tests. During the reexamination period, Lowell special education students underperformed their peers in the state, and their achievement was substantially below that of all students in Lowell.

High school efforts such as "Operation Attendance" and the Freshman Academy showed promise for improving attendance rates, although since the last EQA review student average attendance rates remained unchanged at just below 93 percent. Chronic absence rates continued at high levels in the high school, and average attendance rates at the high school level were substantially below those for grades K-8. Student participation rates in MCAS testing improved during the reexamination period. For the aggregate student population in Lowell, MCAS test participation rates in 2007 were no lower than 99 percent at any grade level. Participation rates were 97 percent or higher for most student subgroups, except for students with disabilities in grade 10 ELA, whose participation rate was 92 percent.

Student suspension, retention, dropout, and graduation rates improved since the last EQA review. In-school and out-of-school suspension rates dropped below state averages over the last two years. Retention and dropout rates were lower in 2006 than in 2005. The EQA team found no suspension, retention, or dropout issues for any minority subpopulations during the period reexamined. Grade 9 students had the highest suspension, retention, and dropout rates during the last two years. LEP, special education, and Hispanic students had lower graduation rates than the aggregate population. Yet, the 2006 graduation rate for Lowell Public Schools exceeded the Massachusetts urban district graduation rate.

2005 Indicators

2.1. The district and each of its schools had clear management systems in use that required all students to participate in all mandatory and appropriate assessments that resulted in a two- or three-year average participation rate of 95 percent in the state assessment.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review (2001-2004), the district had management systems requiring all students to participate in all mandatory assessments. The Lowell Public Schools' policy manual contained district policies and procedures for mandatory participation in all assessments. The district informed all students about the relevant assessments at the beginning of the academic year, and regularly informed parents of impending assessments. Principals had the responsibility to oversee the administration of the assessments, and many principals held MCAS test assemblies to explain exam administration responsibilities. The participation rate in MCAS testing was higher than the recommended state standard of 95 percent at most grade levels. However, in 2004 only 87 percent of the eligible grade 10 students had taken the test in ELA and only 88 percent had taken the test in math.

During the reexamination period under review (2005-2007), the aggregate MCAS participation rates for the Lowell Public Schools averaged about 99 percent, much higher than 2004 rates. In 2007, the MCAS participation rate of students with disabilities on the grade 10 ELA test was 92 percent.

District administrators and staff members described district strategies to increase participation rates. District high school staff said that some of the reasons for the lower participation rate of grade 10 students with disabilities included test anxiety, forgetting to attend school on test days, lack of familiarity with test administrators, and temporary changes in residence during MCAS testing. Some of the strategies used by the high school staff to increase special education student participation included using Connect-ED for reminder calls the day before MCAS tests, enrolling special education students in MCAS preparatory classes, and assigning special education students to appropriate classes for testing purposes. Other approaches for increasing participation

were holding individual meetings with special education students to increase comfort levels in taking the MCAS tests, making reminder calls to special education students and parents regarding MCAS retesting, and working with the Department of Social Services (DSS) to prevent residence change issues from interfering with MCAS test administrations.

2.4. The district and each of its schools had clear management systems in place that required all students to attend school, and these systems were actively implemented and resulted in a student attendance rate of 93 percent or higher.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, the district-wide attendance rate for each of the four years in the review period was 92.8 percent, slightly below the state's recommended rate of 93 percent. The DOE's district attendance report for the 2003-2004 school year indicated that the attendance rate for grades preK-12 ranged from a high of 95.4 percent in grade 4 to a low of 84.5 percent in grade 9. High school attendance rates for grades 10-12 were also low, at 89.6 percent, 87.6 percent, and 87.6 percent, respectively. Chronic absenteeism was well above the state average of 11.8 percent; Lowell's rates were 20.2 percent in 2002, 19.9 percent in 2003, and 22.7 percent in 2004. Although the process varied from school to school, every school in the district had a clear management system in place to deal with daily student absence, including parental contact by telephone and required notes from parents.

During the reexamination period under review, the district average attendance rate remained static at 92.7 percent in 2005 and 2006. High school 2006 average attendance rates improved for grades 9-12 to 85.0 percent, 90.0 percent, 89.6 percent, and 90.4 percent respectively. The district bolstered its efforts to improve attendance with renewed efforts and new initiatives, including Connect-ED, the Freshman Academy, Operation Attendance, a collaboration with ONE Lowell, the credit Buy-back Program, the Self-paced Program, , and continued policy enforcement and communication with social services agencies.

The administration at each school monitored student attendance daily. School staff expected parents to call the school and/or send a note each time their child was absent. In 2006-2007, the

district implemented the use of Connect-ED to call parents. School social workers and guidance counselors assisted with student absence cases, and attendance officers ensured outreach to parents in severe cases. Principals sent district-generated letters noting attendance concerns at five, 10, and 15 days of absence. Fifteen consecutive days of unexcused absences resulted in removing students from school attendance rolls. According to the district's promotion policy, excessive absences could result in retention. Since 2005, the district identified grade 9 as a high-risk population and established the Freshman Academy to target identified needs. Freshman Academy guidance staff met weekly with attendance officers to discuss strategies for improving student attendance. The design of the Freshman Academy program promoted good attendance also by addressing factors related to school failure. The Freshman Academy sought to improve transitions from grade 8 to 9, provided additional social workers for counseling students, and provided READ 180 classes for students reading below grade level. Initial data reported by the high school staff in 2007 showed improved attendance for grade 9 students.

During the 2006-2007 school year, Lowell High School initiated Operation Attendance, which provided incentives for good attendance and more aggressive enforcement of the attendance policy. Operation Attendance included the Lowell High School Pride motivational program, which provided incentives for good attendance, as well as other achievements. Students with no tardiness or absence in a quarter received an entry slip for a prize drawing each quarter. Another facet of Operation Attendance involved the use of multilingual staff to call parents of absent students in the evening hours. In addition, ONE Lowell, a local community organization, used its liaisons who spoke many languages to help the district connect with families whose children had chronic absences.

Lowell High School added another two interventions during the reexamination period to assist students in danger of losing credit due to excessive absences. The district already had in place a credit Buy-back Program for students who were absent up to 15 days. In this program, students attended one Saturday tutorial at the Tutoring Center in the high school library to enroll in the Buy-back Program. Enrolled students received credit for one period of class attendance for every two hours of attendance at the Tutoring Center, either after school or on Saturday. In the 2007-2008 school year, the district provided three teachers to staff the new Self-paced Program, which allowed students to prevent the loss of credit even if they did not qualify for the Buy-back

Program due to excessive absences. To participate in the Self-paced Program, students and parents mutually entered into a contract with the high school staff, requiring the student to attend four extended block classes in English/READ 180, math, health, and seminar/enrichment held after school. Good attendance and grades resulted in a maximum of 10 restored credits. The program conducted an exit assessment for every student.

School administrators at all levels acted to prevent unexcused absences, tardiness, and truancy. If other prevention measures did not improve attendance, school administrators contacted district attendance officers or social services agencies for assistance. Attendance officers made home and school visits, conducted investigations, and made recommendations for all cases of truancy. Police, security staff, and headmasters conducted regular "sweeps" of city neighborhoods to locate truant students. If unsuccessful, attendance officers prepared to take the parents to juvenile court, to file the appropriate action: a Child in Need of Services (CHINS) petition, a Truancy Petition, a Duties of Parent Penalty - C.76, s.2, or an Inducing or Abetting the Delinquency of a Child - C.119, s.63. District staff members attended weekly Community-based Justice meetings to review the cases of adjudicated students. Interviewees reported improved attendance using all of these strategies.

2.5. <u>The district and its schools had and enforced, when necessary, clear consequences for students with chronic absenteeism.</u>

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, the district employed several attendance officers to investigate and monitor cases of student absence. Principals, teachers, guidance counselors, and school psychologists initiated referrals to attendance officers. One attendance officer was assigned as the district's liaison to process CHINS petitions in matters related to chronic absenteeism. There were 83 referrals in 2002-2003 and 78 in 2003-2004. An attendance policy at the high school stated that a student with excessive absences would lose credits required for graduation, and that non-promotion to the next grade level was a distinct possibility. Each school also employed a school assistance or intervention team that worked with chronically absent

students. Though the district had a system to address chronic absenteeism, the percentage of chronically absent students in Lowell was much higher than the state average at almost all grade levels. Chronic absenteeism was a particular problem at the high school.

During the reexamination period under review, chronic absenteeism remained high although Lowell Public Schools continued to enforce consequences for chronic absenteeism. According to DOE summary statistics, the district's chronic absence rate increased to 22.4 percent in 2005 and 22.7 percent in 2006. At the high school, already high rates of chronic absenteeism slightly increased between 2004 and 2006 to 45.2 percent in grade 9 students and 34.1 percent in grade 10 students. Rates of chronic absenteeism declined significantly in grades 11 and 12. In grade 11, the decline was 5.0 percentage points to 34.7 percent. In grade 12, the decline was 9.0 percentage points to 34.5 percent. The district had initiated new strategies to improve student attendance, especially at the high school.

District staff addressed chronic absences at all grade levels. The district used its X2 database system to track student attendance cases daily in order to enforce standard consequences and apply standard interventions.

District accountability for chronic absenteeism became more vigorous for students in higher grades, where chronic absenteeism occurred at a higher rate. Elementary administrators monitored student attendance and contacted parents when there were concerns. Middle school staff held attendance hearings and high school staff held Attendance Review Board meetings to discuss attendance concerns with parents and students. At the middle school level, four or more excused or unexcused absences in a marking period could result in a school attendance hearing. Unexcused absences in excess of 16 days resulted in retention/provisional promotion; unexcused absences over 25 days resulted in retention. At the high school level, seven unexcused absences in a semester triggered the attendance officer to contact the parent for a meeting with the Attendance Review Board to consider dropping the student from the high school rolls. High school students who recorded their sixth absence in a subject might lose credit for the course, even if their grade was passing. Further unexcused absences resulted in no credit for the course and the student had to attend summer school to make up the credit. The district also conducted

attendance sweeps, worked with attendance officers, and involved the court and social service systems for extreme cases.

Besides enforcing consequences, the district provided interventions and incentives to reduce chronic absenteeism. District and school staff continued their partnership with ONE Lowell, a local community organization, whose volunteers spoke many languages. ONE Lowell volunteers worked with the district to connect with families whose children had chronic absences and helped them get to school. High school staff initiated Operation Attendance to provide coherence to different attendance strategies; Lowell High School Pride provided incentives for good attendance; high school staff started using multilingual staff to call parents of absent students in the evenings; Freshman Academy guidance staff met weekly with attendance officers; district staff attended weekly Community-based Justice meetings; and, police, security staff, and headmasters conducted regular sweeps of city neighborhoods to locate truant students. To help high school students earn course credits, motivate improved attendance, and retain students at-risk of dropping out, Lowell High School offered three levels of intervention: , the Academic/Attendance Recovery Program (Buy-back Program), and the Self-paced Program.

2.6. <u>The district maintained and used accurate records on attendance, suspensions, discipline, and dropouts by student subgroup populations and frequently analyzed these records to improve participation, involvement, and achievement for all students.</u>

EQA Rating from 2005: Unsatisfactory

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, the district maintained that school administrators and guidance counselors could review individual students' records regarding attendance, suspensions, discipline, and dropouts through internally-developed computer software. The district provided no documentation indicating that the data were disaggregated by student subgroup. A review of the district's DOE directory profile for the 2002-2003 school year revealed that dropout, attendance, out-of-school suspension, in-school suspension, and retention rates were worse than state averages. The widest gap was in the dropout rate, with 11.7 percent for the district compared to 3.3 percent for the state. A review of October 1 enrollment figures

for the cohort group of the Class of 2003 indicated that only 61 percent, or 747, of the 1,228 students who entered grade 9 in 2000 entered grade 12 three years later. However, with 659 seniors who earned a Competency Determination and graduated from Lowell High School in 2003, the actual percentage of the cohort graduating was 53.7 percent. Therefore, the cohort dropout rate for the Class of 2003 was 46.3 percent.

During the reexamination period under review, 2006 DOE data showed that the district had worked to decrease disproportionate at-risk behaviors for racial/ethnic subgroups. The district had lower rates of suspension for the aggregate population and for subgroups compared to the state. The district initiated programs to increase attendance and discourage dropouts, particularly at the high school, although Lowell's rates were worse than those statewide. The special education subgroup in Lowell was the most at-risk subgroup for dropping out of school, with rates higher than the special education state averages.

Hispanic students had an attendance rate of 90.4 percent, while African-American, Asian, and White students attended school at or above the 93 percent attendance target. Average attendance rate for Lowell Public Schools were 92.7 percent in 2005 and 2006, and the attendance of the Hispanic subgroup, which comprised 22 percent of the population, brought the district attendance rate below the attendance target. The district's partnership with the ONE Lowell community organization to call parents in different languages and help children get to school was a way to address this subgroup difference. The district also invested in greater intervention efforts at the high school, where data indicated the most severe attendance issues.

While the district did not describe specific programs to address differences in racial/ethnic subgroup discipline data, the relatively low incidence of suspensions, with minority gaps lower than those of the state, and proactive district efforts indicated that the district has worked to decrease discipline referrals for all populations. A review of School Improvement Plans showed that school councils considered discipline needs in their plans. Over the last few years, many schools implemented schoolwide social skills programs including Second Step, Responsive Classroom, and Open Circle to improve school climate and reduce discipline problems.

In addition to reviewing X2 information, district staff also mentioned a report that was useful in finding root causes for inappropriate student behavior. In a district document entitled Social

Worker Component Report, district administrators and social workers analyzed student referrals to social workers during the 2005-2006 school year. The report separated referrals into the categories of abuse/neglect, academic performance, attendance, behavioral, family stressors, mental health, peer/social skills, substance abuse, teacher/student conflict, transition issues, and other. The report stated that 3,182 students, or 26 percent, of the student population went to a school social worker at least once during 2005-2006. The top three categories for referrals to a social worker were family stressors, peer relationships, and behavioral. Based on this report, district staff decided to use Title I funds to pay the cost for behavior management programs and additional social workers to address family and relationship issues that triggered inappropriate behaviors. Last year the high school added two classrooms to the program for students with emotional disabilities at the Freshman Academy.

The district's dropout rate was higher than the state's, especially for special education students. The dropout rate was 4.5 percent in 2004, 7.5 percent in 2005, and 5.6 percent in 2006. The 2006 state dropout rate was 3.3 percent. The dropout rate for Lowell special education students in 2006 was 9.7 percent, significantly higher than the districtwide rate as well as the 5.1 percent dropout rate for special education students across the state.

Among racial/ethnic subgroups, Hispanic students were most likely to drop out, with a rate of 7.8 percent in 2006, followed by Asian students at 6.8 percent, White students at 4.5 percent, and African-American students at 3.0 percent. Aggregate dropout rates vacillated widely between 2004 and 2006, from 4.5 to 7.5 to 5.6 percent; however, the order of subgroups at risk of dropping out remained the same in 2005 and 2006. The subgroups most at risk for high school retention followed the same order: Hispanic students (16.0 percent), Asian students (12.0 percent), White students (7.5 percent), and African-American students (6.3 percent). Lowell's suspension rates were lower in the aggregate and for all subgroups for out-of-school suspension and in-school suspension, with Hispanic rates the highest at 7.5 and 2.6 percent, respectively (compared to statewide rates of 11.1 and 6.2, respectively). The respective rates for African-American students were 6.5 and 2.5 percent, for White students were 3.6 and 1.5 percent, and for Asian students were 3.0 and 1.5 percent. No suspensions of special education students were reported by the DOE, compared to the 0.9 percent statewide rate.

The Lowell Public Schools offered several programs to support students who dropped out or were in danger of dropping out of school. The high school offered three levels of intervention to help high school students earn course credits and motivate them to stay in school. These programs were , the Academic/Attendance Recovery Program (Buy-back Program), and the Self-paced Program. The high school also provided MCAS preparation classes to prevent or reverse an MCAS failure and tutoring for students struggling in ELA and math.

The district also provided alternative programs such as the Lowell Alternative High School at Molloy for regular and special education high school students and the Lowell Therapeutic Day Program for special education high school students with severe special needs.

6.7. The district and its schools had consequences, policies, and practices that addressed patterns of staff attendance and chronic staff absenteeism.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

Only during the final year of the prior period under review did the district enable its principals to address chronic staff absenteeism by providing them with detailed attendance data and by specifying steps a principal should take to address attendance concerns. While the principals began to address attendance issues with individual teachers during the 2003-2004 school year, teacher absences in 2003-2004 averaged approximately 10 days per year, excluding long-term absences and professional development days.

During the reexamination period under review, the district continued to enable principals to address absenteeism by providing data on teachers' absences. Some administrators stated they addressed attendance issues with staff members in conferences and had the authority to suspend teachers for problematic attendance patterns. Administrators stressed the importance of attendance to staff in newsletters, handbooks, and faculty meetings. Examiners saw references to attendance in evaluations, and the superintendent reported that four members of the staff with chronic absence histories were encouraged to resign or retire. District data continued to show average absenteeism of approximately 10 per year (10.24 for FY 2006 and 10.37 for FY 2007, excluding long term illnesses, professional development days, and jury/military duty).

7.1. All of the students in the district graduated in their senior year. All senior students met or exceeded the state's Competency Determination.

EQA Rating from 2005: Unsatisfactory

EQA Rating from 2007: Needs Improvement

Evidence

During the prior period of EQA review, the district's Competency Determination (CD) attainment rate was below the state average of 97 percent. In Lowell, the CD attainment rate for the Class of 2003 was 88 percent, and for the Class of 2004 it was 90 percent.

During the reexamination period, the district continued not to achieve the state's average CD attainment rate. In 2006 and in 2007, 93 percent of Lowell seniors attained the Competency Determination, an increase of three percentage points compared to 2004. The percentage of seniors attaining the CD in 2006 was 96 percent in ELA and 95 percent in math. In 2007, the percentage of seniors attaining the CD was 95 percent in ELA and 94 percent in math. Subgroups with the lowest CD attainment rates in 2007 were special education students (87 percent), LEP/FLEP (89 percent), African-American students (84 percent) and Hispanic students (85 percent). Other reported subgroups had CD rates ranging from 91 to 95 percent.

African-American students demonstrated different patterns in CD attainment rates than other district subgroups. Firstly, African-American senior CD attainment rates were lowered more by their math performance than for other subgroups in 2007. While 94 percent passed ELA, only 86 percent passed math, a difference of eight percentage points. Other subgroups demonstrated a one-percentage point difference between ELA and math passing rates except for special education students, which had a three percentage point difference in ELA and math passing rates. Secondly, African-American students who were juniors (68 total) achieved a CD attainment rate of 85 percent, equal to the CD attainment rate for all juniors, and higher than the rate of African-American students who were seniors (64 total).

The district's 2006 graduation rate exceeded the graduation rate for urban districts in the commonwealth, as stated in a district report. According to DOE 2006 cohort graduation rates, the four-year graduation rate for students in the district was 69.6 percent, and the four-year adjusted cohort graduation rate was 79.0 percent. Subpopulations with the lowest four-year adjusted

cohort graduation rates were special education at 45.5 percent, LEP at 57.5 percent, and Hispanic at 62.4 percent. According to a district document prepared by the Research, Testing, and Assessment department, the graduation rate of the Class of 2006 was 70.5 percent, lower than the state rate of 79.9 percent, but higher than the rate of 62.3 percent for urban districts. The district provided dropout prevention and recovery programs to address the needs of students who struggled in school and/or might not graduate.

7.3. Disaggregated trend data (minimum of 3 years) indicated no significant differences or disproportionate rates of discipline referrals, retentions, suspensions, exclusion, or dropout rates among students of all subgroup populations.

EQA Rating from 2005: Unsatisfactory

EQA Rating from 2007: Needs Improvement

Evidence

During the prior period of EQA review, DOE data indicated that Lowell's out-of-school suspension rates exceeded the state averages during 2001-2003. The data clearly indicated high rates of out-of-school and in-school suspensions and disproportionate rates of out-of-school suspensions for subgroups. The out-of-school suspension rate of 24.0 percent for Lowell's Hispanic students was more than twice the statewide average of 11.9 percent. The suspension rate was 8.7 percent for Asian-American students, exceeding the state average of 3.7 percent.

During the reexamination, the team found that the district significantly reduced the incidence of suspensions to levels below the statewide averages for all students and for subgroups. High school data indicated high levels of at-risk student behaviors, and the handbook for students at this level was less clear than at the elementary and middle levels. The team also learned that in spite of equitable policies and district interventions, Hispanic and special education subgroups in Lowell had disproportionately higher rates on at-risk indicators compared to other subgroups in the district.

Hispanic students had a disproportionately low attendance rate of 90.4 percent, while African-American, Asian, and White students attended school at or above the 93 percent state attendance target. The dropout rate for special education students in 2006 was 9.7 percent, significantly higher than the district rate of 5.6 percent. Among racial/ethnic subgroups, Hispanic students

were most likely to drop out, with a rate of 7.8 percent in 2006, followed by Asian students at 6.8 percent, White students at 4.5 percent, and African-American students at 3.0 percent. Aggregate dropout rates vacillated widely between 2004 and 2006, from 4.5 to 7.5 to 5.6 percent; however, the order of subgroups at risk of dropping out remained the same in 2005 and 2006. The subgroups most at risk for high school retention followed the same order: Hispanic students (16.0 percent), Asian students (12.0 percent), White students (7.5 percent), and African-American students (6.3 percent). Lowell's suspension rates were lower in the aggregate and for all subgroups for out-of-school suspension and in-school suspension, with Hispanic rates the highest at 7.5 and 2.6 percent, respectively (compared to statewide rates of 11.1 and 6.2, respectively). The respective rates for African-American students were 6.5 and 2.5 percent, for White students were 3.6 and 1.5 percent, and for Asian students were 3.0 and 1.5 percent. No suspensions of special education students were reported by the DOE, compared to the 0.9 percent statewide rate.

The EQA team determined that district's policies and procedures for discipline were standard, fair, and equitable. According to elementary and middle level code of conduct handbooks, "The goal of discipline is to help students develop wise decision-making skills so they may learn to make responsible choices in their interactions with others." The handbooks described the "progressive discipline" strategies used in schools including discussion/counseling, meaningful written assignments, detention, suspension, or long-term suspension. The middle school handbook also mentioned assignment to the Behavior Modification Center (BMC) or to an alternative program as additional possibilities. Both handbooks outlined social and academic responsibilities of students.

At the high school level, where at-risk behaviors were more frequent, the student handbook was less clear. The high school handbook was more of a legal description of discipline issues including minor violations, in-house suspensions, suspensions, and expulsions. The district staff expected all students to use appropriate behavior. However, discipline data for the district showed that the district fell below the state average rates for suspensions since the last EQA review. The EQA team was unable to obtain exclusion data, except for DOE data indicating that the district suspended no special education students for longer than 10 days.

The promotion and retention policies of district were also fair and equitable, and staff intervened in several ways before retaining students. According to the promotion/retention policy in the elementary and middle school code of conduct handbooks, school staff endeavored to "maximize the opportunity for each student to progress through school according to his/her own needs and abilities without the stigma of failure or retention." Elementary principals considered multiple factors before recommending retention for elementary students, including a thorough examination of the student's "attendance, tardiness, academic progress, academic performance, developmental readiness, and any other applicable indicators of the student's potential for success in the next grade." Building administrators assigned middle school students who failed to meet attendance and/or grade requirements to "retention/provisional promotion." These students, with 16 to 25 absences and with two or fewer failing classes, could be promoted through good attendance and passing grades at summer school.

The high school student/parent handbook specified the number of credits required for promotion to grades 10, 11, and 12. High school staff held meetings regularly to discuss attendance and failing grade issues for students and to make plans to support students so they did not fail or face retention. Staff reported that the Freshman Academy at Lowell High School was particularly successful in improving student attendance and grades, both of which affected retention and dropout rates. Schools at all levels used Teacher Assistance Teams (TATs) to address concerns about any student, including students who were candidates for retention. In the elementary code of conduct handbook, the superintendent was the final authority on the promotion or retention of students. Lowell retention rates were 2.0 to 2.5 percentage points higher than state retention rates, but school staff tried to avoid retaining students.

High school staff indicated that insufficient credits impacted the graduation rates more than the Competency Determination attainment rates, and that the school worked to help students meet graduation requirements. High school staff met once a week to discuss at-risk students. They notified parents of students in danger of not completing graduation requirements. District staff also worked to prevent students from dropping out of school and to recover dropouts. According to interviewees, the summer school program was a major dropout prevention strategy. The district provided the EQA team with a communication noting that over 25 students completed their graduation requirements during the 2007 summer school.

7.4. The district used aggregated and disaggregated student achievement data on participation and achievement to adjust instruction and policies for populations at risk and evaluated the effectiveness of these adjustments.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, the district indicated that it used aggregated and disaggregated achievement data to adjust instruction for populations at risk. The district also indicated it performed item analyses of the MCAS test data, and modified instruction for at-risk populations. The district indicated that MCAS test analyses were a building-based effort, with principals and administrative teams meeting with teachers and department heads to review test results. It was not clear how these analyses of test results were used in instruction for diverse learners. Interviews with district personnel indicated that administrators analyzed districtwide trends, which the leadership team discussed. Those findings then informed professional development. The district leadership team also reviewed student achievement trends for special education and LEP students. The district trained 1,000 teachers in the Sheltered Instruction Observation Protocol (SIOP). Principals had evaluated teachers to look at how effectively teachers used the sheltered model. The district also used Individual Student Success Plans (ISSPs) to discuss student achievement and modify instruction. The district used a building-based support team model to address individual students at risk.

For the reexamination period under review, the team learned of many examples in which Lowell used aggregated and disaggregated student achievement and participation data at the district and school levels to adjust instruction and policies for at-risk students.

Each school in Lowell developed a Unified School Improvement Plan (USIP). Through this process, the school analyzed student achievement data from the MCAS tests as well as locally administered measures such as benchmark assessments, unit tests, and standardized achievement tests. The school also reviewed data on participation including student attendance, health, and behavior records. Following this analysis, each school determined the likely root causes for

student underperformance and created specific action plans for at-risk populations, such as ELL and special education students.

At one elementary school, for example, the USIP action plan for ELL students included building content area vocabulary, and background experiences to provide meaningful context. At the same school, the action plan for special education students included development of a collaborative partnership between classroom teachers and special educators through common trainings and weekly meetings on targeted students. In another school the action plan for special education students included development of mathematics vocabulary to facilitate the explanation of reasoning, and increasing instructional time in mathematics to allow a greater emphasis on problem-solving.

Each school's USIP was reviewed annually to determine the degree of accomplishment of the measurable goals. The school then made appropriate revisions and appended them to the plan. The EQA team reviewed the USIPs and USIP addenda for all Lowell schools, and confirmed the development process in interviews with central office administrators, principals, and teachers. Teachers and principals stated that USIPs were the guiding documents in their schools, and that they monitored progress on USIP goals at intervals throughout the year.

In interviews with the EQA team, administrators and teachers described some changes in policy and expectations intended to meet the needs of district at-risk students. For example, the high school instituted an Academic/Attendance Recovery Program to allow students who had exceeded the excused absences limit in a class to make up the time and receive credit through tutorial sessions held during and outside of the school day. The high school also provided MCAS remediation classes for students who had failed a course twice in order to afford credit and prevent repeated failure.

The district instituted the Freshman Academy at Lowell High School in 2005-2006 to facilitate the transition from middle to high school and to address significant problems with grade 9 attendance and achievement. Academy staff attempted to improve student attendance through active outreach, including calling parents at home in the evening, announcing the attendance each day, and celebrating sustained improvements. District records showed increased attendance

in grade 9 in 2007-2008 against the baseline of 85 percent reported by the Department of Education for 2006.

The district created a freshman seminar at the Academy to help students meet high school expectations. The seminar included MCAS tutoring, personal goal-setting, and instruction in study skills and research methods. The district intended to review course failures for grade 9 and 10 students over the last two years to determine whether there had been a reduction.

Administrators told the EQA team that they abolished the "business track" at the high school because the expectations for student learning were too low. The data had indicated that many at-risk students were enrolled in this track. They added that when MCAS test scores and grades subsequently improved, teachers were convinced that they had been "underestimating what some students could do when the bar was raised."

7.8. The district had policies and practices that assigned faculty to students and courses that maximized all faculty talents and skills and promoted high levels of student achievement.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, the district made a concerted effort to assign the most qualified math and ELA teachers to the MCAS test remediation classes. Department heads determined assignments at the secondary level. In grades K-8, the homeroom teacher screened and identified at-risk students, and sent students to the appropriately certified and experienced teacher based on educational needs. In many cases, this would require sending the student to another school. Teachers were usually assigned based on their certification area, and they were generally not assigned outside their area of teaching certification. After the Education Reform Act was passed the district had changed its teacher assignment practices as a result of a provision in the transfer clause of the teacher contract that allowed an arbitrator to strike down seniority transfer, allowing the management more latitude in teacher assignment.

During the reexamination period under review, the district maintained a high level of certified teachers—93.4 percent.

9.2. The district adopted and implemented a District Curriculum Accommodation Plan (DCAP) as a component of the District Improvement Plan (DIP) to assist principals in ensuring that all efforts were made to meet students' needs in regular education.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, the district had a District Curriculum Accommodation Plan (DCAP) that was dated 2003-2005. District administrators said that prior to 2003, the district used a draft copy of a DCAP, which they described as a work in progress.

During the reexamination period under review, the district provided the EQA team with a District Curriculum Accommodation Plan (Amended). The document was dated 2003-2005 and was the same as the one reviewed by the 2003 examiners, except that it included increased time on learning for literacy for grades K-8. Interviewees, when questioned about the DCAP, showed little recognition of the document itself. However, when shown the goals and the bulleted items underneath each goal, elementary and middle school staff indicated they were familiar with the content of the DCAP. Generally, the objectives in the DCAP were being implemented at these levels, but not at the high school.

Goal #1 referenced "Assist[ing] regular classroom teachers in analyzing and accommodating students' needs." Among the objectives under this goal already in place in grades K-8 were: "Provide teachers with the opportunity for job-embedded professional development in differentiated instruction"; and "provide novice teachers with mentoring by experienced, skilled teachers who are trained in mentoring." At the time of the site visit, each of these objectives played an important part in K-8 classrooms in Lowell's goal to support students' needs.

Goal #2 was to "[p]rovide students with direct and systematic instruction in reading." It was in this section that mandated reading times for elementary and middle schools were extended in the amended version. Also, the high school added READ 180 for its students in need of reading assistance in grade 9. The amendments in the current version were extensions of the mandated time for reading literacy at the elementary level and of the reading period at the middle schools.

Goals #3 and #4 were related to students with behavioral issues and maintaining strong relationships with parents.

Goal #5 was to "[p]rovide new teachers and 'teachers in transition' with mentors and the opportunity to collaborate to learn and develop curriculum and teaching strategies that meet the needs of diverse learners." Objectives listed under this goal include: "Guide principals to make effective use of common planning time as opportunities for teachers to expand their repertoires of instructional and assessment strategies and to collaborate on curriculum planning and looking at student work." The administration had recently prevailed in two arbitrations related to this objective. The union had questioned its authority to use faculty meetings for curriculum and instruction and to use teacher planning time for instructional purposes. These matters had been resolved in the administration's favor. This objective was fully in place in grades K-8 and partially in place in grade 9. At the high school, they did begin during, the period under reexamination, to use early release time to develop aligned curricula.

An additional objective under Goal #5 was to "[g]uide principals to make effective use of Instructional Specialists, Literacy Specialists, Math Resource teachers and ELL Lead Teachers as mentors for new teachers." The district's support for new teachers was strong. Interviews with principals and instructional specialists confirmed that these objectives were being accomplished in the elementary and middle schools. The small number of instructional specialists and the role they played at the high school prohibited the accomplishment of this objective at the secondary level.

9.4. <u>At each grade level, the district used data available from classroom teachers, standardized tests, and local benchmarks to identify all students who are not meeting grade-level performance expectations and provided these students with sufficient supplementary and/or remedial services.</u>

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, the district identified students who were not meeting grade-level performance expectations by using the Assessment of Pre-Schoolers for pre-

kindergarten students, the Diagnostic Reading Assessment (DRA) for grades 1-3, the Terra Nova for grades 3-8, the Scholastic Reading Inventory (SRI), and the MCAS tests. During the 2003-2004 school year, the high school was unable to provide MCAS test classes for all eligible students due to funding which limited the number of spaces available to 200 students.

During the reexamination period under review, Lowell identified students who were not making expected progress through a systematic review of MCAS test results and district formative and summative assessments. Over the last two years, the district increased its capacity to deliver appropriate instructional interventions in reading and mathematics to struggling students identified through assessment. Students in grades 1-5 were assessed with unit tests from the Reading Street series. The SRI was also administered to all grade 4 students and some grade 3 students, depending on the school. Schools with grant-funded reading initiatives also administered the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) and Group Reading Assessment and Diagnostic Evaluation (GRADE) tests to students in grades K-3.

Elementary schools assigned students reading at the lowest levels to intervention groups instructed by classroom teachers who were often assisted by reading specialists and special educators. The district utilized the Sidewalks supplement to the Reading Street series for remediation. These supplements were specially designed to provide explicit and intensive instruction. The district administered the SRI in grades 5-9 and provided technology-assisted reading instruction for middle and high school students with identified chronic reading difficulties. Middle schools enrolled low-performing students in the Power Up program, and the Freshman Academy enrolled low-performing grade 9 students in READ 180. Some students continued in the READ 180 program through grade 10.

The district administered the unit tests from the Investigations series in grades 1-5 and the Connected Math series in grades 6-8. Lowell also administered benchmark assessments in grades 1-8 based on locally-developed mathematics “power standards.” Students who had not achieved standards were assigned to intervention groups for additional instruction. Administrators stated that individual schools were given discretion to design their own interventions, and the interventions in mathematics therefore varied from school to school. They added that they intended to identify the most promising practices.

Students were also identified through parent and teacher referrals to the school-based Teacher Assistance Teams. These teams composed of teachers and specialists prescribed regular education modifications and supplements, including after-school tutorial programs. Students were referred for assessment under the special education law when the TAT plans did not improve their performance.

9.5. Early intervention programs in literacy were provided at the primary level to ensure that by the end of Grade 3 students were reading at the 'Proficient' level on the MCAS test. *

*This indicator is not applicable to secondary and vocational-technical schools and districts.

EQA Rating from 2005: Unsatisfactory

EQA Rating from 2007: Needs Improvement

Evidence

During the prior period of EQA review, the district provided after-school and Saturday programs through the 21st Century grant to K-8 students identified as eligible, as determined by cut-off scores on the Terra Nova and the DRA. Using the same assessments, the district also provided summer school to low-performing students in grades 3-4 during the 2001-2002 school year. During the school day, the district provided small-group literacy tutoring to students in grades K-1. Additionally, Title I staff provided additional small group instruction during the school day for students not meeting grade-level expectations, and the district offered Reading Recovery. Six of the district's elementary schools offered Waterford Reading Instruction throughout the review period and three schools participated in a Reading First grant to provide early reading interventions for at-risk students during the 2003-2004 school year. Despite these interventions, the percentage of grade 3 students attaining proficiency on the MCAS reading test was 34 percent in 2001, 43 percent in 2002, 38 percent in 2003, and 39 percent in 2004.

During the reexamination period under review, the district provided a number of early intervention programs and assessments to help students attain proficiency in grade 3 reading. However, the percentage of students scoring at or above the 'Proficient' level in grade 3 reading remained flat from 2005 to 2007. The percentage of grade 3 students attaining proficiency in reading was 36 percent in 2005, 35 percent in 2006, and 34 percent in 2007. Lowell students

performed significantly below the state averages, with grade 3 reading proficiency rates of 62 percent in 2005, 58 percent in 2006, and 59 percent in 2007.

According to district documents provided to the EQA, the district used the three-tier model for reading for all K-3 students. At Tier I, the district used the Scott Foresman Reading Street series as its core elementary reading program for all regular education students, special education students, and some ELL students. Some schools added other interventions to their core reading program such as vocabulary strategies. To support ELL students in regular education classrooms, the district also offered classroom teachers professional development in DOE's Category I and Category II training for sheltered English immersion (SEI). Central office staff expected all classroom teachers to provide an uninterrupted reading block of at least 120 minutes per day, with time for whole group instruction and small flexible group instruction. Tier I assessments included formative district benchmark assessments and Scott Foresman baseline, unit, and end of year tests.

School staff placed students with continued reading difficulties after Tier I interventions into Tier II. Tier II students received 15 to 25 minutes of small, needs-based group instruction within the 120-minute block, for a minimum of three weekly sessions. To monitor the progress of these students, teachers administered monthly DIBELS or DRA assessments. Classroom teachers or reading teachers used specialized strategic intervention materials including leveled readers, Leap Frog, Leap Track, Soliloquy, and LEXIA as the Tier II program. Tier II students not making adequate progress were assigned to Tier III. At Tier III, classroom teachers, special education teachers, reading teachers, or Title I teachers provided intensive intervention using the Scott Foresman Early Reading Intervention (ERI) or My Sidewalks intervention. Tier III students received 30 to 40 minutes per day of small group instruction in addition to the 120 minutes of core reading instruction, with bimonthly progress monitoring using DIBELS or DRA to ensure adequate progress.

District ELL staff reported that the Scott Foresman Reading Street program was unsuitable for most second language learners, especially newcomers and early intermediate students. Instead, they used the Carousel of Ideas, a research-based English language development program. The program enabled teachers to support a wide range of student abilities in a single grade or a multi-

grade class, allowed flexible use of pull-out programs, immersion classes, or English language development programs, and integrated content found in K-5 academic standards. The district used the Carousel of Ideas for ELL students in certain school-based programs, specifically designed to instruct students whose first language was Spanish, Cambodian, Portuguese, or low-incidence African languages.

In spite of the early intervention programs provided, grade 3 MCAS reading scores remained static. Administrators and teachers discussed the need to further study the root causes for the lack of growth, considering comparisons between former LEP students and students who remained in the ELL program, and between students who attended and did not attend pre-kindergarten. District staff expressed the need to expand the summer partnership program for at-risk students, with a special emphasis on literature expertise and support. They also reported the need for increased support from special education teachers to assist classroom teachers with inclusion.

10.1. The district engaged in a documented, formal, comprehensive analysis of the results from student performance assessments and student needs to determine the content and scope of academic programs and support services offered.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, the district engaged in formal analysis of the results of student performance assessments and student needs to determine the content and scope of programs and support services. Interviews with administrators and the document review indicated that the district used Filemaker Pro for the analysis of MCAS test data and provided administrators with a district-created database containing student performance on the MCAS tests and other assessments. Interviews with administrators and teachers indicated that data analyses were usually general and focused on the aggregate and individual student performance, with a few examples of data disaggregation by subgroup. Curriculum coordinators and department heads conducted item analyses and identified areas of weakness. Support was offered to students on an as needed basis, including small group tutoring in specific areas of weakness

from individual students' MCAS assessment profiles. However, there was no specific district focus for the support that was offered.

During the reexamination period under review, Lowell increased its capacity to analyze student data and improve programs and services, and the district focused its support on math, literacy, and ELL subgroup performance.

In comparison to the prior examination, the district was making more effective use of its comprehensive student database as a tool. This database contained detailed information on student participation and performance. The district regularly updated the database, adding relevant and useful fields. For example, administrators told the EQA team that they intended to add to the database each student's history of interventions in reading and mathematics. Lowell produced formal, documented reports on student performance and needs. The district produced reports on certain programs and services, on the Unified District Improvement Plan (UDIP) and on Unified School Improvement Plans (USIPs). The UDIP and USIPs contained thoughtful analyses of student performance data, root causes of low performance, objectives, and specific strategies and provisions for improving performance.

Administrators described how the district database informed and facilitated evaluations of district program and services. For example, Lowell's analysis of the participation and achievement of students enrolled in extended day and year programs resulted in specific recommendations to increase student attendance and instructional effectiveness. Lowell also evaluated its grant funded programs with a comprehensive design that went well beyond minimal requirements.

Lowell began to analyze the root causes of low subgroup performance more deeply in its UDIP and USIPs. For example, administrators cited the inadequate preparation of special education tutors and lack of access to regular program interventions as factors in the poor performance of district students under special educational management. They also told the EQA team that they were beginning to investigate some of the reasons for the low participation of Hispanic parents in school activities, and ways of increasing outreach to those parents .

Administrators told the EQA team that the district database could be used to answer immediate inquiries because data could be sorted and correlated by many fields. For example, one administrator stated that he might request a list of all grade 7 students with attendance below the district average in grades 1-3 who did not receive supplemental reading instruction. He added that this kind of information might be useful for research in the district on "what matters and doesn't matter in improving student achievement."

10.2. The district used MCAS grant funds to develop or enhance academic support programs for students scoring in 'Warning/Failing' and 'Needs Improvement' categories.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, the district used grant funds to develop academic support programs for students scoring in the 'Warning/Failing' and 'Needs Improvement' categories. The district used its MCAS 632 Academic Support Grant to offer services to approximately 400 students at Lowell High School, where the funds paid for part-time tutors who were each assigned an average of six students. After 2003, MCAS test funds were no longer available; the district attempted to pick up the cost, but financial constraints resulted in significant reductions to the program. Prior to cuts, approximately 40 tutors ran sessions before school, after school, and on Saturdays. After cuts, four tutors ran sessions after school and two on Saturdays. In addition to these MCAS test remediation programs, the district offered remediation and enrichment for five weeks each summer at several sites throughout the city. Each site contained programs for students at all grade levels, with typically more than 1,500 participants. During the review period, the district drew on its academic support services program funds. In 2004, according to district documentation and administrators, the funding was significantly cut from $850,000 to $140,000.

During the reexamination period under review, the district allocated local funds for MCAS support staff and applied for other grants. The district applied for and received a DOE academic support services grant for its high school level Summer School Support Program (SSSP). Students selected for the program were in grades 9-12 and had scored in the 'Warning/Failing'

category on the MCAS tests. SSSP staff used each student's Individual Student Success Plan (ISSP) to drive instruction. Staff also placed LEP students who needed to meet the competency requirement in the SSSP. SSSP staff used other standardized test results to assess the needs of the LEP and grade 9 students, since they did not have grade 10 MCAS results for these students. The SSSP offered READ 180 to support remedial reading students and a summer math academy for Algebra I enrichment to incoming grade 9 students. The district found that SSSP participation increased the ELA and math performance on Quick Pre-Post tests for regular education and ELL students. Using district funds, the high school continued to offer its MCAS preparation classes during the regular school year.

At the middle and elementary school levels, the district offered various MCAS test preparation programs at three elementary schools, two middle schools, and one K-8 school as part of the 21st Century Learning Centers. Staff reported that the district established itself as a Supplementary Educational Services (SES) provider and used Title I funds to pay for this MCAS support program. This SES program, Expanded Learning Tutorial Services (ELTS), was a K-12 reading, math, and writing tutoring service for regular education, LEP, and special education students. The program occurred before or after school at each middle and elementary school, and was aligned with the district's curriculum and ELA and math programs.

District staff indicated in interviews that academic support programs needed to better address improvement for all students, especially for special education and LEP students. In 2007, the percentage of Lowell's special education students scoring at or above the 'Proficient' category in ELA was six percent, 37 percentage points below the district's proficiency rate of 43 percent. In math, the special education proficiency rate was five percent, 31 percentage points below the district rate of 36 percent. The LEP student proficiency rate in ELA was 23 percent, 20 percentage points below the district rate. The LEP student proficiency rate in math was 21 percent, 15 percent percentage points below the district rate. Lowell LEP students met or outperformed their peers in the state, but Lowell special education students performed below their statewide peers.

10.3. District and/or school administrators evaluated the overall effectiveness of its grant-funded MCAS success program.

EQA Rating from 2005: Poor

EQA Rating from 2007: N/A

Evidence

At the time of the prior EQA review, interviews with administrators and a review of the district's documentation revealed that the district had not consistently evaluated its support programs and measured their effectiveness. During interviews, district administrators made many references to anecdotal evaluations that had been conducted. However, in most cases the district was not able to produce any such formal evaluations. The district had evaluated the Academic Support Grant for summer sessions and the grant for MCAS test tutorial sessions. These evaluations met the requirements for continued funding; however, they were not substantial enough to help the district determine the effectiveness of the programs.

During the reexamination period under review, after the state discontinued funding grants for MCAS support, district staff applied for other grants and allocated local funds for MCAS support.

10.4. The district used a range of supplemental support programs to advance student performance for those students in need. These programs were designed to address a variety of learner needs and styles in the assessed content areas.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, the district used a range of supplemental support programs in the attempt to advance student achievement. These programs were designed to address a variety of learner needs and styles in the assessed content areas, including Read!, Wilson Reading, Waterford, Title I reading and math programs, and an inclusion model of instruction. At the high school, tutors provided MCAS test preparation classes for ELA and math during the school day. Special education services in small group speech and language instruction were provided in inclusion classes. The district provided professional development to over 1,000

teachers in the Sheltered Instruction Observation Protocol (SIOP) to help instructors address English language learner needs.

During the reexamination period under review, the district offered supplemental support programs to address a variety of learner needs. For example, Lowell Public Schools' staff provided strategic and intensive reading interventions for K-3 students making inadequate progress in the core reading program in three tiers with increasing levels of support and monitoring. Another example of a remedial program was the Summer School Support Program for high school students who scored in the 'Warning/Failing' category on the grade 10 MCAS tests, needed to meet the competency requirement (for LEP students), or were determined to be at risk in grade 9. SSSP staff used the MCAS and other standardized test results to assess student needs and followed each student's Individual Student Success Plan. Results of the SSSP showed increases in most ELA and math categories on Quick Pre-Post tests. The high school offered MCAS test preparation classes as part of the regular academic program, and some middle and elementary schools offered MCAS test preparation as a component of the 21st Century program. The district also provided reading, math, and writing tutoring for regular, LEP, and special education students at each school, as part of the Expanded Learning Tutorial Services program.

10.5. Evaluations of academic support programs indicated that overall programs were efficient, managed effectively, and resulted in moving students from 'Warning/Failing' and 'Needs Improvement' to the 'Proficient' category.

EQA Rating from 2005: Poor

EQA Rating from 2007: Satisfactory

Evidence

During the prior period of EQA review, the majority of the district's academic support programs were not formally evaluated on a regular basis to determine the effectiveness and efficiency of the programs' management. The percentage of students in the 'Warning/Failing' and 'Needs Improvement' categories did not decline substantially. Between 2001 and 2004, the percentages of students performing in the lowest two achievement categories were 74, 75, 72, and 70 percent, respectively.

During the reexamination period under review, the district evaluated academic support programs to increase their effectiveness in helping students become proficient in math and ELA. The district made some progress in moving students from 'Warning/Failing' and 'Needs Improvement' to the 'Proficient' category. ELA proficiency increased from 39 percent in 2004 to 38 percent in both 2005 and 2006 to 43 percent in 2007. Math proficiency increased from 22 percent in 2004 to 24 percent in 2005 to 25 percent in 2006 to 36 percent in 2007. Over three years, the district increased proficiency in ELA by four percentage points and in math by 14 percentage points.

Of all the district's program evaluations, one of the most needed evaluations conducted—as determined by MCAS test performance—was of its special education service delivery. Beginning in the 2005-2006 school year, the district's special education department conducted a program evaluation of Lowell High School special education programs and services in order to assess needed changes. District-level special education administrators collected responses from seven focus groups to gather information about strengths, weaknesses, and changes needed in the high school special education department. Special education administrators analyzed focus group responses and developed findings and recommendations. Recommendations implemented during the 2006-2007 school year were the restoration of the department chair for special education position, the addition of special education teaching positions, and the provision of clinical support for students with emotional disabilities. A recommendation not implemented at that time was the identification of best practices for teachers of students needing life skills training and with emotional disabilities. In 2007-2008, the new special education chair decided to implement new programs for students with emotional disabilities and enhanced programming for life skills students. District and school staff noted that the special education program evaluation resulted in significant changes to the special education service delivery. However, there were no improvements in the MCAS performance of special education students in ELA, and only small increases in math.

Another program evaluation in an area of need, as measured by MCAS test results, concerned early literacy. The district reported that Reading First schools increased the percentage of students reaching grade-level benchmarks by 10 percentage points since the model was

implemented. However, districtwide implementation of the three-tier reading model yielded flat results to date on the grade 3 MCAS reading test.

Two program evaluations described to the EQA examiners revealed effectiveness and efficiency in increasing student proficiency. In reference to one evaluation, the district reported that its 12 schools with 21st Century Learning Centers improved in reading by 14 percentage points from 2004 to 2006 and in mathematical problem-solving by 16 percentage points over the same period. Another program was implemented and evaluated in the 2006-2007 school year, in partnership with EduTron Corporation, Massachusetts Institute of Technology, and Fitchburg State College. Lowell Public Schools conducted year-long Intensive Immersion Institutes in Mathematics for teachers of grades 4-8. Seventy-four staff, including administrators and teachers, participated in this mathematics professional development program. An EduTron evaluation cited initial math test results for students whose teachers participated in the program. Students of participating teachers achieved higher than the control group by nine percentage points on the grade 5 Galileo benchmark assessments of the nine Massachusetts curriculum frameworks standards, and by 10 percentage points higher on the grade 6 Galileo benchmark assessments.

2007 Indicators

4. The district immediately assessed the skills and needs of entering and mobile students when records were not available or accessible, and made educationally appropriate and effective placements.

EQA Rating from 2007: Satisfactory

Evidence

During the reexamination period under review, registration for new students in grades preK-8 occurred at the district's downtown Parent Information Center (PIC) office and for new students in grades 9-12 at Lowell High School. The district expedited placements by asking entry questions and using formal assessments when necessary, whether or not the district had records from the sending school, which was usually not the case. For both locations, the district had procedures for the expedited enrollment of homeless and/or specialized foster care students.

Also, PIC staff checked with parents to confirm whether their child was eligible for special education services.

District ELL staff at the PIC tested the language skills of all K-8 students whose parents indicated on the home language survey that the family and/or student spoke a language other than English at home. For grades 9-12, ELL staff at the high school assessed the language of the students who spoke limited English based on a transcript review and their response to a district 'home language' survey. To assess language ability, ELL staff administered the Quick Informal Assessment (QIA) from the Carousel of Ideas English Language Development Program and the Language Assessment Scales-Oral (LAS-O). If a student was eligible for English language learning services, ELL staff explained to the parent the available options. The district had a number of Spanish Specialty Schools, Cambodian Specialty Schools, Portuguese Specialty Schools, and multilingual (low incidence language) schools for students primarily from African countries. Students from all of these programs eventually moved to a sheltered English immersion (SEI) school setting.

5. The district provided programs and services to alleviate the adverse effects of poverty (including delayed language development, lack of readiness skills, low self-esteem and aspirations, high mobility, and family instability) on students' social, emotional, and intellectual development.

EQA Rating from 2007: Satisfactory

Evidence

District and school staff stated that many students and their families lived in difficult circumstances. According to 2006-2007 DOE data, 68 percent of Lowell students were low-income students. Interviews and documents revealed that during the 2006-2007 school year the district had 152 homeless students, including 41 students awaiting foster care, 11 students living in hotels or motels, eight unaccompanied youth, 91 students living in shelters, and one student in another type of temporary residence.

The team learned from district documents and interviews that Lowell provided many programs and used many strategies to support students and families with challenging circumstances. Lowell offered half-day Integrated Preschool Programs, which served disabled three- and four-

year-olds. The district also offered the half-day Integrated Preschool Program for four-year-old regular education students. The district was a member of the Lowell Community Partnership for Children (CPC), a collaboration of over 20 agencies that worked together to address the needs of young children and families in Lowell. The CPC offered "Child Care Scholarships" to eligible low-income working parents.

Homeless students received free services including transportation, school materials, mentoring programs, counseling, before-/after-school and summer programs, referrals for health services, and coordinated collaboration between schools and social services agencies. The district budgeted $110,000 to cover the cost of homeless transportation. District staff held parent information sessions to groups and individuals to inform homeless families about their rights and available services. According to a district document entitled Community School Connections, the district linked many services to students and families through district partnerships with local organizations.

Additionally, interviewees stated that the Student Support Department added two ELL support specialists during the period under review to provide assistance to at-risk families and connect them with needed services. The district also operated a Family Literacy Center for parents, providing two levels of English as a second language classes, citizenship classes, and GED classes.

6. The district directly involved parents and community organizations in the education of their children through their regular communication and outreach, and facilitated their participation by such means as holding meetings and events at convenient times and locations and providing translators, transportation, and child care.

EQA Rating from 2007: Satisfactory

Evidence

During the reexamination period under review, documents and interviews revealed that Lowell Public Schools purposefully created an environment that welcomed parents starting from the time of enrollment in the district. Staff reported that the district designed the Parent Information Center to welcome parents of preK-8 students, and preK-8 schools planned activities to encourage parent involvement. All district schools held open houses for parents at the beginning

of each school year. A district document entitled Title I Parent Involvement Evaluation 2006-2007 provided an overview of district communication with parents and activities to encourage parent participation. The district evaluation summarized the parent communication mechanisms for all schools; forms of parent communication included newsletters and calendars. For example, three elementary schools doubled their documented communication efforts from the 2005-2006 to the 2006-2007 school year. The 10 full-time and the twelve part-time parent liaisons, who compiled the evaluation, compared the effectiveness of strategies for active and passive communication with parents. Other means of parent communication reported to the EQA team and/or included in the district evaluation were midterm progress reports, report cards, parent conferences, Connect-ED automated phone calls, district and school websites, and notices sent home to parents. Further, school and district staff stated that they invited parents to all school meetings and activities, including those for the special education PAC, the ELL PAC, and the Parent Teacher Organization (PTO). School staff worked to recruit parent volunteers and school council parents.

Ample evidence indicated that the district thoughtfully considered ways to increase parent involvement. In parent surveys compiled for the evaluation, many elementary and middle school parents ranked "provide information in a language you understand" as one of their school's greatest strengths. District leaders and teachers shared during interviews that district staff provided written and oral communications with parents in Spanish, Portuguese, Khmer, and other languages, as needed. District staff said they also provided simultaneous translation during many parent events and trainings. School staff used many strategies for parent involvement that made it easier for parents to participate in school events. In the evaluation, parent liaisons noted successful strategies for encouraging parent involvement. The report noted that "combined activities attracted more parents," suggested that staff "make personal invitations to improve attendance," and recommended "multicultural activities/student performances to increase attendance." Staff in interviews noted that successful district strategies to increase parent involvement included free babysitting and free transportation for parents; this allowed more parents to attend a "showcase of student work" last year.

The district assigned one of its support specialists at central office to be the district homeless liaison who saw that the district followed the requirements of the McKinney-Vento Homeless

Assistance Act. The act defined homeless students as lacking a fixed, regular, and adequate nighttime residence. According to interviewees, district and school staff tried to minimize the effects of mobility on transient students by encouraging parents to select a centrally located school. By making this choice, parents increased the likelihood that their children stayed in the same school if the Department of Social Services relocated the family. The district often provided free student transportation, allowing a student to remain in the same school when agencies moved families to another part of the city.

Standard VI: Financial and Asset Management Effectiveness and Efficiency														
Indicators► Ratings▼	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**Total**
Excellent														
Satisfactory	✓	✓		✓	✓		✓	✓	✓	✓		✓	✓	**10**
Needs Improvement			✓			✓					✓			**3**
Unsatisfactory														

Rather than reexamine the district only on those 2005 indicators on which the district was rated 'Poor' or 'Unsatisfactory,' the EQA conducted a full examination of the district on Standard VI covering the period 2005-2007.

VI. Financial and Asset Management Effectiveness and Efficiency

The district engaged in a participative, well-documented, and transparent budget process that used student achievement as a factor in the overall budget. The district acquired and used financial, physical, and competitive capital resources to provide for and sustain the advancement of achievement for all students enrolled in the district. The district regularly assessed the effectiveness and efficiency of its financial and capital assets and had the ability to meet reasonable changes and unanticipated events.

Standard Rating: Satisfactory

Findings:

- During the period under review, the district experienced significant reductions in entitlement grants accompanied by contractual and fixed cost increases that resulted in dramatic reductions in programs, services, and personnel.
- The district's actual school spending was between 95.2 and 98.4 percent of its 603 CMR 10.06 net school spending (NSS) requirement during the period under review and for at least eight prior years.
- Budget decisions were based on the analysis of student assessment data, and it was emphasized in interviews that there was a close relationship between those who collected and interpreted the data and those who made decisions on the budget.

- The district was in the process of developing a capital improvement plan and was remiss in the adoption of a preventative maintenance plan, but it did attempt to address its needs relative to new construction and rehabilitation of school buildings.

Summary

Generally, the EQA team determined that the district had a sound budget development process and fiscal management procedures. However, the district had limited local funds to provide for student needs and improve its facilities. The district had a timeline for development of the budget process, but ultimate decisions were heavily dependent on final revenue determinations from the state legislature. The process began in January and the superintendent involved all administrators and other staff members in the preparation. Interviewees acknowledged that the analysis of student assessment data was an integral part of the process, and when the superintendent met with the budget subcommittee of the school committee, that subcommittee expected to receive assessment data along with financial data. The superintendent developed the budget using a three-phase process: a trade off budget which consisted of programmatic changes with no net cost increase; an essential needs budget, which consisted of mandates the district was required to do such as the special education program; and a critical needs budget, which consisted of items that should be put in place to enable the district to move in the right direction. Members of the school committee supported this process. The full school committee held public hearings after receiving the budget and voted a recommended budget after deliberations. City officials made the final determination concerning the school committee budget.

With a high level of need and limited local funding, the school district was heavily dependent on Chapter 70 aid and on federal and state entitlement and competitive grants. The district did not meet net school spending requirements for the period under review and for a number of prior years, but always met the 95 percent spending requirement. When federal and state entitlement grants began to be cut, the district did not have adequate local funding to absorb these reductions and therefore had to reduce programs, services, and personnel. Most school administrators, and school committee members, in interviews, expressed concerns about an inadequate school budget. School personnel articulated the need for more up to date technology and general supplies. Some city personnel felt that the building program of schools in the district had been a benefit to the schools but that it was consuming a large part of available city and school funds.

The district was in the process of developing a capital improvement plan. The city was also adopting a capital maintenance plan, which would incorporate the school district's plan. A preventative maintenance plan was not in place and the routine maintenance of the schools was the responsibility of the city. The city had a number of licensed tradespeople, but principals commented in interviews that response time to repair requests was not timely. The city did attempt to address its needs relative to new construction and rehabilitation of school buildings. A review of the Massachusetts School Building Authority's audit of the district's school buildings conducted in 2006 indicated that in the past decade the city had an ambitious building and rehabilitation program, which continued to the time of the reexamination, with new construction and rehabilitation projects in process. The district's schools were clean and secure with all buildings having security equipment in place and access to exterior doors monitored.

Indicators

1. The district's budget was developed through an open, participatory process, and the resulting document was clear, comprehensive, complete, current, and understandable. The budget also provided accurate information on all fund sources, as well as budgetary history and trends.

Rating: Satisfactory

Evidence

The district's budget was developed through an open, participatory process. Examiners reviewed a memorandum prepared by the district regarding school committee dates for deliberation of the 2008 proposed budget. According to the budget calendar, the superintendent presented her recommended budget first to the school committee finance subcommittee and then to the full committee in early May. The committee then held its open budget hearing. The committee also held another open budget hearing in the middle of May. The school committee deliberated the submitted budget between the first and second hearing. Shortly after the second hearing, the committee voted to approve the budget. The budget was forwarded to the city manager who subsequently submitted the requested budget to the city council. The city manager, by city charter, was required to submit the budget in the amount requested by the school committee. The city council, by charter, could not increase the budget but could reduce the budget. However, the city council could not direct in what areas the budget could be reduced.

District administrators described the budget preparation process beginning in January when preliminary state revenues became available. Central office began to put preliminary salary schedules together. Preliminary estimates were also made of insurance and energy costs. The principals began to prepare their budgets also in that period. From February to April, the superintendent met with principals and other administrators for budget sessions. The superintendent stated that principals were given a lot of latitude in the preparation and management of their budgets. Interviewees commented that the budget process had changed from a "top down" process to a more collaborative process.

The administration developed the budget in three phases. The first was a "trade off" budget which consisted of programmatic changes with no net cost increase. The superintendent then presented an essential needs budget, which consisted of mandates the district was required to do such as special education programs. The third phase was a critical needs budget, which consisted of items that should be put in place to enable the district to move in the right direction. The budget subcommittee of the school committee was then brought into the process regarding budget development resources and new initiatives. In late April or in May, the full school committee was brought into the process.

The budget presentations and deliberations were open and covered on live cable television, reported in the local newspapers, and made available to the public for input in two public hearing sessions.

The budget document was clear, comprehensive, complete, current, and understandable. The document contained a detailed explanatory letter from the superintendent describing what the requested budget would achieve, a description of the required increases, budget highlights, and critical needs. The budget provided accurate information on fund sources, except grants, as well as budgetary history and trends. The budget was displayed by detailed line items in accordance with the Department of Education account structure and included full-time equivalent staff information and amounts for the current budget, requested budget, and two years of budget history. The document did not contain budget information for grants or revolving accounts.

2. The budget was developed and resources were allocated based on the ongoing analysis of aggregate and disaggregated student assessment data to assure the budget's effectiveness in supporting improved achievement for all student populations.

Rating: Satisfactory

Evidence

The budget was developed and resources were allocated based on the ongoing analysis of aggregated and disaggregated student assessment data. Central office administrators stated that the district engaged in intense discussions concerning student assessment data during budget development sessions. District administrators also stated that data analyses were presented to the school committee, whose members wanted to see data before making decisions. They stated that the efforts of "data gatherers" and "decision-makers" were intertwined in budget development sessions. Administrators reported that the district introduced a number of tests to analyze data and facilitate decisions, particularly regarding mathematics and ELA, and invested in a number of programs, also particularly in mathematics and ELA, following analysis of student assessment data.

Interviewees provided examples of budget decisions based on data analyses. Administrators pointed out that the analysis of assessment data resulted in the purchasing of the revised edition of the Scott Foresman reading textbook series for grades K-5. The district also established the positions of instructional specialists and literacy specialists, increased ELA instructional time, and implemented the My Reading Street materials to support the Scott Foresman series. Lowell supplemented the Scott Foresman series with a technology-assisted instructional support program. Lowell also increased the ELA block at the middle school level. The high school introduced READ 180 to assist students in reading. The district increased instructional time in math and purchased Investigations Math for grades K-5 and Connected Math for grades 6-8 in order to improve math proficiency.

3. The district's budget and supplemental funding were adequate to provide for effective instructional practices and to provide for adequate operational resources. The community annually provided sufficient financial resources to ensure educationally sound programs and facilities of quality, as evidenced by a sufficient district revenue levy and level of local spending for education.

Rating: Needs Improvement

Evidence

The district's budget and supplemental funding were not adequate to provide for effective instructional practices and to provide for adequate operational resources.

Inadequate funding has been a longstanding problem in the Lowell Public Schools. The NEASC report in 2004 had concluded prior to the review period that "the community has not been successful in ensuring an adequate and dependable source of revenue to meet the school's needs. Budget cuts have handicapped a dedicated team of educators…"and "more money, more staff members and more planning are required to maintain program quality."

The superintendent stated in the FY 2007 Budget Request letter to the school committee that "we have made dramatic reductions in programs and services in recent years. Over the past five years we have eliminated nearly 300 local and grant funded positions. Primarily due to grant cutbacks, more positions have been eliminated in this year's budget plan."

The district had been experiencing significant cost increases in the same areas that afflicted most school districts: health insurance, energy, and out-of-district tuitions. However, according to DOE data, the district's special education percentage of the budget remained at an average of 11.3 percent for the three years under review. The superintendent also reported in the FY 2007 Budget Request letter that the budget has been "complicated" by the heaviest losses in federal entitlement grants in recent memory. The anticipated reduction was $1,348,009. According to DOE data, enrollment in the district decreased by only 701 pupils from 2005 to 2007. In addition, two competitive grants totaling $600,000 were ending. In the FY 2008 Budget Request letter, the superintendent noted that the budgets for capital improvements and equipment replacement have been level funded for five years.

District personnel in interviews stated that technology needed to be increased, particularly in the classroom. Administrators at all levels stated that district purchasing of technology was not a priority. Some admitted that new schools were equipped with updated technology, and older hardware in other schools was gradually being replaced. Some teachers stated that the district had a lot of computer hardware but it was so dated that it could not run current software programs. Teachers could not access the assessment information available for each student due to hardware limitations. In addition, personnel reported that the budget for supplies had not increased for a number of years. Science teachers talked about lack of science equipment such as probes.

District administrators stated that the budget is a combination of the superintendent's request and the mayor's assessment of funds, and that it is a bare bones budget and funds additional needs if money is available. School committee members stated in interviews that they did not have an adequate budget in FY 2007. They also stated that they worked to ensure that necessary funds were appropriated for the district, although other personnel interviewed felt that school committee members were not aggressive advocates for the school budget. However, in an interview, school committee members stated that last year they had challenged the city council's recommendation.

The community did not annually provide sufficient financial resources to ensure educationally sound programs and facilities of quality, as evidenced by a sufficient district revenue levy and level of local spending for education. The combination of Chapter 70 aid, local revenues, and indirect charges did not meet the net school spending (NSS) requirements of the education reform formula from the previous period under review through the FY 2008 budget year. In FY 2006, the district was under its NSS requirement by $3,864,231. In 2007, the district was under its NSS requirement by $4,341,679. The district spent less than its NSS requirement in every year since at least 1998, although never more than 4.9 percent under. For FY 2008, the amount budgeted by the district was under its NSS requirement by $305,812.

According to Department of Education data, the district received $20,221,448 in federal and state grants in FY 2006 and $19,066,675 in FY 2007, which was a reduction of $1,154,813. Major

federal grant awards were for Title I, SPED 94-142, Teacher Quality, and 21st Century Learning. Major state grants consisted of Adult Education Learning Center and Kindergarten Enrichment.

A review of information from the Department of Revenue (DOR) website indicated that in July 2006 the city had negative free cash of $2,220,766, no stabilization fund, and a $975,484 overlay reserve for FY 2007. There was excess levy capacity of $5,055,488. Excess levy capacity is the difference between the levy limit and the actual levy, an additional amount the city could but chose not to levy. The override capacity was $87,853,472. Override capacity is the difference between the city's levy ceiling and its levy limit, or the maximum amount the city may override its levy limit. State aid to the city represented 56.38 percent of revenue, tax levy represented 28.87 percent, and local receipts represented 14.13 percent. The residential tax rate was $10.61. The district's percentage of total expenditures in the city for FY 2006 was 49.54 percent and for FY 2007 was 48.16 percent.

4. The district, as part of its budget development**,** implemented an evaluation-based review process to determine the cost effectiveness of all of its programs, initiatives, and activities. This process was based, in part, on student performance data and needs.

Rating: Satisfactory

Evidence

As part of its budget development**,** Lowell Public Schools did implement an evaluation-based review process to determine the cost effectiveness of all of its programs. The superintendent reported in the budget letter for 2006 that "Efforts to identify economies and efficiencies in the transportation budget by re-drawing all routes have yielded anticipated savings of $300,000 in the regular education transportation costs." Other district administrators reported that bus routes were realigned and starting and ending times of schools were changed, which reduced 14 buses at a cost of $55,000 per bus. Special education transportation was also rebid, which resulted in a three percent savings to the district the first and second year.

The district had made efforts to reduce its special education costs by establishing programs in district that previously had been tuitioned out. Administrators mentioned a program for deaf students that was established in district, and not only did students return but the district was able to receive tuition by enrolling out-of-district students into the program. Examiners were also

informed that the district had completed a systematic review of services from consultants who provided professional development activities, and as a result decided to utilize only those consultants who provided services that had a measurable effect on the district's goals.

The superintendent also reported that the grant funded program for adolescents at the Leblanc School was being expanded and added a fourth elementary program for students with pervasive developmental delays. These changes enabled the district to avoid budgeting for increased costs for special education tuition.

The superintendent's budget recommendation letters to the school committee included a number of "trade-offs," which were the elimination of local budget funded positions in order to fund other positions deemed more critical to priority goals. These "trade-offs" incurred no net new costs because the cost of the positions added was equal to the costs of the positions eliminated. Examples of "trade-offs" proposed in the superintendent's budget were elimination of a vacant paraprofessional position at one school to retain the full-time parent liaison position that could no longer be funded through a grant, elimination of a behavior specialist position to add a psychologist position, and consolidating classes at several middle schools and balancing enrollment across the district.

The district hired a special programs coordinator to improve the design, results, and cost effectiveness of supplemental extended programs. Interviewees said that if grant regulations permitted, programs were sometimes combined to increase the impact and efficiency, and offered the example of a middle school program that utilized both Title I and 21st Century grant funds.

5. <u>The district and community had appropriate written agreements and memoranda related to 603 CMR 10.0 that detailed the manner for calculating and the amounts to be used in calculating indirect charges levied on the school district budget by the community.</u>

Rating: Satisfactory

Evidence

The district and community recently developed appropriate written agreements and memoranda related to 603 CMR 10.0. An audit finding in the Report on Applying Agreed-Upon Procedures

Over Compliance for the district's End of Year Pupil and Financial Report for FY 2006 stated auditors were required to "obtain a written agreement between the School Committee and Municipal officials documenting the methodologies to be used when allocating municipal expenditures to the district…. We were provided with a formal agreement documenting the methodology to be used in applying expenditures incurred by the municipality. However, the document has not been signed by the appropriate School Committee and Municipal Officials and therefore we were unable to verify that the municipal expenditures have been reported in accordance with a signed written agreement."

The city manager showed examiners a recently signed document that was executed by school committee and municipal officials. Examiners also reviewed the formal Memorandum of Agreement, which memorialized the understanding reached by the school committee and city pertaining to the allocation of indirect charges incurred by the municipality on behalf of the school district.

6. The combination of Chapter 70 Aid and local revenues, considering justified indirect charges, met or exceeded the Net School Spending (NSS) requirements of the education reform formula for the period under examination.

Rating: Needs Improvement

Evidence

The combination of Chapter 70 aid and local revenues, considering justified indirect charges, did not meet the net school spending (NSS) requirements of the education reform formula from the previous period under review through the FY 2008 budget year.

Examiners reviewed a letter dated December 6, 2007 from the school district to city officials that stated "although the district did not meet the NSS requirements for 2007 with a spending requirement shortfall of $351,921, based on the 2008 budgeted net school spending report, it appears that the City of Lowell will meet the FY 2008 net school spending requirement and clear up the deficiency that has carried over from year to year." However, according to DOE data updated as of January 11, 2008, the amount budgeted by the district for FY 2008 will be under the required NSS amount by $305,812.

7. Regular, timely, accurate, and complete financial reports were made to the school committee, appropriate administrators and staff, and the public. In addition, required local, state, and federal financial reports, and statements were accurate and filed on time.

Rating: Satisfactory

Evidence

The district made regular, timely, accurate, and complete financial reports to the school committee, appropriate administrators and staff, and the public. Financial reports were accurate and filed on time. Examiners reviewed minutes of a finance subcommittee meeting of the school committee which stated that the FY 2007 2nd Quarter Financial Report was presented by the school administration, the Fluency Case Cost Estimate was presented by the administration, and the FY 2006 Per Diem Pay Report was also presented. Reports were generated from the MUNIS software financial and payroll program. The administration also presented a report on additional teaching positions required in the district. The finance subcommittee then made a report to the full school committee relative to these reports from the school administration.

Examiners reviewed a copy of the quarterly financial report and observed that it contained detailed categories of personnel salaries and expenses. The report displayed the approved budget, the amount expended and encumbered to date, and the available balance.

In addition, the finance administration also prepared budget status reports for the principals. The city chief financial officer also prepared a quarterly report that contains a summary report of expenditures of the school committee budget.

EQA examiners did not review a budget report relative to the monthly or quarterly financial status of federal or state grants.

8. The district used efficient accounting technology that integrated the district-level financial information of each school and program, and the district used forecast mechanisms and control procedures to ensure that spending was within fiscal budget limits. District administrators were able to regularly and accurately track spending and other financial transactions.

Rating: Satisfactory

Evidence

The district used efficient accounting technology that integrated the district-level financial information of each school and program. The district and the city used the MUNIS software program for accounting and payroll. This software allowed the city auditor to monitor all transactions entered into the computer system. School principals had terminals at their schools that allow them to monitor their budgets and track expenditures on a “read only” basis.

The district used forecast mechanisms and control procedures to ensure that spending was within fiscal budget limits. The administration forecasted expenditures through the MUNIS software and district-developed Excel software programs. Salaries were forecasted by using the actual salaries expended through specific periods during the budget year plus adjusting for the changes in personnel during the year to estimate the costs for the balance of the year.

Requisitions were prepared at the school level and forwarded to the central administration. The administration reviewed the requisitions and sent them to the city purchasing department, which changed them into purchase orders and forwarded them to vendors. The MUNIS software program would not process a transaction if the request exceeded the budget balance. In addition, all transfers between budget line items required the approval of the assistant superintendent for finance. The principals had considerable latitude in the expenditure of their budgets and were expected to use data to manage their line items, but were required to get central administration approval to change funding of requisitions from local budget funds to grant funds.

However, payroll and expense warrants were not required to be approved for payment by the school committee. These warrants went directly to the city finance departments for their audit and payment.

Administrators reported in interviews that because they prepared the budget realistically, they have never had to freeze it during a budget year.

9. The district had a system in place to pursue, acquire, monitor, and coordinate all local, state, federal, and private competitive grants and monitored special revenue funds, revolving accounts, and the fees related to them to ensure that they were managed efficiently and used effectively for the purposes intended.

Rating: Satisfactory

Evidence

The district had a system in place to pursue, acquire, monitor, and coordinate all grants to ensure they were managed efficiently. The district hired a person to manage the financial aspect of grants. This area was then staffed with the manager plus four clerks. Central administration met with the grants' manager and staff regularly to review unexpended grant funds as the year progressed. The June 2006 independent audit of Reports on Federal Award Programs, for which prior audits stated in some of their findings that "the school finance department needed to amend their policies so that the financial reporting is in compliance with local and state and federal laws," concluded in 2006 that "based on our audit of the major educational grant programs it appears that the city has implemented necessary elements to ensure a continuity of the financial management of programs funded with federal funds."

The 2006 independent audit also found that "Audit procedures employed on this year's education grants indicate that the client is filing necessary financial reports with grant oversight agencies on a timely basis."

Aside from the high school student activity accounts, he district does not have any student activity accounts at the individual school (K-8) level. The MUNIS software is a fund-based system and each account was in a separate fund and monitored and audited as such.

10. The district had a system in place to ensure that state procurement laws were followed, that appropriate staff had MCPPO credentials, and that all assets and expenditures were monitored and tracked to insure efficient and maximum effective utilization. The district also competitively procured independent financial auditing services at least every five years, shared the results of these audits, and consistently implemented their recommendations. All procurement, tracking, monitoring systems, and external audits were accurate, current and timely.

Rating: Satisfactory

Evidence

The district had a system in place to ensure that state procurement laws were followed and that appropriate staff had MCPPO credentials. Most formal procurement was done by the city purchasing department on behalf of the school district and the appropriate staff had MCPPO credentials, although one administrator for the school district also had MCPPO certification. Examiners interviewed the city's chief procurement officer and the city auditor who stated that all procurements of the school district were subject to their review.

Examiners reviewed independent audits for FY 2006. The district had implemented findings for previous years. The team noted that the district had the same independent auditing firm for a period in excess of five years.

11. The district had a formal preventative maintenance program to maximize and prolong the effective use of the district's capital and major facility assets, to ensure that educational and program facilities were clean, safe, well-lit, well-maintained, and conducive to promoting student learning and achievement.

Rating: Needs Improvement

Evidence

The district did not have a formal preventative maintenance program to maximize and prolong the effective use of the district's capital and major facility assets. Both school district and city administrators stated there was not a formal preventative maintenance program in place. The maintenance personnel who serviced the schools were city rather than school department employees, and school administrators stated in interviews that response to maintenance requests

was often not in a timely manner even though there was a work order system in place. The city Department of Public Works managed the maintenance program, and the school department did not have a budget to institute or maintain a preventative maintenance program.

Although the city maintenance personnel included licensed electricians, plumbers, as well as carpenters, painters, and roofers, there was no program to have these employees inspect building systems on a routine and systematic basis.

Examiners who visited the district's schools reported that the buildings were clean, well lit, and the environment promoted student learning and achievement, although there were occasional conditions of roof leaks and buildings "showing their age."

12. The district had a long-term capital plan that clearly and accurately reflected the future capital development and improvement needs, including educational and program facilities of adequate size. The plan was reviewed and revised as needed with input from all appropriate stakeholders.

Rating: Satisfactory

Evidence

The district and the city have recently developed a long-term capital plan that clearly and accurately reflected the future capital development and improvement needs, including educational and program facilities of adequate size. The district had contracted with an engineering firm for a comprehensive evaluation of the HVAC systems for all 28 schools. The inspections included the recording and cataloging of information of each piece of equipment and were completed in June 2007. According to interviews with district personnel, they began to develop the Lowell Public Schools Five Year Plan two years ago, which was approved by the school committee last year. Examiners reviewed a December 2007 letter from the superintendent of schools to the city manager emphasizing the importance of the development of a capital plan for all the district and city buildings.

City administrators stated they are presently completing a 10-year capital plan to present to the city council, which will include the needs of the school district. City officials stated that the plan

includes the HVAC, roofing, and window needs of the district's schools. They said that after the final plan is approved by the city council it would be reviewed every year.

The district had a new elementary school under construction next to an existing school, which will be demolished upon completion of the new school. The district had a plan to combine and rehabilitate other schools. The city's Department of Public Works monitors school construction on behalf of the school district.

13. The schools were secure and had systems to ensure student safety.

Rating: Satisfactory

Evidence

The schools were secure and had systems to ensure student safety. Examiners reviewed the recent Massachusetts School Building Authority's assessment of all the district's schools, which indicated that all schools had secured main entrances with buzzer and intercom systems, and most schools had camera configurations. Sign-in requirements and identification badges were required in most schools. All schools were alarmed and some secondary schools had security personnel stationed in and outside the school. EQA examiners confirmed these security methods when visiting the schools.

Security in Lowell High School was a high priority with the school committee, and it had recently expended $100,000 to update and install additional equipment in that school. Examiners reviewed this equipment, which monitored critical areas and doors inside the high school as well as the exterior areas all around the high school complex.

Administrators responsible for security, in interviews, stated there is a districtwide crisis team that works with the city officials and other agencies to develop security plans.

Appendix A: Proficiency Index (PI)

The proficiency index is a metric used to measure and compare all schools and school districts regarding their performance on the MCAS tests. The proficiency index is a measure of the level of achievement a district, school, grade, or subgroup has made in relation to the 'Proficient' achievement level on the MCAS tests. The EQA computes three indices: the English Language Arts Proficiency Index (EPI), the Math Proficiency Index (MPI), and the Science and Technology/Engineering Index (SPI).

The proficiency index is calculated as follows:

Percentage of students scoring 200-208 on test	x	0 = A
Percentage of students scoring 210-218 on test	x	25 = B
Percentage of students scoring 220-228 on test	x	50 = C
Percentage of students scoring 230-238 on test	x	75 = D
Percentage of students scoring 240 or more on test	x	100 = E

The proficiency index equals the sum of A + B + C + D + E = PI

Example: The Anywhere High School had the following results on the 2007 MCAS tests in a given content area:

12 percent of all students scored 200-208; therefore,	12 percent	x 0 =	0
15 percent of all students scored 210-218; therefore,	15 percent	x 25 =	3.75
21 percent of all students scored 220-228; therefore,	21 percent	x 50 =	10.5
34 percent of all students scored 230-238; therefore,	34 percent	x 75 =	25.5
18 percent of all students scored 240 or more; therefore,	18 percent	x 100 =	18.0

The proficiency index is calculated by adding: 0 + 3.75 + 10.5 + 25.5 + 18 = 57.75

The proficiency index (API) for the Anywhere High School would be 57.75.

The EPI is calculated using the ELA results for all students taking the ELA exam. The MPI is calculated using the math results for all students taking the math exam. The SPI is calculated using the STE results for all students taking the STE exam.

The 100 point proficiency index is divided into six proficiency categories as follows: 90-100 is 'Very High' (VH), 80-89.9 is 'High' (H), 70-79.9 is 'Moderate' (M), 60-69.9 is 'Low' (L), 40-59.9 is 'Very Low' (VL), and 0-39.9 is 'Critically Low' (CL).

Appendix B: Chapter 70 Trends, FY 1998 – FY 2007

	Foundation Enrollment	Pct Chg	Foundation Budget	Pct Chg	Required Local Contribution	Chapter 70 Aid	Pct Chg	Required Net School Spending (NSS)	Pct Chg	Actual Net School Spending	Pct Chg	Dollars Over/Under Requirement	Percent Over/ Under
FY98	15,817	3.3	110,164,327	6.0	26,365,909	80,149,845	13.0	106,515,754	12.7	103,165,466	11.2	-3,350,288	-3.1
FY99	16,334	3.3	116,862,864	6.1	28,723,025	89,392,188	11.5	118,115,213	10.9	113,030,641	9.6	-5,084,572	-4.3
FY00	16,370	0.2	117,309,962	0.4	31,708,201	92,280,705	3.2	123,988,906	5.0	117,965,163	4.4	-6,023,743	-4.9
FY01	16,374	0.0	121,859,164	3.9	32,902,170	95,067,629	3.0	127,969,799	3.2	125,977,313	6.8	-1,992,486	-1.6
FY02	16,439	0.4	129,497,748	6.3	29,743,610	109,418,078	15.1	139,161,688	8.7	134,771,233	7.0	-4,390,455	-3.2
FY03	16,481	0.3	132,753,346	2.5	32,141,579	109,418,078	0.0	141,559,657	1.7	134,737,611	0.0	-6,822,046	-4.8
FY04	16,006	-2.9	130,510,526	-1.7	33,836,467	103,496,105	-5.4	137,332,572	-3.0	131,679,465	-2.3	-5,653,107	-4.1
FY05	15,650	-2.2	135,590,402	3.9	33,602,991	107,640,518	4.0	141,243,509	2.8	135,234,587		-6,008,922	-4.3
FY06	15,172	-3.1	134,573,109	-0.8	35,673,716	108,399,118	0.7	144,072,834	2.0	140,208,603	2.7	-3,864,231	-2.7
FY07	14,704	-3.1	139,116,838	3.4	35,026,888	111,660,607	3.0	146,687,495	1.8	146,246,641	3.7	-440,854	-0.3
											4.3		

	Dollars Per Foundation Enrollment			Percentage of Foundation			Chapter 70 Aid as Percent of Actual NSS
	Foundation Budget	Ch 70 Aid	Actual NSS	Ch 70	Required NSS	Actual NSS	
FY98	6,965	5,067	6,522	72.8	96.7	93.6	77.7
FY99	7,155	5,473	6,920	76.5	101.1	96.7	79.1
FY00	7,166	5,637	7,206	78.7	105.7	100.6	78.2
FY01	7,442	5,806	7,694	78.0	105.0	103.4	75.5
FY02	7,877	6,656	8,198	84.5	107.5	104.1	81.2
FY03	8,055	6,639	8,175	82.4	106.6	101.5	81.2
FY04	8,154	6,466	8,227	79.3	105.2	100.9	78.6
FY05	8,664	6,878	8,641	79.4	104.2	99.7	79.6
FY06	8,870	7,145	9,241	80.6	107.1	104.2	77.3
FY07	9,461	7,594	9,946	80.3	105.4	105.1	76.4

Foundation enrollment is reported in October of the prior fiscal year (e.g., FY07 enrollment = Oct 1, 2005 headcount).
Foundation budget is the state's estimate of the minimum amount needed in each district to provide an adequate educational program.
Required Net School Spending is the annual minimum that must be spent on schools, including carryovers from prior years.
Net School Spending includes municipal indirect spending for schools but excludes capital expenditures and transportation.

Appendix C: Instructional Inventory

The EQA conducted an instructional inventory in order to investigate the level of "fidelity of implementation" of district priorities among its schools. The team interviewed the superintendent, all 23 building principals, and 39 teachers representing all levels within the Lowell Public Schools. All interviewees were asked parallel questions concerning the district's priorities and their implementation. The Fidelity of Implementation section of this report synthesizes the summative results. Qualitative results from principal and teacher interviews are described below.

Principals

During the EQA reexamination of the Lowell Public School that took place from December 10-13, 2007, the EQA team interviewed all 23 building principals as well as the director of Lowell High School's Freshman Academy. Specifically, these interviews were conducted with 13 elementary school principals, seven middle school principals, the principals of district's two K-8 schools, the headmaster of Lowell High, and the director of Lowell High School's Freshman Academy.

A single examiner interviewed each principal during a scheduled one-hour block of time. All EQA examiners asked the same nine questions of the principals to determine the extent to which district and school instructional priorities were supported, reflected, and/or linked to four major district systems. These systems are curriculum development, student assessment, professional development, and supervision and evaluation. All building principals were also asked to explain their school safety plan.

The summary below provides each question asked and a composite of the responses to that question. The bulleted responses pertain to all principals interviewed regardless of level except where noted. The number at the end of the each bulleted response indicates the number of principals who responded to that particular question in a similar manner.

1**a**. **What are the instructional priorities of the district?**

- to improve achievement for all students in literacy (ELA) and mathematics (21)
- attention to the needs of ELL and special education students (12)

- devote more time daily in ELA—to 120 to 150 minutes, and in math—to 90 minutes, for all students in grades K-4 (10)
- use a tiered level of instruction model: core, supplemental, and intervention (10)
- safety for all students and staff is paramount (10)
- SIOP training for all teachers to better understand differentiated instruction (10)
- use data to drive instruction at all levels (10)
- motivate students to think more and put more effort into their studies (7)
- initiatives for professional growth through the Lowell Teachers Academy (7)
- special education placement in least restrictive environment (7)
- "consistency and continuity" in all elementary/middle schools (7)

1b. What are the instructional priorities of your school?

- Almost all principals responded that their school's instructional priorities were similar in almost all aspects to the district priorities and that the two were linked with improving literacy and math achievement as their top priority. (23)
- create intervention programs in ELA and math for those in need (9)
- encourage small group instruction (7)
- make the "extended day" at the community schools more meaningful (2)
- help students take ownership of their work, or effort-based ability (2)

1c. How are the school priorities related to the district priorities?

- Most principals responded that their School Improvement Plan (SIP) used the District Improvement Plan (DIP) as the foundation of their school plan. (20)
- school goals match district goals but more specific to individual school population (7)
- encourage climate of collaboration (5)
- district priorities integrated into the culture of the school (4)

2. How were the school priorities determined?

- analyzing data an important element in setting school priorities (20)
- "data-driven" school; analyzing data and adjusting instruction to improve weak areas (13)
- use PIM process to evaluate programs and set goals (11)
- meeting the needs of a diverse student population (10)
- preparing middle school students to become productive high school students (6)
- collaborating with instructional specialists/coaches and teachers (5)
- school population affects priorities (4)
- more emphasis and focus on working with ELL population (4)

3. How were the school priorities communicated to staff members?

- through "Leadership Team" communication to all teachers (18)
- discussed at regularly scheduled faculty meetings, usually monthly (17)
- departmental/grade level meetings, usually bimonthly (17)
- through Connect-ED (11)
- faculty bulletins sent through either e-mail or hard copy (10)

- directly by one-on-one communication (10)

4. How does curriculum development support the accomplishment of the school's priorities?

- based on the Massachusetts frameworks but reviewed and revised regularly to better meet the needs of the students (17)
- scope and sequence of curriculum based on assessment results (11)
- use of "literacy/math specialists" as key individuals in looking at curriculum development (10)
- use MCAS analysis and item analysis to determine strengths and weaknesses of programs (10)
- through discussion at Professional Learning Communities (9)
- create opportunities for teachers to work in study groups (6)
- through "Brigade Days"; math and ELA teachers pulled out of classes for a day to look at vertical and horizontal alignment of curriculum (6)
- vocabulary development in all grades and in all disciplines (5)

5. How do formative and summative assessments support the accomplishment of the school's goals?

- now using more formative assessments than summative assessments (15)
- measure progress by improvement in achievement scores (14)
- progress and report cards regularly distributed at all levels to inform parents of their child's progress (14)
- helps teachers identify areas of weaknesses in curriculum (11)
- helps teachers identify struggling students (10)
- use Galileo results administrated four times per year in middle schools (11)
- use assessment charts from Scott Foresman, Investigations, etc. in each class at the elementary level (7)
- developed common assessments with the assistance of NELMS consultant at the middle level (5)
- teachers adjust instruction and intervention time through analysis of data (4)
- department heads key individuals in determining types of assessments at Lowell High School (1)

6. How does professional development support the accomplishment of the school's priorities? How do schools support the use of professional development?

- Lowell Teachers Academy encourages teachers to take professional development opportunities (17)
- professional development based on district's adopted programs, e.g., Investigations, Scott Foresman, etc. (11)
- SIOP (Sheltered Immersion Observation Protocol) training for all teachers (10)
- writing across the curriculum using the John Collins model (7)
- MELA-O training to better serve ELL students (7)
- common planning time provided to teachers (7)

- sharing and/or demonstrating best practices (7)
- safety issues, e.g., restraint training, CPR training/retraining, crisis management, etc. (6)
- three-tiered level of instruction training (5)
- Reading First training (5)

7a. How do supervision and the evaluation of instruction support the accomplishment of the school's priorities?

Supervision:

- posting of objectives (both content and language) in the district's classrooms daily (20)
- supervision by principals primarily performed through "walk-throughs" and informal feedback (17)
- during "walk-throughs" looking for focus on consistency of instruction (12)
- during "walk-throughs" looking for differentiated instruction (9)
- coaching and professional collaboration with instructional specialists occurs "all the time" (12)
- analysis of MCAS scores to determine amount of improvement (12)
- mentoring program working well for new teachers (11)
- submitting lesson plan books optional (9)
- lesson plan books turned in weekly/monthly and checked(7)
- wish teachers were less defensive about "informal feedback" (5)

Evaluation:

- evaluations: follow the contract (pre-conference, observation and post-conference) (20)
- professional status teacher, during "off year" have goal-setting conferences with principal (11)
- official evaluation process not very helpful (8)

7b. To whom are you accountable for supervision? How does that work?

- accountable to and evaluated by superintendent (23)
- evaluation based on "Principles of Effective Administrative Leadership" and mutually set goals (20)
- write self-assessment of reaching goals annually (16)
- superintendent supportive of my efforts (11)

8. What should we look for as evidence of the implementation of the district and school priorities when we observe classes?

- objectives of the day posted in all classrooms (20)
- engaging students in learning process (18)
- student-centered learning and an abundance of group work (18)
- lessons well organized (18)
- when second or third adult is in the room, all working collaboratively (12)
- students working on "open-response" questions/concentration on writing (12)
- collaborative and "cooperative" learning (12)

- differentiated instruction apparent (10)
- high expectations apparent (9)
- classroom management issues minimal (7)
- use of graphic organizers evident (7)
- "effort-based" questioning technique used (7)
- "accountable talk" evident (6)
- in science, project-based instruction (4)

9. What is your school safety plan?

- all emergency guides use district template (20)
- all doors locked and check-in system in place at all schools, including badges (18)
- crisis plan and team in place (17)
- all school personnel (secretaries, custodians, etc.) have plan (17)
- evacuation drills and lockdown drills ("soft and hard") common occurrences (15)
- faculty and staff wear identification badges (11)
- administrators and faculty in corridors during class passing periods at the middle and high schools (7)

Teachers

The EQA team interviewed 39 teachers: six in grades 2-4, 27 in grades 5-8, and six in grades 9-12. Teacher interviews took place at the Lowell High School and Lowell High School's Freshman Academy. K-8 schools included Payne/Arts and Bartlett Community Partnership. Middle schools included Butler, Daley, Robinson, Rogers, Stoklosa, Sullivan, and Wang. Elementary schools included Bailey, Greenhalge, Lincoln, McAuliffe, Moody, Morey, Pawtucket, Memorial, Shaughnessy, and Washington.

An examiner interviewed each teacher during a scheduled period. The EQA examiners all asked the same nine questions to determine the extent to which district and school curriculum and instructional priorities were supported. Teachers were also asked to explain their respective schools' safety plans. The nine questions are listed below. A composite listing of categories of the responses for each question is presented with the number of responses given for each category. For the purpose of this report, responses are divided into two categories: grades 2-8 and grades 9-12. Grade 9-12 responses are italicized.

1. What are your school's instructional priorities?

Programmatic:

- improve math and ELA MCAS scores districtwide (22)

- improve proficiency in mathematics and English language arts, particularly with subgroups: English language learners and special education students (19)
- emphasis on mathematics application problems: how to answer open-response questions and infer what the question is asking (11)
- implementation of intervention programs in math and ELA (11)
- vocabulary development-tiered words, e.g., tier 2 everyday words, tier 3 context specific vocabulary (10)
- investigation implementation for problem solving (6)

General:
- teaching to diverse abilities by making curriculum accessible to intervention groups-differentiated instruction (14)
- ensure that all students have the opportunity to learn in a safe, inclusive environment (9)
- SIOP instruction (8)
- effort-based learning-students being in control of their own learning (7)
- build professional learning community-collaboration (6)
- *prepare students for higher education opportunities (4)*
- *horizontal and vertical alignment of curriculum (3)*
- *develop common assessments (3)*
- *principal guides curriculum focus which drives what happens in the school (2)*
- *alternate means of assessing students (2)*
- *literacy programs (2)*
- *READ 180- improve instruction for low level students-differentiate (2)*

2. How were the school's instructional priorities determined?

Data drives instruction to determine where there is room for improvement:
- specific assessments are fundamental to our instruction: MCAS, SRI, GRADE, unit tests, Wilson, benchmark tests (Galileo), Power Up (14)
- MCAS analysis at meetings and in study groups (11)
- results from subgroup tests (4)
- benchmark data from Galileo tests provide real data to drive instruction (3)

Priorities are determined through collaboration:
- collaborative effort on the part of administrators and teaching staff (7)
- leadership team designs SIP, with staff input, prior to presenting to the faculty at large (6)
- identifying critical needs and addressing them by team through instructional teams during common planning time (6)
- instructional specialists determine what needs to be addressed (6)
- SIPs derived from DIPs by panel of teachers and administrators (4)
- standards focused-standards based instruction (5)
- content and test vocabulary a priority (5)
- PIM teams led by assistant principals (2)
- *common assessments schoolwide (4)*
- *collaboration between the headmaster and department heads (3)*

- *thematic semesters in English (2)*
- *teachers get together monthly to discuss changes to keep on the same pace (2)*

3. How were the school's instructional priorities communicated to you?

- disseminated through scheduled staff and faculty meetings (27)
- grade level, subject area common planning time (administrators share information) (17)
- disseminated through study/focus groups (8)
- everyone gets a copy of the SIP at the beginning of the school year (8)
- role of instructional specialists and lead teachers key "go to people" (8)
- e-mails (6)
- PIM group from each discipline at monthly meetings (4)
- memos (4)
- literacy and math teams disseminate goals (3)
- all-day orientation meetings before school starts in the fall (2)
- *department heads/meetings-monthly (6)*
- *literature in mail box (4)*
- *sometimes specialists attend to provide information (test results-initiatives)*
- *e-mails (3)*
- *assistant principal meets with cluster (8 teachers) weekly to discuss new programs (2)*

4. How do the district and school curriculum development reflect your school's instructional priorities?

Math:

- curriculum development is used to deepen conceptual understanding of math concepts (11)
- district provides information to instructional specialists and math resource teachers and then it is presented to teachers-they then refine it to reflect their classrooms (5)
- CMP has 80 percent alignment with state framework documents according to math brigade teachers; teachers discussed how the other 20 percent would be covered and disseminated information to staff (5)
- math and literacy teachers pulled out for the day to tweak how curriculum is delivered (4)
- math developed power standards to concentrate on and to create intervention classes ((4)

Science:

- science teachers met to realign middle school and high school curriculum to better prepare students for MCAS (6)
- grades 6-8 curriculum modified and rearranged to reflect life science (3)

General:

- common planning time-look at assessments and figure out how to best serve student needs (9)
- aligning curriculum across grade levels according to standards, by meeting with study groups (7)
- faculty/staff meeting review MCAS scores (6)

- superintendent's vision aligned with school priorities in compliance with goals of district (5)
- directives are from district and then tailored instruction to meet the needs of our students (4)
- district/school curriculum based on state standards-anchor papers to elaborate meaning and application of standards were written this summer in workshops elaborate meaning and application of standard and what responses teachers should look for (4)
- district provides information to instructional specialists and math resource teachers and then presented to teachers-it is then refined to reflect their individual classroom needs (4)
- co-planning for ELL and special education students (3)
- opportunity to discuss methods and power standards (3)
- test-taking strategies developed (3)
- *teachers work on curriculum at monthly department meetings (4)*
- *work as teams to build a unified curriculum-not only what to cover, but also vocabulary (3)*
- *every goal is mapped and "hooked up" to a frame work standard (3)*
- *common assessments are analyzed, strategies discussed, and content realigned (2)*
- *ELA uses exemplars and refines common assessments (2)*
- *revising curriculum in science (2)*

5. How do you use student assessment results to plan instruction which reflects the school's priorities?

In classroom based instruction:

- data-driven instruction gives us the ability to individualize instruction (11)
- ELA uses GRADE and SRI tests to determine student reading level; also, Wilson Reading or Power Up for those below grade level-others will go into content reading or literature circles (7)
- data used for flexible grouping (6)

To provide intervention and support:

- math designs pre-tests (Galileo) to determine background knowledge, then they are placed into re-teaching groups (6)
- 30-minute intervention block focuses on basic skills and benchmarks (6)
- paraprofessional support for native language newcomers (5)

Using various assessments:

- flag questions frequently missed/incorrect on test-readdress concepts in a mini lesson that allows students to access the material again in a different format (9)
- PLC for math looks at data from Galileo, benchmark tests, and MCAS tests and decide which standards need more focus-divide if curriculum is teaching to standards based on these results (6)
- look at student work to assess student learning and lessons that work (5)
- enrichment depending on student performance-groups restructured every six weeks (4)
- use SRI tests to develop reading groups and strategies (4)

- use DIBELS at elementary level to structure grouping and keep data boards for students in grades K-2 (3)
- MCAS results analyzed to help determine where gaps are and then addressed (3)
- *e-mail of MCAS results-flag kids in danger of failing for tutoring (4)*
- *analyze test results-decide if more time needed or too much time on a given topic (4)*
- *use flashback sheet for review/maintenance/re-teaching (3)*
- *emphasis on open response to prepare for MCAS (2)*
- *assessment results give an indication of the level to which they have mastered or didn't master material* (2)
- *quarterly tests consistent across the department comprising 75 percent of grade (2)*
- *skill builders at end of day to prepare for MCAS (2)*

6. How is the mandatory professional development program related to the district and school priorities?

- curriculum mapping opportunities after school/during the school day (19)
- Lowell Teachers Academy, after school, graduate level course for new teachers in first three years relating to behavior/classroom management, specific content areas, working with subgroups, and also used for mentor training (12)
- everyone takes SIOP- other ELL courses optional (9)
- content courses in math and science (8)
- study groups/teams (8)
- John Collins training-target areas (6)
- coaching/literacy specialists meet with grade level teachers and resource room teachers (6)
- Math brigade- 2 to 4 times a year by grade-half or full day-district initiative-review quarterly benchmarks (4)
- professional development is moving toward reflecting on school and district priorities (4)
- more focused summer workshops on specific topics-better questioning for better responses-enhancing comprehension-note taking-main idea, etc. (4)
- staff meetings-team building-reading *Whatever it Takes* and *On Common Ground (3)*
- differentiated instruction (3)
- mentor program (2)
- peer observations (2)
- imbedded professional development (2)
- sometimes a waste of time-"do we need to go to another meeting?" (2)
- *Lowell Academy-new teachers and mentor teachers (4)*
- *early release monthly-usually department meeting (3)*
- *take advantage of courses offered at area colleges (2)*
- *teachers and administrators offer courses (2)*
- *John Collins-target areas (2)*
- *opportunities to work on curriculum and lab manuals (2)*

7. **How do supervision and evaluation of your work support you in accomplishing the school's priorities?**

The formal process has evolved:

- principal conducts thorough evaluations and writes comments/has conversations (15)
- meets with teachers individually and gives constructive criticism you can learn from and reflect on-you leave with a clear picture of how you can better align instruction so as to meet your goals (13)
- evaluations have direct relationship to school goals (8)
- the process has become friendlier-more of a conversation instead of criticism (7)
- information gathered by principal during observation is synthesized to highlight things that we are doing well already and areas in which we can improve (7)
- used to be a check list-not helpful or relevant (7)
- evaluations are fair-not stressful (6)
- more immediate feedback to our lessons (5)
- supervision and evaluation give instruction focus-had help in writing objectives to focus lessons working on launch, explore, and summary (3)
- turn plan books every month (3)
- establishment of goals in evaluation process specifically correlated to school priorities (4)
- evaluated every two years-process is just pressure-not helpful (2)

The informal process is helpful:

- frequent informal observations and feedback given (11)
- instruction specialists support team with resources and strategies (5)
- establishment of goals in evaluation process specifically correlated to school priorities (4)
- helps focus your attention on your strengths and weaknesses (4)
- study groups are accountable to pre-/post-test (2)
- administrator walk-throughs (2)
- *narrative format with constructive comments (4)*
- *found to be helpful with suggestions and feedback (4)*
- *evaluations bring something to mind-a cross pollination of ideas (3)*
- *evaluations twice a year by department head-stressful but helpful-meet before and after (2)*
- *positive reinforcement for teaching practices (2)*
- *frequent visits to Freshman Academy by department heads(1)*

8. **How will we see district and school priorities during classroom observations?**

Through high levels of student engagement:

- content standards/objectives clearly posted (21)
- vocabulary word walls (17)
- organizational strategies: colored folders, different notebooks, homework notebooks, etc. (7)
- students are actively engaged in their learning (6)
- investigation-focused curriculum (5)
- students helping one another (5)

- students actively thinking by asking questions, working cooperatively, and doing inquiry activities (4)
- accountable talk-students adding, rephrasing what others are saying (4)
- students explaining their thinking and practicing active listening skills (4)
- students asking questions/clarification (4)
- students working in groups, not in rows (3)
- balanced literacy from Tufts training (3)
- hearing student voice (3)
- students are doing more of the talking than teachers (3)
- deep academic discussions (2)
- good questioning techniques (2)

Through differentiation:

- launch-explore-summary model (9)
- differentiated instruction (7)
- modifications of lessons to make content more accessible for subgroups (6)
- variety of formative assessment during explore and summary phase (5)
- co-teaching/co-planning with specialists in ELL, special education, and content areas (4)
- *overlapping of strategies listed below (6)*
- *math-always a focus-problems on board-lectures (3)*
- *ELA-student focused-students have responsibility to lead class discussions-teacher facilitates (3)*
- *science-labs-group work-lecture-reading assignments (2)*

9. What is your school's safety plan?

- Safety plans kept in folders/notebooks/posted/in desk-full plan in principal's office (31)

Safety mechanisms:

- practicing fire exit procedures (practice at least twice a year) and procedures posted in classrooms (22)
- procedures for hard and soft lockdown (19)
- bus evacuation drills (14)
- keys for each classroom-doors kept locked at all times (11)
- Connect-ED (5)
- building evacuation plan (5)
- crisis management team (4)
- announcements with codes (3)
- restraint training (2)
- *fire drills-practice at least once a year (5)*
- *soft and hard lockdown (5)*
- *evacuation plans are broadcast during advisory period at beginning of year for all students (4)*
- *teachers have folders with safety plan (4)*

Other safety mechanisms:

- all emergency procedures are in sub-folder (11)
- nurse in building (7)
- police officer in building (5)
- Lowell Community Health Center in one of the schools (4)
- *security guards in building with radios (3)*
- *four school resource officers from the Lowell Police Department talk to student groups and at faculty meetings (3)*
- *teen clinic run by St. Memorial Hospital (3)*
- *community liaisons-native speakers-visit homes (3)*
- *several nurses in building (2)*