The Commonwealth of Massachusetts

School District Examination Report:

Littleton
Public Schools
Technical Report

data driven
standards based
learner centered

The Education Management Audit Council
The Office for Educational Quality and Accountability

2004 - 2006

The Commonwealth of Massachusetts
Office of Educational Quality and Accountability

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The Educational Management Audit Council accepted this report and its findings at their meeting of October 1, 2007.

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 Littleton Public Schools, Diane Bemis; the school department staff of the Littleton Public Schools; and the town officials in Littleton.

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Executive Summary

The Office of Educational Quality and Accountability (EQA) examined the Littleton Public Schools in January 2007. With an average proficiency index of 88 proficiency index (PI) points in 2006 (92 PI points in English language arts and 83 PI points in math), the district is considered a 'High' performing school system based on the Department of Education's rating system (found in Appendix A of this report), with achievement above the state average. More than two-thirds of Littleton's students scored at or above the proficiency standard on the 2006 administration of the MCAS tests.

District Overview

The town of Littleton, located in Middlesex County in northeastern Massachusetts, is a rural industrial town on the outer edge of suburban Boston. The largest sources of employment within the community are manufacturing; educational, health and social services; and professional, scientific, management, administrative and waste management services. The town has a Board of Selectmen/Executive Secretary/Open Town Meeting form of municipal government.

According to the Massachusetts Department of Revenue (DOR), the town had a median family income of $83,365 in 1999, compared to the statewide median family income of $63,706, ranking it 61 out of the 351 cities and towns in the Commonwealth. According to the 2000 U.S. Census, the town had a total population of 8,184 with a population of 1,620 school-age children, or 20 percent of the total. Of the total households in Littleton, 40 percent were households with children under 18 years of age, and 22 percent were households with individuals age 65 years or older. Forty-eight percent of the population age 25 years or older held a Bachelor's degree or higher, compared to 33 percent statewide.

The Massachusetts Department of Education (DOE) data from 2005-2006 indicate that the Littleton school district had a total enrollment of 1,562. The demographic composition in the district was: 95.8 percent White, 0.7 percent Hispanic, 1.5 percent Asian, 1.6 percent African-American, 0.0 percent Native American, 0.3 percent multi-race, non-Hispanic; 0.0 percent limited English proficient (LEP), 4.0 percent low income, and 17.4 percent special education. Approximately 92 percent of school-age children in Littleton attended public schools. The district offers school choice, and 24 students from other communities attended school in

Littleton. A total of 127 Littleton students attended public schools elsewhere, including 55 students attending charter schools and 32 students attending Nashoba Valley Technical School.

The district has four schools serving grades pre-kindergarten through 12, including two elementary schools serving grades pre-kindergarten through 5, one middle school serving grades 6 through 8, and one high school serving grades 9 through 12. The administrative team at the time of the review consisted of a newly appointed superintendent, a director of pupil services, a business manager, a part-time curriculum coordinator, a director of athletics, health, and physical education, and a director of special education. Each school has a principal and the high school has an assistant principal. The district has a five-member school committee.

In FY 2005, Littleton's per pupil expenditure, based on appropriations from all funds, was $9,563.83, compared to $10,626 statewide, ranking it 195 out of the 328 school districts reporting data (charter schools not included). The district exceeded the state net school spending requirement in each year from FY 2004 through FY 2006. Over this period, net school spending increased from $13,975,831 to $ 14,599,851; Chapter 70 aid increased from $1,387,507 to $1,464,107; the required local contribution increased from $9,361,446 to $10,499,232; and the foundation enrollment decreased from 1,597 to 1,532. Chapter 70 aid as a percentage of actual net school spending increased from 9.9 to 10.0 percent over this period. From FY 2004 to FY 2005, total curriculum and instruction expenditures as a percentage of total Schedule 1 net school spending reported in the End of Year Pupil and Financial Report decreased from 60 percent to 58 percent.

Context

The Littleton school district has experienced a change in leadership over the past few years, with a new superintendent, curriculum coordinator, and business manager hired during the latter half of 2006. The longest-serving school committee member has served for only three years. Hopes and expectations arising in both the community and the district seem to have energized the community and renewed enthusiasm and creativity. Those within the district, however, did not minimize the accomplishments of the recently departed superintendent, whom they credit with having instituted many necessary innovations, albeit at the expense of his personal popularity.

Since 2001, the town has supported the district with two brand new buildings, and passed a general override of Proposition 2½. Midway through the EQA visit, the town opened the new middle school building, and EQA conducted classroom visits during the first two days of its operation. The high school was conducting midterm examinations; the EQA team conducted its classroom visits while students were preparing for the examination period rather than participating in new learning experiences. Still, the positive and cooperative spirit of the faculty and students was obvious to the EQA examiners.

During the period under review, 2004 through 2006, the district became deeply committed to the use of data as an integral part of the educational process. So far, the district used the data for instructional purposes more than for curriculum or professional development planning purposes, but the foundation for improvement was in place.

One particular area of concern for the district is the inflow and outflow of students through school choice and other alternatives. Students enter the district, apparently seeking the individual attention and good facilities that Littleton can offer. On the other hand, many more students leave the district for increased academic choices and comprehensive athletic teams available in larger neighboring districts. The annual net economic loss resulting from the in- and out-migration is close to $500,000.

The EQA Examination 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 January 22-25, the EQA conducted an independent examination of the Littleton Public Schools for the period 2004-2006, with a primary focus on 2006. This examination 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 onsite visit.

For the period under examination, 2004-2006, this report finds Littleton to be a 'High' performing school district with an average proficiency index of 88 proficiency index (PI) points in 2006, marked by student achievement that was 'High' in English language arts (ELA) and 'High' in math on the 2004-2006 MCAS tests. Over this period, student performance was flat in ELA and improved by two PI points in math, which closed the district's average proficiency gap by five percent.

The following provides a summary of the district's performance on the 2006 Massachusetts Comprehensive Assessment System (MCAS) tests and the findings of the EQA examination.

Summary of Analysis of MCAS Student Achievement Data

Are all eligible students participating in required state assessments?

On the 2006 MCAS tests in ELA, math, and STE, eligible students in Littleton 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-thirds of all students in Littleton attained proficiency on the 2006 MCAS tests, much more than that statewide. Nearly four-fifths of Littleton students attained proficiency in English language arts (ELA), more than three-fifths of Littleton students attained proficiency in math, and more than two-thirds of Littleton students attained proficiency in science and technology/engineering (STE). Ninety-eight percent of the Class of 2006 attained a Competency Determination.

- Littleton's average proficiency index (API) on the MCAS tests in 2006 was 88 proficiency index (PI) points, 10 PI points greater than that statewide. Therefore, Littleton's average

proficiency gap, the difference between its API and the target of 100, in 2006 was 12 PI points.

- In 2006, Littleton's proficiency gap in ELA was eight PI points, eight PI points narrower than the state's average proficiency gap in ELA. This gap would require an average improvement in performance of one PI point annually to achieve adequate yearly progress (AYP). Littleton's proficiency gap in math was 17 PI points in 2006, 11 PI points narrower than the state's average proficiency gap in math. This gap would require an average improvement of two PI points per year to achieve AYP. Littleton's proficiency gap in STE was 13 PI points, 16 PI points narrower than the statewide average.

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

Between 2003 and 2006, Littleton's MCAS performance showed a decline overall, in ELA, and in math, and an improvement in STE.

- The percentage of students scoring in the 'Advanced' and 'Proficient' categories fell by five percentage points between 2003 and 2006, while the percentage of students in the 'Warning/Failing' category increased by three percentage points. The average proficiency gap in Littleton widened from 13 PI points in 2003 to 16 PI points in 2006.
- Over the three-year period 2003-2006, ELA performance in Littleton declined at an average of less than one PI point annually.
- Math performance in Littleton also showed a decline, at an average of slightly more than one PI point annually over this period.
- Between 2004 and 2006, Littleton had improved STE performance, increasing at an average of two PI points annually over the two-year period.

Do MCAS test results vary among subgroups of students?

MCAS performance in 2006 varied substantially among subgroups of Littleton students. Of the six measurable subgroups in Littleton in 2006, the gap in performance between the highest- and lowest-performing subgroups was 21 PI points in ELA and 28 PI points in math (regular education students, students with disabilities, respectively).

- The proficiency gaps in Littleton in 2006 in both ELA and math were wider than the district average for students with disabilities, low-income students (those participating in the free or reduced-cost lunch program), and male students. Less than half of students with disabilities and low-income students attained proficiency, while two-thirds of male students did so.
- The proficiency gaps in ELA and math were narrower than the district average for regular education students, non low-income students, and female students. For each of these subgroups, roughly three-fourths of the students attained proficiency.

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

The performance gap between the highest- and lowest-performing subgroups in ELA widened from 23 PI points in 2003 to 28 PI points in 2006, and the performance gap between the highest- and lowest-performing subgroups in math widened from 26 to 29 PI points during this period.

- In Littleton, all subgroups of students had a decline in performance in ELA between 2003 and 2006. The subgroup with the greatest decline in ELA was low-income students.
- In math, all subgroups in Littleton with the exception of low-income students showed a decline in performance between 2003 and 2006. The subgroup with the greatest decline in math was students with disabilities.

Standard Summaries

Leadership, Governance, and Communication

The EQA examiners gave the Littleton 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.

The five-member school committee experienced complete turnover during the period under review. During the last election, the chairperson of the school committee shared all pertinent, but not confidential, information with each candidate. Newly elected members met with the superintendent and other members of the committee prior to their first school committee meeting. While the committee did not have a formal mentoring program in place, veteran members offered support via the telephone, face-to-face meetings, and e-mail. The committee

had subcommittees in the areas of budget and policy that met on a regular basis and shared information with the entire committee. The policy subcommittee continually worked on the policy manual to ensure that it reviewed and updated all policies on a regular schedule.

The superintendent delegated the leadership of each school and program to the relevant administrator, and the district practiced controlled site-based management within the parameters set by the superintendent. The central office team met on a weekly basis and the administrative team met bi-weekly. The superintendent set agendas for all meetings, and members of the administrative team had ample opportunity to introduce topics deemed necessary. The district website provided a great amount of information, including updated notices of importance issued by the office of the superintendent, as well as links to each of the four schools.

The district had a District Improvement Plan (DIP) in place for all the years under review, which the administrative team and the school committee reviewed on a regular basis. While the goals of curriculum and instruction, professional development, assessment, community and communications, and culture and climate did not change, the objectives, timelines, and strategies changed on a regular basis as the district continued to use data and assess student achievement. The DIP appeared on the website and was available in the form of a brochure to all interested parties. Curriculum brochures for each grade level were available in each building. The district prominently displayed its vision and mission statements in each school, as well as in the office of the superintendent.

The district analyzed MCAS data on a regular basis to review and modify programs, and utilized a multitude of other assessment tools. The superintendent provided the school committee and the community at large with an annual district report card, outlining the MCAS results and reporting on the achievements of the district. While the district used aggregated assessment data regularly, the only use of disaggregated data applied to the special education subgroup.

Members of the teaching staff had 90-minute professional development periods scheduled over 24 days, in addition to the use of time at general faculty meetings held every other week. These periods afforded staff members the time to review data and to work in grade level/department sessions to share information and various teaching strategies.

Curriculum and Instruction

The EQA examiners gave the Littleton Public Schools an overall rating of 'Needs Improvement' on this standard. They rated the district as 'Satisfactory' on one, 'Needs Improvement' on seven, and 'Unsatisfactory' on two of the ten performance indicators in this standard.

A curriculum initiative began in Littleton two years prior to the period under review, but the district interrupted the work the following year and turned its focus to assessment because of concerns about student performance on the MCAS tests. The written curriculum in Littleton had gaps in certain domains at some grade spans. Most of the documents were working drafts and many were incomplete.

Littleton's benchmarks in each domain at every grade level measured the taught and tested curriculum. Littleton attempted to improve achievement by measuring student progress against benchmarks, providing early intervention and adopting programs. During the four-year interval from 2003 to 2006, there was little increase in the percentage of regular and special education students attaining proficiency on the MCAS tests; the achievement gap between regular education and special education students did not close; and the disparity between proficiency in English language arts (ELA) and mathematics in favor of ELA remained.

The district had infrastructure to ensure horizontal alignment of the curriculum, and the district was building infrastructure to ensure K-12 vertical alignment. The principal of each school was the curriculum leader. Littleton had leadership positions in reading and mathematics at the elementary level spanning grades K-5 and department head positions spanning grades 6-12. Changes in the curriculum tended to be student or cohort specific and short-term rather than broad and systemic, and district leadership did not use data on the accomplishment of the annual student performance goals routinely to update or modify the curriculum. In 2006-2007, the district created elementary and secondary curriculum councils consisting of the specialists, department heads, and other staff. These councils have been meeting jointly with the superintendent and curriculum coordinator to implement a K-12 approach.

Littleton assessed the relationship between student achievement and learning time at the elementary level, but did not conduct analysis at the middle and high school levels. The district increased instructional time in mathematics from 45 to 60 minutes daily at the elementary level

to address deficiencies in student learning. The high school schedule did not provide weekly extended or double periods for laboratories in biology, chemistry, and physics. Instead, teachers conducted laboratories within the scope of the five 48-minute periods, compacting the curriculum.

Appropriate technology was available during the period under review, but successive reductions in funding for assistive personnel, maintenance and repair of equipment, acquisition of hardware and software, and professional development constrained the use of technology as a tool for both instruction and data analysis. Personnel reductions diminished leadership and services in technology. As a result, computers were out of service for longer periods, and teachers were not informed of new applications. School data team leaders lacked technology for scoring assessments and analyzing results and trends.

Littleton did not actively monitor teachers' instruction in order to ensure an emphasis on high expectations and mastery. Supervision was infrequent, and the district did not support the heterogeneous grouping and open enrollment practices with adequate resources to ensure that teachers could address the range of differences in their classes. Littleton did not use student achievement data to determine needed resources and professional development offerings to improve teaching and learning.

Assessment and Program Evaluation

The EQA examiners gave the Littleton Public Schools an overall rating of 'Satisfactory' on this standard. They rated the district as 'Satisfactory' on five and 'Needs Improvement' on three of the eight performance indicators in this standard.

The district used several forms of assessment to measure student learning. Tests such as the Dynamic Indicators of Basic Early Literacy Skills (DIBELS), Developmental Reading Assessment (DRA), Group Mathematics Assessment and Diagnostic Evaluation (GMADE), and Group Reading Assessment and Diagnostic Evaluation (GRADE) were in place, and the Stanford Reading and Mathematics Test had also been used during a part of the period under review. In addition, the Clay Observation Survey was given to grade 1 students who were considered "at risk," based upon the DIBELS results. Beginning at grade 3, the MCAS tests were added to the assessment battery. While it initially used a consultant to analyze the data, the

district evolved into using its own data analysis mechanism to interpret the data and gather more timely information on student progress.

Benchmarks known as "bull's-eyes" were used to measure student progress throughout the school year. Each school had data teams whose role was to monitor progress toward having all students reach the benchmarks. The data teams set "smart goals" that allowed them to work collaboratively to ensure a common focus on the benchmarks and predictable results in their attainment. The curriculum coordinator made regular reports to the school committee on MCAS results, and links to the results, along with the school report card, were prominently displayed on the district website.

Many programs within the district were evaluated using student assessment results. At the high school, for example, changes were made to the Advance Placement (AP) Physics course based upon AP test results. At the elementary schools, programs such as Title I were monitored for effectiveness using the DIBELS, while others were monitored using pre- and post-test assessments. At the middle and high schools, common midterm and final examinations were used to monitor the effectiveness of programs. The results were used effectively to inform instructional techniques, and sometimes to change the level or order of course offerings, but not to change curriculum content.

Common midterm and final examinations were in place at the high school, and common examinations were in place for science from grade 6 onward. In 2006, the district participated in the external program evaluation conducted by the Malcolm Baldrige Commitment to Excellence project and received the annual award. However, few other internal or external audits were conducted during the period under review.

Human Resource Management and Professional Development

The EQA examiners gave the Littleton Public Schools an overall rating of 'Needs Improvement' on this standard. They rated the district as 'Satisfactory' on six, 'Needs Improvement' on four, and 'Unsatisfactory' on three of the thirteen performance indicators in this standard.

The Littleton Public Schools identified, attracted, recruited, and hired effective, certified professional staff during the period under review. All teachers were licensed, and none were

employed on waiver. Principals had almost complete autonomy in selecting staff. Polices and practices encouraged professional growth and placed a high priority on retaining teachers. However, the district's employment, supervision, and professional development processes were neither linked nor supported by appropriate levels of funding.

The mentoring program within the district was well organized and built on a long-standing tradition of mentoring and support for new teachers. Mentors were trained in advance and assigned to teachers new to the district. The program provided written guidelines for regular monthly meetings and topics for discussion. The district held mentoring meetings regularly, and used feedback from the participants to review and revise the program for the following year.

Mentoring for new administrators within the district was less formal and less defined. All new administrators received mentor assignments, but there were no written guidelines, and administrators reported a range of experiences. The process for administrators was described as valuable but unstructured.

It was not clear how the district chose the professional development opportunities it offered. Teachers reported that the leadership often asked for suggestions for professional development activities, but they never received any feedback on how the leadership finally selected topics or why it made those choices. Individual teachers could avail themselves of a generous reimbursement practice, but the district did not generally pay for conferences and workshops; the district did provide a substitute teacher, however, if a teacher chose to pay registration and transportation costs.

Teacher evaluations were not done on a timely basis, and some teachers had not been evaluated at all for a period of years. There were few administrator evaluations available in personnel folders reviewed by the EQA examiners. Administrators did adhere to a procedure for five-minute classroom walk-throughs. Principals were responsible for providing instructional leadership, but felt constrained in their evaluative roles by what they perceived as ambiguity in the teachers' contract.

Access, Participation, and Student Academic Support

The EQA examiners gave the Littleton Public Schools an overall rating of 'Satisfactory' on this standard. They rated the district as 'Satisfactory' on eight and 'Needs Improvement' on two of the ten performance indicators in this standard.

The district used formative assessments and summative data to identify students at risk of not attaining proficiency on MCAS tests. Math scores did not improve over the three-year period and lagged behind ELA scores. Furthermore, the achievement gap between special education students and regular education students did not improve during this period.

The district provided a range of programs that were comprehensive, accessible, and rigorous. The elementary and middle schools grouped students heterogeneously, providing academic support in the classroom for special education students, as needed. The district had a large support staff including special education teachers, speech aides, instructional aides, reading specialists, and math specialists. These professionals and paraprofessionals made it possible for the schools to use an inclusion model for most students.

The high school had three levels of instruction: college preparatory, honors, and Advanced Placement (AP). All courses were open to all students, although teacher input and counseling played a large role in determining course selection. The results of the AP exams were unsatisfactory in many disciplines. EQA examiners attributed these low scores to the heterogeneous population of many AP classes at Littleton High School, and the district concurred.

The only significant subgroup in Littleton was special education students. All other subgroups represented less than 10 percent of the district's enrollment. The model of inclusion drove all major decisions in the district, and therefore all programs and activities were open to all students. Administrators tracked student data carefully to make sure that the special education students were proportionally represented.

The district was effective in maintaining high rates of attendance for students and staff. During the period under review, the district's student attendance rate was in the 95 to 96 percent range,

with the greatest number of absentees in grades 10-12. The average rate of teacher absence was 4.6 days per academic year, including professional development days.

The school committee reviewed and approved discipline, suspension, and exclusions policies in 2004. The district posted these policies on its website, and printed them in all student handbooks. At the elementary schools, classroom teachers handled most discipline issues. The middle school had an in-house suspension program in place; the high school did not, and instead the district instituted a Saturday School in 2005. According to administrators, the number of referrals declined dramatically over the two years that this disciplinary measure was in place.

The district was effective in retaining most students through graduation. The dropout rate for grades 9-12 was 0.6 percent in 2004, although no data were available for the last two years of the review period. The district had procedures in place to provide alternative schedules to meet the graduation requirements of potential dropouts. However, no program was in place for dropout recovery.

Financial and Asset Management Effectiveness and Efficiency

The EQA examiners gave the Littleton Public Schools an overall rating of 'Needs Improvement' on this standard. They rated the district as 'Satisfactory' on three, 'Needs Improvement' on six, and 'Unsatisfactory' on four of the thirteen performance indicators in this standard.

The superintendent developed the annual school budget with no evidence of input from administrators, teachers, or the public. The few budget-related documents covering the period under review made available to EQA examiners were not clear, comprehensive, or complete and did not provide accurate information on funding sources, history, and trends. The district did not implement an evaluation-based review process to determine the cost effectiveness of programs, initiatives, and activities as part of the budget development process, nor was the budget process based, in part, on student performance data and needs. The district did not use an ongoing analysis of aggregated and disaggregated student assessment data to assure the budget would be effective in supporting improved achievement for all students.

The district exceeded the net school spending requirement in each of the years under review by an average of 24.4 percent. An examination of the district operating budgets appropriated at

annual town meeting revealed that appropriations increased by 0.9 percent from FY 2003 to FY 2004, decreased by 1.5 percent from FY 2004 to FY 2005, and increased by 2.4 percent from FY 2005 to FY 2006, for a total increase of $212,419 or 1.7 percent from FY 2003 to FY 2006. During this period, the teacher salary schedule in the collective bargaining agreement with the teachers association increased by an average of three percent each year, and out-of-district special education costs increased by an average of 10 percent per year. These increases, coupled with stagnant operating budget appropriations, placed a strain on the funds available to the district for instruction and other direct student services, resulting in staff eliminations and spending reductions on instructional supplies, materials, and equipment. The town passed a general override of $1.2 million for the district in FY 2006 that alleviated the strain on the district's operating budget for that fiscal year. The town also approved a debt exclusion override to build a new middle school that opened in January 2007.

The district has four school buildings. The high school was built in 2001, the middle school opened in January 2007, and the two elementary schools were last renovated in 1998. All schools were adequately maintained and clean and provided an environment conducive to productive teaching and student learning. Security was evident in all schools. Doors were locked, and visitors had to identify themselves using an intercom at the main entrance to gain entry; once inside, they were required to sign-in. Some schools had a remote video camera/buzzer system.

Analysis of MCAS Student Achievement Data

The EQA's analysis of student achievement data focuses on the MCAS test results for 2003-2006, with primary attention paid to the 2006 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 2006 MCAS test results revealed differences between the achievement of students in Littleton 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 Littleton; and comparative analyses of districtwide, 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 entities. When the performance gap narrows over time, equity increases; when it widens over time, equity decreases.

Achievement

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

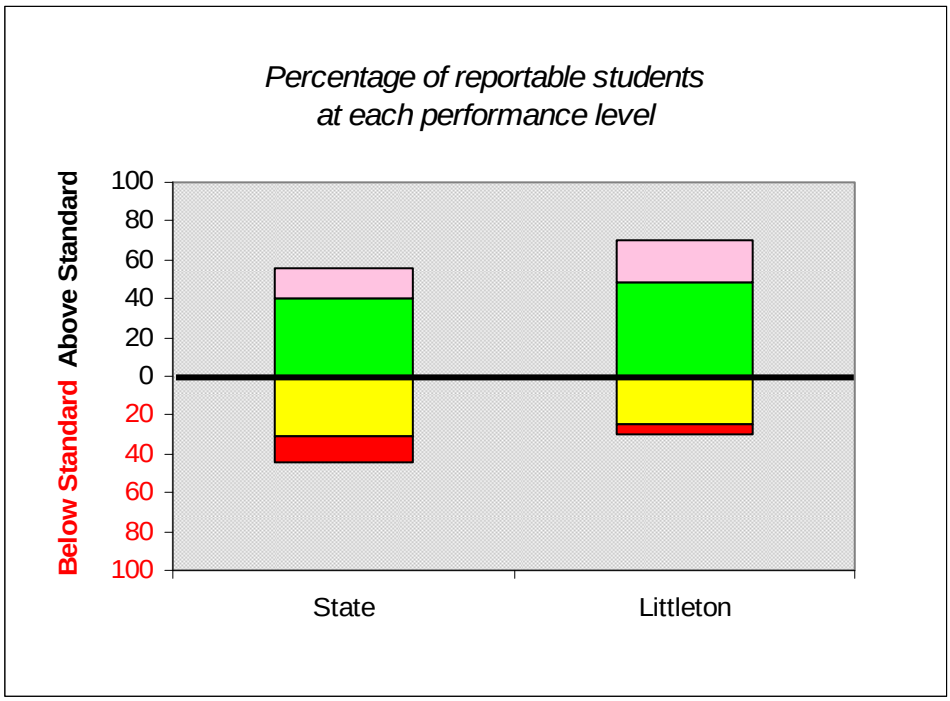
Findings:

- On average, more than two-thirds of all students in Littleton attained proficiency on the 2006 MCAS tests, much more than that statewide. Nearly four-fifths of Littleton students attained proficiency in English language arts (ELA), more than three-fifths of Littleton students attained proficiency in math, and more than two-thirds of Littleton students attained proficiency in science and technology/engineering (STE).

- Littleton's average proficiency index (API) on the MCAS tests in 2006 was 88 proficiency index (PI) points, 10 PI points greater than that statewide. Therefore, Littleton's average proficiency gap, the difference between its API and the target of 100, in 2006 was 12 PI points.

- In 2006, Littleton's proficiency gap in ELA was eight PI points, eight PI points narrower than the state's average proficiency gap in ELA. This gap would require an average improvement in performance of one PI point annually to achieve adequate yearly progress (AYP). Littleton's proficiency gap in math was 17 PI points in 2006, 11 PI points narrower than the state's average proficiency gap in math. This gap would require an average improvement of two PI points per year to achieve AYP. Littleton's proficiency gap in STE was 13 PI points, 16 PI points narrower than the statewide average.

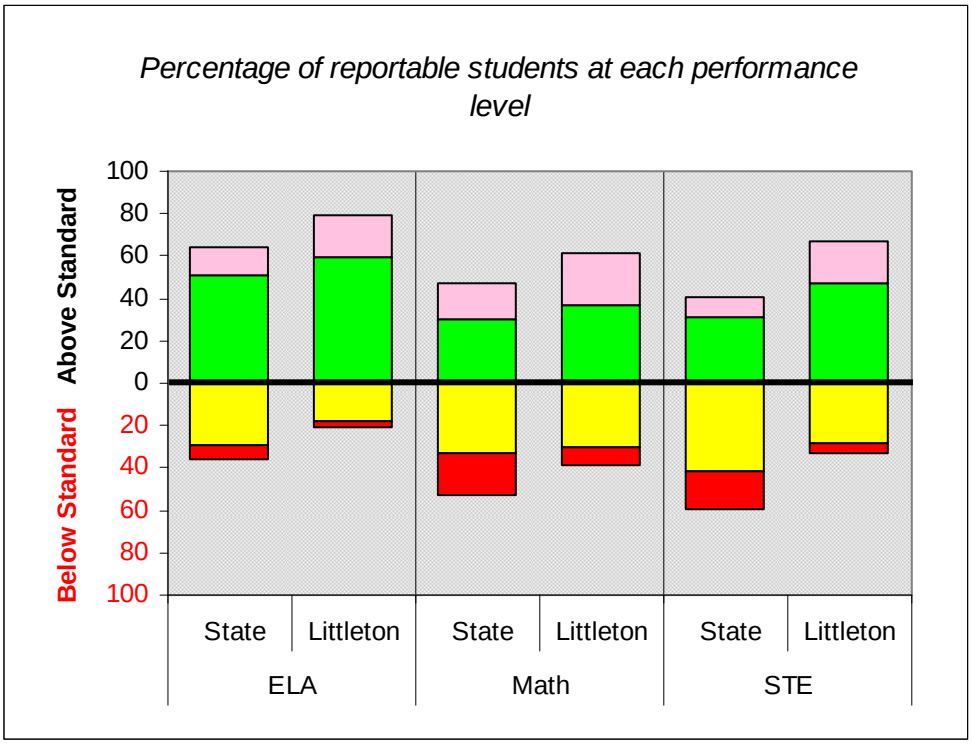
Figure/Table 1: Student MCAS Test Performance, All Students, 2006



	State	Littleton
Advanced	15	22
Proficient	41	48
Needs Improvement	31	24
Warning/Failing	14	6
Percent Attaining Proficiency	56	70
Average Proficiency Index (API)	78.3	87.6

In 2006, 70 percent of Littleton students attained proficiency on the MCAS tests overall, 14 percentage points more than that statewide. Six percent of Littleton students scored in the 'Warning/Failing' category, eight percentage points less than the statewide average. Littleton's average proficiency index (API) on the MCAS tests in 2006 was 88 proficiency index (PI) points, 10 PI points greater than that statewide. Littleton's average proficiency gap in 2006 was 12 PI points.

Figure/Table 2: Student MCAS Test Performance, by Subject, 2006



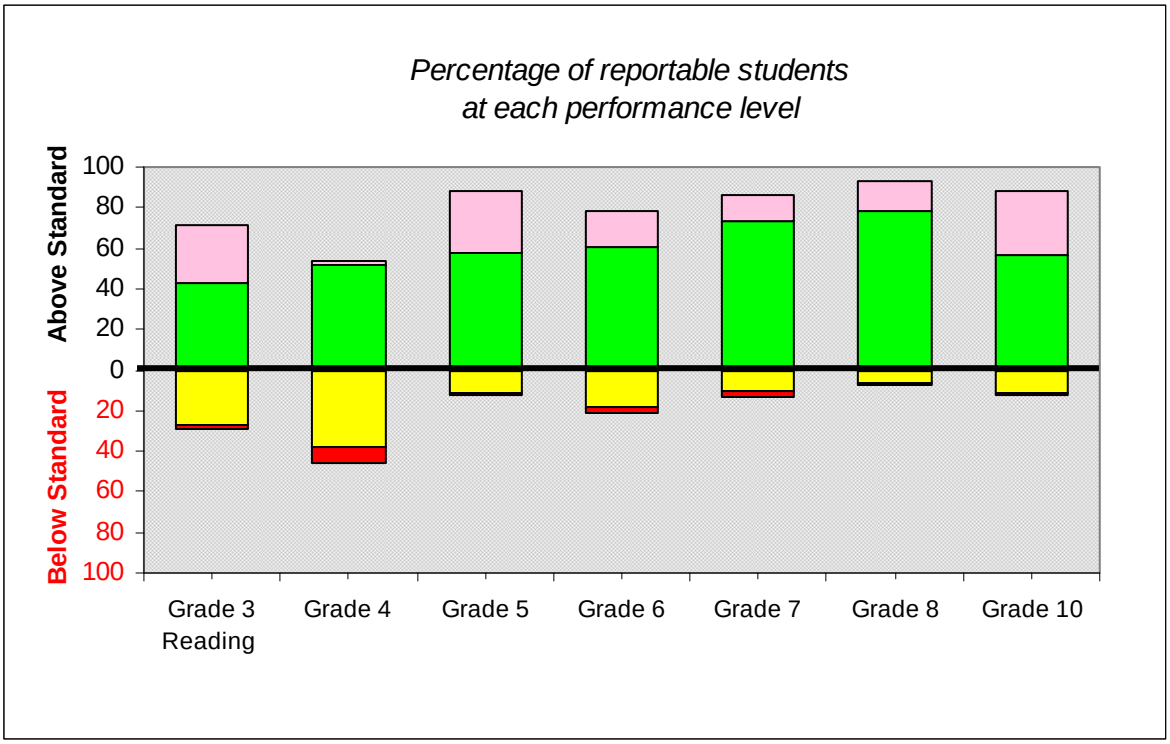
	ELA		Math		STE	
	State	Littleton	State	Littleton	State	Littleton
Advanced	13	19	17	25	10	20
Proficient	51	60	30	37	31	48
Needs Improvement	29	18	33	30	42	29
Warning/Failing	7	3	20	8	17	4
Percent Attaining Proficiency	64	79	47	62	41	68
Proficiency Index (PI)	84.3	91.8	72.3	83.4	71.4	87.1

In 2006, achievement in English language arts (ELA), math, and science and technology/engineering (STE) was higher in Littleton than statewide. In Littleton, 79 percent of students attained proficiency in ELA, compared to 64 percent statewide; 62 percent attained proficiency in math, compared to 47 percent statewide; and 68 percent attained proficiency in STE, compared to 41 percent statewide.

Littleton students had stronger performance on the 2006 MCAS tests in ELA than in math and STE. The proficiency index for Littleton students in ELA was 92 PI points; in math, it was 83 PI points; and in STE, it was 87 PI points. These compare to the statewide figures of 84, 72, and 71 PI points, respectively.

The proficiency gap for Littleton students was eight PI points in ELA, 17 PI points in math, and 13 PI points in STE. These compare to the statewide figures of 16, 28, and 29 PI points, respectively. Littleton's proficiency gaps would require an average annual improvement of one PI point in ELA and two PI points in math to meet AYP.

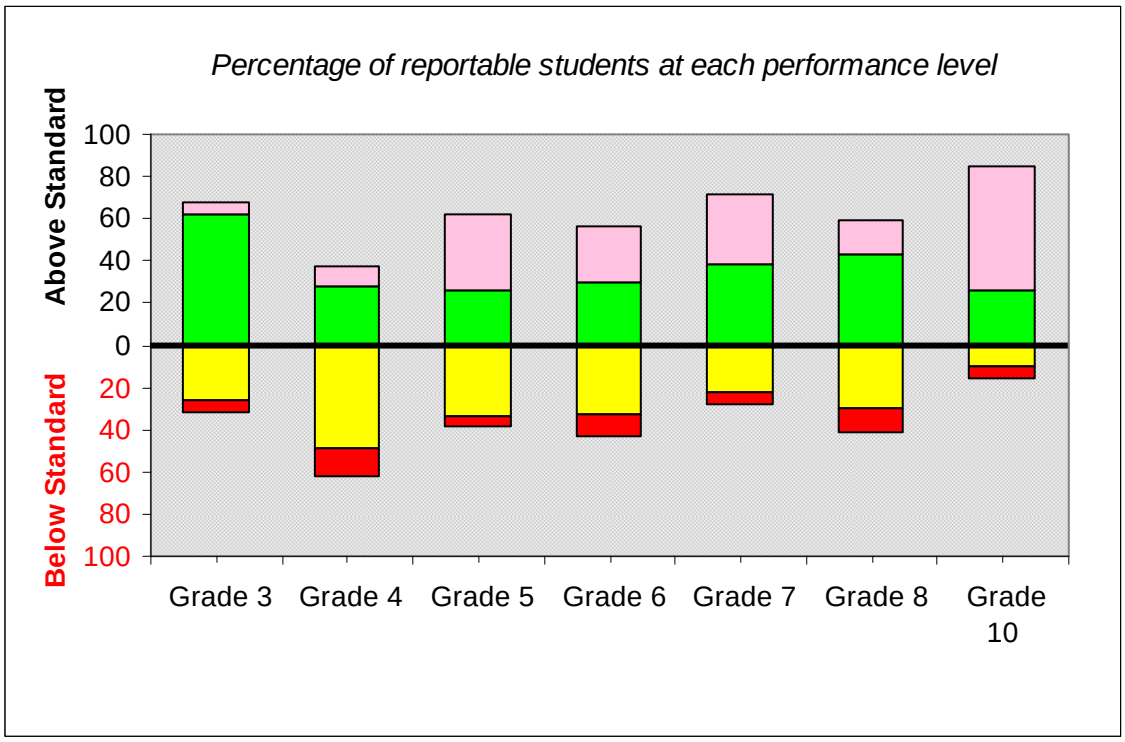
Figure/Table 3: Student MCAS English Language Arts (ELA) Test Performance, by Grade, 2006



	Grade 3 Reading	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10
Advanced	28	2	30	18	13	15	32
Proficient	43	52	58	61	73	78	57
Needs Improvement	27	38	11	18	10	6	11
Warning/Failing	2	8	1	3	3	1	1
Percent Attaining Proficiency	71	54	88	79	86	93	89

The percentage of Littleton students attaining proficiency in 2006 in ELA varied by grade level, ranging from a low of 54 percent of grade 4 students to a high of 93 percent of grade 8 students.

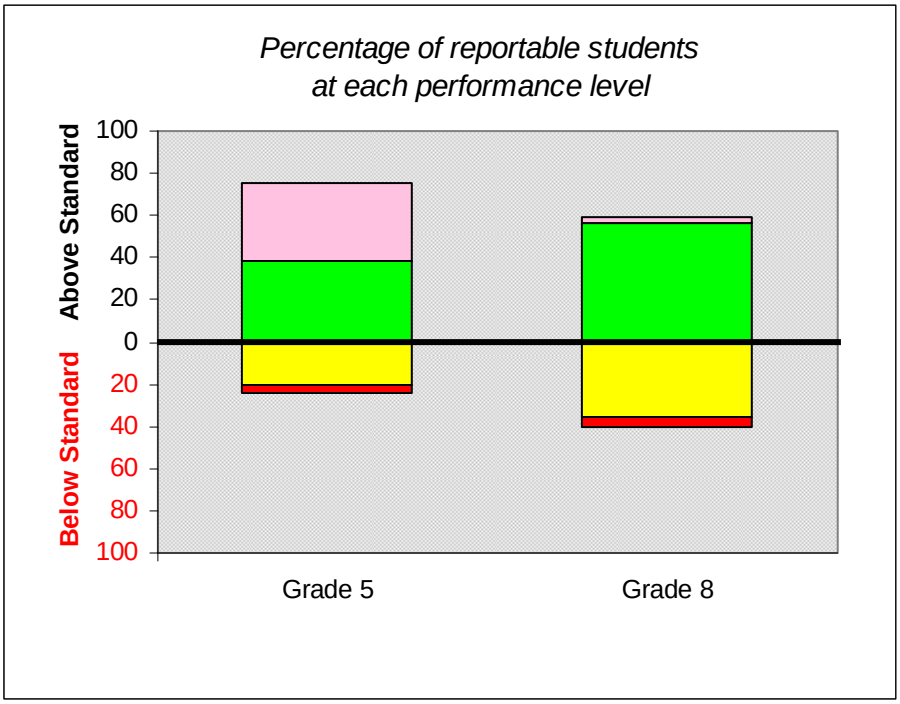
Figure/Table 4: Student MCAS Math Test Performance, by Grade, 2006



	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10
Advanced	6	10	36	27	34	16	58
Proficient	62	28	26	30	38	43	26
Needs Improvement	27	49	34	33	22	30	10
Warning/Failing	5	13	5	11	6	11	5
Percent Attaining Proficiency	68	38	62	57	72	59	84

The percentage of Littleton students attaining proficiency in 2006 in math varied considerably by grade level, ranging from a low of 38 percent of grade 4 students to a high of 84 percent of grade 10 students.

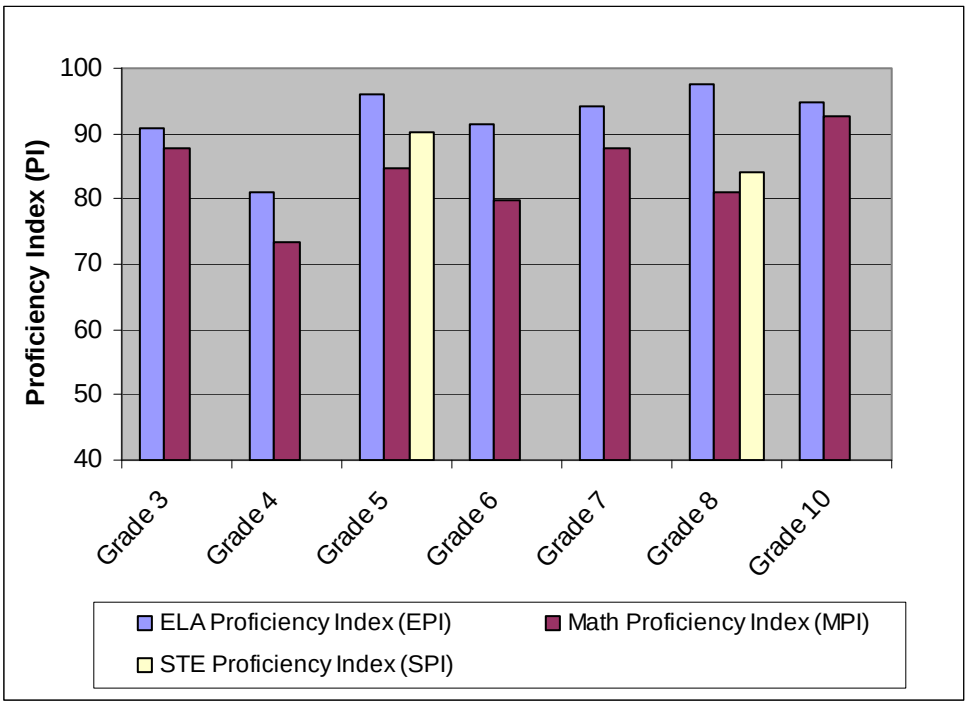
Figure/Table 5: Student MCAS Science and Technology/Engineering (STE) Test Performance, by Grade, 2006



	Grade 5	Grade 8
Advanced	37	4
Proficient	38	56
Needs Improvement	21	36
Warning/Failing	4	4
Percent Attaining Proficiency	75	60

In Littleton in 2006, 75 percent of grade 5 students attained proficiency in STE, and 60 percent of grade 8 students did so.

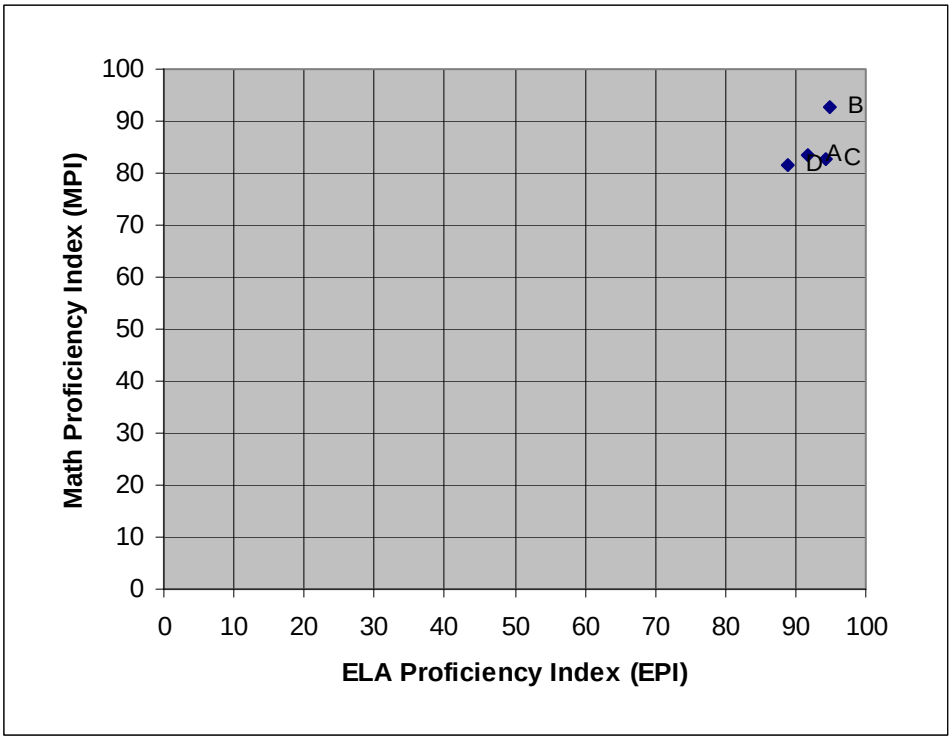
Figure/Table 6: Student MCAS Proficiency Indices, by Grade and Subject, 2006



	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10
ELA Proficiency Index (EPI)	90.7	81.0	96.0	91.4	94.3	97.4	94.8
Math Proficiency Index (MPI)	87.7	73.3	84.6	79.9	87.9	81.1	92.6
STE Proficiency Index (SPI)			90.2			84.2	

By grade, Littleton's ELA proficiency gap in 2006 ranged from a low of three PI points at grade 8 to a high of 19 PI points at grade 4. Littleton's math proficiency gap ranged from a low of seven PI points at grade 10 to a high of 27 PI points at grade 4. Littleton's STE proficiency gap was 10 PI points at grade 5 and 16 PI points at grade 8.

Figure/Table 7: Student MCAS ELA Proficiency Index vs. Math Proficiency Index, by School, 2006



		ELA PI	Math PI	Number of Tests
A	Littleton	91.8	83.4	1,624
B	Littleton High School	94.8	92.6	183
C	Littleton Middle School	94.2	82.7	703
D	Russell Street Elementary	88.8	81.7	738

Littleton's ELA proficiency gap in 2006 ranged from a low of five PI points at Littleton High School to a high of 11 PI points at Russell Street Elementary School. Littleton's math proficiency gap ranged from a low of seven PI points at Littleton High School to a high of 18 PI points at Russell Street Elementary School.

Equity of Achievement

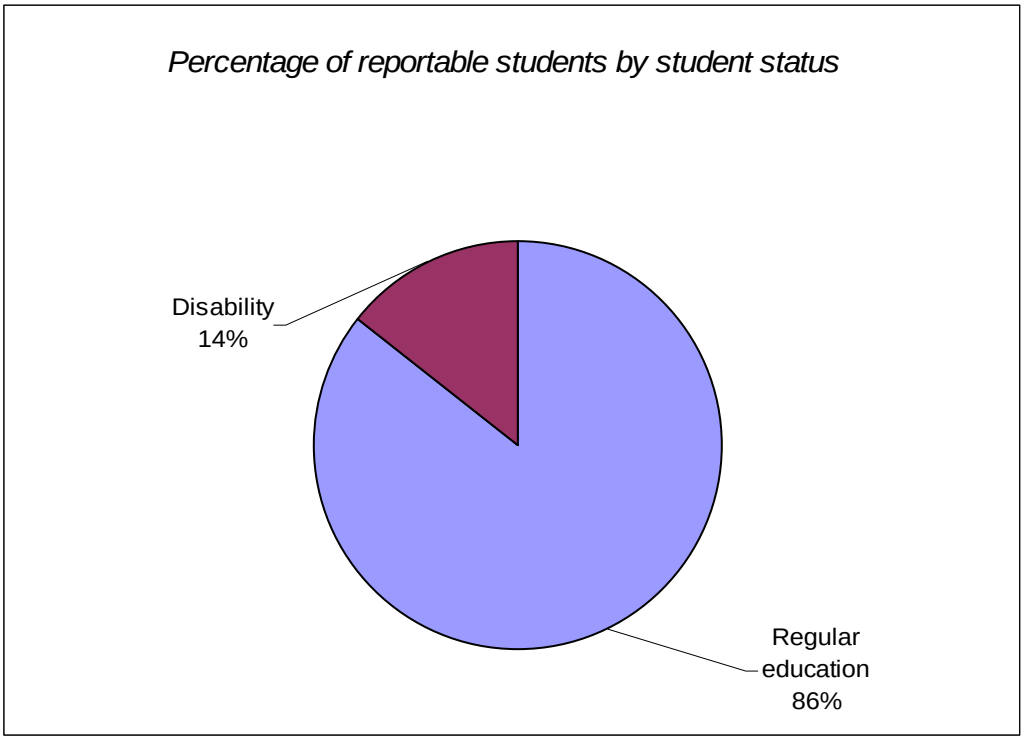
Do MCAS test results vary among subgroups of students?

Findings:

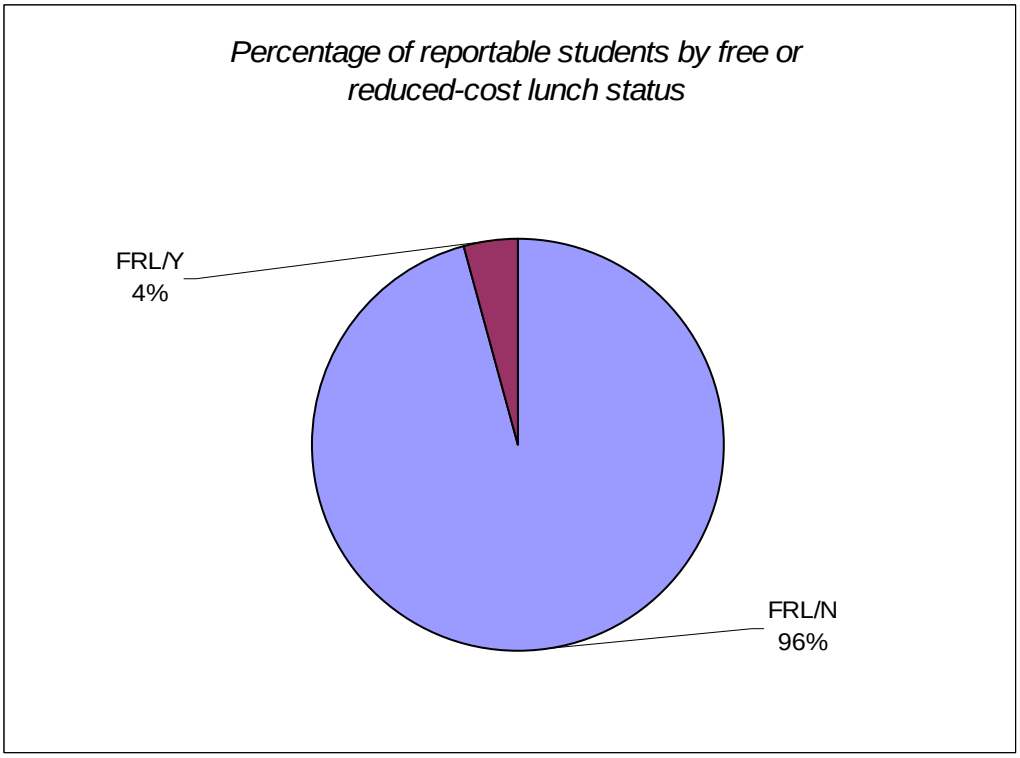
- MCAS performance in 2006 varied substantially among subgroups of Littleton students. Of the six measurable subgroups in Littleton in 2006, the gap in performance between the highest- and lowest-performing subgroups was 21 PI points in ELA and 28 PI points in math (regular education students, students with disabilities, respectively).
- The proficiency gaps in Littleton in 2006 in both ELA and math were wider than the district average for students with disabilities, low-income students (those participating in the free or reduced-cost lunch program), and male students. Less than half of students with disabilities and low-income students attained proficiency, while two-thirds of male students did so.
- The proficiency gaps in ELA and math were narrower than the district average for regular education students, non low-income students, and female students. For each of these subgroups, roughly three-fourths of the students attained proficiency.

Figures 8 A-B/Table 8: Student Population by Reportable Subgroups, 2006

A.



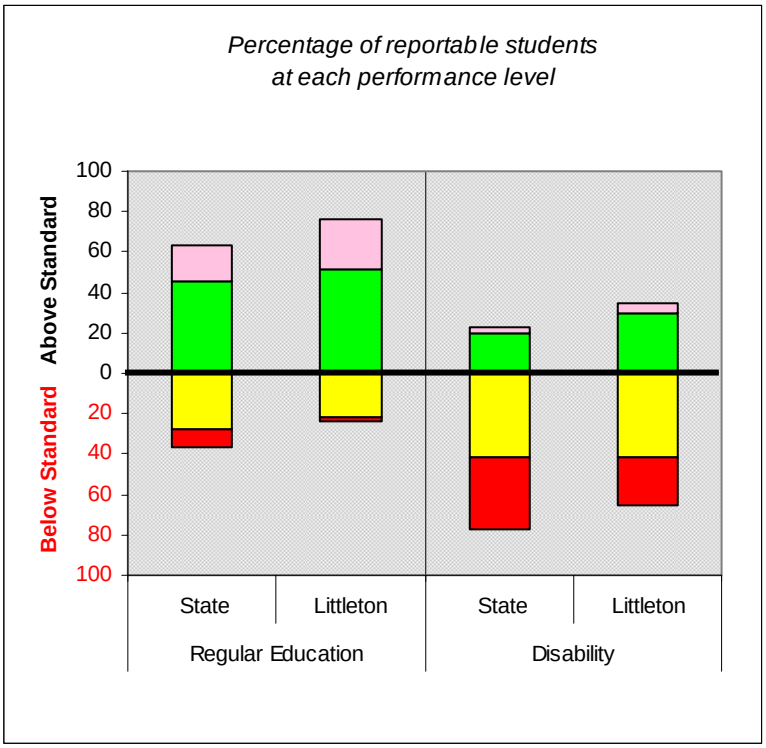
B.



	Subgroup	Number of Students
Student status	Regular education	697
	Disability	117
Free or reduced-cost lunch status	FRL/N	780
	FRL/Y	34

In Littleton in 2006, 14 percent of the students were students with disabilities and four percent were students participating in the free or reduced-cost lunch program.

Figure/Table 9: Student MCAS Test Performance, by Student Status Subgroup, 2006

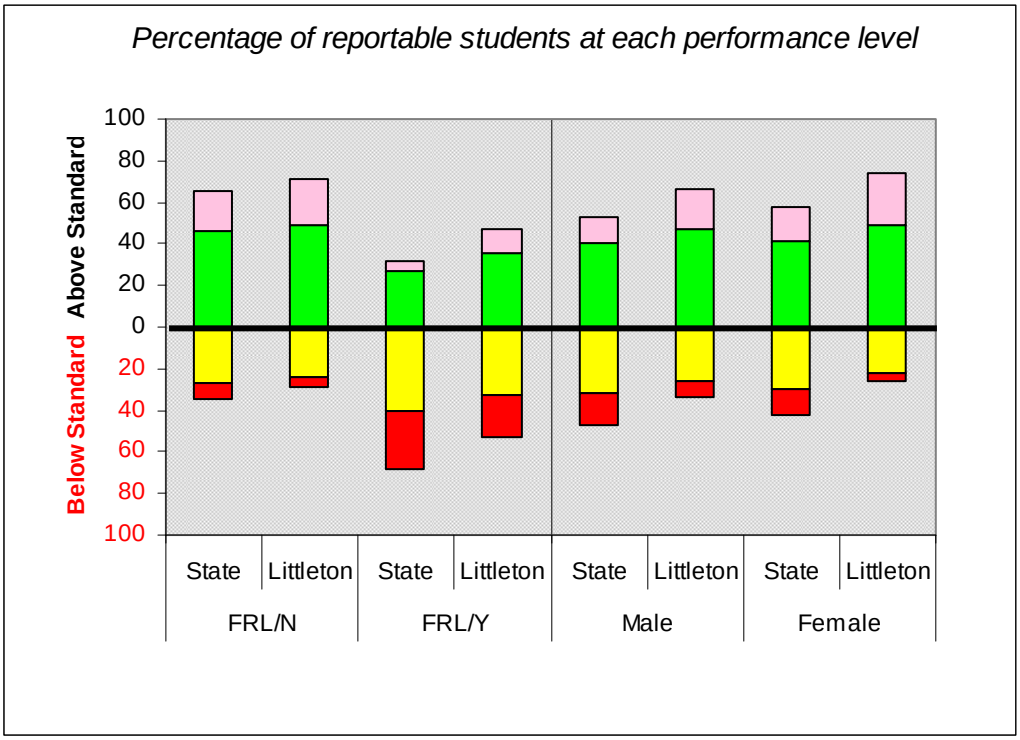


	Regular Education		Disability	
	State	Littleton	State	Littleton
Advanced	18	25	2	5
Proficient	46	51	20	29
Needs Improvement	28	21	41	41
Warning/Failing	8	3	36	24
Percent Attaining Proficiency	64	76	22	34
Average Proficiency Index (API)	84.0	91.0	55.9	66.8

In Littleton in 2006, the proficiency rate of regular education students was more than two times greater than that of students with disabilities. Seventy-six percent of regular education students and 34 percent of students with disabilities attained overall proficiency on the MCAS tests.

Littleton's average proficiency gap in 2006 was nine PI points for regular education students and 33 PI points for students with disabilities. The average performance gap between regular education students and students with disabilities was 24 PI points.

Figure/Table 10: Student MCAS Test Performance, by Socioeconomic Status and Gender Subgroups, 2006

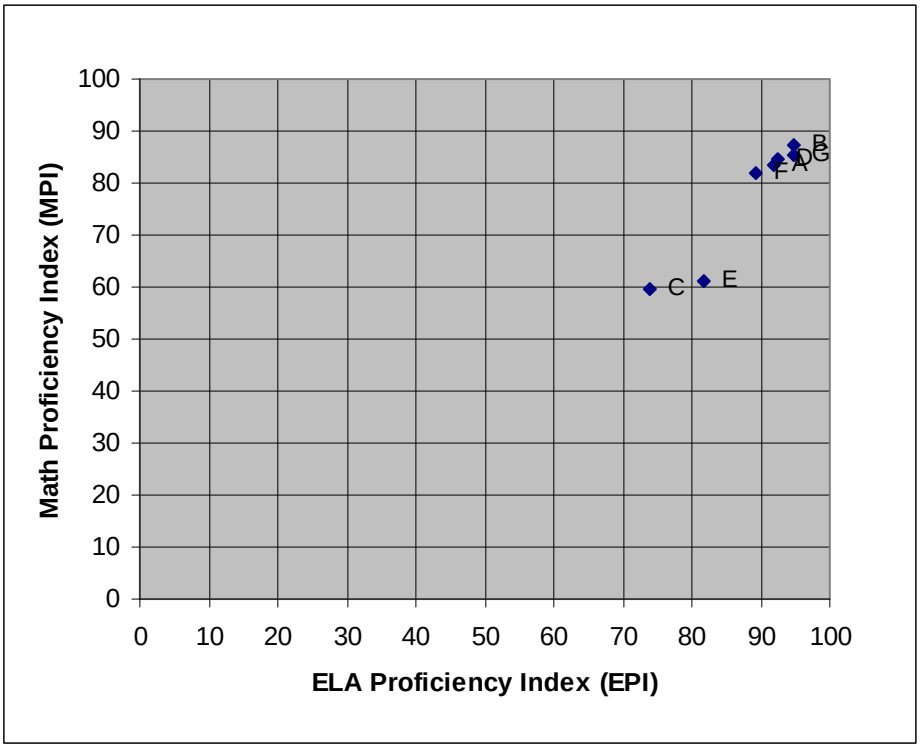


	FRL/N		FRL/Y		Male		Female	
	State	Littleton	State	Littleton	State	Littleton	State	Littleton
Advanced	19	22	5	12	13	19	17	25
Proficient	46	49	27	35	40	47	41	50
Needs Improvement	27	24	40	32	32	26	29	23
Warning/Failing	8	5	27	21	15	8	13	3
Percent Attaining Proficiency	65	71	32	47	53	66	58	75
Average Proficiency Index (API)	84.5	88.4	63.5	71.3	77.1	85.5	79.6	90.0

In Littleton in 2006, 47 percent of low-income (FRL/Y) students attained overall proficiency on the MCAS tests, compared to 71 percent of non low-income (FRL/N) students. The average proficiency gap was 29 PI points for low-income students and 12 PI points for non low-income students, and the average performance gap between the two subgroups was 17 PI points.

Seventy-five percent of female students and 66 percent of male students attained overall proficiency on the 2006 MCAS tests. The average proficiency gap was 14 PI points for male students and 10 PI points for female students, and the average performance gap between the two subgroups was four PI points.

Figure/Table 11: Student MCAS ELA Proficiency Index vs. Math Proficiency Index, by Subgroup, 2006

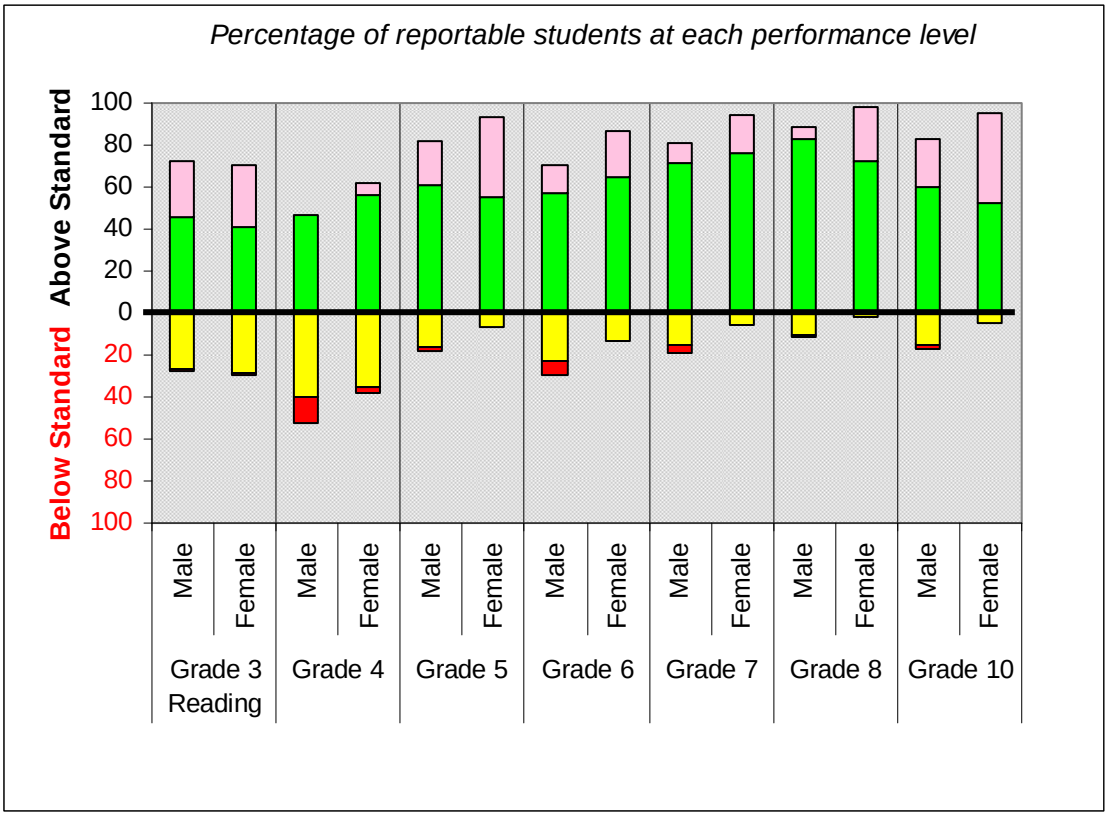


		ELA PI	Math PI	Number of Tests
A	Littleton	91.8	83.4	1,624
B	Regular Education	94.8	87.2	1,395
C	Disability	73.9	59.6	229
D	FRL/N	92.4	84.5	1,548
E	FRL/Y	81.6	61.0	68
F	Male	89.2	81.8	810
G	Female	94.7	85.2	806

Of the six measurable subgroups in Littleton in 2006, the gap in performance between the highest- and lowest-performing subgroups was 21 PI points in ELA and 28 PI points in math (regular education students, students with disabilities, respectively).

The proficiency gaps in Littleton in 2006 in both ELA and math were wider than the district average for students with disabilities, low-income (FRL/Y) students, and male students. The proficiency gaps in ELA and math were narrower than the district average for regular education students, non low-income (FRL/N) students, and female students.

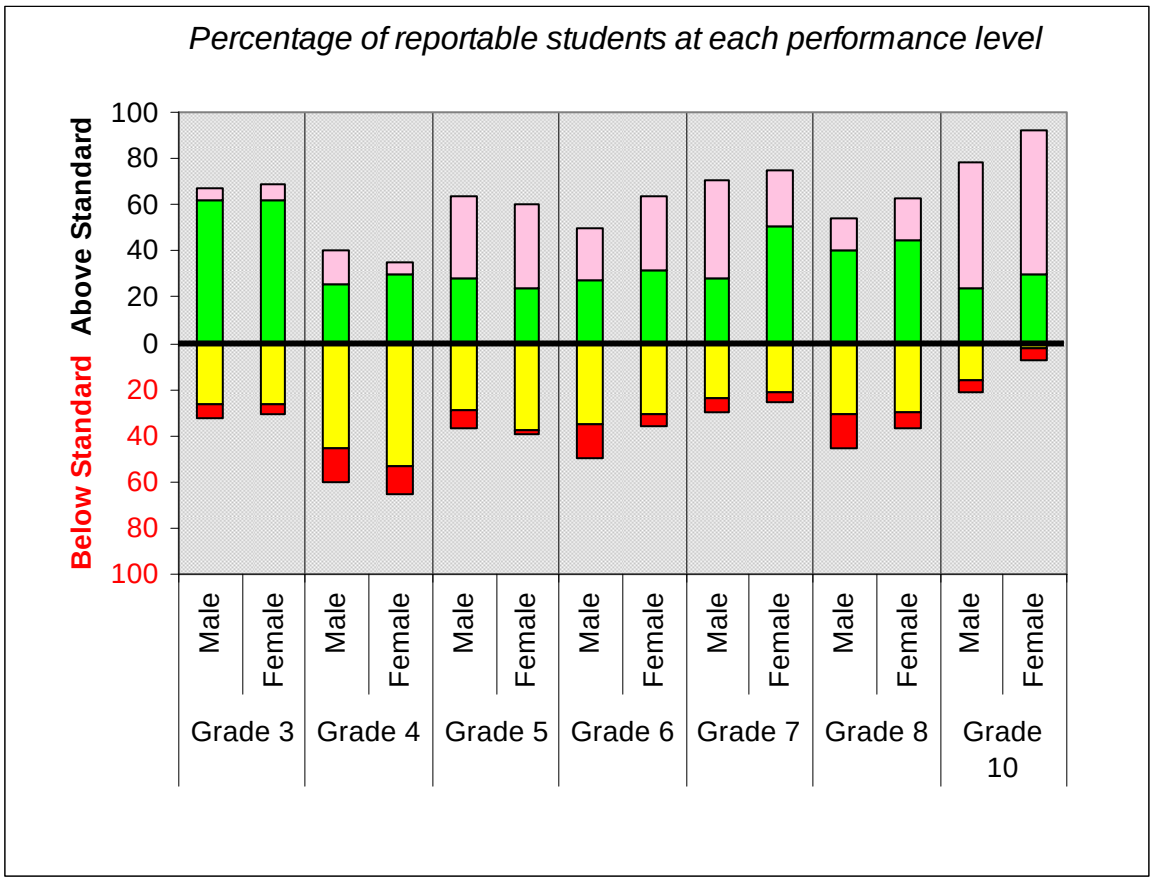
Figure/Table 12: Student MCAS English Language Arts (ELA) Test Performance, by Grade and Gender, 2006



	Grade 3 Reading		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8		Grade 10	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Advanced	26	30	0	5	20	38	13	22	10	18	5	26	23	43
Proficient	46	41	47	57	61	55	57	65	71	76	83	72	60	53
Needs Improvement	26	28	40	35	16	7	23	13	15	6	10	2	15	5
Warning/ Failing	2	1	13	3	2	0	7	0	4	0	2	0	2	0
Percent Attaining Proficiency	72	71	47	62	81	93	70	87	81	94	88	98	83	96

In Littleton in 2006, female students outperformed male students on all grade-level ELA tests except at grade 3.

Figure/Table 13: Student MCAS Math Test Performance, by Grade and Gender, 2006



	Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8		Grade 10	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Advanced	5	7	14	5	35	36	23	32	43	24	14	19	55	63
Proficient	62	62	26	30	29	24	27	32	28	51	41	44	24	30
Needs Improvement	26	27	46	53	29	38	35	30	24	22	31	30	16	3
Warning/ Failing	7	4	14	12	8	2	15	6	6	4	15	7	6	5
Percent Attaining Proficiency	67	69	40	35	64	60	50	64	71	75	55	63	79	93

On the 2006 MCAS tests in math, female students outperformed male students at grades 3, 6, 7, 8, and 10. Male students outperformed female students at grades 4 and 5.

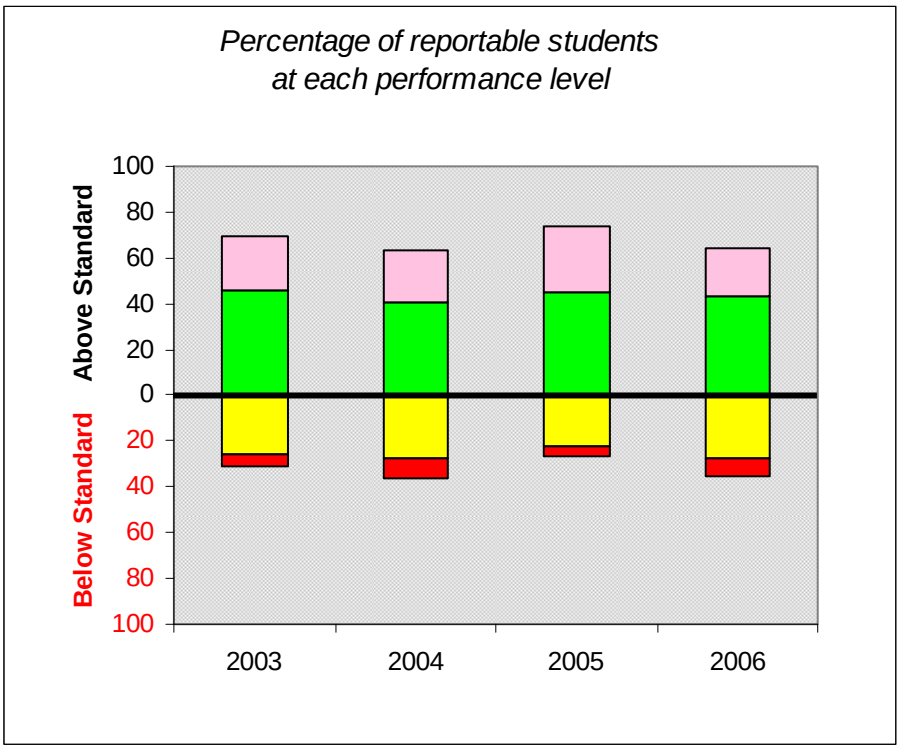
Improvement

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

Findings:

- Between 2003 and 2006, Littleton's MCAS performance showed a decline overall, in ELA, and in math, and an improvement in STE.
- The percentage of students scoring in the 'Advanced' and 'Proficient' categories fell by five percentage points between 2003 and 2006, while the percentage of students in the 'Warning/Failing' category increased by three percentage points. The average proficiency gap in Littleton widened from 13 PI points in 2003 to 16 PI points in 2006.
- Over the three-year period 2003-2006, ELA performance in Littleton declined at an average of less than one PI point annually.
- Math performance in Littleton also showed a decline, at an average of slightly more than one PI point annually over this period.
- Between 2004 and 2006, Littleton had improved STE performance, increasing at an average of two PI points annually over the two-year period.

Figure 14/Tables 14 A-B: Student MCAS Test Performance, All Students, 2003-2006



A.

	2003	2004	2005	2006
Advanced	23	23	29	21
Proficient	46	41	45	43
Needs Improvement	26	27	22	28
Warning/Failing	5	9	4	8
Percent Attaining Proficiency	69	64	74	64
Average Proficiency Index (API)	87.3	83.3	88.8	84.2

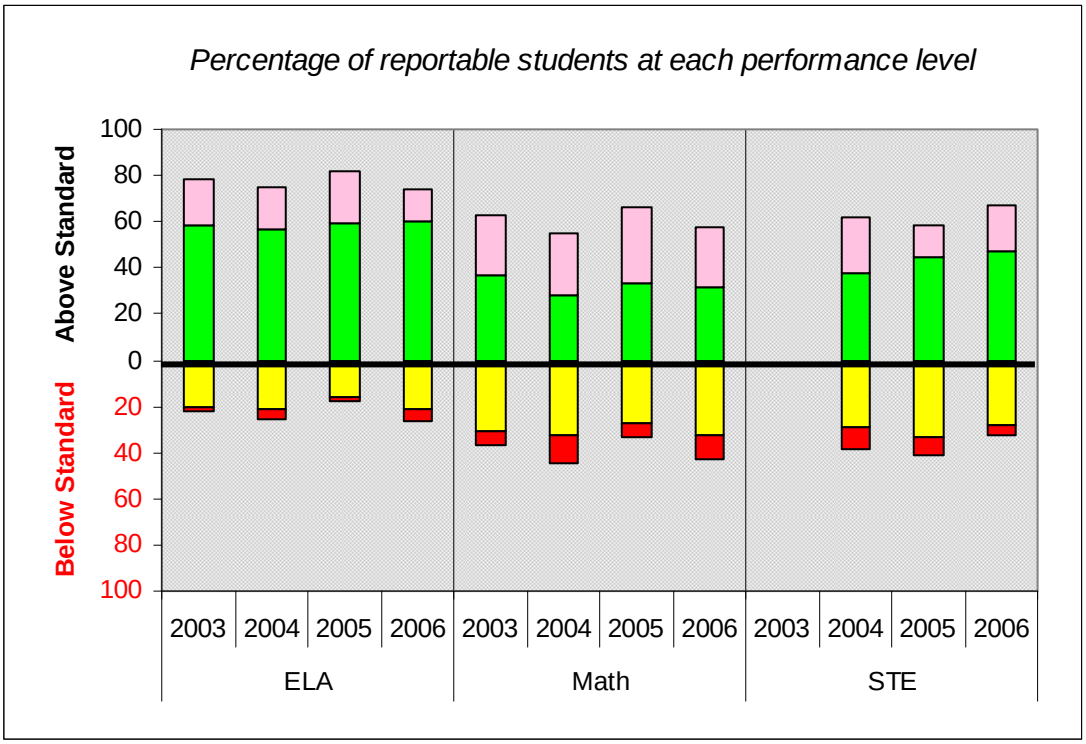
B. n-values

	2003	2004	2005	2006
Advanced	171	200	208	166
Proficient	336	356	321	344
Needs Improvement	191	239	161	220
Warning/Failing	33	78	30	64
Total	731	873	720	794

Note: Trend data include grades for which testing was administered for each subject in all four years; therefore, the 2006 data may differ from those reported in Figure/Table 1.

The percentage of Littleton students attaining overall proficiency on the MCAS tests decreased from 69 percent in 2003 to 64 percent in 2006. The percentage of students in the 'Warning/Failing' category increased from five percent in 2003 to eight percent in 2006. The average proficiency gap in Littleton widened from 13 PI points in 2003 to 16 PI points in 2006.

Figure/Table 15: Student MCAS Test Performance, by Subject, 2003-2006



Note: Trend data include grades for which testing was administered for each subject in all four years; therefore, the 2006 data for ELA and math may differ from those reported in Figure/Table 2. STE data for 2003 are not available.

	ELA				Math				STE			
	2003	2004	2005	2006	2003	2004	2005	2006	2003	2004	2005	2006
Advanced	19	17	23	14	26	27	34	26		24	14	20
Proficient	59	57	59	60	37	28	33	32		38	45	48
Needs Improvement	20	21	16	21	30	32	28	32		29	33	29
Warning/ Failing	2	5	2	5	7	12	6	10		9	8	4
Percent Attaining Proficiency	78	74	82	74	63	55	67	58		62	59	68
Proficiency Index (PI)	91.5	89.2	93.2	89.1	84.3	78.8	85.4	80.8		83.1	82.9	87.1

The percentage of Littleton students attaining proficiency in ELA decreased from 78 percent in 2003 to 74 percent in 2006. The proficiency gap in ELA widened from eight PI points in 2003 to 11 PI points in 2006.

The percentage of Littleton students attaining proficiency in math decreased from 63 percent in 2003 to 58 percent in 2006. The proficiency gap in math widened from 16 PI points in 2003 to 19 PI points in 2006.

The percentage of Littleton students attaining proficiency in STE increased from 62 percent in 2004 to 68 percent in 2006. The proficiency gap in STE narrowed from 17 PI points in 2004 to 13 PI points in 2006, resulting in an improvement rate of 24 percent.

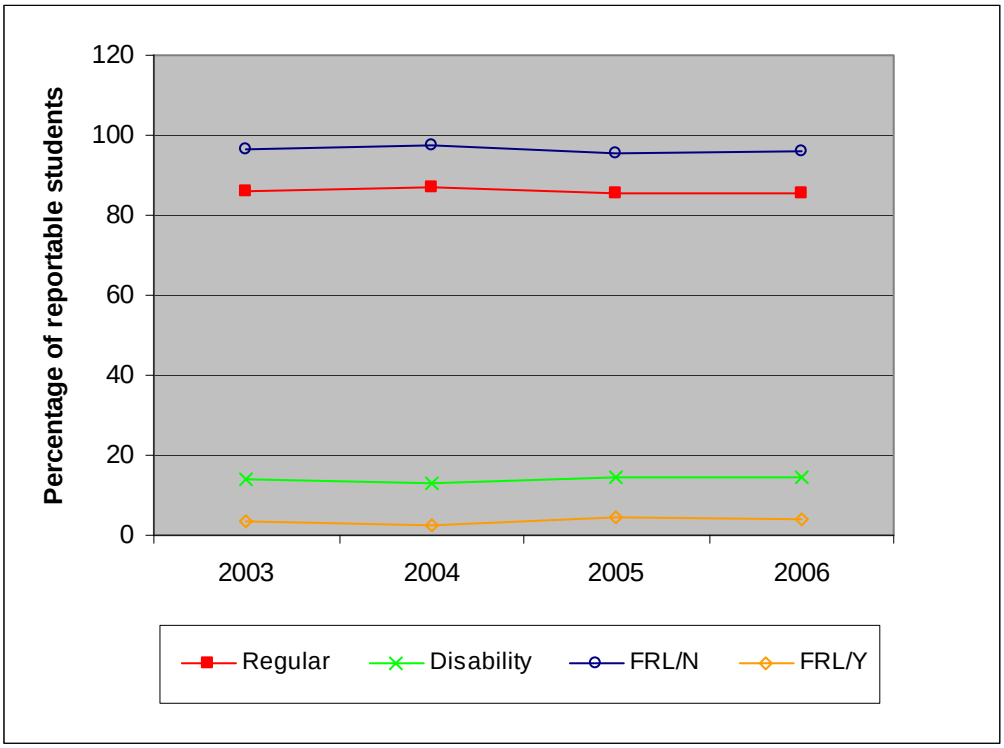
Equity of Improvement

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

Findings:

- In Littleton, all subgroups of students had a decline in performance in ELA between 2003 and 2006. The subgroup with the greatest decline in ELA was low-income students.
- In math, all subgroups in Littleton with the exception of low-income students showed a decline in performance between 2003 and 2006. The subgroup with the greatest decline in math was students with disabilities.
- The performance gap between the highest- and lowest-performing subgroups in ELA widened from 23 PI points in 2003 to 28 PI points in 2006, and the performance gap between the highest- and lowest-performing subgroups in math widened from 26 to 29 PI points during this period.

Figure/Table 16: Student Population by Reportable Subgroups, 2003-2006



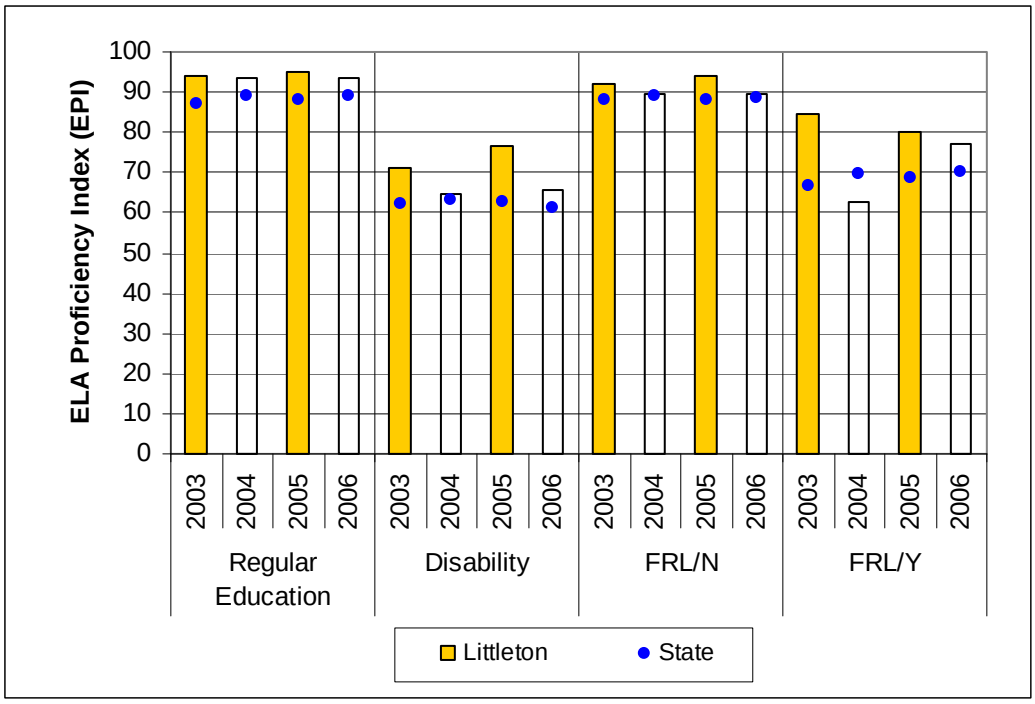
	Number of Students				Percentage of students			
	2003	**2004**	**2005**	**2006**	**2003**	**2004**	**2005**	**2006**
Littleton	583	743	658	814	100.0	100.0	100.0	100.0
Regular	502	646	564	697	86.1	86.9	85.7	85.6
Disability	81	97	94	117	13.9	13.1	14.3	14.4
FRL/N	564	723	629	780	96.7	97.3	95.6	95.8
FRL/Y	19	20	29	34	3.3	2.7	4.4	4.2

Note: The 2006 percentages of students reported here may differ from those reported in Figure 8; the percentages shown here are based on the total number of students in the district, whereas the percentages shown in Figure 8 are based on the number of students in reportable subgroups.

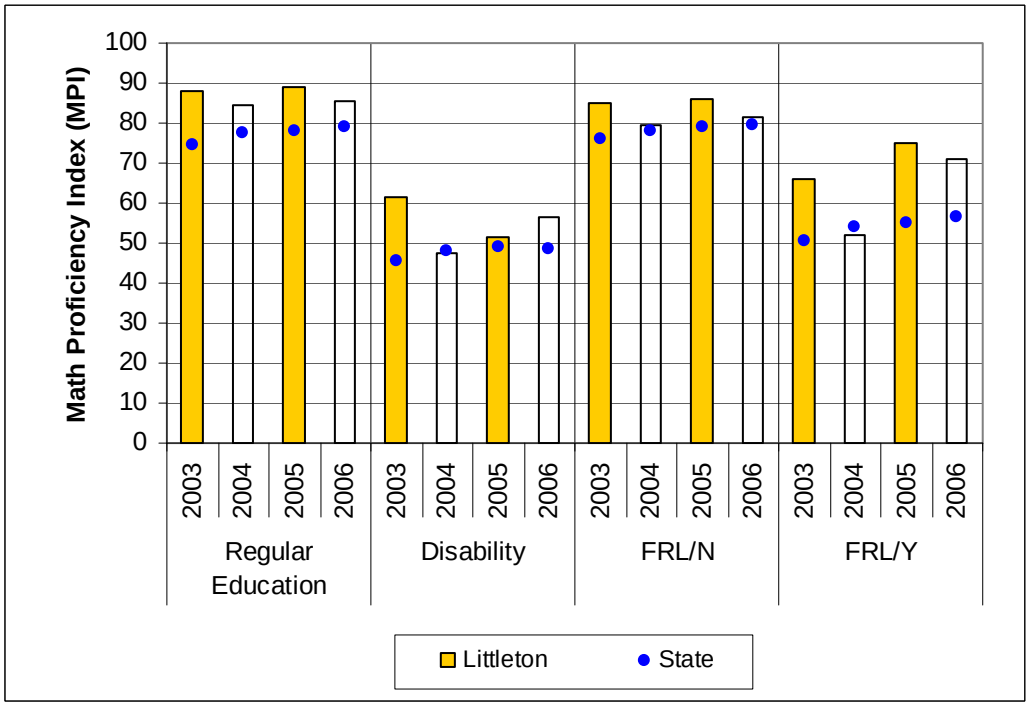
The makeup of the Littleton student population did not change much between 2003 and 2006. The proportion of students with disabilities increased by one-half percentage point, and the proportion of low-income (FRL/Y) students increased by nearly one percentage point over this period.

Figures 17 A-B/Table 18: MCAS Proficiency Indices, by Subgroup, 2003-2006

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

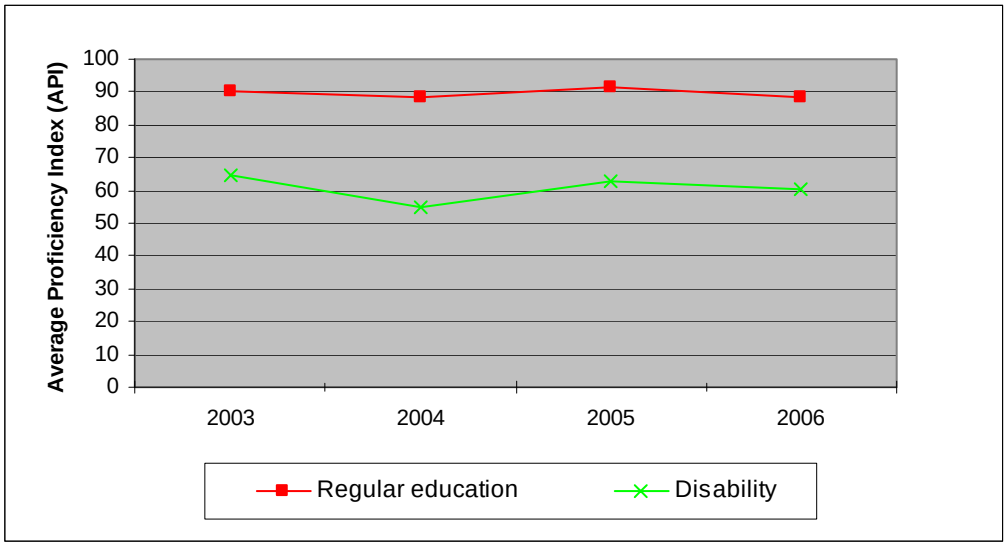


State				Littleton			
Subgroup	**Year**	**EPI**	**MPI**	**Subgroup**	**Year**	**EPI**	**MPI**
Regular Education	2003	87.3	74.7	Regular Education	2003	93.8	87.8
	2004	89.2	77.4		2004	93.4	84.4
	2005	88.3	78.2		2005	95.1	89.0
	2006	89.0	78.9		2006	93.5	85.3
Disability	2003	62.1	45.3	Disability	2003	71.0	61.4
	2004	63.3	47.9		2004	64.7	47.3
	2005	62.9	49.0		2005	76.6	51.3
	2006	61.2	48.4		2006	65.9	56.5
FRL/N	2003	87.9	75.9	FRL/N	2003	91.8	84.9
	2004	88.9	78.1		2004	89.8	79.4
	2005	88.3	79.0		2005	93.9	86.0
	2006	88.6	79.7		2006	89.8	81.3
FRL/Y	2003	66.6	50.7	FRL/Y	2003	84.6	66.1
	2004	69.7	53.9		2004	62.5	52.1
	2005	68.8	55.0		2005	80.0	75.0
	2006	70.0	56.3		2006	76.9	71.1

In Littleton, all subgroups of students had a decline in performance in ELA between 2003 and 2006. The subgroup with the greatest decline in ELA was low-income (FRL/Y) students. In math, all subgroups in Littleton with the exception of low-income (FRL/Y) students showed a decline in performance between 2003 and 2006. The subgroup with the greatest decline in math was students with disabilities.

The performance gap between the highest- and lowest-performing subgroups in ELA widened from 23 PI points in 2003 to 28 PI points in 2006, and the performance gap between the highest- and lowest-performing subgroups in math widened from 26 to 29 PI points during this period.

Figure/Table 18: Student MCAS Test Performance, by Student Status Subgroup, 2003-2006

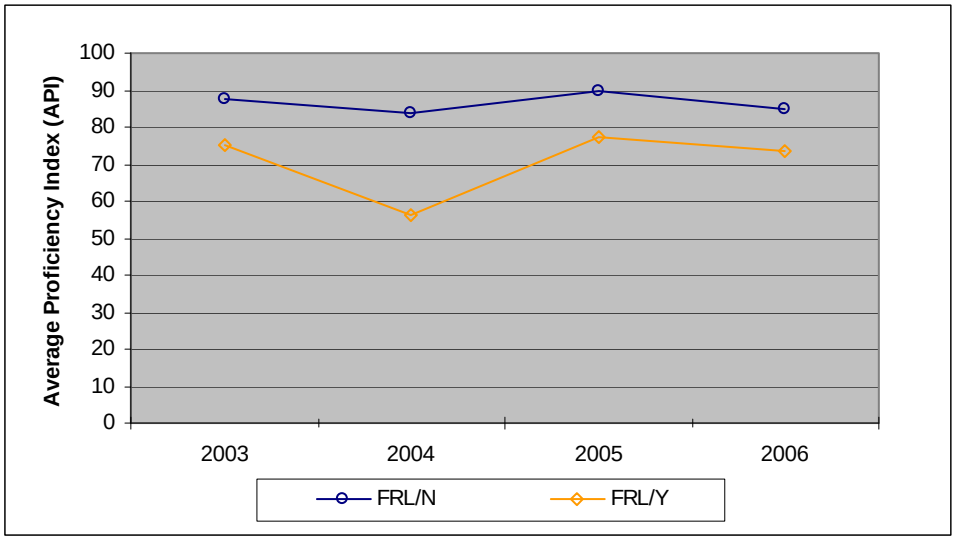


		API	EPI	MPI	Percent Attaining Proficiency ELA	Percent Attaining Proficiency Math
Regular education	2003	90.4	93.8	87.8	83	68
	2004	88.3	93.4	84.4	82	63
	2005	91.7	95.1	89.0	87	73
	2006	88.7	93.5	85.3	82	64
Disability	2003	64.8	71.0	61.4	35	28
	2004	54.7	64.7	47.3	29	11
	2005	62.9	76.6	51.3	41	11
	2006	60.4	65.9	56.5	33	21

Both regular education students and students with disabilities in Littleton had a decline in overall performance on the MCAS tests between 2003 and 2006. The average proficiency gap for Littleton's regular education students widened from 10 to 11 PI points; for students with disabilities, it widened from 35 to 40 PI points.

Between 2003 and 2006, the average performance gap between regular education students and students with disabilities widened by four PI points.

Figure/Table 19: Student MCAS Test Performance, by Socioeconomic Status Subgroup, 2003-2006

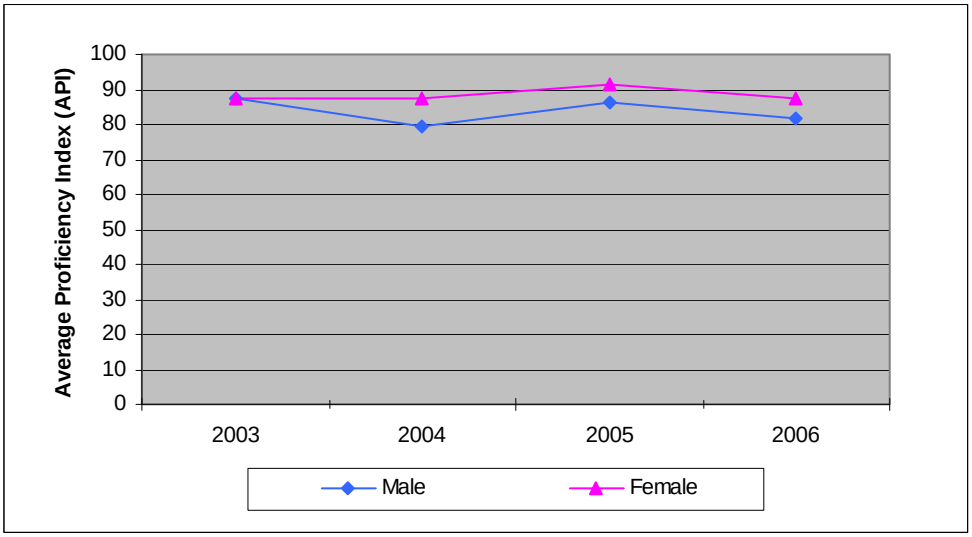


		API	EPI	MPI	Percent Attaining Proficiency ELA	Percent Attaining Proficiency Math
FRL/N	2003	87.8	91.8	84.9	79	64
	2004	83.9	89.8	79.4	76	56
	2005	89.5	93.9	86.0	83	68
	2006	84.8	89.8	81.3	75	58
FRL/Y	2003	75.0	84.6	66.1	62	36
	2004	56.3	62.5	52.1	25	25
	2005	77.2	80.0	75.0	53	47
	2006	73.5	76.9	71.1	54	47

Both the low-income (FRL/Y) and non low-income (FRL/N) subgroups in Littleton had a decline in overall performance on the MCAS tests between 2003 and 2006. The average proficiency gap for low-income students widened from 25 to 26 PI points, and for non low-income students it widened from 12 to 15 PI points.

Between 2003 and 2006, the average performance gap between low-income students and non low-income students narrowed by two PI points.

Figure/Table 20: Student MCAS Test Performance, by Gender Subgroup, 2003- 2006



		API	EPI	MPI	Percent Attaining Proficiency ELA	Percent Attaining Proficiency Math
Male	2003	87.4	90.1	85.2	72	64
	2004	79.4	85.7	74.7	68	50
	2005	86.2	88.7	84.3	72	67
	2006	81.8	86.1	78.7	68	54
Female	2003	87.2	93.0	83.4	85	62
	2004	87.1	92.4	82.9	80	61
	2005	91.3	97.1	86.5	91	67
	2006	87.2	93.0	83.3	81	61

Male students in Littleton had a decline in overall performance between 2003 and 2006, while the performance of female students was relatively flat during this period. The average proficiency gap for male students widened from 13 to 18 PI points, and for female students it remained the same at 13 PI points.

Between 2003 and 2006, the average performance gap between male and female students widened by five PI points.

Participation

Are all eligible students participating in required state assessments?

Finding:

- On the 2006 MCAS tests in ELA, math, and STE, eligible students in Littleton participated at levels that met or exceeded the state's 95 percent requirement.

n-Values by Subgroup and Performance Level, 2006

Subgroup	Performance Level	ELA	Math	STE
Littleton	ALL LEVELS	**811**	**813**	**221**
	Advanced	155	202	44
	Proficient	484	299	105
	Needs Improvement	149	245	63
	Warning/Failing	23	67	9
Regular Education	Advanced	148	197	43
	Proficient	440	276	99
	Needs Improvement	101	198	52
	Warning/Failing	7	28	4
Disability	Advanced	7	5	1
	Proficient	44	23	6
	Needs Improvement	48	47	11
	Warning/Failing	16	39	5
Limited English Proficient	Advanced	0	0	0
	Proficient	0	0	0
	Needs Improvement	0	0	0
	Warning/Failing	0	0	0
White	Advanced	151	196	43
	Proficient	469	288	98
	Needs Improvement	135	232	62
	Warning/Failing	19	60	7
Hispanic	Advanced	1	2	0
	Proficient	3	3	3
	Needs Improvement	3	2	0
	Warning/Failing	2	2	0
African-American	Advanced	0	0	0
	Proficient	1	0	0
	Needs Improvement	3	2	1
	Warning/Failing	1	3	2
Asian	Advanced	3	3	1
	Proficient	9	7	3
	Needs Improvement	7	9	0
	Warning/Failing	0	0	0
Free or Reduced-Cost Lunch/No	Advanced	151	197	43
	Proficient	465	291	101
	Needs Improvement	139	232	58
	Warning/Failing	18	55	6
Free or Reduced-Cost Lunch/Yes	Advanced	4	4	1
	Proficient	17	7	3
	Needs Improvement	9	13	5
	Warning/Failing	4	10	3
Male	Advanced	54	103	25
	Proficient	243	138	46
	Needs Improvement	88	123	31
	Warning/Failing	19	42	6
Female	Advanced	101	98	19
	Proficient	239	160	58
	Needs Improvement	60	122	32
	Warning/Failing	3	23	3

n-Values by Grade and Year, 2003-2006

Grade	Year	ELA	Math	STE
Grade 3	2003	153	0	0
	2004	117	0	0
	2005	129	0	0
	2006	132	132	0
Grade 4	2003	126	126	0
	2004	149	149	0
	2005	113	113	0
	2006	130	130	0
Grade 5	2003	0	0	0
	2004	0	0	123
	2005	0	0	138
	2006	107	107	107
Grade 6	2003	0	122	0
	2004	0	123	0
	2005	0	74	0
	2006	131	132	0
Grade 7	2003	106	0	0
	2004	119	0	0
	2005	111	0	0
	2006	105	107	0
Grade 8	2003	0	99	0
	2004	0	109	109
	2005	0	122	122
	2006	114	114	114
Grade 10	2003	76	76	0
	2004	112	112	0
	2005	94	93	0
	2006	92	91	0
All Grades	2003	461	423	0
	2004	497	493	232
	2005	447	402	260
	2006	811	813	221

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 2003-2006 reported in Figures/Tables 15-22 and in the table of n-values by year:
English language arts (ELA): 3, 4, 7, 10
Math: 4, 6, 8, 10
Science and technology/engineering (STE): 5, 8

Data for science and technology/engineering (STE) are not included in computing overall proficiency and the average proficiency index (API); they will be included beginning in 2007 when STE becomes a graduation requirement.

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

The participation rates of limited English proficient (LEP) students reported here differ from those reported by the Department of Education in its Adequate Yearly Progress (AYP) reports, as the latter includes students who formerly had LEP status but no longer did at the time of testing.

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 2006 data.

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

Rounded values may result in slight apparent discrepancies.

Standard Findings and Summaries

Standard I: Leadership, Governance, and Communication														
Ratings▼ Indicators►	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**Total**
Excellent														
Satisfactory	✓	✓	✓	✓			✓	✓	✓		✓	✓	✓	**10**
Needs Improvement					✓	✓				✓				**3**
Unsatisfactory														

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.

Standard Rating: Satisfactory

Findings:

- The district had a District Improvement Plan (DIP) in place for the entire period under review, as well as School Improvement Plans (SIP) for each of the four buildings that were in alignment with the DIP.
- The five-member school committee changed entirely during the period under review, and all members participated in the Massachusetts Association of School Committees (MASC) training. All newly elected members met with the superintendent and worked with veteran board members to familiarize themselves with the duties and responsibilities associated with the position.
- The entire school district utilized various sources of data to aid in the development of programs to best meet the needs of the student body. Administrators, team leaders, and staff members met on a regular basis to review available data to assist the district in making sound decisions.

- The superintendent in place during the period under review did not work closely with the school committee, town officials, and administrators during the development of the budget, and only sought input from the administrative team when he had to cut the budget. The district presented little evidence that the use of student achievement data drove the establishment of the budget.
- The school committee evaluated the superintendent on two occasions during the period under review, and the administrative files contained only three summative evaluations for the 13 administrators employed by the district during that period.
- The district had a safety/crisis plan in place that the superintendent of schools, the police chief, and the fire chief reviewed on an annual basis. Regular drills occurred annually, and all new members of the educational community received training relative to the procedures set forth in the district manual.
- The district posted a great deal of information on its website, which it updated on a regular basis.

Summary

The five-member school committee experienced complete turnover during the period under review. During the last election, the chairperson of the school committee shared all pertinent, but not confidential, information with each candidate. Newly elected members met with the superintendent and other members of the committee prior to their first school committee meeting. While the committee did not have a formal mentoring program in place, veteran members offered support via the telephone, face-to-face meetings, and e-mail. The committee had subcommittees in the areas of budget and policy that met on a regular basis and shared information with the entire committee. The policy subcommittee continually worked on the policy manual to ensure that it reviewed and updated all policies on a regular schedule.

The superintendent delegated the leadership of each school and program to the relevant administrator, and the district practiced controlled site-based management within the parameters set by the superintendent. The central office team met on a weekly basis and the administrative team met bi-weekly. The superintendent set agendas for all meetings, and members of the administrative team had ample opportunity to introduce topics deemed necessary. The district

website provided a great amount of information, including updated notices of importance issued by the office of the superintendent, as well as links to each of the four schools.

The district had a District Improvement Plan (DIP) in place for all the years under review, which the administrative team and the school committee reviewed on a regular basis. While the goals of curriculum and instruction, professional development, assessment, community and communications, and culture and climate did not change, the objectives, timelines, and strategies changed on a regular basis as the district continued to use data and assess student achievement. The DIP appeared on the website and was available in the form of a brochure to all interested parties. Curriculum brochures for each grade level were available in each building. The district prominently displayed its vision and mission statements in each school, as well as in the office of the superintendent.

The district analyzed MCAS data on a regular basis to review and modify programs, and utilized a multitude of other assessment tools. The superintendent provided the school committee and the community at large with an annual district report card, outlining the MCAS results and reporting on the achievements of the district. While the district used aggregated assessment data regularly, the only use of disaggregated data applied to the special education subgroup.

Members of the teaching staff had 90-minute professional development periods scheduled over 24 days, in addition to the use of time at general faculty meetings held every other week. These periods afforded staff members the time to review data and to work in grade level/department sessions to share information and various teaching strategies.

Indicators

1. The district and school leaders had a clearly understood vision and/or mission, goals, and priorities included in the District Improvement Plan (DIP). The standards-based plan and the analysis of student achievement data drove the development, implementation, and modification of educational programs.

Rating: Satisfactory

Evidence

The district had a district improvement plan (DIP) that served as its strategic plan in place for all of the years under review. The DIP, encompassing the period 2004 through 2008, evolved from the previous DIP (2002 to 2004). Steering committees, made up of school personnel, school committee members, and community members, developed both plans, and the school committee adopted each during a regularly scheduled meeting. Both plans outlined the improvement planning process, and both contained the same five goals: curriculum and instruction, professional development, assessment, community and communications, and culture and climate. Each goal contained a strategy, an action plan, success indicators, timelines, person responsible, professional development and cost, and needed resources. The timeline for the DIP clearly defined the responsibilities of the school committee, administration/staff, and school councils, and it included checkpoint reports, adoption and budget implications, the interpretation of data, and evaluation and revision.

School committee members all stated that the plan had been and continues to be the driving force of the district, and they have spent a great deal of time reviewing the objectives and the accomplishments that they outlined on an annual basis. The EQA team, through its review of administrative council meeting agendas and school committee minutes, verified that the district discussed the DIP on an ongoing basis .

Prominently posted in each building, as well as in the office of the superintendent, were the mission statement and the vision and goals of the district. In addition, a strategic plan brochure was readily available in all buildings and posted on the website.

2. School committee members were informed and knowledgeable about their responsibilities under the Education Reform Act, and relied on student achievement data and other educationally relevant data as the foundation of their policy-making and decision-making.

Rating: Satisfactory

Evidence

The five-member school committee changed during the period under review. The present committee has a chairperson and a vice chairperson who have held their positions for fewer than three years, another member with two years experience, and two recently elected members. All

members of the committee have taken the MASC training and, during the fall of 2006-2007, met with the school attorney for a refresher course on the duties and responsibilities associated with the position. All members stated they understood their role as a member and that micromanagement did not hinder the operation of the district. The committee had active subcommittees in the areas of budget development and policy and procedures. The subcommittees regularly updated the full committee about their activities.

The district did not have a formal mentoring program, but new school committee members worked with veteran members and with the superintendent to become familiar with the information they needed to be active members of the committee. Interviewees stated that during the past election when the town had to elect two new members, the chairperson of the committee shared school committee information with all candidates as soon as they took out papers to run for the position. School committee members stated that communication between the superintendent and members of the committee occurred on a regular basis via e-mail, memos, face-to-face meetings, and telephone conversations. All agreed that they shared information on a regular basis to ensure there would be no surprises brought forth at school committee meetings.

The school committee policy manual provided to the EQA team showed that the committee regularly revised and updated the document during the period under review. The policy subcommittee was proactive and established a timeline for a full review of the entire document. Interviewees stated that when the school committee had to address high profile issues, they involved parents and community members, and the committee valued their input. The committee used the contents of the DIP as its main source of student achievement data to inform its policy and decision-making.

3. <u>The district was highly effective at data selection, data generation, data gathering and interpretation, data use, and data-driven decision-making.</u>

Rating: Satisfactory

Evidence

Interviewees stated that the district had procedures and practices in place directly associated with the gathering, selection, and use of data. EQA's review of documents corroborated these statements. The district analyzed a great deal of MCAS data on a regular basis throughout the

year, and the analyses had an impact on the development and use of the DIP and each School Improvement Plan (SIP). During the period under review, the district utilized the services of an outside consultant to aid in the analysis of the data. Interviewees stated the timelines associated with this arrangement meant that the district did not get a final report until February, and this did not allow the district the opportunity to make needed modifications to curriculum and instruction on a timely basis. This changed during 2005-2006, as the district conducted all analysis in house and could provide the information gathered to the classroom teachers as soon as it received the assessment results. Some administrators had been trained in TestWiz and could share the information on a regular basis with all classroom teachers. A member of the superintendent's staff had an in depth knowledge of TestWiz and began training all members of the administrative staff and interested team leaders and classroom teachers in its use.

The superintendent provided the school committee with an MCAS report card on an annual basis, along with copies of the results showing the difference in scores from the previous year, as revealed in the EQA review of school committee minutes. School committee members stated it spent a great deal of time discussing the data, and how it, as a committee, could assist the schools to improve scores. The district also compared its scores with those of nine other communities they considered comparable to Littleton. The high school principal tracked information about SAT scores, ACT scores, college acceptances, and individual student scoring patterns. The high school administration also did one- and five-year follow-up studies on all graduating classes.

4. Each school used an approved School Improvement Plan (SIP) that was aligned with the DIP and was based on the analysis of student achievement data. (Only for multi-school districts)

Rating: Satisfactory

Evidence

The district produced School Improvement Plans (SIPs) for each school covering the entire period under review. Each SIP aligned with the DIP and included activities, success indicators, and defined timelines; and all SIPs contained the goals within the DIP. Each SIP included the goal related to student achievement/assessment and set annual targets for increasing MCAS scores. Each SIP promoted the importance of reviewing student achievement data. The concept of expanding assessment procedures by comparing a variety of databases to best meet the needs

of the entire student population appeared in each SIP. Each SIP also contained the goal of continuing efforts to promote two-way communication between the school and town and to cultivate a respectful culture. Administrators acknowledged that all members of the staff regularly discussed the goals contained within the DIP and SIPs, as evidenced by the agendas of faculty meetings.

Interviewees stated that all school councils met on a regular schedule within each school and met on a districtwide basis at least once a year. Principals stated parents and community members readily volunteered to serve on the councils. In some cases, a parent served on more than one council. The district produced a booklet during 2003-2004 outlining the duties of a council member, the background of the establishment of school councils, and a fact sheet. The district also produced an end-of-year evaluation that sought input from members regarding the use of data, collaboration, participation, representation, resource enhancement, and internal functions. The evaluation also asked members for written comments and suggestions for improving any noted areas of concern.

5. The district leadership promoted equity by treating schools' populations and allocations differently and allocating more and better resources to their students and schools with greater needs.

Rating: Needs Improvement

Evidence

Interviewees in administrative and budget sessions stated that during the period under review the superintendent did not seek much information from principals and classroom teachers as he developed the budget. Budget allocations did not take into account the differing needs of each school. Administrators indicated they did not know how much money they would have to run their individual buildings until the town meeting had voted.

The special education department always received the amount of money that it deemed necessary; however, in most instances the amount of money allocated for supplies and materials did not cover the needs of the staff. Teachers in focus groups all stated they did not feel the material and supplies afforded them were sufficient and that building PTO groups raised money to supplement the needs of each school.

During the period under review, the district instituted Virtual High School, instituted literacy and math coaches at the K-5 level, and purchased a new elementary literature series. All of these purchases occurred in response to the needs of individual schools and programs as determined through data analysis and research.

Interviewees stated that the new administration has brought about change in 2006-2007, and has established new formulas to look at the needs of each school and program and to allocate funds to those areas in most need.

6. The superintendent annually recommended and the school committee annually approved educationally sound budgets based primarily on the analysis of student achievement data and advocated for these budgets with the appropriating authority and community.

Rating: Needs Improvement

Evidence

Administrators stated that the establishment of the budget came solely under the purview of the superintendent of schools during the period under review, and while discussion relative to the needs of each building/program appeared on administrative council agendas, the requests of principals and other administrators did not always appear in the final budget. Administrators stated that the only time the leadership consulted them was when the district had to make cuts. The administrative team met and discussed the needed cuts and collectively made such cuts as a team. The majority of these cuts affected the supplies budget, and during the period under review this occurred annually. Principals did state they had the opportunity to discuss personnel needs based on student enrollment data, and in most cases class size came into play when final decisions had to be made.

The use of data did not play an integral part in budget decisions during the period under review, as the district had to work its way around budget cuts. Interviewees stated the district had been unable to review the MCAS results in time for budget development, as the consultant the district hired to analyze this information did not submit the report until February and the budget was due in January. Principals worked with the superintendent to identify budget priorities. In one case, interviewees stated that the district eliminated the business program in the high school so that it could save a program in the middle school that was in jeopardy.

School committee members indicated that they had very little to do with the establishment of the annual budget, and some stated they could not understand how the budget was prepared. This issue also surfaced when town officials met with EQA members. Interviewees stated that the finance committee gave the school committee a bottom line figure, and this amount of money became the budget. Interviewees stated that budget presentations occurred annually both at school committee meetings and in a public forum.

The new administration revamped the entire budget scenario with input from all administrators and produced an easy to understand format that included cost centers for each building and program. The school committee and the finance committee received the newly formatted budget with great praise, and all agreed the district provided the town with the information in an easy to understand manner and provided supporting data for the budget requests.

7. The leadership periodically reported to the school committee, staff, and community on the extent of its attainment of the goals in the DIP and the SIPs, particularly regarding student achievement.

Rating: Satisfactory

Evidence

The DIP and each SIP had defined dates when administrators would meet with the school committee. All principals presented their SIPs for the upcoming year at the December school committee meeting, discussing the rationale behind each goal and objective. The school committee discussed the attainment or non-attainment of goals from the previous SIPs. They also discussed the entire DIP and the attainment of district objectives set forth the previous year. School committee members stated the DIP drove the system, and the goals contained within both the DIP and the SIPs dictated the direction of the district, particularly regarding student achievement. The taping and showing of school committee meetings on multiple occasions allowed members of the community to become aware of the direction of the district and to offer suggestions to the superintendent and the members of the school committee. The local newspaper also reported on the results of each meeting, thus providing another avenue for parents and members of the community to understand the goals within the DIP and each SIP.

The district prominently displayed brochures that outlined the DIP, including the mission, vision, and goals of the district. These brochures were available in each building and in the office of the superintendent, as were curriculum documents by grade level. The district posted both the DIP and the SIPs on its website, which included a great deal of information regarding the entire school district.

8. District and school leadership used and effectively implemented practices that required all staff to regularly use aggregated and disaggregated student assessment data to improve instructional programs and services for all student populations.

Rating: Satisfactory

Evidence

The district analyzed MCAS test data on a regular basis for the period under review, according to interviewees. They stated that the use of a consultant to conduct this analysis had prevented them from reviewing data early in the school year, as the reports from the consultant did not reach the district until February. This situation also affected the annual presentation of the SIPs, as school councils did not have the information needed to update their individual plans in time for the December meetings of the school committee. Principals stated they could not make proper budget adjustments due to the lateness of the analysis of MCAS data. The following year, the district eliminated this situation by conducting all data analysis in house, and utilizing the information garnered from TestWiz. Interviewees stated they used the aggregate student assessment data, but only disaggregated data for the special education subgroup. Administrators cited the limited number of students in many subgroup populations as the reason deeper analysis did not occur.

During the latter period under review, the district established a new professional development approach in which each school had 24 early release days built into the school calendar. All interview groups stated the 90-minute sessions dealt with the review of student data and classroom trends at each grade level and within each department. Each group worked on what the district called a “smart” goal that dealt exclusively with the determined needs of the school, grade level, department, or a combination of any two. The team leaders in each building worked

with all staff members to address common issues and to discuss student achievement and teaching methodologies.

9. District and school leaders monitored student achievement data throughout the year, considered the goals identified in the DIP and the SIPs, and implemented or modified programs, policies, and services as required.

Rating: Satisfactory

Evidence

Interviewees stated the importance of the goals included in both the DIP and SIPs continually inspired personnel to search out better methods of assessing student achievement, and the EQA review of faculty meeting agendas and professional development days supported this assertion. The administrative team consistently monitored student achievement data, as well as classroom data, on a regular basis. The documents EQA reviewed included copies of MCAS test results for all of the years under review. School committee minutes revealed discussions concerning the analysis of current data, as well as the progress each school made toward the targets set in the DIP and individual SIPs. At these meetings, school committee members discussed the needs of each school in meeting the long-range goals associated with the No Child Left Behind (NCLB) Act.

The ongoing monitoring of student achievement data allowed the administration the opportunity to modify and/or implement programs and services as it deemed necessary. The district made curriculum modifications in the areas of writing, mathematics, open-response questions, and reading based on this constant monitoring. During the period under review, the district introduced the following assessment programs: Dynamic Indicators of Basic Early Literacy Skills (DIBELS), Developmental Reading Assessment (DRA), Group Reading Assessment and Diagnostic Evaluation (GRADE), and Group Mathematics Assessment and Diagnostic Evaluation (GMADE). The district also employed the John Collins Writing Across the Curriculum program toward the end of the period under review, when the analysis of student data indicated that students had difficulties with the writing process. Finally, at the secondary level the district introduced common midterm and final examinations.

10. The performance of the superintendent, administrators, and principals was annually evaluated based on MCAS results, other student achievement data, and the attainment of the goals in the DIP and the SIPs.

Rating: Needs Improvement

Evidence

The EQA team found evaluations of the former superintendent for the years 2003-2004 and 2004-2005 during its onsite review of the administrative personnel files. These evaluations contained informative statements that promoted growth and identified areas that needed work. All school committee members evaluated the superintendent, and the chairperson gave a composite evaluation to the superintendent. The evaluation tool that the school committee used rated the superintendent in the following areas: relationship with the committee, administrative leadership, curriculum, professional development, assessment, community relations, climate and culture, business and finance, staff relations, professional growth, and general comments. Strengths and areas in need of improvement appeared under each category and included the comments of all members of the school committee.

In its review of the personnel files of all principals and central office administrators, the EQA team found only three summative evaluations for the entire period under review, even though the contracts issued to each administrator explicitly stated that the superintendent would complete an annual evaluation. The three completed evaluations did include informative and instructive statements and did address areas that needed improvement.

The newly appointed superintendent instituted a new evaluation system based on the Principles of Effective Administrative Leadership, and each administrator has submitted mutually agreed upon goals that directly link to the DIP and the use of student achievement data.

11. The superintendent effectively delegated the educational and operational leadership of the schools to the principals and program directors and used student achievement data to assess the success of their leadership.

Rating: Satisfactory

Evidence

Administrative interviewees stated the superintendent delegated the leadership of each school and program to the assigned administrator, and the district practiced controlled, site-based management within the parameters set by the superintendent. Principals and members of the staff worked cooperatively when new staff had to be hired. Committees, made up of staff members and sometimes parents, reviewed the credentials of all applicants and submitted recommendations to the principal for final review and consideration. Interviewees stated that all final candidates met with the superintendent prior to the issuance of a contract. In one administrative interview, the principal stated he/she had the authority to reassign a staff member in a non-voluntary manner, and this proved to be positive for the both the district and the teacher.

During the entire period under review, the administrative council met on a regular basis, and the central office team met on a weekly basis. The superintendent presented sample agendas that included items addressing the DIP, the budget, student data, and other administrative issues. All members of both the administrative and central office councils had the opportunity to discuss district, building, and program needs. Interviews revealed that close communications existed among all members of the administrative team.

During the prior administration, the contracts issued to principals and other administrators did not have components related to student achievement as part of the hiring or re-hiring process. The current superintendent has instituted a new evaluation tool, based upon the Principles of Effective Administrative Leadership, that includes goal setting, alignment of goals to the DIP, and a specific timeline, and she stated that she would use improvements in student achievement to assess the effectiveness of administrators.

12. <u>The school committee and superintendent created a culture of collaboration and developed contracts and agreements that encouraged all stakeholders to work together to support and sustain improved student achievement.</u>

Rating: Satisfactory

Evidence

In its review of documents, the EQA team found signed teacher contracts in place for all of the years under review and for 2007 through 2009. Interviewees stated that the district settled

contracts in a timely fashion and the issue of student achievement did not appear as a bargaining issue. Other groups had agreements in place, with the exception of cafeteria workers, the high school custodian, and the district maintenance person, who received letters of appointment on an annual basis.

Members of the union and district administrators stated that regular meetings occurred and the lines of communication were always open. Members of the union stated that grievances were minimal during the period under review, and of those the superintendent had to handle only one grievance.

In interview sessions, both school officials and town officials stated that the ability of all parties to work collaboratively during the period under review had been an issue. The creation of the annual budget under the former superintendent always brought forth much frustration, as the document that the superintendent presented to both the school committee and the finance committee was constantly in a state of flux and not totally understood by either group. School committee members stated that during the school year, financial reports did not have consistent numbers from month to month, and the line item figures changed regularly. Interviewees stated that the new administration has completely revamped the budget process, the finance committee completely understood the recent presentation of the budget, and the school department is in line for a greater amount of money than in the past.

Interviewees stated the town is vested in the educational system, as evidenced by the fact that it opened a new high school in 2001, and during the site visit by EQA the new middle school opened. School and town officials all stated that student achievement has been, and continues to be, very important to the members of the community.

13. <u>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.</u>

Rating: Satisfactory

Evidence

During the entire period under review, the district had a comprehensive safety plan in place covering all schools and the central administration offices. Interviewees stated that the superintendent and the principals of each school reviewed the plan annually at the beginning of each school year. In addition, the chief of police and the fire chief met with the administration to ensure that the procedures in place met the needs of the entire educational community.

The district provided ongoing and regular training to all staff in dealing with crises and emergencies, and provided the same information to all substitutes and student teachers. Each building had a copy of the complete manual, and each classroom had a flip chart that synthesized the materials found in the manual in an easy to read manner to aid an instructor in the case of an emergency. Interviewees stated that all teachers were familiar with the contents of the flip charts and kept them by the door in their classrooms. Lock-down drills, bus evacuation drills, and fire drills occurred on a regular basis, and members of the police and fire departments worked hand-in-hand with the school department to ensure efficient adherence to the protocols.

The manual and the flip charts contained pertinent information regarding lockdown and evacuation training, and included various scenarios with precise procedures for school personnel to follow. Potential incidents included medical emergencies, fire/explosion, bomb threat, violent intruder, hazardous materials, natural disasters, violent actions, substance abuse, and special circumstances. The crisis team included members of the school department, the fire department, and the police department. Included in the documents the EQA team reviewed was a memo that showed the police and fire departments presented a seminar on safety and security for all district staff at the beginning of 2006-2007. Minutes of school committee meetings indicated that the committee reviewed the safety plan and intended to make any changes deemed necessary by the crisis team.

Standard II: Curriculum and Instruction											
Ratings▼ Indicators►	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Total**
Excellent											
Satisfactory										✓	**1**
Needs Improvement	✓	✓	✓	✓	✓	✓	✓				**7**
Unsatisfactory								✓	✓		**2**

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.

Standard Rating: Needs Improvement

Findings:

- Littleton had neither a process nor a cycle for continuous curriculum review and renewal, during the period under review; nor did the district have a systematic procedure for using student achievement results to inform curriculum planning.
- Proficiency rates did not decrease, the performance gap between regular and special education students did not close, and the disparity in proficiency rates between ELA and mathematics, in favor of ELA did not change.
- Littleton did not have a systematic procedure for using student achievement results to inform curriculum planning.
- Curriculum development in Littleton was increasingly expansive in scope during the period under review, evolving from a fragmented school-based approach to a more comprehensive process spanning two levels, K-5 and 6-12. The district created infrastructure in 2006-2007 for an integrated K-12 approach.
- The curriculum documents in Littleton were left as working drafts in various stages of completion when the district turned from curriculum development to assessment. Curriculum development and revision were to be resumed under a proposed four-stage, six-year cycle developed in 2006-2007.

Summary

A curriculum initiative began in Littleton two years prior to the period under review, but the district interrupted the work the following year and turned its focus to assessment because of concerns about student performance on the MCAS tests. The written curriculum in Littleton had gaps in certain domains at some grade spans. Most of the documents were working drafts and many were incomplete.

Littleton's benchmarks in each domain at every grade level measured the taught and tested curriculum. Littleton attempted to improve achievement by measuring student progress against benchmarks, providing early intervention and adopting programs. During the four-year interval from 2003 to 2006, there was little increase in the percentage of regular and special education students attaining proficiency on the MCAS tests; the achievement gap between regular education and special education students did not close; and the disparity between proficiency in English language arts (ELA) and mathematics in favor of ELA remained.

The district had infrastructure to ensure horizontal alignment of the curriculum, and the district was building infrastructure to ensure K-12 vertical alignment. The principal of each school was the curriculum leader. Littleton had leadership positions in reading and mathematics at the elementary level spanning grades K-5 and department head positions spanning grades 6-12. Changes in the curriculum tended to be student or cohort specific and short-term rather than broad and systemic, and district leadership did not use data on the accomplishment of the annual student performance goals routinely to update or modify the curriculum. In 2006-2007, the district created elementary and secondary curriculum councils consisting of the specialists, department heads, and other staff. These councils have been meeting jointly with the superintendent and curriculum coordinator to implement a K-12 approach.

Littleton assessed the relationship between student achievement and learning time at the elementary level, but did not conduct analysis at the middle and high school levels. The district increased instructional time in mathematics from 45 to 60 minutes daily at the elementary level to address deficiencies in student learning. The high school schedule did not provide weekly extended or double periods for laboratories in biology, chemistry, and physics. Instead, teachers

conducted laboratories within the scope of the five 48-minute periods, compacting the curriculum.

Appropriate technology was available during the period under review, but successive reductions in funding for assistive personnel, maintenance and repair of equipment, acquisition of hardware and software, and professional development constrained the use of technology as a tool for both instruction and data analysis. Personnel reductions diminished leadership and services in technology. As a result, computers were out of service for longer periods, and teachers were not informed of new applications. School data team leaders lacked technology for scoring assessments and analyzing results and trends.

Littleton did not actively monitor teachers' instruction in order to ensure an emphasis on high expectations and mastery. Supervision was infrequent, and the district did not support the heterogeneous grouping and open enrollment practices with adequate resources to ensure that teachers could address the range of differences in their classes. Littleton did not use student achievement data to determine needed resources and professional development offerings to improve teaching and learning.

Indicators

1. The district implemented curricula for all grade levels in tested core content areas that clearly addressed all the components of the state curriculum frameworks. The curricula document contained, at a minimum, components that addressed: objectives, resources, instructional strategies, timelines, articulation maps, and measurable outcomes or assessments.

Rating: Needs Improvement

Evidence

The documented curriculum in Littleton had gaps in certain domains at some grade spans, and the district format did not explicitly require timelines or pacing guides. Most of the documents were labeled as drafts and many were incomplete, usually lacking assessments, resources, and instructional strategies. All of the documents were aligned to the state curriculum frameworks. There were few specific references in the curriculum guides to the standardized assessments, locally developed unit tests, and common mid-year and final examinations administered by the district. When included, assessments were often described in brief generic terms.

In interviews, administrators told the EQA team that a major curriculum initiative began prior to the period under review, in 2001-2002. During that year, grade-level teams at the elementary level and subject teachers at the middle and high school levels drafted curricula under the joint direction of the building principals and the former curriculum director. Staff worked on all of the disciplines simultaneously because either there were no documents or the existing documents were outdated.

According to administrators, the district interrupted the work on curriculum and turned to assessment in the two succeeding years because of concerns about student performance on the MCAS tests. The special education subgroup at the Russell Street School did not achieve adequate yearly progress (AYP) in English language arts in 2003, and few students demonstrated proficiency in mathematics at the grade levels subject to assessment. Administrators told the EQA team that Littleton did not have an assessment program to identify struggling students for early intervention with appropriate instruction and support prior to the period under review. One administrator stated that the district stopped working on curriculum and focused on assessment because "there was literally none and we needed it," adding, "but it's like we forgot about the curriculum and never got back to it."

The EQA examiners reviewed the curriculum documents provided by the district in ELA, mathematics, and science. Administrators and teachers told the EQA team that the district benchmarks provided guidance to K-2 teachers on essential content in these domains. The ELA curriculum lacked assessments, resources, and strategies at grade 3, but was generally complete at grades 4-8, except for pacing guides. Each high school English course had a syllabus with timelines for the units of study. The mathematics curriculum was mostly complete for grades K-5. Pacing guides were developed for these grades during the summer of 2006. The mathematics curriculum for grades 6-8 was incomplete, consisting only of standards and outcomes, and the high school mathematics courses lacked syllabi, except for Honors Calculus. The science curriculum was largely incomplete for grades 3, 6, and 8, and mostly complete for grades 4, 5, and 7, except for pacing guides. Each high school science course had a syllabus with timelines for the units of study.

2. The district's curricula in all tested areas were aligned horizontally and vertically.

Rating: Needs Improvement

Evidence

Although most district curriculum guides were incomplete, Littleton had developed benchmarks, or essential learning outcomes, in each domain at every grade level. These measured the taught and tested curriculum. There was an infrastructure in Littleton to ensure horizontal alignment of the taught and tested curriculum, and the district was building an infrastructure to ensure K-12 vertical alignment. In interviews with the EQA team, administrators and teachers expressed awareness of the next steps to take and eagerness to move forward.

Administrators and teachers told the EQA team that Littleton had developed benchmarks aligned with the state frameworks in each domain at every grade level to ensure that students had a common experience as well as an assessment battery and schedule to measure student mastery of these outcomes. One administrator stated, and others agreed, that the benchmarks and the benchmark assessments constituted the "living curriculum in Littleton." Another stated, "We don't really look at the other documents."

The EQA examiners reviewed the district benchmark assessments and schedule. At the elementary level, the battery included the Dynamic Indicators of Basic Early Literacy Skills (DIBELS), the Clay Observation Survey, the Developmental Reading Assessment (DRA), the Group Reading Assessment and Diagnostic Evaluation (GRADE), and the Group Mathematics Assessment and Diagnostic Evaluation (GMADE). These standardized instruments were supplemented with teacher-made writing prompts and scoring rubrics, and pre-, post- and unit tests in mathematics. At the secondary level, there were common midterm and final examinations.

Administrators and teachers told the EQA examiners that each school had data teams composed of grade level or subject area teachers. A teacher trained in data analysis led each team. These teams reviewed assessment data and tracked student progress. In interviews, teachers and administrators told the EQA team that this process made teachers accountable for addressing the benchmarks, and provided evidence for administrators that teachers at a grade level or of a course had the same high expectations. They went on to say that the assessment results identified

struggling students who might benefit from classroom modifications and supplemental instruction. The frequency of assessment ensured early intervention and timely measurement of the effectiveness of support.

Administrators told the EQA examiners that the taught curriculum vertically aligned within the grade spans represented by the four schools, K-2, 3-5, 6-8, and 9-12, since the curriculum development had been mostly school-based. Vertical alignment between these grade spans was just developing. To facilitate vertical integration, the district created leadership positions in reading and mathematics spanning grades K-5 as counterparts to the department heads spanning grades 6-12. Teachers and administrators told the EQA team that the district adopted the McGraw Hill Treasures reading program in 2006 to provide a uniform base program at K-5 spanning the two elementary schools. In 2006-2007, the district created elementary and secondary curriculum councils consisting of the specialists, department heads, and other staff. These councils have been meeting jointly with the superintendent and curriculum coordinator to bring about a K-12 focus.

3. Each school in the district had a curriculum leader who oversaw the use, alignment, consistency, and effectiveness of delivery of the district's curricula that focused on improvement for all of its students.

Rating: Needs Improvement

Evidence

Each school in Littleton had a curriculum leader to oversee the use, alignment, consistency, and effectiveness of delivery of the district's curriculum. Littleton focused on improving the achievement of all of its students by measuring student progress against benchmarks, setting annual student performance goals, providing early intervention and support, and adopting and modifying programs. Despite this focus, there was little increase in student proficiency during the four-year interval from 2003 to 2006, as measured by the MCAS tests, and the achievement gap between regular and special education students in ELA and mathematics did not decrease.

In interviews with the EQA team, administrators expressed many reasons for lack of improvement. Some administrators stated that modifications and changes in the taught curriculum tended to be student or cohort specific and short-term, rather than broad and

systemic. Central office administrators stated that the district did not routinely use data on the accomplishment of the annual student performance goals set by grade level or subject area teams to update or modify the written curriculum. One administrator said that almost nothing had been codified because there was no formal feedback loop, adding that the curriculum councils were established to close the loop.

In interviews with the EQA team, central office administrators and teachers identified building principals as the curriculum leaders in their schools. Most of the principals acknowledged primary responsibility for curriculum coordination in interviews with the EQA examiners. Reading and mathematics specialists at the elementary level and department heads at the secondary level assisted the principals. The specialists and the department heads coached teachers and recommended methods and materials, but did not evaluate.

The principals stated that they received and reviewed benchmark assessment data and data on the accomplishment of the annual student performance goals. Some said that they looked for trends and discussed the implications at staff meetings. Teachers confirmed that the principals were actively involved with the school data teams, giving direction and providing resources and support.

4. Each school provided active leadership and support for effective instructional strategies, techniques, and methods grounded in research and focused on improved achievement for all students.

Rating: Needs Improvement

Evidence

The Littleton principals were responsible for providing instructional leadership in their schools, but lack of clarity about their supervisory roles under the terms of the teachers' contract reduced the effectiveness of their classroom visits. The district regularly administered assessments to measure student learning, but did not systematically identify instructional needs based on an analysis of student achievement results, and did not record promising methods, strategies, and techniques in revisions of the curriculum documents.

In interviews with the EQA examiners, principals stated that they were the instructional leaders in their schools. They also said that they had little time to observe in classrooms given the press of other demands. Only one of the principals had an assistant. Most stated that they routinely made five-minute classroom walk-throughs, but were not certain of what, if any, feedback they were allowed to give teachers, especially when recommendations were warranted. In interviews, some principals stated that they provided a form of supervision at faculty meetings by asking teachers to share promising practices. Others said that they attended the data team meetings on release days to listen to teachers' concerns and offered suggestions and direction.

In interviews, teachers stated that principals were frequently in their classrooms, but there was little consistency in their responses to the questions about follow-up. Some stated that they received a note or verbal comment, while others said that they neither received nor heard anything after the visit. Elementary teachers told the EQA team that the reading and mathematics specialists had provided effective instructional support and coaching. Other teachers said that special educators had given them good techniques for providing for individual differences.

Most teachers stated that they learned about promising practices from their colleagues. For example, when student performance on the benchmark assessments or unit tests varied from classroom to classroom, teachers on the school data teams identified the methods and strategies that produced the most successful outcomes, and informed their colleagues. In response to further questions from the EQA team, these teachers went on to say that there was no formal procedure for codifying promising methods, strategies, and techniques in the district curriculum documents. In interviews with the EQA examiners, central office administrators stated that the planned institution of a formal curriculum review cycle in the district would ensure the currency and utility of the curriculum documents.

5. <u>The district had an established, documented process for the regular and timely review and revision of curricula that was based on valid research, the analysis of the MCAS test results, and other assessments, and focused on improved achievement for all subgroups.</u>

Rating: Needs Improvement

Evidence

During the period under review, Littleton developed a comprehensive systematic assessment program that provided continuous information about the needs and strengths of the learners. These data were used to inform instruction, but not in curriculum development because the district lacked an established cycle for revision and renewal. Central office administrators told the EQA team that the highest priority in Littleton over the last five years, including the entire period under review, was the development of preliminary curriculum documents and systematic assessment and data analysis procedures. They stated that the district urgently needed to do this work because it had neither curricula nor assessments in 2001.

Through document reviews and interviews, the EQA examiners confirmed that the district developed preliminary curricula prior to the period under review and an assessment process during the period under review. The evidence included the working curriculum documents, assessment schedules and results, and data on the accomplishment of the student-centered achievement goals set by the school data teams. Central office administrators told the EQA examiners that they were proposing a four-phase, six-year curriculum cycle in 2006-2007 to ensure timely revision of curricula informed by student achievement data. The EQA team reviewed a schematic representing the review cycle. In interviews with the EQA examiners, school data team leaders, the district specialists for ELA and mathematics, and department heads confirmed their involvement in this process as members of the newly formed curriculum councils.

6. <u>The district analyzed student achievement data and allocated instructional time in the tested core content areas that focused on improved rates of proficiency for all students.</u>

Rating: Needs Improvement

Evidence

During the period under review, Littleton school data teams formally assessed the relationship between student achievement and learning time at the elementary level, but the district did not conduct comparable analysis at the middle and high school levels. The EQA team found that proficiency rates for both regular and special education students in Littleton did not increase during the period under review, as measured by the MCAS tests, and the achievement gap between regular and special education students did not decrease. The percentage of regular

education students attaining proficiency in ELA was 83 percent in 2003 and 82 percent in 2006, and in mathematics it was 68 percent in 2003 and 64 percent in 2006. The percentage of special education students attaining proficiency in ELA was 35 percent in 2003 and 33 percent in 2006, and in mathematics it was 28 percent in 2003 and 21 percent in 2006.

Teachers and administrators told the EQA examiners that instructional time in mathematics was increased from 45 to 60 minutes daily at the elementary level to address specific deficiencies in student learning identified by school data teams from an analysis of the results of locally developed math unit tests, the GMADE, and the MCAS math tests. The additional learning time was devoted to automatizing facts and operations, problem solving, and responding to open-ended questions.

At the middle school level, instructional time in ELA, mathematics, and science declined from 50 minutes in 2003-2004 to 40 minutes in 2005-2006 in order to accommodate expansions of the world languages and unified arts programs within the limits of the school day. Administrators stated that the allotted time in the core content areas was adequate to accomplish the curricular objectives, although they had not conducted a formal analysis.

Administrators told the EQA examiners that the 48-minute period at the high school level was barely proportionate to the curriculum in the core content areas, and inadequate in science. The high school schedule did not provide weekly extended or double periods for laboratories in biology, chemistry, and physics. Instead, teachers conducted laboratories within the scope of the five 48-minute periods, compacting the curriculum. According to district records reviewed by the EQA team, 43 percent of the Littleton students who took the Advanced Placement (AP) Biology final examination and 66 percent of the Littleton students who took the Physics B final examination achieved a passing grade of three or higher in 2006. The Littleton passing rates were lower than the 2006 passing rates for all Massachusetts public school students of 69 percent in Biology and 75 percent in Physics B, reported by the College Entrance Examination Board (CEEB).

Littleton High School counted directed study as learning time in its time and learning calculations. Administrators told the EQA team that during the period under review, the district abolished study halls and replaced them with directed study. Under this model, students were

required to work purposefully on course assignments and projects under the supervision of a teacher who provided support as needed. Students were permitted to use the media center for research and the computer lab to subscribe to a Virtual High School course during directed study time. They were also allowed to meet with another teacher for extra help in his or her classroom by prior arrangement. Administrators told the EQA examiners that students were scheduled for no more than one directed study daily. The EQA team found that, although directed study had no curriculum and directed study teachers did not develop lesson plans or formally assess student progress, it met the general requirements set forth in a 1999 Massachusetts Department of Education (DOE) advisory: "Directed Study requires students to be engaged in activities directly related to their program of studies, and a teacher must be available to assist students. A directed study may occur in places such as a classroom, computer lab or resource room."

When asked whether maintaining directed study was a choice or a limitation, administrators responded that they believed that students benefited from time during the day to begin homework or projects with access to a teacher for guidance and support. In response to further questions from the EQA team, administrators stated that they might consider reducing the number of periods from seven to six in order to increase the 48-minute period by five to eight minutes. Central office administrators told the EQA team that they would also consider a block schedule, subject to the availability of funds for additional personnel and professional development for teachers on use of the extended period.

7. Appropriate educational technology was available and used as an integral part of the instructional process.

Rating: Needs Improvement

Evidence

Appropriate technology was available in Littleton during the period under review, but successive reductions in funding for assistive personnel, maintenance and repair of equipment, acquisition of hardware and software, and professional development constrained the use of technology as a tool for both instruction and data analysis.

Littleton reported a student per modern computer ratio of 4.0 to 1 to the DOE in 2004-2005. This compared favorably with the state average of 4.9 to 1. Nearly all Littleton classrooms were

wired for the Internet. In site visits, the EQA team saw computer labs with multiple stations at the Russell Street School, the new middle school, and the modern high school. In the course of conducting observations in 23 district classrooms, the EQA team counted 54 computers, an average of 2.3 computers per class, but observed students using computers for learning in only one of the classrooms.

The examiners reviewed the district K-12 technology curriculum, which contained standards, learning outcomes, examples of learning activities, and assessments to determine mastery at each grade level. They also reviewed the multi-year district technology plan, which had specific goals to increase the amount and use of technology in Littleton. In a PowerPoint presentation to the community on the 2005-2006 budget, posted on the district website, the school committee deemed the technology plan "unfunded." Specifically, the presentation stated that technology support was inadequate, professional development was minimal, and hardware and software acquisition was lagging.

Administrators and teachers told the EQA team that the PTO and other benefactors had donated many computers because the district lacked the funds. They went on to state that personnel reductions diminished leadership and services in technology. The positions eliminated included the district integration and assistive technology specialists, and maintenance and repair technicians. As a result, computers were out of service longer, and teachers were not informed of new applications or coached through their difficulties in using unfamiliar hardware and software. One administrator stated that the loss of the assistive technology specialist in the special education department curtailed use of the Kurzweil Reader. This device translated print into audible text for students with significant reading disabilities.

In interviews, school data team leaders told the EQA examiners they lacked technology for scoring assessments and analyzing results and trends. Most said that they spent hours after school hand scoring tests and tabulating the scores for their meetings with grade level colleagues on the implications. Some described the burden as responsible to turnover in these roles. In subsequent interviews, central office administrators told the examiners that acquisition of scanners and data analysis programs was a high priority.

8. District and school leaders actively monitored teachers' instruction for evidence of practices that reflected high expectations for students' work and mastery.

Rating: Unsatisfactory

Evidence

Littleton did not actively monitor teachers' instruction in order to ensure an emphasis on high expectations and mastery. Supervision was infrequent, and the district did not support the heterogeneous grouping and open enrollment practices with adequate resources to ensure that teachers could address the range of differences in their classes.

In interviews with the EQA examiners, most principals stated that they had too many competing responsibilities to monitor teachers' instruction continuously and regularly. All agreed that confusion about the meaning of the language governing short classroom visits in the teachers' contract constrained supervision by those also in the role of evaluator. Teachers told the EQA team that when principals visited their classes, they often did not receive any feedback. Many teachers stated that they relied on colleagues, subject area specialists, and special educators for suggestions and advice on improving instruction. The EQA examiners found few suggestions or recommendations intended to increase expectations for student mastery in the timely evaluations contained in 35 teacher personnel files.

The Littleton District Improvement Plan for 2005-2008 referred to students leaving the district "in search of a stronger curriculum in other schools." District documents showed that in FY 2006, ninety-five students left Littleton for charter school or choice placements, resulting in a loss of $619,860 in Chapter 70 aid to the district. In interviews with the EQA team, administrators stated that parents exercised their right to a choice or charter school placement for a variety of reasons, but many were seeking options for accelerated learners.

According to documentation and interviews with administrators, Littleton increased the number of Advanced Placement (AP) courses offered at the high school during the period under review. Administrators told the EQA team that the district made these additions to address the concerns of some parents about the rigor and challenge of the high school curriculum. They further stated that enrollment in these courses was open. In answer to questions by the EQA team,

administrators stated that this policy gave all students access to higher-level content and instruction.

District records for 2005-2006 showed that fewer than 30 percent of Littleton students enrolled in AP classes took the final examination. The percentage of those Littleton students taking and passing the AP examinations with a qualifying score of three in 2005-2006 was below the state average passing rate reported by the College Entrance Examination Board (CEEB) in four of the seven Littleton AP courses with an enrollment of five or more students.

Central office administrators and the building principal told the EQA team that grouping at the middle school was heterogeneous at all grade levels in every discipline, including grades 7-8 mathematics. In focus groups, teachers told the EQA examiners that special educators consulted with them concerning the students with special needs included in their classes, and entered the classroom to render direct instruction and support. In answer to questions by the EQA team, teachers said that they did not receive the same support in providing for advanced or accelerated learners. One teacher said, and others agreed, that it was largely "up to individual teachers to know what to do."

Central office administrators told the EQA team that providing for accelerated learners in heterogeneous classes had not been an explicit focus of the district professional development program on differentiated instruction. Since they were committed to maintaining heterogeneous grouping, they intended to give teachers more support to address the needs of all students, including advanced students identified by the district's formative and summative assessment program. One administrator stated that there were plans to give advanced middle school students access to Virtual High School courses, and to train all teachers to use such methods as tiered assignments, learning centers, course compacting, and independent study to provide more options for learning.

9. Through the ongoing use of formative and summative student assessment data, the district monitored the effectiveness of teachers' instruction and provided resources, professional development, and support to improve and maintain high levels of instructional quality and delivery.

Rating: Unsatisfactory

Evidence

Littleton did not have a formal centralized process for use of student achievement data to monitor teachers' instruction and to provide resources and professional development to improve teaching and learning. Each school in Littleton used formative and summative assessments to measure students' accomplishment of the district benchmarks and the annual performance goals set by the school data teams. The primary focus was on student learning within a school. Data teams also identified struggling students, planned appropriate interventions for them, and adjusted annual performance goals, sometimes setting them higher, based on a review of the indicators of student progress.

In interviews with the EQA examiners, Littleton administrators and teachers explained the process data teams in each school used to collect and analyze formative and summative data on student achievement. The EQA examiners reviewed schedules for the administration of a range of standardized and locally developed formative and summative assessments. These included common midterm and final examinations at the secondary level. The EQA team also reviewed assessment results and reports of the conclusions drawn by the school data teams from analysis of these results. Teachers and administrators told the EQA examiners that these assessment practices were so deeply rooted in the district that they continued when the administrators who set them in motion left. Teachers stated that they had customized the process for their schools and now had a sense of ownership.

During most of the period under review, funds for professional development were limited. In interviews with the EQA examiners, teachers stated that professional development had not been appropriate or effective. For example, the EQA team reviewed a district survey in which 75 percent of the teachers in one school and 50 percent in another reported that they did not receive adequate training in Everyday Math, the core mathematics program in grades K-6. Teachers and department heads told the EQA team that they had not received training on the Impact Math program adopted for grades 7-8 in 2005-2006 and implemented in 2006-2007.

Central office administrators told the EQA examiners that the district had not formally and routinely identified the instructional implications of student performance data. They went on to state that the planned establishment of a centrally directed curriculum review cycle would

provide leadership and a structure for analyzing student performance data more comprehensively and holistically.

10. 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.

Rating: Satisfactory

Evidence

During the site visit, the EQA examiners observed 23 randomly selected classrooms and recorded the presence or absence of 26 attributes reflected in the Principles of Effective Teaching, grouping them into five categories: classroom management, instructional practice, expectations, student activity and behavior, and climate. The EQA examiners checked the attributes that they observed in each of the five categories during their time spent in the classroom. The team conducted observations at the district's four schools as follows: 10 at the elementary schools, 10 at the middle school, and three at the high school. In total, the EQA examiners observed 10 ELA classrooms, seven math classrooms, five science classrooms, and one social studies classroom.

Classroom management refers to the maintenance of order and structure within the classroom. Positive indicators of classroom management were evident in all of the classrooms observed districtwide.

Instructional practice was the largest category reviewed by the examiners. Effective instructional practice is considered evident when the teacher's questions transcend direct recall and include open-ended questions that require the use of higher order thinking skills. Students should be encouraged to go beyond their initial responses, to analyze, to synthesize, to compare and contrast, and to explain their own thinking. Class time should be focused on student learning. Students who have finished their work should be provided with other appropriate tasks; students who are off-task should be redirected to their task. The work should engage all students; it should be age-appropriate, and attuned to many learning modalities, including auditory, visual, and kinesthetic. The pace of the class should be appropriate, challenging, and engaging for all

students. Instruction should be differentiated so that all learners are challenged. The lesson should be clearly aligned with the state curriculum frameworks and either posted on the board or cited in the teacher's planner. The lesson's objectives should be clear and explicitly articulated. The teacher should use standards-based instruction to set objectives, to plan activities, to assess the effect of the lesson and to measure progress for all learners. Positive indicators of instructional practice were evident in 76 percent of the classrooms observed districtwide, with 80 percent at the elementary level, 76 percent at the middle school level, and 63 percent at the high school level.

Expectations refer to the maintenance of high standards for students by teachers. Evidence of high expectations could include recent examples of high quality student work posted in the classroom. In addition, high quality work should be evident through rubrics that may sometimes be generated by students. Tasks should be challenging for all students, and all students should have access to the same curriculum, although the instruction and strategies may be adapted to the needs of students. The teacher should clearly maintain and communicate high expectations for student work during class time. All students should be expected to be on task and engaged in the lesson. High expectations for students were evident in 76 percent of the classrooms observed districtwide, with 82 percent at the elementary level, 68 percent at the middle school level, and 83 percent at the high school level.

Positive student activity and behavior are considered evident when students are actively engaged in the learning process. They must show a clear understanding of the objective of the lesson and interact with the teacher and each other in accomplishing the tasks at hand. They should be attentive and responsive. While the environment may be busy and constructive, it must also be controlled and orderly. There should be few distractions, and the learning process must be clearly evident. Indicators of positive student activity and behavior were evident in 64 percent of the classrooms districtwide, with 68 percent at the elementary level, 65 percent at the middle school level, and 44 percent at the high school level.

Finally, the concept of *climate* is considered evident when the classroom is welcoming, and the teacher is an active listener and treats all students with respect. Students should listen attentively to and be respectful of all other students. Many resources and means beyond the textbook should

be available for learning; these may include technology, manipulatives, cassettes, visuals, overhead projectors, and a classroom library. Positive indicators of climate were evident in 85 percent of the classrooms observed districtwide, with 100 percent at the elementary school level, 71 percent at the middle school level, and 78 percent at the high school level.

Summary of Classroom Observations

	Number of Classrooms						Computers		
	ELA	Math	Other	Total	Average Class Size	Average Paraprofs. per Class	Total Number	Number for Student Use	Average Students per Computer
Elementary	6	3	1	10	21.7	1.0	24	21	10.3
Middle	3	2	5	10	21.4	1.0	39	32	6.7
High	1	2	0	3	20.7	1.0	3	1	62.0
Total	10	7	6	23	21.4	1.0	66	54	9.1

	Classroom Management	Instructional Practice	Expectations	Student Activity & Behavior	Climate
Elementary					
Total checks	40	72	31	41	30
Maximum possible	40	90	38	60	30
Avg. percent of checks	100	80	82	68	100
Middle					
Total checks	40	67	27	37	20
Maximum possible	40	88	40	60	28
Avg. percent of checks	100	76	68	65	71
High					
Total checks	12	17	10	8	7
Maximum possible	12	27	12	18	9
Avg. percent of checks	100	63	83	44	78
Total					
Total checks	92	156	68	88	57
Maximum possible	92	205	90	138	67
Avg. percent of checks	100	76	76	64	85

Standard III: Assessment and Program Evaluation									
Ratings▼ Indicators►	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**Total**
Excellent									
Satisfactory	✓	✓	✓			✓		✓	**5**
Needs Improvement				✓	✓		✓		**3**
Unsatisfactory									

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.

Standard Rating: Satisfactory

Findings:

- Data analysis and the use of student achievement results to inform instruction increased over the period under review and have become widespread in the district.
- The district considered student assessment to be a functional part of the educational process. Student participation in the MCAS testing program ranged between 99 and 100 percent over the review period.
- Teachers and administrators made consistent and regular efforts to report student assessment results to parents, the community, and other stakeholders.
- The district used curriculum benchmarks called "bulls-eyes" to ensure that students were learning essential parts of the content areas.
- Littleton trained school leaders in data analysis, and used formative and summative assessment strategically to identify struggling students and track the accomplishments of student-centered goals at each school.

Summary

The district used several forms of assessment to measure student learning. Tests such as the Dynamic Indicators of Basic Early Literacy Skills (DIBELS), Developmental Reading

Assessment (DRA), Group Mathematics Assessment and Diagnostic Evaluation (GMADE), and Group Reading Assessment and Diagnostic Evaluation (GRADE) were in place, and the Stanford Reading and Mathematics Test had also been used during a part of the period under review. In addition, the Clay Observation Survey was given to grade 1 students who were considered "at risk," based upon the DIBELS results. Beginning at grade 3, the MCAS tests were added to the assessment battery. While it initially used a consultant to analyze the data, the district evolved into using its own data analysis mechanism to interpret the data and gather more timely information on student progress.

Benchmarks known as "bull's-eyes" were used to measure student progress throughout the school year. Each school had data teams whose role was to monitor progress toward having all students reach the benchmarks. The data teams set "smart goals" that allowed them to work collaboratively to ensure a common focus on the benchmarks and predictable results in their attainment. The curriculum coordinator made regular reports to the school committee on MCAS results, and links to the results, along with the school report card, were prominently displayed on the district website.

Many programs within the district were evaluated using student assessment results. At the high school, for example, changes were made to the Advance Placement (AP) Physics course based upon AP test results. At the elementary schools, programs such as Title I were monitored for effectiveness using the DIBELS, while others were monitored using pre- and post-test assessments. At the middle and high schools, common midterm and final examinations were used to monitor the effectiveness of programs. The results were used effectively to inform instructional techniques, and sometimes to change the level or order of course offerings, but not to change curriculum content.

Common midterm and final examinations were in place at the high school, and common examinations were in place for science from grade 6 onward. In 2006, the district participated in the external program evaluation conducted by the Malcolm Baldrige Commitment to Excellence project and received the annual award. However, few other internal or external audits were conducted during the period under review.

Indicators

1. District assessment policies and practices were characterized by the continuous collection, analysis, and use of student assessment results by district and school leadership.

Rating: Satisfactory

Evidence

The district had many opportunities to collect, analyze, and use student assessment results, and made use of them during the period under review. Assessment at the primary grades included the Stanford Reading Test at grade 1, followed by the Stanford Reading and Mathematics Test at grade 2. During 2005-2006, the Dynamic Indicators of Basic Early Literacy Skills (DIBELS), administered during the spring and fall, and the Developmental Reading Assessment (DRA), replaced the Stanford. In addition, the district gave the Clay Observation Survey to grade 1 students who were considered "at risk" based upon the DIBELS results. When necessary, the district supported its students through the Reading Recovery program.

The Russell Street School, which was also a Targeted Assistance school under Title I, housed the upper elementary grades. Assessments there include both the DIBELS and the DRA, as well as the Group Reading Assessment and Diagnostic Evaluation (GRADE) and the Group Mathematics Assessment and Diagnostic Evaluation (GMADE). The school used GRADE for placement in support services, while GMADE replaced the Stanford to determine mathematics progress in grades 1-2. The upper elementary grades administered DIBELS three times per year, corresponding to the trimester system in place throughout the district, except at the high school. Title I students received the same assessments. Other assessments at the elementary level include baseline writing assessments, which groups of teachers corrected during common planning time. Students requiring support received targeted instruction from trained parent volunteers. The parent volunteer tutor program was led by a retired teacher and supervised by the math and reading specialists, who also conducted training sessions for the parents.

The district administered MCAS tests at grade 3 in reading, grade 4 in ELA and math, and grade 5 in science. During 2005-2006, it conducted the social studies assessment as well. An outside consultant analyzed the results of the MCAS tests for the period under review, but the district

brought that task in house during 2006-2007 to improve the timeliness of the analysis and allow teachers to receive the results more efficiently.

At the middle school, MCAS was the primary assessment provided to students. As discussed previously, a consultant team conducted the data analysis for most of the period under review, but school staff analyzed the data during 2006-2007. The curriculum coordinator's office primarily conducted analysis, although principals were able to use TestWiz for that as well. Other forms of assessment in use included pre- and post-tests as well as common examinations in all departments. In addition, the middle school used open-response questions and questions released from previous MCAS tests across the curriculum. According to both teachers and administrators, the results of the assessments were used to modify and adjust instructional methods, but not to change curriculum in meaningful ways.

At the high school, all students took common mid-year and final examinations. The high school was the only district school that did not operate on the trimester schedule. Teachers corrected the examinations using a common rubric, and they began to practice cross grading in some pilot cases. Outside analysts conducted MCAS analysis during the period under review; but, like the other schools in the district, teachers analyzed their own data for the first time during 2006-2007. The goal of improvement of student assessment results was common to all School Improvement Plans in the district. All schools set what they called "smart goals" to improve student assessment results, and data teams at each school monitored and recommended improvement strategies. Data teams met during the early release Wednesdays that were common during the period under review.

Principals reported that the assessment efforts all began within the past four years. They credited the previous superintendent and curriculum coordinator with making the changes, and the current administration for continuing in the same direction, facilitating the inclusion of data collection and analysis efforts as a part of the culture of the district.

2. <u>District and school leadership required all students to participate in all appropriate assessments.</u>

Rating: Satisfactory

Evidence

The district did not have a specific policy requiring all students to participate in appropriate assessments, but it had practices in place that kept participation rates on the MCAS tests at between 99 and 100 percent across the district during the entire period under review. Principals reported that participation was a "part of the culture," and that parents were informed of assessment schedules "early and often."

In addition, students on Individualized Education Programs (IEPs) were encouraged to participate in the assessment program, and the district provided "all appropriate accommodations possible" to ensure that students were able to provide the best possible picture of what they knew. Principals described procedures for ensuring that students on IEPs for whom standard MCAS participation was not the optimum means of demonstrating proficiency were able to participate in the alternate MCAS assessment process.

Administrators reported that all schools regularly used parent meetings both to orient parents on what to expect for their children on the MCAS tests, and to present the results of the tests once received from the Department of Education (DOE). They reported to parents that in this district, they considered MCAS to be a part of instruction, rather than simply an independent measure of its effectiveness. All schools within the district maintained monthly newsletters and shared examples of them with the EQA examiners. In addition, the district maintained an informative and effectively organized website that was regularly updated by all schools to provide stakeholders and community members with information on MCAS test dates.

3. Through the use of district-generated reporting instruments and report cards, district and school leaders implemented assessment systems to measure the attainment of goals, progress, and effectiveness. These assessment reports were focused on student achievement and were communicated to all appropriate staff and community members.

Rating: Satisfactory

Evidence

Regular assessment and analysis systems in place in all schools, accompanied by effective communication structures across the district, allowed staff and community members to keep abreast of student achievement in a timely and complete way.

Administrators at all of the schools described parent meetings, parent conferences, and local parent teacher organizations, as well as a special education parents' advisory council, that provided information to parents on student achievement on a monthly basis. Parent meetings did not occur at the high school during the period under review, according to administrators, but the district reinstituted them for 2006-2007. The district website and the monthly newsletters from each school prominently displayed dates of parent meetings. The district website also provided up to date information and served as a vehicle for informing parents about items of a general nature regarding student achievement. The website was in place for most of the period under review, and provided links to specific websites for each of the schools in the district. There was not a means for direct parent access to student grades or attendance information by means of the websites, although access by telephone was available and widely reported to parents. The student newsletters were available through the website. The high school newsletter dated November 2006 provided general information on classroom activities in social studies, chorus and theatre, ELA, and public speaking activities. There was a column entitled "Math Notes," another called "What's Happening in Science," as well as links to the Department of Education MCAS results and an announcement of school council meetings and parent conference night.

Report cards were distributed three times per year at the primary, elementary, and middle schools, and four times per year at the high school. At the primary and elementary schools, and for two of the three trimesters at the middle school, students carried the report cards home. For the final trimester at the middle school and for all four quarters at the high school, they were mailed home to parents. Midterm progress reports were provided for all students in all schools as well.

Only at the primary school were report cards described as "standards based." At all of the other schools administrators said that their report cards were "not a strength," but reported that study committees were working on new ways of reporting grades to parents and students.

The curriculum coordinator reported MCAS results to the school committee on a regular basis using PowerPoint presentations at the school committee meeting following return of the data from the Department of Education. The school committee televised its meetings on the local cable access system. Principals made similar presentations to school council members, as well

as to parents, through various means. Elementary schools used parent conferences. Middle school administrators preferred parent "coffees," conducted three times per year, although administrators also scheduled monthly parent-teacher meetings. Administrators reported that the parent meetings often featured guest speakers, and attendance ranged between 12 and 20 parents. The high school offered parent-teacher meetings at 6:45 a.m. at the high school to improve attendance, but reported a number of parent nights organized by the school resource officer, covering topics of interest to parents as well as student achievement topics.

4. In addition to the MCAS test, the district and school leadership regularly used local benchmarks and other assessment tools to measure student progress and analyzed and disseminated the results in a timely manner to appropriate staff.

Rating: Needs Improvement

Evidence

The district regularly used local benchmarks, referred to as "bulls-eyes," to measure student progress. The bulls-eyes were essential learning outcomes. When asked if curriculum change accompanied the assessments, teachers replied "Could, would, and should," but said that the results often did not always get back into the feedback loop in an appropriate way. The "smart goals" often reflected gaps between student performance and the bulls-eyes. The district developed the concept of using the smart goals according to a protocol suggested by Professional Learning Communities training conducted during 2003-2004 and 2004-2005. The school data teams that met each Wednesday during early release times for students set the smart goals. Smart goals were set using the bulls-eyes, and then monitored by the data team. For example, a smart goal might be to "ensure that all fourth-graders meet the bulls-eyes by June." Collection and analysis of the data required to monitor the achievement of the smart goals was laborious and time consuming, however, and the district did not have the technology to assist appropriately in the analysis.

The smart goals essentially formed the basis of the feedback loop for assessment of the benchmarks, but their use focused on student learning within the building and there was no mechanism to report the results to other professional staff members. As a result, there was no consolidated or centralized mechanism for districtwide analysis or action.

5. The district and school leadership used student assessment results and other pertinent data to measure the effectiveness of instructional and support programs.

Rating: Needs Improvement

Evidence

The district used some student assessment results to measure the effectiveness of instructional and support programs. In the elementary school, the staff used the DRA and DIBELS results to measure the effectiveness of the Title I program, as well as the effectiveness of both instructional systems and some instructional programs. Common end-of-course and midterm examinations were in place at the middle school and the high school. Science used all common examinations from grade 6-12. All of the examinations were either team or departmentally corrected and evaluated using a common rubric. Administrators reported that they used the results to adjust instructional methods and to make changes in the curriculum, but they described few changes that resulted from such assessments. Data team leaders were responsible for bringing the data to principals to implement changes in programs, but this was limited to a building level analysis, and there was little evidence of substantive curriculum changes that resulted from the analyses.

Support programs at the elementary school included Title I and the reading tutor and math specialists that it funded, as well as after-school help provided by teachers who voluntarily stayed after school two nights per week. The primary school offered a Reading Recovery program to support its students as well. The district evaluated the effectiveness of these support programs using DIBELS results along with DRA, GRADE, and GMADE results as appropriate.

At the middle school, in addition to the teacher help sessions scheduled two evenings per week, administrators cited the presence of a full-time reading teacher and a study-skill period, taught by members of the instructional team. Students in need of support and not participating in band or chorus, both of which were offered during the same period, would be provided with support then.

The high school offered peer tutoring from National Honor Society members, a math tutor one day per week, and faculty or community volunteers who received access to released MCAS questions. There were no programs specifically applicable only to special education students. Administrators explained that special education students were fully included in the classrooms, and that as such, all students were the responsibility of all teachers. All of the schools offered a

late bus to maximize student access to the after-school help sessions. All of these efforts at offering support programs, however, were loosely organized and the district kept few formal records with which to evaluate their effectiveness.

6. The district and school leadership regularly engaged in internal and external audits or assessments to inform the effectiveness of its program implementation and service delivery systems. The data from these assessments were provided to all appropriate staff.

Rating: Satisfactory

Evidence

The school did participate in some external and internal audits to inform the effectiveness of its program implementation and service delivery systems. In April 2006, the district announced that it had won the Commitment to Excellence Award by Massachusetts Excellence (MASSX), the state organization that supervises the state offering of the Malcolm Baldrige Excellence Award. The MASSX presents the award annually to applicants who the examiners judge to have presented evidence of progress in areas such as student learning outcomes and financial management outcomes. Administrators and teachers cited the value of measuring themselves against standards.

The high school was an accredited member of the New England Association of Schools and Colleges (NEASC), and underwent reaccreditation on a regular basis. In addition, the district participated in regularly scheduled Coordinated Program Reviews conducted by the Department of Education, although it did not do so during the period under review.

During 2004-2005, the district conducted its own internal audit of its special education program, staff, and services. The College Entrance Examination Board (CEEB) audited the district's Advanced Placement courses, and the National Association for the Education of Young Children (NAEYC) reviewed early learning programs within the school district, but both of these were outside the period under review. The district partnered with the Newton Public Schools in its internal review of its Everyday Math program.

7. The district and school leadership annually reviewed student assessment results and other pertinent data to maximize effectiveness in assigning staff, prioritizing goals, and allocating time and resources.

Rating: Needs Improvement

Evidence

Since 2003-2004, the district has undergone a major change in the faculty, largely due to retirements of the long-serving teaching staff. Principals reported "looking at" data when making staff reassignments but offered no specific criteria used in making assignments, and had no predetermined plan to reassign staff in the absence of retirement adjustments. The district regularly used data to prioritize goals and allocate time and resources.

Administrators reported a few instances over the period under review in which they assigned or reassigned teachers to particular classes based on student achievement data. At the high school, for example, administrators cited a change assigning all teachers four class preparations. This replaced the former model in which teachers "specialized" in particular groups or courses, and the principal projected that this change would allow for more flexibility in assignments in the future.

More commonly reported, however, were instances in which interpretation of data resulted in the changing goals and allocation of time and resources. One example cited was a review of the Everyday Mathematics curriculum based upon MCAS results. Review of the data suggested that the program was less effective in Littleton than reported at other districts. The leadership conducted visits to other districts, resulting in an expenditure of $10,000 to train teachers in better methods of differentiating instruction. Another example was the interpretation of MCAS ELA data that led to a full-time reading teacher at the middle school and an additional part-time (0.2) reading teacher at the high school. Furthermore, administrators reported that the acquisition of the McGraw-Hill Treasures program at the K-5 grade level resulted from the interpretation of data results, and that the addition of a math specialist in K-5 during 2005-2006 resulted from an attempt to improve the 2004-2005 MCAS mathematics scores.

8. District and school leadership routinely used program evaluation results to initiate, modify, or discontinue programs and services to continuously improve the delivery of instruction and student achievement.

Rating: Satisfactory

Evidence

With cuts in the district budget for the past five years, the goal of saving money or decreasing student enrollment may have driven decisions to discontinue programs, but an element of program evaluation contributed to the final decision.

The Russell Street School changed the direct services mathematics tutorial to the services of a K-5 mathematics specialist. Administrators reported the need for the additional support to improve student performance in mathematics as well as to assist in lowering the performance gap between regular education and special education students in math.

At the high school, two changes were evident. The first was the discontinuance of the AP Physics course due to poor student achievement on the AP examination, and its replacement with a course exploring advanced topics in physics. Administrators also cited the part-time reading teacher at the high school as having resulted from the interpretation of data.

Also at the high school, the district eliminated the business technology program based upon a review of the curriculum frameworks. Most of the courses were restructured and resituated at the middle school. One course, Accounting, was retained at the high school. Administrators at all levels also reported that special education data drove the assignment of special education teachers and support staff as well.

Standard IV: Human Resource Management and Professional Development														
Ratings▼ Indicators►	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**Total**
Excellent														
Satisfactory	✓	✓	✓	✓		✓							✓	**6**
Needs Improvement					✓		✓	✓	✓					**4**
Unsatisfactory										✓	✓	✓		**3**

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.

Standard Rating: Needs Improvement

Findings:

- Littleton's professional development plan was not systemic, consistent, or informed by data.
- The district's employment, supervision, and professional development processes were not linked, nor were they supported by appropriate levels of funding.
- Littleton principals were constrained in their supervisory roles by ambiguity in the teachers' contract.
- All professional staff examined all had appropriate Massachusetts licensure. The district employed no staff members on waivers.
- The district had a comprehensive mentor program for teachers. The mentoring program for administrators was undocumented and informal.
- The district's human resources policies and practices encouraged professional growth and recognized and placed a high priority on retaining effective professional staff.
- The district had a crisis management plan in place and conducted ongoing, regular training and practice for staff and training for substitutes and volunteers.

Summary

The Littleton Public Schools identified, attracted, recruited, and hired effective, certified professional staff during the period under review. All teachers were licensed, and none were

employed on waiver. Principals had almost complete autonomy in selecting staff. Polices and practices encouraged professional growth and placed a high priority on retaining teachers. However, the district's employment, supervision, and professional development processes were neither linked nor supported by appropriate levels of funding.

The mentoring program within the district was well organized and built on a long-standing tradition of mentoring and support for new teachers. Mentors were trained in advance and assigned to teachers new to the district. The program provided written guidelines for regular monthly meetings and topics for discussion. The district held mentoring meetings regularly, and used feedback from the participants to review and revise the program for the following year.

Mentoring for new administrators within the district was less formal and less defined. All new administrators received mentor assignments, but there were no written guidelines, and administrators reported a range of experiences. The process for administrators was described as valuable but unstructured.

It was not clear how the district chose the professional development opportunities it offered. Teachers reported that the leadership often asked for suggestions for professional development activities, but they never received any feedback on how the leadership finally selected topics or why it made those choices. Individual teachers could avail themselves of a generous reimbursement practice, but the district did not generally pay for conferences and workshops; the district did provide a substitute teacher, however, if a teacher chose to pay registration and transportation costs.

Teacher evaluations were not done on a timely basis, and some teachers had not been evaluated at all for a period of years. There were few administrator evaluations available in personnel folders reviewed by the EQA examiners. Administrators did adhere to a procedure for five-minute classroom walk-throughs. Principals were responsible for providing instructional leadership, but felt constrained in their evaluative roles by what they perceived as ambiguity in the teachers' contract.

Indicators

1. The district's policies and practices for the identification, recruitment, and selection of professional staff resulted in the employment of an effective teaching force that advanced student achievement.

Rating: Satisfactory

Evidence

The superintendent of schools, during the period under review, issued a memorandum in October 2005 outlining the process steps administrators were to follow in hiring any employee. These steps included engaging an interview team of staff, parents, and students for the initial interview; a second interview, which included the teaching of a lesson; background checks; and sending the candidate to the superintendent for final approval/disapproval. Despite this, principals reported that they had never had a choice declined by the superintendent. The memorandum included requirements for the central office: posting, advertising, Criminal Offender Record Information (CORI) checks, and contract preparation. Interviewees reported that the district posted openings on the website, advertised locally, and occasionally advertised in *The Boston Globe*.

At the middle and high school, department heads for grades 6-12 participated with the principals in initial screenings. Site councils made up of teachers, parents, and, at the high school, students, interviewed five to six candidates. Candidates often performed demonstration-teaching lessons. The candidates also met with department colleagues or team members. The best candidates, up to three, were recommended to the superintendent, and a CORI check was conducted. Interviewees reported that this was essentially the same process followed at the elementary school level. Principals felt they had the authority to hire, despite having to send a finalist to the superintendent. Teachers and administrators reported that the cost of a new hire was not a concern; the district hired very experienced teachers during the period under review.

2. All professional staff had appropriate Massachusetts licensure.

Rating: Satisfactory

Evidence

A review of teacher folders revealed that all were certified. A review of administrator folders revealed all were certified. Interviewees reported that new hires had to have appropriate

licensing. However, the EQA team did not always find certification certificates in the employee's personnel folder; all were kept in a separate binder.

3. In the event of unfilled positions, professional staff were hired on professional waivers and were provided mentoring and support to attain the standard of substantial annual progress toward appropriate licensure.

Rating: Satisfactory

Evidence

Administrators reported that during the period under review no one was hired on a waiver. They further stated that this was a "rule" of the superintendent.

4. The district provided teachers and administrators who were new to the district or their assignments with coaches or mentors in their respective roles and included an initial orientation that addressed the importance of the assessment and use of student data.

Rating: Satisfactory

Evidence

The Littleton school district had a well-written, well-defined, and well-received mentoring program for new teachers. A *Mentoring Handbook* outlined the program's goals, criteria for applying, selection of mentors, timeline, the role of the beginning teacher, new teacher support system, the primary role of the mentor, alternative mentoring scenarios, and confidentiality requirements. The program was available to new teachers to the district and teachers new to a position within the district. Each school building had a mentor coordinator responsible for training mentors. An outside consultant trained mentors. Teachers reported program consistency throughout the district. Administrators reported that the program was effective and strong and that mentoring of new teachers involved the principals and grade-level, team, and department members. It was also reported that due to the small size of the district, some mentors were selected who did not meet basic requirements. Protégés provided feedback at the end of the year. Teachers and administrators stated that although the formal mentoring program was designed for one year, it was sometimes extended informally for a second year. An orientation program was held in late August for teachers new to the district.

Although there was no formal mentoring program for administrators, interviewees reported that administrators new to the district used the administrative team, including the superintendent, for advice and support.

5. The district's professional development programs included development of data analysis skills and the use of item analysis and disaggregated data to address all students' achievement.

Rating: Needs Improvement

Evidence

Although the teachers received substantial professional development in data acquisition and some on data analysis, there was comparatively little training on the use of data to implement change. During the period under review, the district contracted MCAS data analysis to an outside vendor. When results were returned to the district too late for use in the revision of course content or instructional practices, the district chose in 2006-2007 to bring the data analysis practice in-house. Since few staff members were trained in TestWiz, the data analysis was largely limited to item and trend analyses using aggregated data.

EQA uses the term "disaggregated data" to indicate data that is "broken apart," and as such the district did use disaggregated data (item analyses, for example). The EQA examination, however, focuses on the analysis of subgroup achievement using disaggregated student assessment results. The district convened its own task force in 2004-2005 to address the performance gap between subgroups. Since then, the gap, particularly in mathematics, has not measurably improved. In Littleton, the data were analyzed, and the information on the performance gap between special education and regular education students was recognized, but there was little evidence reported by teachers or administrators of special efforts in student support programs intended to narrow the performance gap. Six training sessions were held at the end of 2005-2006 in strategies for the differentiation of instruction. Administrators expressed hope that continued efforts in that area would produce improved student performance by the special education subgroup.

6. The district's human resources policies and practices encouraged professional growth and recognition and placed high priority on retaining effective professional staff and on creating promotional opportunities for effective teachers.

Rating: Satisfactory

Evidence

The district provided a mentoring program for staff new to the district, and awarded professional status to teachers who successfully completed three or more years in the district. Through the collective bargaining agreement with the teachers association, the district awarded longevity pay after 15 years of district service and 20 years total service, step increases for years of experience, graduate course tuition reimbursement of up to $2,000 a year, a sick leave bank, and sick leave buy-back upon retirement of up to $2,000. The teacher salary scale for the period under review increased at an average of three percent per contract year.

Interviewees reported that staff did not leave the district for better pay in other districts; most of the turnover was due to retirements and staff remaining at home after leaves to raise families. The district had an exit interview procedure and a survey for exiting teachers. Interviewees also reported that the labor contract with the school committee attracted new teachers, the school committee wanted to be competitive with neighboring districts, and there was much support and collegiality from peers, parents, and "great" children.

Professional development opportunities were not limited by the district policy (GCIA), but were limited by practices engendered by recent budget cuts. District practice during the period under review did not allow the district to pay for conferences or transportation, but did allow the district to excuse teachers for conferences for which they had paid themselves and provide for substitute coverage for the teacher. Such mechanisms as the course reimbursement and the Littleton University, a district initiative that consisted of purchasing a course from a local college or university and offering it onsite to teachers, served to supplement professional development activities of the district.

Opportunities for promotion and leadership were somewhat limited. These opportunities included department head positions for grades 6-12, mentorship positions, and data team leader

positions, as well as administrative positions that would occasionally open. Both the principal and assistant principal of the high school were promoted from the teaching staff.

7. The district's professional development program was informed by most or all of the following: the instructional program content; student, teacher, and administrator needs as indicated by program assessments; research-based practices; the staff evaluation process; and student achievement data.

Rating: Needs Improvement

Evidence

The district designed the professional development plan for teachers using criteria that were not clear to interviewees. Teachers reported that administrators regularly solicited input regarding professional development activities that they thought they might have needed. It was not clear, however, the extent to which those suggestions informed the professional development plan. One teacher reported that the "analysis of data" informed professional development planning, but EQA examiners could observe no obvious connection between the planning process and the actual implementation of professional development activities.

The School Improvement Plan for each school called for varying approaches to professional development, none of which included training for teachers in the use of data. Professional development was included as a part of many goals, but it was building-based and inconsistent. One school needed Writing Across the Curriculum training from the John Collins Reading consultants during the early-release Wednesdays. It also needed staff training in differentiated instruction. Two schools required professional development for "best use of flexible group training" to facilitate the goals of the SIPs. Improvement of student assessment results was a goal, but it did not directly tie to professional development activities according to the data presented to the EQA examiners.

Some interviewees reported that research-based practices informed the professional development plan, and training in The Skillful Teacher techniques appeared in the high School Improvement Plan. There was still no direct connection to measured student needs requiring this activity. The district did engage in training in Professional Learning Communities, however, and maintained that effort over two years during the period under review. This allowed the district to begin

discussions of curriculum goals using a common vocabulary. It was not clear what drove the professional development plan within the district. It was clear that, while there were peripheral connections to student achievement, there was no direct connection with measured student progress.

8. Changes in the expectations for programs and practice were monitored and supported by changed supervision and evaluation standards and in the professional development plans of professional staff.

Rating: Needs Improvement

Evidence

Both teachers and administrators agreed that although the building principal reviewed teachers' individual professional development plans (IPDPs), they did not monitor them or support them through supervision or evaluation standards. IPDPs were kept on file in some of the school buildings within the district, while they were not in others, according to interviews with administrators. Administrators reported that there were walk-throughs and walk-bys conducted, but that there were no written records kept except in those cases in which the five-minute walkthrough was used as the district evaluation method. Administrators reported that they were not sure about their ability to comment in writing about what they saw during walk-throughs due to their lack of clarity over the interpretation of language in the collective bargaining agreement.

During interviews, teachers reported that they lacked sufficient training to improve student performance using the Everyday Math program.

In a review of 35 randomly selected teacher personnel files, EQA examiners judged only 3.3 percent of the evaluations reviewed as promoting growth and overall effectiveness. In the majority of the files reviewed, there were no recommendations. Timely teacher evaluations were found in only 23.3 percent of the personnel files examined. Only 10 percent of those were considered instructive.

9. The district's evaluation procedure for administrators' performance was aligned with the requirements of the Education Reform Act and was informative and instructive, and used to promote individual growth and overall effectiveness. Compensation and continued employment were linked to evidence of effectiveness, as measured by improvement in student performance and other relevant school data.

Rating: Unsatisfactory

Evidence

Interviewees stated that administrators, including the superintendent, had not been evaluated in years and that employment contracts did not make administrators accountable for student achievement.

EQA examiners reviewed personnel files for 13 administrators, all of whom had served in the district throughout the period under review. Three of the administrators were newly appointed, and thus would not necessarily have been evaluated by the time of the examination visit. Of the 10 remaining administrators, the EQA team found only four evaluations: two for one administrator, one for each of two others. Only the two evaluations for the single administrator were timely. EQA examiners considered them both informative and capable of promoting growth and overall effectiveness.

10. The district's evaluation procedure for teachers' performance was aligned with the requirements of the Education Reform Act and was informative and instructive and used to promote individual growth and overall effectiveness. The district provided opportunities for additional professional development and support to struggling teachers. After following due process, the district took action against persistently low-performing teachers.

Rating: Needs Improvement

Evidence

A review of teacher folders revealed that 93.3 percent of evaluations contained components of the Education Reform Act, 33.3 percent were informative, 10.0 percent were instructive and 3.3 percent promoted growth or overall effectiveness. Evaluations for teachers with non-professional status in their first year included one to three full period observations and a summative evaluation at the end of the school year. After the first year, teachers could select a

full period observation or five-minute walk throughs, which the principal formally recorded in writing after every 10 had occurred.

Goal setting was a component of the evaluation process for both teachers with and without professional status, and all teachers evaluated received a written summative evaluation at the end of the school year. The collective bargaining agreement with the teachers association stipulated a four-year evaluation cycle for teachers with professional status. Interviewees indicated the practice in use was a two-year cycle. Teachers stated that few summative evaluations contained recommendations; suggestions were informal and on going, at least in one school.

Administrators and teachers stated that an apprehensive culture in the district made it difficult to include constructive criticism/recommendations in teacher evaluations. Principals in particular stated that the collective bargaining agreement limited the feedback they offered after classroom walk-throughs and that the evaluation tool and process was neither clear nor in management's favor. Teachers also stated that evaluations were not done in at least one school, including for new teachers, and many teachers throughout the district with professional status had not been evaluated in years. Principals and assistant principals conducted evaluations, but department heads for grades 6-12 did not.

There was little evidence that the district wrote plans with suggestions and recommendations for improvement for underperforming teachers, or that it provided in- and out-of-district professional development activities to support teachers in need of improvement. As mentioned earlier, there was a formal mentoring program in place for first-year teachers, and mentoring sometimes continued informally for a second year. There was no evidence that the district used mentoring for teachers deemed underperforming.

Representatives of the teachers association could not recall an instance of termination of a teacher with professional status during the period under review, but stated that there had been non-renewals during the first 90-day review period and one to two non-renewals at the end of the school year.

11. Administrators in the district used effective systems of supervision to implement district/school programs and goals for improving student achievement in their respective assignments, and used these systems to address the strengths and needs of assigned staff.

Rating: Unsatisfactory

Evidence

The absence of written administrative evaluations made it impossible to hold administrators accountable in writing for improving student achievement in the schools. In addition, 76 percent of the teacher personnel folders examined did not contain a timely personnel evaluation. Thus, the district did not officially hold teachers accountable for student achievement either.

In interviews, both teachers and administrators considered themselves responsible for improving student performance. Both teachers and administrators reported that they held themselves more responsible than any written evaluation could make them feel. Some administrators reported that the superintendent evaluated them "orally", but such an evaluation does not meet the requirements of the Educational Reform Act or 603 CMR 35.

12. The district's employment (human resources), supervision, and professional development processes were linked and supported by appropriate levels of funding.

Rating: Unsatisfactory

Evidence

According to the End of Year Pupil and Financial Reports for FY 2004 through FY 2006 the district expended $272,813 on professional development in FY 2004, $128,467 in FY 2005, and $123,550 in FY 2006. The amount expended in FY 2006 was a decrease of 120 percent over FY 2004 and a decrease of 3.9 percent over FY 2005. In addition, the FY 2005 per-pupil expenditure on professional development from all funding sources in Littleton was 65 percent less than the state average ($117.48 per pupil in district compared to $194.25 in state). Interviewees affirmed that lack of funds for professional development was always an issue. Several principals stated that a lack of a system-wide approach to professional development was a weakness in the district.

Lack of linkage to and support from an appropriate level of funding hindered effective supervision. No evidence was found that staff needing professional assistance were provided professional development opportunities either in-district or off-site.

In numerous interview sessions, personnel reported that the district was underfunded. There was no evidence that this affected the district's ability to attract qualified candidates. Further, interviewees reported that there were no financial limits on hiring professional staff. However, during the period under review, the district eliminated staff positions and hiring opportunities were few.

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.

Rating: Satisfactory

Evidence

The district had a "Crisis Book" detailing specific responses and responsibilities for various emergencies. The district also had a flip chart that served as an abbreviated "Crisis Book." Although not directly observed in classrooms, principals stated that flip charts were in every room usually affixed to the main classroom door. All staff attended safety workshops during the period under review. Substitute teachers and volunteers also received training during the period under review. Interviewees reported the district reviewed the "Crisis Book" annually. Documentation revealed that various schools practiced fire drills, student bus safety procedures, lock downs, and so forth. The EQA team observed that the front doors of all schools were locked and that at some schools visitors had to press a buzzer and were allowed entry when a staff member opened the door. Several schools had video camera and remote entry capability.

Standard V: Access, Participation, and Student Academic Support											
Ratings▼ Indicators►	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Total**
Excellent											
Satisfactory	✓		✓	✓	✓		✓	✓	✓	✓	**8**
Needs Improvement		✓				✓					**2**
Unsatisfactory											

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.

Standard Rating: Satisfactory

Findings:

- The district offered a range of academic programs for its students including special education programs, college preparatory classes, honors classes, and Advanced Placement classes. A variety of after-school activities was also available to all students. The district espoused a philosophy of inclusion for all students into all programs.
- The district used formative assessments and summative data to identify students who did not meet expectations. Academic support services were in place at all levels for students at risk.
- The district was effective in retaining most students through graduation, although it had no program in place for dropout recovery.
- The district had fair and equitable procedures to reduce discipline referrals, suspensions, and exclusions. An in-school suspension policy was in place at the middle school but not at the high school; the high school used a Saturday school to address attendance and discipline issues.
- The district provided transition activities for its students, from grade to grade and from school to school.

Summary

The district used formative assessments and summative data to identify students at risk of not attaining proficiency on MCAS tests. Math scores did not improve over the three-year period and lagged behind ELA scores. Furthermore, the achievement gap between special education students and regular education students did not improve during this period.

The district provided a range of programs that were comprehensive, accessible, and rigorous. The elementary and middle schools grouped students heterogeneously, providing academic support in the classroom for special education students, as needed. The district had a large support staff including special education teachers, speech aides, instructional aides, reading specialists, and math specialists. These professionals and paraprofessionals made it possible for the schools to use an inclusion model for most students.

The high school had three levels of instruction: college preparatory, honors, and Advanced Placement (AP). All courses were open to all students, although teacher input and counseling played a large role in determining course selection. The results of the AP exams were unsatisfactory in many disciplines. EQA examiners attributed these low scores to the heterogeneous population of many AP classes at Littleton High School, and the district concurred.

The only significant subgroup in Littleton was special education students. All other subgroups represented less than 10 percent of the district's enrollment. The model of inclusion drove all major decisions in the district, and therefore all programs and activities were open to all students. Administrators tracked student data carefully to make sure that the special education students were proportionally represented.

The district was effective in maintaining high rates of attendance for students and staff. During the period under review, the district's student attendance rate was in the 95 to 96 percent range, with the greatest number of absentees in grades 10-12. The average rate of teacher absence was 4.6 days per academic year, including professional development days.

The school committee reviewed and approved discipline, suspension, and exclusions policies in 2004. The district posted these policies on its website, and printed them in all student handbooks.

At the elementary schools, classroom teachers handled most discipline issues. The middle school had an in-house suspension program in place; the high school did not, and instead the district instituted a Saturday School in 2005. According to administrators, the number of referrals declined dramatically over the two years that this disciplinary measure was in place.

The district was effective in retaining most students through graduation. The dropout rate for grades 9-12 was 0.6 percent in 2004, although no data were available for the last two years of the review period. The district had procedures in place to provide alternative schedules to meet the graduation requirements of potential dropouts. However, no program was in place for dropout recovery.

Indicators

1. The district administration and staff used aggregated and disaggregated student achievement data on student participation and achievement to adjust instruction and policies for at-risk populations and provided additional programs and supports to assist their progress and academic achievement.

Rating: Satisfactory

Evidence

The Littleton school system used extensive data collection and analysis to drive revisions in instruction and programs. Data team leaders were trained in MCAS data and SAT score item analysis during two days in the summer. These team leaders were responsible for the data analysis for their buildings.

Support services were set up at each school in the district in the form of a systematic "Pyramid of Support and Intervention." For all students needing support, the services started with students receiving accommodations while in the regular classroom and progressed to meetings with teachers, parents, and counselors, which led to child-study team meetings. At the top of the pyramid were referrals to Title I services or to the special education program.

For the period under review, the only significant subgroup present in the Littleton district was that of special education students, which made up between 17 and 18 percent of the school-age population. Minority students and low-income students comprised less than five percent of the

student population. The district reported and analyzed disaggregated scores for regular education and special education subgroups by grade level. Special education students consistently scored below regular education students in the years under review, and did not meet AYP in 2006.

From interviews with teachers and administrators, the EQA team learned that the district was very aware of the gap between regular education and special education MCAS scores. In order to address this inequity, it took a number of different approaches. First, in terms of staffing, the visiting team found that at the elementary level a large number of professionals and specialists serviced students identified as being "at risk." For grades K-2 there were three Reading Recovery teachers, four special needs teachers, and an instructional support staff made up of 12 paraprofessionals. Students with significant delay in reading worked individually with a teacher, or in small group settings. At the Russell Street School (grades 3-5), 68 students received reading support in 2006. A reading specialist, a Title I math specialist, three special education teachers, and eight aides were available to help students improve their skills. At the middle school, students could go to a learning center to receive extra help, or just to "cool off" if necessary. Teachers indicated that, at times, some regular education students also used the learning center.

In order to improve the MCAS scores of regular education students, the district used a number of different approaches. Reading tutors and parents were utilized to help at-risk students improve their language and math skills, at all levels. At the elementary schools, classroom teachers provided after-school assistance to re-teach and reinforce concepts. A literacy specialist, a speech therapist, and a math specialist were also in charge of small group support and instruction. At the high school, student volunteers who were members of the National Honor Society did peer tutoring.

The district used aggregated and disaggregated student achievement data to adjust instruction. According to the district curriculum accommodation plan (DCAP), teachers gained information about their students through participation on child study teams and in consultation with specialists. The philosophy of the Littleton school district was to use inclusion whenever possible, and to provide additional support as needed. In classroom visits throughout the district,

the EQA team observed many students working well in a regular classroom setting, with the aid of a special education teacher or an assistant.

At the beginning of each school year, the leadership formed a student success team (SST) in each building. This team consisted of a representative from administration (such as a principal or assistant), a guidance counselor, a pupil personnel representative such as a psychologist, and a volunteer teacher. The district had a process for referring a student who was having academic, emotional, social, or behavioral difficulties. Staff members who referred a student were encouraged to attend SST meetings. Each building held regularly scheduled meetings, which the leadership posted.

2. At each grade level, the district used formative assessments and summative data to identify all students who did not meet expectations and provided these students with supplementary and/or remedial services that resulted in improved academic achievement and MCAS test proficiency.

Rating: Needs Improvement

Evidence

The district attempted to improve MCAS scores and particularly the MCAS math scores, which lagged behind the ELA results at all grade levels. It held vertical team meetings at the elementary schools and made recommendations for improved instruction and for remedial strategies to address these weaknesses. Team leaders, trained for that purpose, conducted item analyses of all MCAS tests. In addition, administrators used TestWiz in order to identify areas of weakness, conducting the analysis by learning standard and by grade level, and distributing the results to teachers. Teachers met on release days and in after-school sessions to discuss the item analyses and to develop an action plan for each grade level. Once a month throughout the year, all team leaders met with the superintendent and the curriculum coordinator to discuss changes and to realign the curriculum both horizontally and vertically.

Instructions for downloading MCAS data and TestWiz were given to teachers, although no formal training was provided. In October 2006, each teacher was expected to conduct an analysis for his/her respective grade level and students scores. The district conducted MCAS workshops for all staff in March 2005 and in February 2006.

The district strategic plan for 2005-2007, which includes the period under review, included many forms of assessment, both formative and summative. In grades preK-K, the district used benchmark assessments. In grades 1-2, the district administered Stanford Reading (now discontinued), trimester Benchmark Assessments, Clay Observation Surveys, GRADE, DIBELS, and DRA tests (in fall and spring). The district expected that there would be a minimum five to 10 percent yearly improvement on the benchmark data for each grade and course, in all subject areas. The district also gave Reading Recovery tests to the students in the program. During the period 1998-2004, the district analyzed MCAS scores for Reading Recovery students separately. It found that in ELA, for all grades and all years, 58 percent of students fell in the 'Needs Improvement' or 'Warning/Failing' categories.

Teachers told the EQA team that in elementary grades the district also used student portfolios and performance assessments. At the middle and high schools, it used locally developed end-of-course assessments. Groups of teachers teaching the same subject and level developed these tests. Students in grades 11-12 also took PSAT, SAT, ACT, and Advanced Placement tests. SAT data indicated that the percentage of students taking the test declined from 100 percent in 2004 to 89 percent in 2006. During these years, the SAT math scores were in the 533-556 range, while the English scores were in the 533-543 range, all above state average. During the last two years, from 12 to 17 percent of students in grades 11-2 took the ACT.

3. Early intervention programs in literacy were provided at the primary education level to ensure that all students were reading at the 'Proficient' level on the MCAS test by the end of Grade 4.

Rating: Satisfactory

Evidence

In 2004, the grade 4 ELA scores showed that 38 percent of the students fell in the 'Warning/Failing' and 'Needs Improvement' category. In 2006, 46 percent of the grade 4 students scored at these levels, with 79 percent of special education students performing at these levels.

During the years 2002-2003 through 2004-2005, the Littleton school district used the DC Heath and Letter People Programs as a basis for reading instruction. Through the examination of data,

the faculty determined that these programs were not effective. After piloting several programs and making site visits to other school districts, the district adopted the McGraw Hill reading program in 2006. Teachers told the EQA team that they were hopeful that with the adoption of this reading program, they would see an improvement in scores.

A special education/regular education partnership task force was created in January 2005 to address the achievement gap between special education and regular education students, as measured by MCAS data. Training for all staff on differentiated instruction, curriculum accommodation, and inclusion was proposed and delivered.

The Reading Recovery program was in place for grade 1-2 students during the years under review. The district used results from the Developmental Reading Assessment (DRA) to place students into the program and to track students' achievement while in the program. Only a small percentage of children served by Reading Recovery required special education services, and none were retained. Of the 20 students served by Reading Recovery in 2004-2005, 83 percent were discontinued after a full program. Teachers interviewed felt that the Reading Recovery program was very effective.

In 2005-2006, the district wrote a teacher leader training grant to provide early literacy intervention and professional development. This was a multi-year process with a training year, a field experience year, and two support years for providing continuing professional development. Reading Recovery teachers were involved in this process during 2006-2007.

All students who were identified as "at risk" at Shaker Lane were assessed using DRA tests in the fall and spring of each year. Dynamic Indicators of Basic Early Literacy Skills (DIBELS) and GRADE reading assessments were also given to students in grades 1-5.

According to the 2005-2006 data from DIBELS, at the Shaker Lane School 15 percent of the kindergarten students tested were in the intensive category (needed substantial intervention), and 18 percent scored in the strategic category (needed additional intervention). Grade distribution for DIBELS showed that the following percentages of students needed either substantial or additional intervention: 12 percent at grade 1, 17 percent at grade 2, 49 percent at grade 3, 81 percent at grade 4, and 60 percent at grade 5. According to the School Improvement Plan for the

Shaker Lane School, students who did not meet the 50th percentile were identified and a personalized plan was developed for each student. A "reading together" program, which included students and their families, was developed in 2003-2004 to improve reading skills.

4. District administration and staff helped all students make effective transitions from one school, grade level, or program to another. This assistance was focused on maintaining or improving levels of student performance.

Rating: Satisfactory

Evidence

The district provided effective transitions from one school, grade level, or program to another. The Littleton school district has only four schools, making the upward transitions simple and efficient.

At the high school level, the district held a four-hour freshman orientation in August of each year under review. At this time, students toured the building and were given explanations on policies and procedures. A cookout followed the orientation. For parents of new grade 9 students, the guidance department made a presentation at a parents' night held in March or April. For special education students the district held a separate open house, following the general freshman orientation. For Littleton High School students that came from a group home for adolescent boys, the district developed a specific plan for transition for each student individually.

For the transition from grade 2 to grade 3, teachers from the Shaker Lane School met with teachers from the Russell Street School to discuss the promotion of their students. A parent's night was held in March at each elementary school to facilitate transitions. These meetings were followed by student visits to their new school in the spring. A similar procedure was used for the transition from the Russell Street School to the middle school.

5. The district had fair and equitable policies, procedures, and practices to reduce discipline referrals, grade retention, suspension, and exclusion.

Rating: Satisfactory

Evidence

The school committee adopted discipline, suspension, and exclusion policies in 1995, and reviewed them in 2004. The Behavioral Guidelines for Students appeared in all of the schools' student handbooks and on the district website. The principal of each school set forth the policies, in consultation with the school council. Discipline procedures for special education students were modified according to students' disabilities and their IEPs.

Teachers and principals told the EQA examiners that at the Shaker Lane School and at the Russell School, classroom teachers effectively handled all discipline issues. Occasionally, a student was referred to the principal. There was no in-school suspension for grades K-5. No incidents of out-of-school suspension were reported at the elementary level during the years under review.

At the middle school, the classroom teacher handled minor infractions, addressing them mostly through the assignment of an after-school detention. The principal, who could assign one or more days of in-house suspension, handled infractions of a more serious nature. The special education staff used the Learning Center at the middle school as a place to deal with social and emotional problems.

At the high school, Saturday School was instituted in 2005, and according to the principal and assistant principal, has been very effective in dealing with disciplinary issues. Students were assigned to Saturday School for behaviors such as failure to comply, unacceptable language, fighting, smoking, or disrespect for a staff member. The number of referrals for Saturday School declined from 173 students in 2005 to 150 students in 2006. The EQA team was told that many of the students were repeat offenders.

Retention rates were highest for grade 1 students. The rate increased from 17.3 percent in 2004 to 18.8 percent in 2005. Students that were not considered ready for grade 2 were placed in a Transition class (K-1), which allowed them to mature socially and academically. The three-year retention rate at the high school was 0.7 percent.

6. The district had policies, procedures, and practices to prevent or minimize dropping out, and to recover dropouts and return them to an educationally appropriate placement.

Rating: Needs Improvement

Evidence

The district had policies and procedures in place to prevent or minimize student dropouts. According to the high school administrators, the assistant principal, the principal, and the guidance counselor counseled students that were at risk of dropping out.

Before a student could officially drop out, the district held a meeting with the student and the parents to explore alternatives to leaving school. One alternative was that of dual enrollment at Littleton High School and at another nearby high school. Some students attended advanced classes at Mount Wachusett Community College, although this often required them to withdraw from the high school. Some potential dropouts opted to take Virtual High School courses to complete their senior year. According to the principal, the fixed schedule at the high school also allowed students to complete their senior year by attending a half-day program, on a modified work-study schedule.

For the period under review, the dropout rate for grades 9 through 12 was 0.6 percent in 2004. No overall data were available for 2004-2005 or 2005-2006. No program was in place for dropout recovery.

7. The district implemented policies and programs that addressed the needs of transient and homeless students and provided them with timely and equitable access to quality programs.

Rating: Satisfactory

Evidence

According to the data provided, there were no homeless students in the Littleton district during the period under review. The school committee had a policy in place that described the services the district would provide, if such students entered the district. The superintendent would designate a staff person to be the district's liaison between the student and the parents. The director of pupil personnel services would act as the homeless coordinator. Homeless students

would receive transportation to and from the school, as well as all programs for which they would be eligible, including Head Start, special education, and Title I.

8. District and school policies and practices promoted the importance of student attendance, and attendance was continuously monitored, reported, and acted upon.

Rating: Satisfactory

Evidence

During the period under review, the district's attendance rate was 95.4 percent in 2003-2004, 96.2 percent in 2004-2005, and 95.8 percent in 2005-2006. The rate of chronically absent students across the district was 5.6 percent in 2004-2005 and 6.7 percent in 2005-2006. The rates of chronic absenteeism were highest for students in grades 10-12, for which the rate was between 15.1 and 16.7 percent.

At all schools, the classroom teacher took attendance during the first period of the day and then sent it to the office. At all levels, parents were asked to notify the school when a student was absent, either by phone or by e-mail. At the high school, there was a 24-hour automated phone line in place to report absences. Parents were contacted by phone and/or by mail when students were chronically absent. A full-time resource officer was available in the district to track students with excessive absenteeism and to make appropriate referrals to the Department of Social Services (DSS).

At the high school, a loss of credit policy was in place to prevent excessive absenteeism, and Saturday School was instituted to deal with the problem. According to the principal, this policy has become effective over the last two years. The district kept a record of students assigned to Saturday School for cutting class, for exceeding the tardy to school policy, or for perpetual tardiness to class. In 2004-2005, students incurred 620 of these infractions, while in 2005-2006 the number decreased to 310.

At the high school, perfect attendance was recognized at Awards Night. Students who had not missed any school days during the year were recognized with a special award.

9. District and school policies and practices promoted and tracked the importance of staff attendance and participation, and appropriate provisions were made to ensure continuity of the instructional program.

Rating: Satisfactory

Evidence

Staff attendance was not a problem in the Littleton district. According to data provided for the visiting team, the average absence rate of teachers was 3.8 days, excluding professional development days. When professional development days were considered, the average absence rate was 4.6 days per teacher. The Shaker Lane School reported the largest number of teacher absences, with an average rate greater than six.

From interviews with teachers across the district, the EQA team learned that the teaching staff was very dedicated to the students in the district, and did not abuse the system. When a problem of questionable absenteeism presented itself, administrators dealt with the individual situation at a meeting with the teacher.

10. District and school leadership implemented policies, procedures, and practices to increase proportionate subgroup representation in advanced and/or accelerated programs, in order to close the achievement gap.

Rating: Satisfactory

Evidence

The Littleton school district has a philosophy of open enrollment for all students into all programs and activities. The model of inclusion was prevalent across the district, and applied to classes as well as to after-school programs.

Going along with this philosophy, all honors and Advanced Placement (AP) courses at the high school were open to all students, without regard to previous placement. Guidance counselors, teachers, and parents were involved in the decision-making process and were consulted to make course recommendations for student placement. For students in grades 11-12 eligible to take AP courses, participation increased from 30 percent in 2003-2004 to 40 percent in 2004-2005 to 46

percent in 2005-2006. During the years under review, of the students enrolled in AP courses, between 24 and 29 percent took AP exams.

The high school principal tracked data for all students. During interviews with the EQA examiners, he stated that he also tracked the representation of special education students in honors and AP courses.

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

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: Needs Improvement

Findings:

- The district did not use an open, participatory process to develop its budget, and the budget did not provide accurate information on all fund sources, budgetary history, and trends.
- Although the district exceeded net school spending requirements by an average of 24.4 percent during the period under review, it was required to eliminate staff and reduce spending on instructional materials, equipment, and supplies.
- As part of budget development the district did not implement an evaluation-based review process to determine cost effectiveness of its programs, initiatives, and activities, and did not base budgetary decisions, at least in part, on student performance data and needs.
- The district's payroll and financial management software system was either incapable of providing, or not utilized to provide, district-level school and program financial information, nor was it used to forecast and control spending within fiscal budget limits. Administrators were unable to track spending and other financial transactions regularly and accurately.

- 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 use in calculating, indirect charges levied on the school district budget by the community.
- The schools were secure and had systems in place to ensure student safety.

Summary

The superintendent developed the annual school budget with no evidence of input from administrators, teachers, or the public. The few budget-related documents covering the period under review made available to EQA examiners were not clear, comprehensive, or complete and did not provide accurate information on funding sources, history, and trends. The district did not implement an evaluation-based review process to determine the cost effectiveness of programs, initiatives, and activities as part of the budget development process, nor was the budget process based, in part, on student performance data and needs. The district did not use an ongoing analysis of aggregated and disaggregated student assessment data to assure the budget would be effective in supporting improved achievement for all students.

The district exceeded the net school spending requirement in each of the years under review by an average of 24.4 percent. An examination of the district operating budgets appropriated at annual town meeting revealed that appropriations increased by 0.9 percent from FY 2003 to FY 2004, decreased by 1.5 percent from FY 2004 to FY 2005, and increased by 2.4 percent from FY 2005 to FY 2006, for a total increase of $212,419 or 1.7 percent from FY 2003 to FY 2006. During this period, the teacher salary schedule in the collective bargaining agreement with the teachers association increased by an average of three percent each year, and out-of-district special education costs increased by an average of 10 percent per year. These increases, coupled with stagnant operating budget appropriations, placed a strain on the funds available to the district for instruction and other direct student services, resulting in staff eliminations and spending reductions on instructional supplies, materials, and equipment. The town passed a general override of $1.2 million for the district in FY 2006 that alleviated the strain on the district's operating budget for that fiscal year. The town also approved a debt exclusion override to build a new middle school that opened in January 2007.

The district has four school buildings. The high school was built in 2001, the middle school opened in January 2007, and the two elementary schools were last renovated in 1998. All schools were adequately maintained and clean and provided an environment conducive to productive teaching and student learning. Security was evident in all schools. Doors were locked, and visitors had to identify themselves using an intercom at the main entrance to gain entry; once inside, they were required to sign-in. Some schools had a remote video camera/buzzer system.

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: Unsatisfactory

Evidence

EQA examiners found no written evidence that the district used an open, participatory process to develop its budget. No budget documents were available for review; thus, there was no evidence that the budget process resulted in a clear, comprehensive, complete, and understandable document that provided accurate information on fund sources, history, and trends. Interviewees, including administrators, teachers, school committee, and finance committee members, described the budget development process during the period under review as "top down," and only when reductions had to be made were administrators and the school committee invited to participate in finalizing budget numbers for town meeting. Parents reported that school councils were never involved in either developing or reducing budgets, and budget reduction decisions were "top down," sometimes taking place during the summer. Administrators also stated that they knew how much money they had to work with during a school year when the superintendent informed them of available funds periodically throughout the school year.

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: Needs Improvement

Evidence

There was some evidence that the district used student assessment data to allocate resources during the period under review. Interviewees reported the high school eliminated business courses and increased the number of Advanced Placement course offerings. The high school also contracted with Virtual High School and introduced a Latin course requiring the purchase of textbooks. The K-5 reading scores resulted in funds made available for a new anthology during this period. MCAS data analysis resulted in the adoption at the middle school of Impact Mathematics. However, there was no written evidence such as minutes of administrative meetings, minutes of school committee meetings, or financial documents that ongoing analysis of student assessment data played a direct role in allocating funds.

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

During the period under review, the district exceeded the required net school spending by 30.0 percent in FY 2004, 21.2 percent in FY 2005 and 22.0 percent in FY 2006. Excluding debt retirement and service, school committee and town expenditures for education decreased by 0.4 percent from FY 2003 to FY 2004, increased by 1.9 percent from FY 2004 to FY 2005, and increased by 4.4 percent from FY 2005 to FY 2006. Thus, from FY 2003 to FY 2006, expenditures increased by 5.9 percent. However, other financial data indicated that in FY 2004 the district's per pupil expenditure was 0.9 percent less than the state average, and in FY 2005 it was 11.2 percent less than the state average. The Department of Education document FY05 Expenditures by Function, All Funds – Summary indicated that the district exceeded the state average per pupil expenditure only in the areas of instructional leadership (12.3 percent), guidance, counseling, and testing (25.5 percent), operations and maintenance (5.6 percent), and payments to out-of-district schools (5.6 percent). In the area of instruction (classroom and specialists teacher salaries, other teaching services, professional development, and instructional

materials, equipment and technology), the district was below the state per pupil average expenditure by 23.2 percent.

Interviewees reported that budget reductions the last five years resulted in program eliminations in areas such as art, music, and physical education, and parent organizations that once provided funding only for enrichment programs provided funding for essential classroom needs such as pencils. It was also reported that teachers spent more of their own money during the period under review for essential classroom needs, and that the teachers association provided funding to place defibrillators in older schools. Although it was reported that in general there was not enough funding, money was often made available when needed; for example, new ELA and mathematics textbooks were purchased for the high school. Teachers wrote grants and the Local Education Foundation also served as a source of revenue for purchases such as laptop computers. Interviewees stated that the district needed elementary school science kits and library books that it never funded.

The town passed a general override for FY 2006 of $1.2 million for the school district. Interviewees stated that it was "bare bones" and not intended to ease financial stress on the school district beyond one year. A general override was defeated two years earlier.

A new high school was built in 2001, and the two elementary schools were renovated in 1998. However, the middle school facility was in a deplorable condition with poor lighting, inadequate space, and a porous roof. During the period under review, plans for a new grades 6-8 middle school were developed, funding was appropriated by the town, and construction started resulting in the opening of a new middle school in January 2007.

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: Unsatisfactory

Evidence

Interviewees, including administrators, teachers, school committee, and finance committee members, reported the budget development process during the period under review to be "top

down." The superintendent developed the annual school district budget without collaboration. The little documentation related to budget development did not suggest that an evaluation-based review of cost effectiveness of programs, initiatives, and activities was part of the budget development process. There also was no written evidence or reports by interviewees that the budget development process was based, in part, on student performance data.

5. 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.

Rating: Satisfactory

Evidence

The district and town had an appropriate, detailed written agreement dated December 10, 2004 related to 603 CMR 10.0 stating how indirect charges levied on the district by the town were to be calculated. The school committee voted on the document at its meeting on November 29, 2004, and the chairmen of the school committee and the board of selectmen signed it.

Town administrative costs levied on the district included 50 percent of the total spending of the treasurer's office, 40 percent of the accountant's office, and 7.5 percent of the selectmen and offices of the town administrator and town counsel. Other levies included maintenance of the Shattuck Street building (11 percent of total spending), Shattuck Street office space (1.5 percent of assessed value), five percent of total highway department spending, 80 percent of the parks department's total personnel services, 40 percent of property and liability insurance, 50 percent of workers' compensation, actual unemployment insurance, actual cost to the town of health and life insurance for school employees both active and retired, actual retirement contributions calculated as a percentage, actual long-term debt and long- and short-term interest, and the actual regional school assessment.

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: Satisfactory

Evidence

During the period under review, the district exceeded required net school spending by 30.0 percent in FY 2004, 21.2 percent in FY 2005, and 22.0 percent in FY 2006. Chapter 70 aid remained constant for FY 2004 and FY 2005 and increased by 5.5 percent in FY 2006. However, from FY 2003 to FY 2006, Chapter 70 aid decreased by 15.6 percent.

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: Needs Improvement

Evidence

The district provided no regular, timely, and complete financial reports for the period under review to EQA examiners. Interviewees, including school and finance committee members, stated that financial reports were provided inconsistently, and changes in format, level of detail and budget numbers made the reports difficult to comprehend and financial data difficult to track. Administrators reported never receiving financial reports. The town contracted for independent audits during the period under review. Although there were no inaccuracies reported, the FY 2004 audit found exception to the timeline for filing and signing of timesheets for the Title I grant. The FY 2005 audit found exception to the timeline for filing and signing of timesheets for the special education IDEA grant. The district provided no evidence that it made internal or external audits of student activity accounts.

The district and town recently collaborated on identifying and selecting new payroll and financial management software, SoftRight Sumaria. They expected the software to come on line during FY 2007.

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: Unsatisfactory

Evidence

The payroll/financial software used during the period under review either could not or did not provide the district and town accurate and timely reporting. There was no evidence the software was capable of or used to provide school and program financial information, budget forecasting, and spending controls. Administrators reported they did not receive regular financial reports and were unable to track spending and other financial transactions through the software.

As mentioned above, the district and town have selected new payroll and financial management software, SoftRight Sumaria, that they will jointly use.

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: Needs Improvement

Evidence

Principals, the curriculum coordinator, and special education director were responsible for grants during the period under review. In all three years, federal and state grants included Teacher Quality, Enhanced Education through Technology, Special Education 94-142, Special Education Program Improvement, Title V, Title I, Drug Free Schools, and Early Intervention Literacy. In FY 2004 and FY 2005, the district also received Special Education Early Childhood and Summer Academic Support grants, and in FY 2005 it received the Learn and Serve school-based grant. The amounts of these grants totaled $494,782 in FY 2004, $488,207 in FY 2005, and $536,465 in FY 2006. The district also received the Baldrige Award of $10,000 in FY 2006. Teachers occasionally secured smaller grants for schoolhouse initiatives, including grants from the Local Education Foundation. Such grants funded community service endeavors and microscopes. Special revenue funds, revolving accounts, and related fees were the responsibility of the superintendent. There was no indication that he delegated this responsibility to the business manager. Interviewees reported that funds from revolving accounts were used to pay expenses, and revenue and receipts were difficult to track.

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: Needs Improvement

Evidence

No staff member either in the district or in town government was MCPPO certified. The superintendent had the responsibility to ensure that district personnel followed state procurement laws, by school committee policy. Few single purchases of $25,000 or more were made during the period under review. EQA reviewed one purchase, for contracted cleaning services, and the bid document and executed contract conformed to state procurement laws. Purchase orders were used for all non-salaried expenditures from all revenue sources. The purchasing process was two-fold; a supply requisition was initiated and entered into the accounting system and was either approved or disapproved by the responsible administrator (principal, special education director, etc.). If approved, the requisition was forwarded to the business manager for his approval. If approved, the requisition was assigned a purchase order number, and the location from which the requisition was initiated contacted the vendor.

EQA examiners reviewed financial audits, and no findings or remarks relative to the district were significant. The audits were completed in a timely manner.

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

There was no evidence of a formal preventive maintenance program. The district employed one full-time maintenance person for approximately 330,000 square feet of school space. The district relied on the town to maintain its grounds. There was evidence that the annual capital budget for the schools and town approved at town meeting contained funds for maintenance-related projects. The high school was built in 2001, and the two elementary schools each were renovated in 1998. The general condition of these three schools was good to excellent. However, the middle school facility was in a deplorable condition with poor lighting, inadequate space, and a porous roof. It was not conducive to promoting student learning and achievement. This was the opinion voiced by numerous interviewees. However, during the period under review, plans for a new middle school for grades 6-8 were developed, funding was appropriated by the town, and construction started resulting in the opening of the new middle school in January 2007.

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: Unsatisfactory

Evidence

There was no evidence of a long-term capital plan in existence during the period under review.

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

Rating: Satisfactory

Evidence

Security was evident in all schools. Doors were locked and a buzzer at the main entrance had to be pressed and the visitor had to identify him/herself via intercom to gain entry. Once inside, visitors were required to sign in. Some schools had a remote video camera/buzzer system. The district sought funding through the FY 2008 capital budget to place video cameras at all schools. The district had a resource officer during the years under review, funded by the police department for two years and by the district for a third year.

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. There are four indices: the Average Proficiency Index (API), the English Language Arts Proficiency Index (EPI), the Math Proficiency Index (MPI), and the Science and Technology/Engineering Index (SPI). The API currently is a weighted average of the EPI and MPI; the SPI will be included beginning in 2007, when passing the STE test becomes a graduation requirement.

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 2006 MCAS tests:

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

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

The EPI would use the same calculation using the ELA results for all students taking the ELA exam. The MPI would use the same calculation using the math results for all students taking the math exam. The SPI would use the same calculation 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, FY1997 – FY2006

	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
FY97	1,181	3.8	6,769,453	6.3	6,501,349	654,804	15.6	7,156,153	5.1	7,511,560	-2.0	355,407	5.0
FY98	1,246	5.5	7,266,141	7.3	6,881,125	773,802	18.2	7,654,927	7.0	7,850,559	4.5	195,632	2.6
FY99	1,273	2.2	7,722,895	6.3	7,269,396	901,102	16.5	8,170,498	6.7	8,380,913	6.8	210,415	2.6
FY00	1,321	3.8	8,017,641	3.8	7,737,770	1,099,252	22.0	8,837,022	8.2	8,996,545	7.3	159,523	1.8
FY01	1,387	5.0	8,706,147	8.6	8,103,163	1,341,977	22.1	9,445,140	6.9	10,635,987	18.2	1,190,847	12.6
FY02	1,472	6.1	9,738,621	11.9	8,103,311	1,635,309	21.9	9,738,620	3.1	12,010,076	12.9	2,271,456	23.3
FY03	1,492	1.4	9,929,542	2.0	8,394,423	1,734,384	6.1	10,128,807	4.0	12,920,456	7.6	2,791,649	27.6
FY04	1,597	7.0	10,748,953	8.3	9,361,446	1,387,507	-20.0	10,748,953	6.1	13,975,831	8.2	3,226,878	30.0
FY05	1,527	-4.4	10,620,933	-1.2	10,079,364	1,387,507	0.0	11,466,871	6.7	13,899,383	-0.5	2,432,511	21.2
FY06	1,532	0.3	11,139,291	4.9	10,499,232	1,464,107	5.5	11,963,339	4.3	14,599,851	5.0	2,636,512	22.0

	Dollars Per Foundation Enrollment			Percentage of Foundation			
	Foundation Budget	Ch 70 Aid	Actual NSS	Ch 70	Required NSS	Actual NSS	Chapter 70 Aid as Percent of Actual NSS
FY97	5,732	554	6,360	9.7	105.7	111.0	8.7
FY98	5,832	621	6,301	10.6	105.4	108.0	9.9
FY99	6,067	708	6,584	11.7	105.8	108.5	10.8
FY00	6,069	832	6,810	13.7	110.2	112.2	12.2
FY01	6,277	968	7,668	15.4	108.5	122.2	12.6
FY02	6,616	1,111	8,159	16.8	100.0	123.3	13.6
FY03	6,655	1,162	8,660	17.5	102.0	130.1	13.4
FY04	6,731	869	8,751	12.9	100.0	130.0	9.9
FY05	6,955	909	9,102	13.1	108.0	130.9	10.0
FY06	7,271	956	9,530	13.1	107.4	131.1	10.0

Foundation enrollment is reported in October of the prior fiscal year (e.g. FY06 enrollment = Oct 1, 2004 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.