

District Review Report

Medford Public Schools

Review conducted April 14-17, 2014



Center for District and School Accountability

Massachusetts Department of Elementary and
Secondary Education

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Medford Public Schools District Review Overview

Purpose

Conducted under Chapter 15, Section 55A of the Massachusetts General Laws, district reviews support local school districts in establishing or strengthening a cycle of continuous improvement. Reviews consider carefully the effectiveness of systemwide functions, with reference to the six district standards used by the Department of Elementary and Secondary Education (ESE): leadership and governance, curriculum and instruction, assessment, human resources and professional development, student support, and financial and asset management. Reviews identify systems and practices that may be impeding improvement as well as those most likely to be contributing to positive results.

Districts reviewed in the 2013-2014 school year include districts classified into Level 2 or Level 3 of ESE's framework for district accountability and assistance. Review reports may be used by ESE and the district to establish priority for assistance and make resource allocation decisions.

Methodology

Reviews collect evidence for each of the six district standards above. A district review team consisting of independent consultants with expertise in each of the district standards reviews documentation, data, and reports for two days before conducting a four-day district visit that includes visits to individual schools. The team conducts interviews and focus group sessions with such stakeholders as school committee members, teachers' association representatives, administrators, teachers, parents, and students. Team members also observe classroom instructional practice. Subsequent to the onsite review, the team meets for two days to develop findings and recommendations before submitting a draft report to ESE. *District review reports focus primarily on the system's most significant strengths and challenges, with an emphasis on identifying areas for improvement.*

Site Visit

The site visit to the Medford School District was conducted from April 14 to April 17, 2014. The site visit included 29.25 hours of interviews and focus groups with stakeholders, including school committee members, district administrators, school staff, students, and teachers' association representatives. The review team conducted 3 focus groups with 18 elementary school teachers, 11 middle school teachers, and 3 high school teachers.

A list of review team members, information about review activities, and the site visit schedule are in Appendix A, and Appendix B provides information about enrollment, student performance, and expenditures. The team observed classroom instructional practice in 63 classrooms in 9 schools. The team collected data using an instructional inventory, a tool for recording observed characteristics of standards-based teaching. This data is contained in Appendix C.

District Profile

The Medford School District has a mayor-council form of government and the chair of the school committee is the mayor. There are seven members of the school committee and they meet bi-weekly.

The current superintendent has been in the position since 1995. The district leadership team includes superintendent, deputy superintendent, assistant superintendent, director of pupil services, director of finance and administration, director of athletics and community schools, and director of media, instructional technology, and fine arts. Central office positions have been mostly stable over the past six years. The district has nine principals leading nine schools. There are nine other school administrators, including assistant principals. The assistant principals are members of a bargaining unit. There are a total of 383.6 FTE teachers in the district.

As of 2013, 4,677 students were enrolled in the district's 9 schools:

**Table 1: Medford Public Schools
Schools, Type, Grades Served, and Enrollment**

School Name	School Type	Grades Served	Enrollment
Brooks	ES	K-5	574
Columbus	ES	K-5	481
McGlynn	ES	PK-5	550
Roberts	ES	PK-5	543
Andrews	MS	6-8	520
McGlynn	MS	6-8	566
Curtis-Tufts	HS	9-12	15
Medford	HS	9-12	1,218
Medford Voc Tech	HS	9-12	210
Totals	9 schools	PK-12	4,677
*As of December, 2013			

Between 2009 and 2013 overall student enrollment decreased from 4,872 to 4,677. Enrollment figures by race/ethnicity and high needs populations (i.e., students with disabilities, students from

low-income families, and English language learners (ELLs) and former ELLs) as compared to the state are provided in Tables B1a and B1b in Appendix B.

Total in-district per-pupil expenditures were higher than the median in-district per pupil expenditures for K-12 districts of similar size in fiscal year 2013: total in-district per-pupil expenditures were \$13,366 as compared with a median of \$11,729 (see [District Analysis and Review Tool Detail: Staffing & Finance](#)). Actual net school spending has been above what is required by the Chapter 70 state education aid program, as shown in Table B8 in Appendix B.

Student Performance¹

Medford is a Level 2 district because all its elementary and middle schools are in Level 2.

- All four of Medford's elementary schools are in Level 2 because they have not met their gap narrowing goals for all students and high needs students. Columbus is in the 28th, Roberts is in the 33rd, Brooks is in the 38th, and McGlynn is in the 41st percentile of elementary schools.
- Andrews and McGlynn, in the 31st and 26th percentile of middle schools, respectively, are classified as Level 2 because they failed to meet their gap narrowing targets for all students and high needs students.
- Medford High is in the 46th percentile and Medford Vocational Technical High is in the 36th percentile of high schools; they are in Level 1 because they achieved a cumulative Progress Performance Index (PPI) of 75 or greater for all students and for high needs students.

The district did not reach its 2013 Composite Performance Index (CPI) targets for ELA, math, and science.

- The district's ELA CPI was 84.7 in 2013, below the district's target of 88.0.
- The district's Math CPI was 75.8 in 2013, below the district's target of 79.9.
- The district's Science CPI was 78.2 in 2013, below the district's target of 80.0.

ELA proficiency rates were below the state rate for the district as a whole and for every grade except Grade 10. ELA performance varied by school.

- ELA proficiency rates for all students in the district were 64 percent in 2010 and 2013, below the state rate of 69 percent.

¹ See also student performance tables in Appendix B.

- In 2013, ELA proficiency was below the state by 1 to 3 percentage points in grades 5, 7, and 8, and by 7 to 13 percentage points in Grades 3, 4, and 6.
 - ELA proficiency was 9 percentage points lower in 2013 than in 2010 in grades 3 and 6.
- ELA proficiency varied by school.
 - In the elementary schools, ELA proficiency ranged from 46 percent at Columbus Elementary to 58 percent at Brooks Elementary.
 - ELA proficiency was 66 percent at McGlynn Middle and 70 percent at Andrews Middle.
 - ELA proficiency was 95 percent at Medford High and 97 percent at Medford Vocational Technical High.
- Grade 10 ELA proficiency was 95 percent in 2013, 13 percentage points higher than the grade 10 rate of 82 percent in 2010, and above the 2013 state rate of 91 percent.

Math proficiency rates were below the state rate for the district as whole and for every grade except grade 10.

- Math proficiency rates for all students in the district were 50 percent in 2010 and 52 percent in 2013, compared to the state rate of 61 percent.
- Math proficiency in the district was below the state rate by 7 to 12 percentage points in grades 3, 5, 6, 7, and 8 and below the state rate by 16 percentage points in grade 4.
 - In the elementary schools, math proficiency ranged from 43 percent at Columbus and Roberts Elementary to 55 percent at Brooks Elementary.
 - Math proficiency was 47 percent at McGlynn Middle and 48 percent at Andrews Middle.
 - Math proficiency at Medford High was 86 percent and was 78 percent at Medford Vocational Technical High.
- Grade 10 math proficiency was 83 percent in 2013, 7 percentage points higher than the grade 10 rate of 76 percent in 2010, and above the 2013 state rate of 80 percent.

Science proficiency in the district was similar to statewide rates.

- Grade 5 science proficiency was 52 percent in 2010 and 51 percent in 2013, equal to the state rate of 51 percent.

- Grade 8 science proficiency was 37 percent in 2013, 3 percentage points higher than the rate of 34 percent in 2010, and below the 2013 state rate of 39 percent.
- Grade 10 science proficiency was 70 percent in 2013, 8 percentage points higher than the 2010 rate of 62 percent, and slightly below the 2013 state rate of 71 percent.

Medford met the 2014 targets for four-year cohort graduation rate and five-year cohort graduation rate.²

- The four-year cohort graduation rate improved each year from 78.0 percent in 2010 to 85.7 percent in 2013, above the state graduation rate of 85.0 percent.
- The five-year cohort graduation rate was 83.5 in 2012, lower than the rate of 88.3 percent in 2009, and lower than the 2012 state graduation rate of 87.5 percent.
- The annual dropout rate for Medford was 2.9 percent in 2010 and 1.8 percent in 2013, below the statewide rate of 2.2 percent.

² 2014 graduation rate targets are 80 percent for the four year and 85 percent for the five year cohort graduation rates and refer to the 2013 four year cohort graduation rate and 2012 five year cohort graduation rate.

Medford Public Schools District Review Findings

Strengths

Leadership and Governance

1. The superintendent has strategically guided the school district over a long period of time.

- A. The superintendent has forged productive relationships with many constituencies.
 - 1. The relationship with city officials has resulted in sustained support for the schools. They have been continually funded at a level that far exceeds net school spending. In addition, the elementary and middle schools have either been renovated or built new. Currently the high school is being renovated to accommodate new science labs.
 - 2. The superintendent and school committee have established a collegial working relationship that results in the smooth running of the school system.
 - 3. The administration's relationship with the teachers' association is also collegial. A recently established Labor-Management Committee monitors the implementation of the new educator evaluation system. In addition, the association was asked to provide some examples of District Determined Measures to begin the bargaining process.
- B. The superintendent makes strategic personnel decisions.
 - 1. Over the past five years the superintendent has had the opportunity to fill all of the principal positions in the district. In hiring principals, the superintendent has demonstrated his strategic vision for the schools. Each principal is well prepared to develop the programs and instruction under his/her direction.
 - 2. The plan to bring more cohesion between the vocational and traditional high schools to provide greater access to challenging curriculum for the vocational school as well as vocational curricula to the high school is a significant example of strategic decision-making.
 - 3. The superintendent developed a central office team that works well together and shares a vision for the direction of the school system. In addition, concurrently, the superintendent restored several K-12 curriculum director positions that had been lost for fiscal reasons in previous years.
- C. The district operates through inclusive decision-making.
 - 1. The central office administrative team works together to make decisions as well as working collegially with principals and curriculum directors to solve problems. The

curriculum directors and the instructional leadership team meet regularly with principals to discuss curriculum implementation and materials.

2. Principals work on districtwide initiatives and provide counsel and direction regarding building- based implementation. An example of inclusive decision-making is the preparation of the district's first SMART goals. In this endeavor, principals refined goals that were developed with central administration and then disseminated them to staff within their buildings. Teachers reported that they were familiar with the goals and used them to develop their professional goals with their principals.

Impact: As a result of the superintendent's strategic leadership, the schools enjoy city-wide support. The strategic nature of the superintendent's leadership leaves the district well positioned to move forward in ensuring access and opportunity for all students.

Curriculum and Instruction

2. **The district is in the process of completing and aligning curriculum documents, has dedicated personnel to oversee the curriculum, and has an ongoing process for teachers to participate in developing, reviewing and revising the curriculum.**

- A. The district has recently been systematically developing curriculum documents. It is currently adding assessments as well as instructional strategies and resources to ELA documents. All foreign language documentation is complete based on the 2011 state framework. The district is in the process of aligning its math documents to current state frameworks and providing teachers with a complete curriculum as it pilots several new math programs. Science curriculum is aligned to the current frameworks K-6.
- B. Directors described themselves as the "gatekeepers" for the K-12 curriculum. They work with the principals and teachers as documents are developed and later ensure that teachers throughout the district use them with fidelity.
 1. Six teachers from every elementary grade, and six from each school, participate in ongoing curriculum committees that work on curriculum with the directors.
- C. Administrators reported that a director of curriculum and instruction ensures that all curricula are current and coordinated among departments.

Impact: By completing the curriculum, by putting in place directors with the expertise to oversee the work, and by ensuring that teachers are central to the work, the district is providing its teachers with updated and aligned curriculum documents that help to ensure access for all students to a high-quality learning experience.

Financial and Asset Management

3. The Medford Public Schools and the city of Medford are well managed financially. The financial administrators regularly and accurately track spending and other financial transactions.

- A. The district regularly exceeds its Net School Spending (NSS) requirements.
 - 1. The district's NSS expenditures have exceeded its foundation budget by an average of approximately 20 percent since FY08. This places the district at approximately the state average in this category.
 - 2. The district's NSS expenditures have exceeded required NSS by an average of about 15 percent since FY08. In this, the district is again close to the state average in NSS, although it has fallen below the state average in the last four years.
 - 3. The district's FY14 budget projects that it will exceed the NSS requirement by about 14 percent in FY14.
- B. The director of finance and administration provides a monthly financial report to the superintendent and school committee.
 - 1. The report contains a narrative enumerating key areas of concern such as utility costs, special needs tuitions, and payroll. The narrative includes projections of year-end status.
 - 2. The report includes a spreadsheet listing all accounts, their appropriation, encumbrances, expenditures, balances, and percent used. The spreadsheet does not include projected end- of-year balances.
- C. The district has accurate, current, and timely external audits.
 - 1. The city has employed an audit firm to perform the Single Audit.
 - a. According to city officials, the audits have uncovered no issues for the schools other than a minor comment on food services.
 - b. The audits commented on minor issues with the student activities funds, food service, federal special education grants, and ARRA funding.
 - c. The city and schools have generally corrected the minor findings of the audits.
 - 2. The district employed an auditor to perform the End-of-Year Compliance Audit.
 - a. The audit did not find any significant problems.
 - b. The majority of the findings were either corrected immediately or prior to the next year's audit.

D. The district's financial tracking, forecasting, controls, and audits are strong in several other areas.

1. The city has a plan for reporting municipal expenditures on behalf of schools based on ESE regulations.
 - a. The district accepts this plan as reasonable.
 - b. The city and the schools have not yet formally accepted the plan.
2. There have been no deficits in recent years. And city officials reported that the school budget is well managed.

Impact: The sound financial management of the district enables thoughtful educational planning unencumbered by negative financial issues.

Challenges and Areas for Growth

It is important to note that district review reports prioritize identifying challenges and areas for growth in order to promote a cycle of continuous improvement. The report deliberately describes the district's challenges and concerns in greater detail than the strengths identified during the review.

Curriculum and Instruction

5. Administrators and teachers have varying expectations regarding effective instruction.

- A. A shared definition of instruction did not emerge from interviews.
 1. Across the district, when asked about the district's instructional model, staff noted various components of quality instructional practices. Although *Understanding by Design* (UbD) has been used in the district for years, staff do not share a common understanding of good practice as illustrated in UbD and were inconsistent in describing what the components of good teaching are in the Medford Public Schools.
 - a. Administrators suggested instructional practices included good modeling, active teachers, and "kids doing lots of work."
 - b. Principals suggested learning objectives, cold calling, formative assessment, student engagement, use of groups, student understanding, and "teacher as facilitator."
 - c. In a series of interviews and focus groups, teachers suggested the use of objectives, agendas, essential questions, grouping, students working independently, student engagement; one teacher suggested differentiated instruction.

2. When questioned, staff was unclear as to who the instructional leader was in their buildings. Principals suggested they were, and provided various descriptions of their own responsibilities, including reading in classes, modeling, being part of the team, and substituting. They also suggested that curriculum directors helped with instruction in grades 6-12. Teachers said that they themselves were the instructional leaders in addition to senior teachers, team leaders, and department heads.
3. Teachers have inconsistent opportunities to examine data to learn about their instructional practice.
 - a. Principals told the team that there has not been any recent training in learning to conduct learning walks or instructional rounds that would allow the district to gather and share data about broad trends in instructional practice.
 - b. While the curriculum directors report on data from districtwide testing to grade-level teams, neither the district nor the schools have an organized structure or system, such as data teams, to collaboratively examine and plan for the use of assessment data for improvement.

Impact: The absence of a common districtwide instructional model for teaching and learning results in a lack of clarity for teachers and administrators regarding what constitutes effective instruction. Without a common understanding to frame the monitoring, support and consistent evaluation of instruction, the district cannot ensure that students will consistently have access to instruction that meets their diverse learning needs.

6. The quality of instruction in 67 observed classrooms was inconsistent and indicated a relatively low occurrence of most effective instructional strategies.

The team observed 67 classes throughout the district³: Twenty at the two high schools, 22 at the two middle schools, and 25 at the 4 elementary schools. The team observed 24 ELA classes, 22 mathematics classes, and 21 classes in other subject areas. Among the classes observed were two special education classes, four ELL classes, and three career/technical education classes. The observations were approximately 20 minutes in length. All review team members collected data using ESE's instructional inventory, a tool for recording observed characteristics of standards-based teaching. Results indicated here reflect only instances of clear and consistent evidence. Please see Appendix C for all instructional inventory data.

- A. The review team noted a difference between interviewees' perceptions of instruction in the district and what was consistently observed in lessons across school levels.

3. District administrators reported that the onsite review took place during Passover and the Christian holy week when several staff members observed their holidays, resulting in a higher than typical number of classrooms being covered by substitute teachers.

1. Staff responses during interviews led review team members to expect to see the use of learning objectives, group work, and student engagement, since interviewees most frequently cited these three components as district instructional expectations. The review team observed clear and consistent evidence of these strategies in 58 percent or less of all classrooms observed.
 - a. Clear evidence of learning objectives aligned to state standards was observed in 48 percent of elementary, 32 percent of middle school, and 45 percent of high school lessons, and there seemed to be confusion between learning objectives and agendas.
 - b. In observed classrooms, students assumed responsibility for their own learning in pairs, groups, or individually in 56 percent of the elementary lessons, 36 percent of middle school lessons, and 40 percent of high school lessons.
 - c. Students were observed consistently engaged in challenging academic tasks in 58 percent of elementary lessons, 45 percent of middle school lessons, and 40 percent of high school lessons.
2. Interviewees also indicated that the district provided much professional development for differentiated instruction; however, overall, reviewers observed little evidence of differentiated instruction in observed lessons.
 - a. Of observed classrooms, 22 percent of elementary, 14 percent of middle school, and 0 percent of high school classes used appropriate modifications for English language learners and students with disabilities, such as explicit language objectives, direct instruction in vocabulary, presentation of content at multiple levels of complexity, and differentiation of content, process and/or products.
- B. Observed instructional practices did not strongly reflect elements of academic rigor, higher order thinking skills or the use of varied questioning techniques.
 1. In 36 percent of observed elementary classrooms, 48 percent of observed middle school classrooms, and 40 percent of high school classrooms, teachers provided multiple opportunities for students to engage in higher order thinking.
 2. In 35 percent of observed classrooms overall, teachers used questioning techniques that required thoughtful responses that demonstrated understanding.
 3. The use of formative assessments to check for understanding, requests that students articulate and elaborate about content and ideas, whether verbally or in writing, varied widely across classrooms and across school levels.
- C. The observed learning environment frequently showed clear evidence of most elements of a positive learning environment. This is a quality to build on.

1. In 85 percent or more of observed lessons, there were positive teacher-student relationships, consistent behavior management techniques, an accessible learning environment and good use of instructional time.
- D. Teachers' use of technology to support and enhance learning and students' use of technology as a tool for learning were observed, overall, in 31 percent and 11 percent of observed lessons, respectively.
- E. The review team observed students making connections to prior knowledge, real world experiences, and applying this knowledge to other subjects in 32 percent of elementary, 24 percent of middle school, and 40 percent of high school lessons.

Impact: Without a shared instructional model, the district cannot ensure that teachers consistently deliver high-quality instruction that meets students' diverse learning needs. Also, absent such a model, the district cannot plan and provide for targeted professional development that will optimize all students' access to curricular knowledge, skills and understandings.

Assessment

7. The middle and high schools do not maximize the potential of using multiple assessment formats and the analysis of multiple forms of assessment data to improve teaching and learning.

- A. The middle and high schools demonstrated a limited number of formative assessments in place to provide teachers with real-time data concerning students' progress.
 1. The high school reported that it administered common (summative) mid-year and final exams in a number of courses, as did the middle school in algebra.
 2. High school teachers and administrators reported first analyzing mid-year and final exam results to refine the assessments and second, to make decisions about areas in need of attention when the course is taught again.
 3. Administrators and teachers reported that analysis of middle school assessments leads to student assignments to interventions.
 4. In some high school courses teachers were beginning to develop and implement common unit assessments, which may eventually provide teachers with real-time data on students' achievement on benchmarks. However, benchmark development is in the early stages, and at the time of the site visit, the connection between common unit assessments and benchmarks was tenuous.

5. As reported in the Assessment Matrix and in observed classrooms at the middle and high schools, few formative assessments were used clearly and consistently in math and ELA lessons. (See Appendix C, Indicator #15.)

- B. While the curriculum directors report on data from grade-level teams and districtwide testing, neither the district nor the schools have developed an organized, systematic approach to collect, analyze and use data for improvement, such as data teams, for example.

Impact: With the limited availability of formative assessments and well-developed benchmarks, teachers are planning lessons without a timely and accurate knowledge of students' learning status and learning needs. There is limited real-time data to inform teachers about students' progress during the instructional sequence. Because existing assessments occur infrequently, instructional decisions are made on the basis of summative assessments that may not be timely or accurate in supporting improvements to student learning.

Human Resources and Professional Development

8. **The district did not fully implement the new educator evaluation system in 2012-2013 as required for Race to the Top (RTTT) participants, although some teacher and administrator training had taken place at the time of the review.**

- A. The district took part in the Race to the Top grant program and was required under 603 CMR 35 to begin to implement an educator evaluation system aligned to the Department of Elementary and Secondary Education's new educator evaluation framework in 2012-2013.
 1. District leaders and Medford Teacher Association (MTA) representatives reported that the school committee and the association were unable to complete negotiations on a new collective bargaining agreement (CBA) that included the major components of the new evaluation system until March of 2013. The school committee approved the CBA on March 18, 2013.
 2. A review of committee minutes from March 18, 2013 indicated that the district was aware of the requirement of RTTT districts to implement the new evaluation system in 2012-2013 and was training teachers and administrators; however, it did not begin implementing the evaluation system during CBA negotiations.
 3. Under a new three-year CBA that runs through August 31, 2015, the district adopted ESE's model CBA language and rubrics with limited adaptations of some evaluation forms.

4. According to information included in the CBA and confirmed by district leaders and MTA representatives, a joint labor-management evaluation team is now in place to review the evaluation processes and procedures. Although the CBA indicated the team would meet annually, it is in fact meeting monthly, according to MTA representatives and district leaders.
 5. Although the new educator evaluation system was implemented at the beginning of the 2013-2014 school year, the review team was unable to review educator evaluation documents such as self-evaluations, goal-setting documents, evidence artifacts, or formative observations. District leaders and MTA representatives told the review team that because negotiations were ongoing about what documents would be included in personnel files, none were available for review.
 - a. District leaders and MTA representatives told the team that educator evaluation documents are kept at the school or by the teacher. Only one school uses a software-based evaluation management system to house and manage documents. Administrators reported that at the time of the review, the district was piloting the Baseline Edge software package in one school and that they had experienced challenges in adapting forms.
 6. District leaders and teachers reported that evaluators and all teachers received training on educator evaluation during the spring of 2013. A review of training documents provided to the review team shows that in April 2013 teachers received training in unpacking the evaluation rubric and self-assessment.
 7. District leaders reported that administrators and teachers aligned their goals to district goals; however, the team was unable to confirm this alignment because of the absence of access to evaluation documents.
- B. The district has a priority goal to prepare students for state assessment(s) and to implement District Determined Measures (DDMs).
1. The new teacher CBA includes a side letter that confirms that the school committee and MTA reserve their rights to negotiate the DDMs in the educator evaluation system under General Laws 150E. District leaders and the MTA indicated that work was continuing on DDMs.
 2. In September 2013, the district submitted the DDM pilot plan to the Department of Elementary and Secondary Education's educator evaluation team. The pilot plan includes literacy and mathematics assessments for grade 3, a mathematics assessment for grade 6, a grade 11 writing assessment, and a grade 12 assessment of musical performance. Despite the plan to pilot some DDMs in 2013-2014, the district sent a memo to the educator evaluation team on July 29, 2014, requesting a blanket one-year extension for

the implementation of DDMs. The memo included a plan for using the 2014-2015 school year to develop or refine DDMs for all educators.

Impact: Without full implementation of the educator evaluation system, the district misses the opportunity to have evidence-based conversations with educators about their practice and to hold them accountable for delivering effective instruction.

9. A number of professional development options are available to staff, and some support district goals. However, inadequate time and an absence of clear expectations for participating in professional development limit its impact.

- A. The district has a professional development plan dated 2013-2014. The plan includes a philosophy and goals, was developed using a needs assessment, and includes funding sources.
 - 1. A review of offerings shows that a wide range of workshops is available for staff. Examples include Self-Assessment, SMART goals, “Journeys” training, social-emotional learning training, iPad training, Go-Math Pilot training, and Apple TV training. Both district and school professional development offerings are posted on the district’s website. On professional development days, staff can enroll in district-sponsored workshops or curriculum committee offerings.
 - 2. According to district leaders and teachers, not all professional development is mandated, including some of the training linked to district goals. For example, the district has two full days for district professional development that staff is required to attend. However, the district has numerous early-release days when professional development linked to district goals may be offered, but staff is not required to attend professional development on these days unless the training is associated with a pilot program, such as the piloting of the Go Math or “Journeys” literacy curriculum. This leads to inadequate available time for common professional development activities.
 - a. District leaders told the team that the staff requirement to attend professional development was eliminated in the past during the collective bargaining process,.
 - 3. According to district leaders, additional professional development takes place during common planning time, mentoring, staff meetings, department meetings, and outside conferences, and is job-embedded through activities with curriculum directors, ESL teachers, special educators, or behavior specialists.
- B. Teachers recently reported a desire for more resources and focus in the area of professional development.

1. According to the 2014 TELL MASS survey data⁴, 64 percent of teachers disagreed or strongly disagreed that sufficient resources are available for professional development at their school and 57 percent disagreed or strongly disagreed that an appropriate amount of time is provided for professional development.
 2. Teachers who responded to the 2014 TELL MASS survey indicated a need for more professional development in content (54 percent), standards (69 percent), assessments (56 percent), use of data to drive instructional decision-making (47 percent), differentiation (54 percent), and managing student behavior (35 percent).
- C. The district has a mentoring program for new teachers during their first year of employment. It has trained mentors and two mentor coordinators.
1. The district tries to assign mentors to teachers from the same grade level, although this is not always possible.
 2. There is no requirement, but rather an expectation, that mentors and mentees meet regularly during the school year.
 - a. Of teachers who responded to the 2014 TELL MASS Survey, 86 percent indicated that they were formally assigned a mentor during their first year. Seventy-seven percent indicated that formal time was not provided during class hours to meet with their mentors, and 40 percent did not have common planning time to meet with other teachers. Also, district leaders reported that new teachers may not be assigned a mentor if they are hired during the school year.
- D. Some common planning time is in place at all school levels. At the elementary schools teachers meet daily during common prep periods. At the middle schools teachers meet in grade-level teams twice a week and subject-level teachers meet once a week. At the high school teachers meet in department meetings or during Grade 9 collaborative. The high school is examining ways to embed more common planning time into the schedule.
1. Although teachers have common planning time across the district, they are not required to set agendas, keep notes, or share notes with team members, principals, or curriculum directors.
 2. According to the 2014 TELL MASS Survey data, 16 percent of teachers who responded said that they spent no time planning collaboratively, and another 47 percent indicated that they spent less than one hour a week.

Impact: The district is providing many professional development opportunities for staff; however, teachers report that district professional development is inadequate for their needs. In some cases, limited time, expectations, or support is hindering the district from maximizing the impact of some

4. Sixty-seven percent of Medford's teachers responded to the TELL Mass survey in 2014.

forms of professional development, which limits the district's ability to progress in accomplishing its strategic goals and providing access to a high quality learning experience for all students.

Student Support

10. The district's current programs do not systematically ensure equity and access for all learners.

- A. Varied implementation of tiered instructional practices have led to wide program differences across the district.
 - 1. The superintendent reported "an uneven implementation of RtI (academic) in the district."
 - 2. Teachers in focus groups expressed concerns about tiered instruction. High school teachers noted that there may be tiered instruction for certain groups of students but it is not an expectation.
 - 3. Parents In a focus group reported the lack of standardization of practices and services across schools. They stated that there are inadequate supports for students who have not mastered classroom content.
- B. Students and families experience differing access to programs and services.
 - 1. Staff acknowledged the need to address access for English language learners (ELLs), students enrolled at Medford Vocational-Technical High School (MVTHS), and students in the high needs subgroup. While the district has responded to the 2012 CPR partially implemented findings regarding ELLs and special education programs, interviewees acknowledged structural challenges that impact access for some students to the general education setting.
 - 2. The district recognized the need "to help teachers build capacity to own all students" in responding to performance data, including four- and five-year ELL graduation rates that have improved but are either below the target or are declining. The district has submitted a three-year plan for SEI training to ESE.
 - 3. WIDA standards are not yet integrated into the curriculum. ELL students usually stay in ELL classrooms, even for more challenging courses.
 - 4. Both the current high school principal and vocational director are committed to making all high school courses available to MVTHS and Medford High School (MHS) students. Plans are underway to accomplish this beginning in the fall of 2014.

5. In addition, Curtis Tufts (the alternative high school) and MHS are working together to reduce obstacles to allow more access to programs at the high school for Curtis Tufts students.

Impact: The variability in understanding and implementation of a robust, multi-tiered system of supports hinders students' access to high-quality core educational experiences. In the absence of a coherent systemic approach for student support that consistently provides specific, targeted, research-based interventions and supports for students, performance is unlikely to improve. Under the current approach, students are not guaranteed equity in the supports they receive across the district. The response to students' needs continues to be driven by individual schools, rather than by the overarching district mission and systems to provide equitable and universal access to a high quality core curriculum.

Financial and Asset Management

11. Medford spends less than 60 percent of the state average on instructional materials, equipment and technology, and teachers cited evidence that the lack of these resources impedes good instruction.

- A. Medford spends substantially less than the state average in this expenditure category.
 1. Medford has spent less than 60 percent of the state average in this category for the last three years and spent only 51 percent of the state average in FY13.
- B. In focus groups, teachers noted a lack of sufficient instructional materials.
 1. Elementary teachers cited insufficient science materials, technology, computers, Smart boards, and iPads. One teacher stated that her wish was for a supply cabinet (so that she would have supplies).
 2. Middle school teachers cited a lack of books, internet sources, printers, and toner. They stated that books had publication dates as old as 2000.
 3. High school teachers cited a lack of texts, technology, and software.
- C. Parents in a focus group stated that their challenge area was that technology is "archaic," "inconsistent," and varied from school to school.
- D. In the 2014 TELL MASS Survey data, 42 percent of Medford teachers disagreed or strongly disagreed that "teachers have sufficient access to appropriate instructional materials." By contrast, 27 percent of teachers who responded statewide reported the same lack of materials. Twenty-six percent of Medford teachers disagreed or strongly disagreed that "teachers have sufficient access to technology." Thirty-six percent of teachers who responded statewide disagreed or strongly disagreed with this statement.

- E. The instructional inventory indicated that only 58 percent of elementary classes and 45 percent of high school classes showed clear and consistent evidence that multiple resources were available to meet all student's diverse learning needs. The inventory also indicated that only 17 percent of elementary, 38 percent of middle and 39 percent of high school classrooms showed clear and consistent evidence of teachers making use of technology to support instruction.
- F. Administrators reported that funds in addition to the appropriated budget allocation are paid out for textbooks, science materials, and band and orchestra equipment.

Impact: Curriculum insufficiently supported with instructional resources leads to less than adequate implementation and learning experiences that also miss an opportunity to meet the diverse learning needs of all students. Teachers cannot design effective classroom activities without adequate teaching materials. Learning is not enhanced through the dimension that learning through technology can add. Teachers cannot better differentiate instruction without a greater variety of instructional materials.

12. The city and the district have successfully replaced all schools except Medford High School and have made major capital improvements at the high school. There is, however, no long-term capital plan for further renovations at the high school or for the future needs of the elementary and middle schools, schools in which the community has made significant financial investment.

- A. The district does not have a long-term capital improvement plan or budget.
 - 1. Past improvements have been completed as a result of short-term planning, expressed in an interview as, "We run on emergencies."
 - 2. Capital needs are looked at as part of the annual budget, not as part of a long-term plan.
 - 3. Past improvements have been made when funds were available, not as part of a long-term plan.
- B. All Medford elementary and middle schools were replaced between 2001 and 2003.
 - 1. The schools were well designed with modern facilities and adequate spaces.
 - 2. Medford successfully used state funding to minimize the cost to the city.
 - 3. The new buildings have been well maintained and necessary upgrades have been made.
- C. However, there are still aging facilities and no long-term plan that reflects how the city intends to upgrade these facilities.
 - 1. Medford High School and Medford Vocational Technical High School were built in 1970 and are almost 45 years old. Medford High is rated a "2" for building condition and a "2"

for general environment (out of 4) by MSBA. MVTHS is rated a “2” for building condition and a “3” for general environment in the same study.

2. The Curtis-Tufts building that houses the alternative high school was built in 1939. It is rated a “2” for general condition.
3. Other than the science rooms, most of the high school facilities are showing their age.

D. The high school has had several major upgrades.

1. Heating and mechanical systems have been upgraded over the years. Two new artificial turf fields have been built at the high school and Hormel Stadium has been renovated. The high school pool has been renovated. There have been lighting upgrades.
2. The head-end room (computer network and servers) has been upgraded.
3. All science labs are being replaced in a major upgrade.
4. An SOI has been submitted to MSBA to replace the heating system.

Impact: The district has positively impacted education by building and maintaining first rate elementary and middle school buildings. The high school and vocational-technical high school have had some modern renovations, but they still need renovation in many areas. Without a long term capital plan, the district may have to wait an unnecessarily long time before upgrading its high school facilities.

Medford Public Schools District Review Recommendations

Curriculum and Instruction

- 1. The district should collaboratively develop a model of effective instruction, make the model explicit districtwide, and support teachers in its implementation.**
 - A.** The district should convene a representative group of teachers and administrators to define the elements of high-quality, rigorous instruction.
 1. Principals' current instructional leadership roles and the district's culture of inclusive decision-making will be assets for this process.
 2. The group should explore the possible links between the instruction currently delivered (as measured by information from the instructional inventory of classroom observations in Appendix C, as well as other sources) and student achievement data and trends (including standardized assessments, district common assessments, and other data).
 3. The district should clearly articulate expectations for classroom practice.
 - a. Strategies to be considered include those that: are research-based; focus on clear objectives; demonstrate rigor and high expectations; provide students with challenging academic tasks; require students to engage in higher order thinking; involve the use of technology to deepen and extend learning; and identify and address students' diverse strengths and needs.
 - b. The educator evaluation rubric identifies the broad parameters for an instructional model.
 4. Building on previous curriculum development work, curriculum materials should be reviewed and updated as needed to ensure that they reflect the district's instructional expectations.
 - B.** Once a model of instructional practice is defined, district administrators should develop a plan for sharing instructional expectations with staff and for providing the support and monitoring necessary for the model to be well-implemented in all classrooms. This should include:
 1. Providing teachers with professional development that is aligned with specific instructional strategies;
 2. Providing administrators with training on developing skillful observation practices and providing effective feedback to teachers about their instruction; and

3. Supervising and evaluating teachers and principals with a focus on the quality of teaching and learning.
- C. The district should consider introducing a learning walk protocol as a way for administrators and teachers to gather data about instructional trends and calibrate expectations for teaching and learning.

Recommended resources:

- ESE's *Learning Walkthrough Implementation Guide* (<http://www.doe.mass.edu/apa/dart/walk/ImplementationGuide.pdf>) is a resource to support instructional leaders in establishing a *Learning Walkthrough* process in a school or district. It is designed to provide guidance to those working in an established culture of collaboration as well as those who are just beginning to observe classrooms and discuss teaching and learning in a focused and actionable manner.

Appendix 4, *Characteristics of Standards-Based Teaching and Learning: Continuum of Practice* (<http://www.doe.mass.edu/apa/dart/walk/04.0.pdf>) is a framework that provides a common language or reference point for looking at teaching and learning.

- *Characteristics of an Effective Standards-Based K-12 Science and Technology/Engineering Classroom* (<http://www.doe.mass.edu/STEM/Standards-BasedClassroom.pdf>) and *Characteristics of a Standards-Based Mathematics Classroom* (http://www.doe.mass.edu/STEM/news07/mathclass_char.pdf) are references for instructional planning and observation, intended to support activities that advance standards-based educational practice, including formal study, dialogue and discussion, classroom observations, and other professional development activities.

Benefits: A clear, shared definition of effective instruction provides a common language for all educators in the district, which facilitates meaningful dialogue about classroom practice. It ensures that principals and other leaders have a common framework with which to provide feedback that helps teachers to consistently deliver effective instruction. When a consistent set of highly effective instructional practices are used in all classrooms every day, students throughout the district will have greater access to high-quality teaching and meaningful learning.

Assessment

2. The district should develop a system of assessments that provides teachers with timely data concerning their students' academic progress. Teachers and administrators should be provided with guidance and support in order to collect, analyze, and use data to inform instruction.

- A.** The district should establish structures to ensure that each school uses a balanced system of assessments that are administered and analyzed regularly to guide instruction and determine individual students' needs for remediation and/or enrichment.
 - 1. The district is encouraged to create a central district data team composed of administrators and teacher representatives from each school, whose primary responsibility is to oversee the development and effective operation of a comprehensive and fully coordinated K-12 assessment system.
 - a. Its work should be supported by data teams in each of the district's schools, which should be responsible for the collection, analysis, and dissemination of student assessment data in their respective grade levels and subject areas.
 - b. As part of this effort, the data teams should identify areas in which additional assessments should be developed or disseminated, to ensure that meaningful student performance data is available for all grades and subjects.
 - c. A plan for the identification and development of district-determined measures (DDMs), part of the educator evaluation system, should be included in this work.
 - d. The district's set of assessments should include a variety of formats, including portfolios, performance tasks, and more traditional tests.
 - 2. The data teams should provide information to teachers to guide their analysis and use of data from formative, summative, and benchmark assessments, both standardized and locally developed.
 - a. This should include protocols and support for using data from assessments at the middle and high school levels to target instruction.
- B.** The district should provide educators with support as they collect, analyze and use assessment data to improve teaching and learning.
 - 1. Targeted and sustained professional development should be provided for all staff in the collection, analysis, and use of student performance data.
 - 2. The district should consider ways to structure common planning time so that teachers use effective protocols for data analysis and instructional planning on a regular basis.

Recommended resources:

- ESE's *Assessment Literacy Self-Assessment and Gap Analysis Tool* (<http://www.doe.mass.edu/edeval/ddm/webinar/PartI-GapAnalysis.pdf>) is intended to support districts in understanding where their educators fit overall on a continuum of assessment literacy. After determining where the district as a whole generally falls on the continuum, district leaders can determine potential next steps.

- ESE's *District Data Team Toolkit* (<http://www.doe.mass.edu/apa/ucd/ddtt/toolkit.pdf>) is a set of resources to help a district establish, grow, and maintain a culture of inquiry and data use through a District Data Team.

Benefits: By implementing this recommendation, the district will provide teachers with real-time evidence illustrating their students' progress, as well as with the opportunity and the capacity to use data to design instruction that addresses students' specific strengths and needs. The district will also support educators in monitoring the effectiveness of curriculum implementation, which will help the district to realize the benefits of its careful attention to curriculum development.

Human Resources and Professional Development

3. District and school leaders should work urgently to ensure that the new educator evaluation system is fully implemented in 2014-2015.

- A. All educators should participate in the new educator evaluation system this year, such that the district is able to report formative or summative evaluation ratings for all educators in 2014-2015.
- B. The district should adhere to the plan for implementing DDMs as outlined in its memo to ESE's educator evaluation team dated July 29, 2014. This plan will result in full implementation of DDMs in 2015-2016.

Recommended resources:

- ESE's *District-Determined Measures* web page (<http://www.doe.mass.edu/eval/ddm/>) provides information, implementation resources, and other materials related to the development and implementation of DDMs.
- *District-Determined Measures* (<http://www.youtube.com/playlist?list=PLTuqmiQ9ssquEalxpfpzD6qG9zxvPWl0c>) is a series of videos featuring different aspects of the development and use of district-determined measures (DDMs).
- The October 2014 edition of ESE's Educator Evaluation e-newsletter (<http://www.doe.mass.edu/eval/communications/newsletter/2014-10.pdf>) features an example of how a district provided meaningful professional development to staff focused on district-determined measures.

Benefits: Full, effective implementation of the educator evaluation system—including the use of identified measures for assessing student learning—will contribute to an authentic and collaborative culture of growth-oriented supervision, self-assessment, and evaluation. This will increase the

likelihood that the overall effectiveness of both teachers and administrators will continue to improve, which will lead to improved student learning and achievement.

4. The district should enhance its professional development program to ensure that it is well-supported, informed by data, and structured in a way that affects the practice of all teachers.

- A.** The district should establish a professional development planning committee whose membership includes district and school leaders and teachers.
 - 1. The committee should ensure that professional development objectives are aligned to support district and school improvement plan goals.
 - 2. The committee, perhaps in collaboration with the district data team (see Assessment recommendation above), should compile and review data in order to identify important areas of focus for professional development.
 - a. The data could include assessment results, data from learning walks, and formal input from teachers, such as through a survey.
 - b. In addition to identifying topics and focus areas for professional development, the committee should ensure that professional development is differentiated based on teachers' roles and needs.
- B.** The district should ensure that sufficient resources (time, funding, staff, materials, technology, etc.) are available to provide sustained support over time for educators to achieve the identified learning objectives. The district should investigate ways to increase teachers' participation in professional development sessions offered during early release days, as well as in embedded professional development opportunities, such as common planning time.
 - 1. The district should consider collaborating with the MTA to provide teachers with incentives to attend professional development sessions on early release days.
 - 2. Teachers should be encouraged to develop agendas for common planning meetings that provide opportunities to extend and deepen learning from professional development.

Recommended resources:

- *The Massachusetts Standards for Professional Development* (<http://www.doe.mass.edu/pd/standards.pdf>) describe, identify, and characterize what high quality learning experiences should look like for educators.
- ESE's Mathematics Learning Community materials (<http://www.doe.mass.edu/STEM/mlc/default.html>) are designed to support job-embedded

professional development for K-8 mathematics teachers. Their focus is to develop teachers' content knowledge through examining students' work in professional learning communities.

- The *PLC Expansion Project* website (<http://plcexpansionproject.weebly.com/>) is designed to support schools and districts in their efforts to establish and sustain cultures that promote Professional Learning Communities.
- *PBS LearningMedia* (<http://www.pbslearningmedia.org/>) is a free digital media content library that provides relevant educational resources for PreK-12 teachers. The flexible platform includes high-quality content tied to national curriculum standards, as well as professional development courses.
- *Quick Reference Guide: Educator Evaluation & Professional Development* (<http://www.doe.mass.edu/eval/resources/QRG-ProfessionalDevelopment.pdf>) describes how educator evaluation and professional development can be used as mutually reinforcing systems to improve educator practice and student outcomes.
- *The Relationship between High Quality Professional Development and Educator Evaluation* (<http://www.youtube.com/watch?v=R-aDxtEDncg&list=PLTuqmiQ9ssqt9EmOcWkDEHPKBqRvurebm&index=1>) is a video presentation that includes examples from real districts.

Benefits: Professional development that meets teachers' needs provides teachers with an incentive to participate. Teachers' skills and student learning are likely to continually improve when the district implements an organized, well-funded, focused, and collaborative professional development system.

Student Support

5. The district should take a structured, systematic approach to developing a multi-tiered system of support (MTSS).

- A.** The district should take steps to ensure consistent implementation of a multi-tiered system of support.
 1. The district might consider convening a working group to guide this process.
 2. The process should include an assessment of the current range of K-12 academic and non-academic interventions and services provided in the district.
 3. Any gaps in support, including gaps at particular schools or levels, should be identified; the district may need to put in place additional interventions to ensure that a full range of support structures are available at all schools.

4. Policies and practices at each school should be modified as needed to ensure that all students have access to targeted, research-based supports beyond core instruction that are based on their specific needs.
 5. The district should establish a process and timeline for monitoring the effectiveness of interventions and modifying them as needed.
- B.** The district should evaluate the degree of access that all students have to the general education program, and continue to modify policies and practices as needed.
1. The district should carry out its plan to provide professional development in SEI for general education teachers.
- C.** The district should ensure that it has an updated plan for integrating WIDA into the curriculum.
1. WIDA standards should be at least partially integrated into the curriculum, with full integration completed in time for the 2016-17 school year, at the latest.

Recommended resources:

- The *Massachusetts Tiered System of Support (MTSS)* (<http://www.doe.mass.edu/mtss/>) is a blueprint for school improvement that focuses on systems, structures and supports across the district, school, and classroom to meet the academic and non-academic needs of all students.

MTSS Self-Assessment Overview (includes links to the MTSS Self-Assessment tool and *How to Complete the MTSS Self-Assessment*): <http://www.doe.mass.edu/mtss/sa/>
- ESE's *RETELL: Extending the Learning* web page (<http://www.doe.mass.edu/retell/courses.html>) provides a registry of SEI-related courses which have been reviewed and approved by the Department's Office of English Language Acquisition and Academic Achievement. These courses provide opportunities for educators to extend their learning and practice beyond the Sheltered English Instruction (SEI) Endorsement course.

Benefits: By establishing a shared understanding and consistent implementation of a tiered system of support, and by addressing policies related to student placement, the district will be better able to ensure that all students have access to the general education setting and to targeted interventions that meet their specific needs.

Financial and Asset Management

6. The district should provide materials needed to support and extend student learning.

A. Principals and curriculum leaders should conduct a thorough inventory of the materials that are already available to teachers and students, including instructional technology.

1. Based on this inventory, a list of gaps and requests should be created.

B. The district should take the necessary steps to include the requested materials in its budget.

Recommended resources:

- The Rennie Center's *Smart School Budgeting* (http://www.renniecenter.org/topics/smart_school_budgeting.html; direct link: <http://www.renniecenter.org/research/SmartSchoolBudgeting.pdf>) is a summary of existing resources on school finance, budgeting, and reallocation.

Benefits: Adequate classroom materials support instruction that engages students and deepens learning.

7. The district and city should develop a long-term capital plan to address the need for upgrading older school facilities and maintaining the newer facilities.

A. The administration should focus on developing a plan for the three high school buildings: Medford High, Medford Vocational Technical, and Curtis-Tufts. These facilities must be addressed in a long-term plan to ensure that they remain adequate.

1. Principals, school improvement councils, and the director of buildings and grounds should work together each year to plan for the capital needs of each building. Their analysis should be documented in a long-term plan that includes a request for long-term capital funding.

Recommended resources:

- *Planning Guide for Maintaining School Facilities* (<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2003347>), from the National Center for Education Statistics, is intended to help school districts plan for efficient and effective operations. It addresses various topics, including conducting a facilities audit, planning and evaluating maintenance, and managing staff and contractors.
- ESE's *School Building Issues* web page (<http://www.doe.mass.edu/finance/sbuilding/>) includes funding opportunities, guidelines, and resources related to school buildings.
- *The Massachusetts School Checklist* (<http://www.mass.gov/eohhs/gov/departments/dph/programs/environmental-health/exposure-topics/iaq/iaq-methods/the-mass-school-checklist.html>) is a list of the most important environmental health and safety issues for schools to address. It includes regulations and industry standards/guidelines related to elements on the checklist, as well as additional resources.

- The Green Ribbon Schools Award honors schools that are exemplary in reducing environmental impact and costs, improving the health and wellness of students and staff, and delivering effective environmental and sustainability education. The district might find several related resources useful, including Massachusetts' *Green Ribbon Schools Award Resource Guide* (<http://www.doe.mass.edu/finance/sbuilding/GreenRibbon/ResourcesGuide.pdf>) and the US Department of Education's *Green Strides* resource list (<http://www2.ed.gov/about/inits/ed/green-strides/resources.html>).
- MassEnergyInsight (<http://www.massenergyinsight.net/home>) is a free, web-based tool made available by the Massachusetts Department of Energy Resources as part of the Massachusetts Green Communities Program. The tool is designed to help communities learn about and monitor energy use and related costs, plan energy efficiency programs, and communicate this information.

Benefits: Developing a long-term capital plan ensures that buildings will continue to function well and meet the needs of students and adults as an educational facility. If buildings do fall into disrepair, the educational process can suffer and the cost of recovering from this situation would be considerably higher than that of proactively addressing needs.

Appendix A: Review Team, Activities, Site Visit Schedule

Review Team Members

The review was conducted from April 14 to April 17, 2014 by the following team of independent ESE consultants.

1. Dr. Magdalene Giffune, leadership and governance
2. Mary Eirich, curriculum and instruction
3. Patricia Williams, assessment, review team coordinator
4. James Hearn, human resources and professional development
5. Dr. Marilynne Quarcoo, student support
6. David King, financial and asset management

District Review Activities

The following activities were conducted during the review:

The team conducted interviews with the following financial personnel: business manager, payroll staff member, administrative assistant personnel & finance.

The team conducted interviews with the following members of the School Committee: vice-chair, secretary, 4 members.

The review team conducted interviews with the following representatives of the teachers' association: president, 7 building representatives.

The team conducted interviews/focus groups with the following central office administrators: superintendent, deputy superintendent, assistant superintendent, director of curriculum and instruction, director of pupil services, business manager, coordinator of ELL.

The team visited the following schools: Medford High School (grades 09-12), Medford Vocational Technical High School (grades 09-12), Andrews Middle School (grades 06-08), and McGlynn Middle School (grades 06-08), Brooks Elementary School (grades K-05), Columbus Elementary School (grades K-05), McGlynn Elementary School (grades PK-05), and Roberts Elementary School (PK-05).

During school visits, the team conducted interviews with teacher focus groups with 18 elementary school teachers, 11 middle school teachers, and 3 high school teachers.

The team observed 67 classes in the district: 20 at the 2 high schools, 22 at the 2 middle schools, and 25 at the 4 elementary schools.

The review team analyzed multiple data sets and reviewed numerous documents before and during the site visit, including:

- Student and school performance data, including achievement and growth, enrollment, graduation, dropout, retention, suspension, and attendance rates.
- Data on the district's staffing and finances.
- Published educational reports on the district by ESE, the New England Association of Schools and Colleges (NEASC), and the former Office of Educational Quality and Accountability (EQA).
- District documents such as district and school improvement plans, school committee policies, curriculum documents, summaries of student assessments, job descriptions, collective bargaining agreements, evaluation tools for staff, handbooks, school schedules, and the district's end-of-year financial reports.
- All completed program and administrator evaluations, and a random selection of completed teacher evaluations.

Site Visit Schedule

Monday 4/14/2014	Tuesday 4/15/2014	Wednesday 4/16/2014	Thursday 4/17/14
Orientation with district leaders and principals; interviews with district staff and principals; document reviews; interview with teachers' association.	Interviews with district staff and principals; review of personnel files; student focus group, teacher focus groups; parent focus group; and visits to Medford High School and Medford Vocational Technical High School for classroom observations.	Interviews with town or city personnel; interviews with school leaders; interviews with school committee members; visits to Brooks, Columbus, McGlynn, Roberts elementary schools, and Andrews Middle School for classroom observations.	Interviews with school leaders; follow-up interviews; district review team meeting; visits to McGlynn Middle School and Medford High School for classroom observations; emerging themes meeting with district leaders and principals.

Appendix B: Enrollment, Performance, Expenditures

**Table B1a: Medford Public Schools
2013-2014 Student Enrollment by Race/Ethnicity**

Student Group	District	Percent of Total	State	Percent of Total
African-American	733	16.0%	82990	8.7%
Asian	390	8.5%	58455	6.1%
Hispanic	443	9.7%	162647	17.0%
Native American	9	0.2%	2209	0.2%
White	2868	62.5%	620628	64.9%
Native Hawaiian	2	0.0%	1007	0.1%
Multi-Race, Non-Hispanic	145	3.2%	27803	2.9%
All Students	4590	100.0%	955739	100.0%

Note: As of October 1, 2013

**Table B1b: Medford Public Schools
2013-2014 Student Enrollment by High Needs Populations**

Student Groups	District			State		
	N	Percent of High Needs	Percent of District	N	Percent of High Needs	Percent of State
Students w/ disabilities	856	38.3%	18.5%	164336	34.8%	17.0%
Low Income	1576	70.5%	34.3%	365885	77.5%	38.3%
ELLs and Former ELLs	313	14.0%	6.8%	75947	16.1%	7.9%
All high needs students	2237	100.0%	48.3%	472001	100.0%	48.8%

Notes: As of October 1, 2013. District and state numbers and percentages for students with disabilities and high needs students are calculated including students in out-of-district placements. Total district enrollment including students in out-of-district placement is 4,634; total state enrollment including students in out-of-district placement is 966,360.

**Table B2a: Medford Public Schools
English Language Arts Performance, 2010-2013**

Grade and Measure		Number Included (2013)	Spring MCAS Year					Gains and Declines	
			2010	2011	2012	2013	State 2013	4-Year Trend	2 Year Trend
3	CPI	344	81	82.3	81.4	78.4	83.3	-2.6	-3
	P+	344	53.0%	55.0%	51.0%	44.0%	57.0%	-9.0%	-7.0%
4	CPI	334	79.2	75.4	76.2	76.7	78.9	-2.5	0.5
	P+	334	51.0%	45.0%	48.0%	46.0%	53.0%	-5.0%	-2.0%
	SGP	310	50	46.5	48	50	49	0	2
5	CPI	307	83	86.8	80.3	83.5	84.7	0.5	3.2
	P+	307	62.0%	66.0%	54.0%	64.0%	66.0%	2.0%	10.0%
	SGP	283	54	54	58	59	52	5	1
6	CPI	377	85.2	83.4	83.4	80	85.1	-5.2	-3.4
	P+	377	66.0%	57.0%	61.0%	57.0%	67.0%	-9.0%	-4.0%
	SGP	353	40	32	40	42	52	2	2
7	CPI	366	88.3	89.2	88.6	88.5	88.4	0.2	-0.1
	P+	366	70.0%	72.0%	71.0%	71.0%	72.0%	1.0%	0.0%
	SGP	337	50	52	56	47	48	-3	-9
8	CPI	336	88.7	88.3	91.1	88.3	90.1	-0.4	-2.8
	P+	336	71.0%	72.0%	78.0%	75.0%	78.0%	4.0%	-3.0%
	SGP	309	40	38	43	47	50	7	4
10	CPI	311	94.5	94.6	96	98.4	96.9	3.9	2.4
	P+	311	82.0%	84.0%	89.0%	95.0%	91.0%	13.0%	6.0%
	SGP	251	64	66.5	61	72	57	8	11
All	CPI	2375	85.4	85.6	85.4	84.7	86.8	-0.7	-0.7
	P+	2375	64.0%	64.0%	65.0%	64.0%	69.0%	0.0%	-1.0%
	SGP	1843	49	49	51	51	51	2	0

Notes: The number of students included in CPI and percent *Proficient* or *Advanced* (P+) calculations may differ from the number of students included in median SGP calculations. A median SGP is not calculated for students in grade 3 because they are participating in MCAS tests for the first time.

**Table B2b: Medford Public Schools
Mathematics Performance, 2010-2013**

Grade and Measure		Number Included (2013)	Spring MCAS Year					Gains and Declines	
			2010	2011	2012	2013	State 2013	4-Year Trend	2 Year Trend
3	CPI	344	75.5	82.3	76.6	76.7	84.3	1.2	0.1
	P+	344	52.0%	55.0%	51.0%	54.0%	66.0%	2.0%	3.0%
4	CPI	334	75.9	72.8	75.9	73.1	80.2	-2.8	-2.8
	P+	334	42.0%	35.0%	45.0%	36.0%	52.0%	-6.0%	-9.0%
	SGP	310	47.5	51	50	42	54	-5.5	-8
5	CPI	307	73.9	77.2	74.6	76.2	80.6	2.3	1.6
	P+	307	47.0%	52.0%	48.0%	51.0%	61.0%	4.0%	3.0%
	SGP	281	56	50	58	50	54	-6	-8
6	CPI	382	74.8	74.1	73.4	75.1	80.3	0.3	1.7
	P+	382	48.0%	48.0%	48.0%	50.0%	61.0%	2.0%	2.0%
	SGP	353	41	47	39	49	50	8	10
7	CPI	373	70.7	67.8	68.2	67.8	74.4	-2.9	-0.4
	P+	373	43.0%	41.0%	39.0%	42.0%	52.0%	-1.0%	3.0%
	SGP	341	41	47.5	48	48	46	7	0
8	CPI	338	71.9	70.5	70.6	72.3	76	0.4	1.7
	P+	338	48.0%	45.0%	43.0%	48.0%	55.0%	0.0%	5.0%
	SGP	311	54	53	53	55	50	1	2
10	CPI	312	90.1	88.7	90.4	91.3	90.2	1.2	0.9
	P+	312	76.0%	75.0%	79.0%	83.0%	80.0%	7.0%	4.0%
	SGP	252	55	50	54	59	51	4	5
All	CPI	2390	75.9	75.9	75.6	75.8	80.8	-0.1	0.2
	P+	2390	50.0%	49.0%	51.0%	52.0%	61.0%	2.0%	1.0%
	SGP	1848	48	50	51	50	51	2	-1

Notes: The number of students included in CPI and percent *Proficient* or *Advanced* (P+) calculations may differ from the number of students included in median SGP calculations. A median SGP is not calculated for students in grade 3 because they are participating in MCAS tests for the first time.

**Table B2c: Medford Public Schools
Science and Technology/Engineering Performance, 2010-2013**

Grade and Measure		Number Included (2013)	Spring MCAS Year					Gains and Declines	
			2010	2011	2012	2013	State 2013	4-Year Trend	2 Year Trend
5	CPI	306	81.8	79.6	78.6	79.3	78.5	-2.5	0.7
	P+	306	52.0%	49.0%	48.0%	51.0%	51.0%	-1.0%	3.0%
8	CPI	338	68.8	65.9	73.2	69.3	71	0.5	-3.9
	P+	338	34.0%	34.0%	44.0%	37.0%	39.0%	3.0%	-7.0%
10	CPI	290	83.6	83.5	86.1	87.4	88	3.8	1.3
	P+	290	62.0%	60.0%	66.0%	70.0%	71.0%	8.0%	4.0%
All	CPI	934	77.4	76	79	78.2	79	0.8	-0.8
	P+	934	48.0%	47.0%	52.0%	52.0%	53.0%	4.0%	0.0%

Notes: P+ = percent *Proficient* or *Advanced*. Students participate in STE MCAS tests in grades 5, 8, and 10 only. Median SGPs are not calculated for STE.

**Table B3a: Medford Public Schools
English Language Arts (All Grades)
Performance for Selected Subgroups Compared to State, 2010-2013**

Group and Measure			Number Included (2013)	Spring MCAS Year				Gains and Declines	
				2010	2011	2012	2013	4 Year Trend	2-Year Trend
High Needs	District	CPI	1200	76.6	76.9	77.5	76.4	-0.2	-1.1
		P+	1200	46.0%	46.0%	48.0%	48.0%	2.0%	0.0%
		SGP	887	48	47	49	50	2	1
	State	CPI	237163	76.1	77	76.5	76.8	0.7	0.3
		P+	237163	45.0%	48.0%	48.0%	48.0%	3.0%	0.0%
		SGP	180087	45	46	46	47	2	1
Low Income	District	CPI	886	80.5	80.1	79.4	79.1	-1.4	-0.3
		P+	886	53.0%	52.0%	53.0%	53.0%	0.0%	0.0%
		SGP	659	49	47	49	50	1	1
	State	CPI	184999	76.5	77.1	76.7	77.2	0.7	0.5
		P+	184999	47.0%	49.0%	50.0%	50.0%	3.0%	0.0%
		SGP	141671	46	46	45	47	1	2
Students w/ disabilities	District	CPI	494	65.9	68	66.9	64.3	-1.6	-2.6
		P+	494	25.0%	26.0%	28.0%	27.0%	2.0%	-1.0%
		SGP	347	43.5	42	48	47	3.5	-1
	State	CPI	88956	67.3	68.3	67.3	66.8	-0.5	-0.5
		P+	88956	28.0%	30.0%	31.0%	30.0%	2.0%	-1.0%
		SGP	64773	41	42	43	43	2	0
English language learners & Former ELLs	District	CPI	213	68.9	66.7	69.2	69.5	0.6	0.3
		P+	213	29.0%	29.0%	33.0%	33.0%	4.0%	0.0%
		SGP	133	52	53	65	52	0	-13
	State	CPI	46676	66.1	66.2	66.2	67.4	1.3	1.2
		P+	46676	32.0%	33.0%	34.0%	35.0%	3.0%	1.0%
		SGP	31672	51	50	51	53	2	2
All students	District	CPI	2375	85.4	85.6	85.4	84.7	-0.7	-0.7
		P+	2375	64.0%	64.0%	65.0%	64.0%	0.0%	-1.0%
		SGP	1843	49	49	51	51	2	0
	State	CPI	496175	86.9	87.2	86.7	86.8	-0.1	0.1
		P+	496175	68.0%	69.0%	69.0%	69.0%	1.0%	0.0%
		SGP	395568	50	50	50	51	1	1

Notes: The number of students included in CPI and percent *Proficient* or *Advanced* (P+) calculations may differ from the number of students included in median SGP calculation. State figures are provided for comparison purposes only and do not represent the standard that a particular group is expected to meet.

**Table B3b: Medford Public Schools
Mathematics (All Grades)
Performance for Selected Subgroups Compared to State, 2010-2013**

Group and Measure			Number Included (2013)	Spring MCAS Year				Gains and Declines	
				2010	2011	2012	2013	4 Year Trend	2-Year Trend
High Needs	District	CPI	1211	65.7	66	65.5	64.8	-0.9	-0.7
		P+	1211	33.0%	32.0%	33.0%	34.0%	1.0%	1.0%
		SGP	888	45	46	48	46	1	-2
	State	CPI	237745	66.7	67.1	67	68.6	1.9	1.6
		P+	237745	36.0%	37.0%	37.0%	40.0%	4.0%	3.0%
		SGP	180866	46	46	46	46	0	0
Low Income	District	CPI	893	69.4	69.1	68.5	67.6	-1.8	-0.9
		P+	893	39.0%	37.0%	37.0%	38.0%	-1.0%	1.0%
		SGP	661	46	45	48	46	0	-2
	State	CPI	185392	67.1	67.3	67.3	69	1.9	1.7
		P+	185392	37.0%	38.0%	38.0%	41.0%	4.0%	3.0%
		SGP	142354	47	46	45	46	-1	1
Students w/ disabilities	District	CPI	494	54.9	55.2	53.8	51.7	-3.2	-2.1
		P+	494	16.0%	15.0%	17.0%	16.0%	0.0%	-1.0%
		SGP	348	40	46.5	47	40	0	-7
	State	CPI	89193	57.5	57.7	56.9	57.4	-0.1	0.5
		P+	89193	21.0%	22.0%	21.0%	22.0%	1.0%	1.0%
		SGP	65068	43	43	43	42	-1	-1
English language learners & Former ELLs	District	CPI	224	60.2	59.4	63.3	60.7	0.5	-2.6
		P+	224	28.0%	28.0%	30.0%	30.0%	2.0%	0.0%
		SGP	134	52	44.5	63	49	-3	-14
	State	CPI	47046	61.5	62	61.6	63.9	2.4	2.3
		P+	47046	31.0%	32.0%	32.0%	35.0%	4.0%	3.0%
		SGP	31986	54	52	52	53	-1	1
All students	District	CPI	2390	75.9	75.9	75.6	75.8	-0.1	0.2
		P+	2390	50.0%	49.0%	51.0%	52.0%	2.0%	1.0%
		SGP	1848	48	50	51	50	2	-1
	State	CPI	497090	79.9	79.9	79.9	80.8	0.9	0.9
		P+	497090	58.0%	58.0%	59.0%	61.0%	3.0%	2.0%
		SGP	396691	50	50	50	51	1	1

Notes: The number of students included in CPI and percent *Proficient* or *Advanced* (P+) calculations may differ from the number of students included in median SGP calculation. State figures are provided for comparison purposes only and do not represent the standard that a particular group is expected to meet.

**Table B3c: Medford Public Schools
Science and Technology/Engineering (All Grades)
Performance for Selected Subgroups Compared to State, 2010-2013**

Group and Measure			Number Included (2013)	Spring MCAS Year				Gains and Declines	
				2010	2011	2012	2013	4 Year Trend	2-Year Trend
High Needs	District	CPI	457	66.7	66.5	69.4	67.1	0.4	-2.3
		P+	457	29.0%	31.0%	35.0%	33.0%	4.0%	-2.0%
	State	CPI	96902	64.3	63.8	65	66.4	2.1	1.4
		P+	96902	28.0%	28.0%	31.0%	31.0%	3.0%	0.0%
Low Income	District	CPI	318	69.3	68.5	73	69.9	0.6	-3.1
		P+	318	35.0%	33.0%	42.0%	39.0%	4.0%	-3.0%
	State	CPI	75485	63.6	62.8	64.5	66.1	2.5	1.6
		P+	75485	28.0%	28.0%	31.0%	32.0%	4.0%	1.0%
Students w/ disabilities	District	CPI	200	58.5	59.3	58.5	57.9	-0.6	-0.6
		P+	200	14.0%	17.0%	15.0%	19.0%	5.0%	4.0%
	State	CPI	37049	59	59.2	58.7	59.8	0.8	1.1
		P+	37049	19.0%	20.0%	20.0%	20.0%	1.0%	0.0%
English language learners & Former ELLs	District	CPI	68	50	54.9	61.5	54.8	4.8	-6.7
		P+	68	13.0%	20.0%	26.0%	24.0%	11.0%	-2.0%
	State	CPI	16179	51.8	50.3	51.4	54	2.2	2.6
		P+	16179	16.0%	15.0%	17.0%	19.0%	3.0%	2.0%
All students	District	CPI	934	77.4	76	79	78.2	0.8	-0.8
		P+	934	48.0%	47.0%	52.0%	52.0%	4.0%	0.0%
	State	CPI	209573	78.3	77.6	78.6	79	0.7	0.4
		P+	209573	52.0%	52.0%	54.0%	53.0%	1.0%	-1.0%

Notes: Median SGPs are not calculated for STE. State figures are provided for comparison purposes only and do not represent the standard that a particular group is expected to meet.

**Table B4: Medford Public Schools
Annual Grade 9-12 Dropout Rates, 2010-2013**

	School Year Ending				Change 2010-2013		Change 2012-2013		State (2013)
	2010	2011	2012	2013	Percentage Points	Percent	Percentage Points	Percent	
All students	2.9	3.6	2.5	1.8	-1.1	-37.9	-0.7	-28.0	2.2

Notes: The annual dropout rate is calculated by dividing the number of students who drop out over a one-year period by the October 1 grade 9–12 enrollment, multiplied by 100. Dropouts are those students who dropped out of school between July 1 and June 30 of a given year and who did not return to school, graduate, or receive a GED by the following October 1. Dropout rates have been rounded; percent change is based on unrounded numbers.

**Table B5a: Medford Public Schools
Four-Year Cohort Graduation Rates, 2010-2013**

Group	Number Included (2013)	School Year Ending				Change 2010-2013		Change 2012-2013		State (2013)
		2010	2011	2012	2013	Percentage Points	Percent Change	Percentage Points	Percent Change	
High needs	172	66.5%	69.4%	72.2%	78.5%	12.0	18.0	6.3	8.7	74.7%
Low income	127	66.1%	64.5%	74.1%	80.3%	14.2	21.5	6.2	8.4	73.6%
Students w/ disabilities	74	62.3%	70.5%	64.0%	71.6%	9.3	14.9	7.6	11.9	67.8%
English language learners & Former ELLs	23	46.7%	48.5%	65.8%	73.9%	27.2	58.2	8.1	12.3	63.5%
All students	335	78.0%	79.9%	80.5%	85.7%	7.7	9.9	5.2	6.5	85.0%

Notes: The four-year cohort graduation rate is calculated by dividing the number of students in a particular cohort who graduate in four years or less by the number of students in the cohort entering their freshman year four years earlier, minus transfers out and plus transfers in. Non-graduates include students still enrolled in high school, students who earned a GED or received a certificate of attainment rather than a diploma, and students who dropped out. Graduation rates have been rounded; percent change is based on unrounded numbers.

**Table B5b: Medford Public Schools
Five-Year Cohort Graduation Rates, 2009-2012**

Group	Number Included (2012)	School Year Ending				Change 2009-2012		Change 2011-2012		State (2012)
		2009	2010	2011	2012	Percentage Points	Percent Change	Percentage Points	Percent Change	
High needs	212	84.6%	71.7%	77.7%	76.9%	-7.7	-9.1	-0.8	-1.0	78.9%
Low income	162	87.1%	71.3%	72.9%	77.8%	-9.3	-10.7	4.9	6.7	77.5%
Students w/ disabilities	86	77.8%	67.0%	78.4%	69.8%	-8.0	-10.3	-8.6	-11.0	73.8%
English language learners & Former ELLs	38	90.0%	66.7%	63.6%	73.7%	-16.3	-18.1	10.1	15.9	68.5%
All students	369	88.3%	81.6%	85.7%	83.5%	-4.8	-5.4	-2.2	-2.6	87.5%

Notes: The five-year cohort graduation rate is calculated by dividing the number of students in a particular cohort who graduate in five years or less by the number of students in the cohort entering their freshman year five years earlier, minus transfers out and plus transfers in. Non-graduates include students still enrolled in high school, students who earned a GED or received a certificate of attainment rather than a diploma, and students who dropped out. Graduation rates have been rounded; percent change is based on unrounded numbers. Graduation rates have been rounded; percent change is based on unrounded numbers.

**Table B6: Medford Public Schools
Attendance Rates, 2010-2013**

Group	School Year Ending				Change 2010-2013		Change 2012-2013		State (2013)
	2010	2011	2012	2013	Percentage Points	Percent Change	Percentage Points	Percent Change	
All students	94.8%	94.8%	95.6%	95.2%	0.4	0.4	-0.4	-0.4	94.8%

Notes: The attendance rate is calculated by dividing the total number of days students attended school by the total number of days students were enrolled in a particular school year. A student's attendance rate is counted toward any district the student attended. In addition, district attendance rates included students who were out placed in public collaborative or private alternative schools/programs at public expense. Attendance rates have been rounded; percent change is based on unrounded numbers.

**Table B7: Medford Public Schools
Suspension Rates, 2010-2013**

Group	School Year Ending				Change 2010-2013		Change 2012-2013		State (2013)
	2010	2011	2012	2013	Percentage Points	Percent Change	Percentage Points	Percent Change	
In-School Suspension Rate	0.0%	0.0%	0.5%	0.2%	0.2	--	-0.3	-60.0	2.2%
Out-of-School Suspension Rate	2.4%	2.2%	5.2%	3.6%	1.2	50.0	-1.6	-30.8	4.3%

Note: This table reflects information reported by school districts at the end of the school year indicated. Suspension rates have been rounded; percent change is based on unrounded numbers.

Table B8: Medford Public Schools
Expenditures, Chapter 70 State Aid, and Net School Spending Fiscal Years 2011–2013

	FY11		FY12		FY13	
	Estimated	Actual	Estimated	Actual	Estimated	Actual
Expenditures						
From local appropriations for schools:						
By school committee	\$43,185,000	\$43,224,787	\$44,900,000	\$44,900,000	\$47,483,000	--
By municipality	\$21,402,427	\$22,982,535	\$23,465,346	\$22,135,130	\$22,516,288	--
Total from local appropriations	\$64,587,427	\$66,207,322	\$68,365,346	\$67,035,130	\$69,999,288	--
From revolving funds and grants	--	\$9,358,832	--	\$7,797,585	--	--
Total expenditures	--	\$75,566,154	--	\$74,832,715	--	--
Chapter 70 aid to education program						
Chapter 70 state aid*	--	\$10,778,927	--	\$10,836,793	--	\$11,047,553
Required local contribution	--	\$42,205,952	--	\$42,820,019	--	\$44,080,589
Required net school spending**	--	\$52,984,879	--	\$53,656,812	--	\$55,128,142
Actual net school spending	--	\$58,370,945	--	\$60,079,471	--	\$61,616,271
Over/under required (\$)	--	\$5,386,066	--	\$6,422,659	--	\$6,488,129
Over/under required (%)	--	10.2%	--	12.0%	--	11.8%

*Chapter 70 state aid funds are deposited in the local general fund and spent as local appropriations.

**Required net school spending is the total of Chapter 70 aid and required local contribution. Net school spending includes only expenditures from local appropriations, not revolving funds and grants. It includes expenditures for most administration, instruction, operations, and out-of-district tuitions. It does not include transportation, school lunches, debt, or capital.

Sources: FY11, FY12 District End-of-Year Reports, Chapter 70 Program information on ESE website

**Table B9: Medford Public Schools
Expenditures Per In-District Pupil
Fiscal Years 2010-2012**

Expenditure Category	2010	2011	2012
Administration	\$390	\$365	\$355
Instructional leadership (district and school)	\$1,016	\$888	\$1,010
Teachers	\$4,760	\$4,979	\$5,205
Other teaching services	\$747	\$780	\$792
Professional development	\$90	\$92	\$114
Instructional materials, equipment and technology	\$259	\$242	\$206
Guidance, counseling and testing services	\$305	\$292	\$343
Pupil services	\$829	\$821	\$863
Operations and maintenance	\$1,045	\$1,075	\$964
Insurance, retirement and other fixed costs	\$2,824	\$2,974	\$2,800
Total expenditures per in-district pupil	\$12,265	\$12,507	\$12,653

Sources: [Per-pupil expenditure reports on ESE website](#)

Note: Any discrepancy between expenditures and total is because of rounding.

Appendix C: Instructional Inventory

Learning Environment	Evidence by Grade Span				Evidence Overall			
	Grade Span	None	Partial	Clear & Consistent		None	Partial	Clear & Consistent
		(0)	(1)	(2)		(0)	(1)	(2)
1. Tone of interactions between teacher and students and among students is positive and respectful.	ES	0%	4%	96%	#	2	2	63
	MS	5%	5%	91%	%	3%	3%	94%
	HS	5%	0%	95%	---	---	---	---
2. Behavioral standards are clearly communicated and disruptions, if present, are managed effectively and equitably.	ES	0%	4%	96%	#	1	1	65
	MS	0%	0%	100%	%	1%	1%	97%
	HS	5%	0%	95%	---	---	---	---
3. The physical arrangement of the classroom ensures a positive learning environment and provides all students with access to learning activities.	ES	4%	8%	88%	#	2	9	56
	MS	5%	5%	91%	%	3%	13%	84%
	HS	0%	30%	70%	---	---	---	---
4. Classroom rituals and routines promote transitions with minimal loss of instructional time	ES	12%	12%	76%	#	5	5	57
	MS	0%	5%	95%	%	7%	7%	85%
	HS	10%	5%	85%	---	---	---	---
5. Multiple resources are available to meet all students' diverse learning needs.	ES	21%	21%	58%	#	9	14	41
	MS	0%	10%	90%	%	14%	22%	64%
	HS	20%	35%	45%	---	---	---	---

(Please see next page)

Teaching	Evidence by Grade Span				Evidence Overall			
	Grade Span	None	Partial	Clear & Consistent		None	Partial	Clear & Consistent
		(0)	(1)	(2)		(0)	(1)	(2)
6. The teacher demonstrates knowledge of subject and content.	ES	0%	16%	84%	#	3	5	59
	MS	9%	0%	91%	%	4%	7%	88%
	HS	5%	5%	90%	---	---	--	---
7. The teacher plans and implements a lesson that reflects rigor and high expectations.	ES	4%	32%	64%	#	9	23	34
	MS	23%	32%	45%	%	14%	35%	52%
	HS	16%	42%	42%	---	---	---	---
8. The teacher communicates clear learning objective(s) aligned to 2011 Massachusetts Curriculum Frameworks. SEI/language objective(s) are included when applicable.	ES	40%	12%	48%	#	28	11	28
	MS	41%	27%	32%	%	42%	16%	42%
	HS	45%	10%	45%	---	---	---	---
9. The teacher uses appropriate instructional strategies well matched to learning objective(s) and content.	ES	38%	29%	33%	#	23	21	22
	MS	45%	14%	41%	%	35%	32%	33%
	HS	20%	55%	25%	---	---	---	---
10. The teacher uses appropriate modifications for English language learners and students with disabilities such as explicit language objective(s); direct instruction in vocabulary; presentation of content at multiple levels of complexity; and, differentiation of content, process, and/or products.	ES	52%	26%	22%	#	41	14	8
	MS	67%	19%	14%	%	65%	22%	13%
	HS	79%	21%	0%	---	---	---	---
11. The teacher provides multiple opportunities for students to engage in higher order thinking such as use of inquiry, exploration, application, analysis, synthesis, and/or evaluation of knowledge or concepts (Bloom's Taxonomy).	ES	20%	44%	36%	#	15	24	27
	MS	24%	29%	48%	%	23%	36%	41%
	HS	25%	35%	40%	---	---	---	---

(Please see next page)

Teaching (continued)	Evidence by Grade Span				Evidence Overall			
	Grade Span	None	Partial	Clear & Consistent		None	Partial	Clear & Consistent
		(0)	(1)	(2)		(0)	(1)	(2)
12. The teacher uses questioning techniques that require thoughtful responses that demonstrate understanding.	ES	32%	48%	20%	#	16	27	23
	MS	29%	24%	48%	%	24%	41%	35%
	HS	10%	50%	40%	---	---	---	---
13. The teacher implements teaching strategies that promote a learning environment where students can take risks--- for instance, where they can make predictions, make judgments and investigate.	ES	20%	32%	48%	#	13	22	32
	MS	14%	41%	45%	%	19%	33%	48%
	HS	25%	25%	50%	---	---	---	---
14. The teacher paces the lesson to match content and meet students' learning needs.	ES	20%	12%	68%	#	12	14	41
	MS	14%	32%	55%	%	18%	21%	61%
	HS	20%	20%	60%	---	---	---	---
15. The teacher conducts frequent formative assessments to check for understanding and inform instruction.	ES	20%	12%	68%	#	16	17	34
	MS	27%	27%	45%	%	24%	25%	51%
	HS	25%	40%	35%	---	---	---	---
16. The teacher makes use of available technology to support instruction and enhance learning.	ES	83%	0%	17%	#	35	8	19
	MS	38%	24%	38%	%	56%	13%	31%
	HS	44%	17%	39%	---	---	---	---

(Please see next page)

Learning	Evidence by Grade Span				Evidence Overall			
	Grade Span	None	Partial	Clear & Consistent		None	Partial	Clear & Consistent
		(0)	(1)	(2)		(0)	(1)	(2)
17. Students are engaged in challenging academic tasks.	ES	17%	25%	58%	#	10	24	32
	MS	14%	41%	45%	%	15%	36%	48%
	HS	15%	45%	40%	---	---	---	---
18. Students articulate their thinking orally or in writing.	ES	40%	16%	44%	#	14	21	32
	MS	9%	36%	55%	%	21%	31%	48%
	HS	10%	45%	45%	---	---	---	---
19. Students inquire, explore, apply, analyze, synthesize and/or evaluate knowledge or concepts (Bloom's Taxonomy).	ES	38%	24%	38%	#	18	18	26
	MS	23%	32%	45%	%	29%	29%	42%
	HS	26%	32%	42%	---	---	---	---
20. Students elaborate about content and ideas when responding to questions.	ES	54%	29%	17%	#	24	21	19
	MS	27%	32%	41%	%	38%	33%	30%
	HS	28%	39%	33%	---	---	---	---
21. Students make connections to prior knowledge, or real world experiences, or can apply knowledge and understanding to other subjects.	ES	32%	36%	32%	#	22	21	20
	MS	43%	33%	24%	%	35%	33%	32%
	HS	30%	30%	40%	---	---	---	---
22. Students use technology as a tool for learning and/or understanding.	ES	90%	5%	5%	#	45	9	7
	MS	71%	14%	14%	%	74%	15%	11%
	HS	58%	26%	16%	---	---	---	---
23. Students assume responsibility for their own learning whether individually, in pairs, or in groups.	ES	32%	12%	56%	#	26	11	30
	MS	41%	23%	36%	%	39%	16%	45%
	HS	45%	15%	40%	---	---	---	---
24. Student work demonstrates high quality and can serve as exemplars.	ES	43%	35%	22%	#	37	16	12
	MS	64%	14%	23%	%	57%	25%	18%
	HS	65%	25%	10%	---	---	---	---