



District Review Report

Cambridge Public Schools

Review conducted February 24-27, 2014

Center for District and School Accountability

Massachusetts Department of Elementary and
Secondary Education

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Cambridge 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 Cambridge Public Schools was conducted from February 24-27, 2014. The site visit included 38 hours of interviews and focus groups with approximately 90 stakeholders, including school committee members, district administrators, school staff, students, and teachers' association representatives. The review team conducted three focus groups with ten elementary school teachers, five middle school teachers, and eight high school teachers.

A list of review team members, information about review activities, and the site visit schedule are found in Appendix A, and Appendix B provides information about enrollment, student performance, and expenditures. The team observed classroom instructional practice in 113 classrooms in 17 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 Cambridge Public 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 twice a month.

The current superintendent has been in the position since 2009. The district leadership cabinet includes the deputy superintendent, assistant superintendent for elementary education, assistant superintendent for curriculum and instruction, assistant superintendent for student services, chief operation officer, chief financial officer, chief planning officer, legal counsel and director of human resources. Central office positions have changed over the past year with the appointment of the assistant superintendent for curriculum and instruction, the assistant superintendent of elementary education, and the assistant superintendent for student services. The district has 17 principals leading 17 schools. There are other school administrators, including high school subject curriculum deans, and various coordinators, coaches, directors and assistant directors. In 2013, according to ESE Profiles data, there were 563.4 FTE teachers in the district.

As of the 2013-2014 school year, 6,361 students were enrolled in the district's 17 schools. The percentages of students from different subgroups varied substantially from school to school. The district's overall percentage of students in the low-income subgroup was 45.4 percent. The percentage of low-income students at each school ranged from 24.8 percent of school enrollment (Amigos) to 68.5 percent of school enrollment (Fletcher/Maynard Academy). (See Table 1 below for the percentage at each school.)

There was also variation from school to school in the percentages of students from different racial/ethnic subgroups. In 2013-2014 the biggest differences¹ in the percentages at various schools of students from these subgroups were as follows:

- The district's overall percentage of African-American students was 28.8 percent. The percentage of African-American students at each school ranged from 5.5 percent (Amigos) to 40.4 percent (Fletcher/Maynard).
- The district's overall percentage of white students was 38.0 percent. The percentage of white students at each school ranged from 22.5 percent (King) to 50.4 percent (Cambridgeport).

¹ Not counting the difference in the percentages of Hispanic/Latino students, as the school with the highest percentage (42.6 percent), the Amigos School, is a two-way bilingual school (Spanish and English).

**Table 1: Cambridge Public Schools 2013-2014
Schools, Type, Grades Served, Enrollment, and Percent Low-Income**

School Name	School Type	Grades Served	Enrollment	% Low-Income
Amigos School	ESMS	K-8	343	24.8%
Cambridgeport	ES	PK-5	280	38.6%
Fletcher/Maynard Academy	ES	PK-5	235	68.5%
Graham and Parks	ES	PK-5	359	37.0%
Haggerty	ES	PK-5	248	37.5%
John M. Tobin	ES	PK-5	287	37.3%
Kennedy-Longfellow	ES	PK-5	255	63.5%
King Open	ES	PK-5	334	44.0%
Maria L. Baldwin	ES	PK-5	323	30.7%
Martin Luther King, Jr.	ES	PK-5	267	47.2%
Morse	ES	PK-5	281	54.4%
Peabody	ES	PK-5	311	50.5%
Cambridge Street Upper School	MS	6-8	267	57.7%
Putnam Avenue Upper School	MS	6-8	246	62.6%
Rindge Avenue Upper School	MS	6-8	282	45.0%
Vassal Lane Upper School	MS	6-8	302	46.0%
Cambridge Rindge and Latin School	HS	9-12	1,741	44.8%
Totals	17 schools	PK-12	6,361	45.4%

Between 2009 and 2014 overall student enrollment increased by 10.2 percent. 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 more than double the median in-district per pupil expenditures for urban districts of similar size in fiscal year 2012: total in-district per-pupil expenditures were \$27,018 as compared with a median of \$11,815 (see [District Analysis and Review Tool Detail: Staffing & Finance](#)). Actual net school spending has been well above (i.e., 105 percent above) what is required under state law, as shown in Table B8 in Appendix B.

Student Performance²

Cambridge is a Level 3 district because two of the district's 17 schools are in Level 3 – the Kennedy-Longfellow and King Open elementary schools.

- Kennedy-Longfellow is in the 7th percentile of elementary schools statewide, with a Cumulative Progress and Performance Index (CPI) of 44 for all students and 44 for high needs students (target is 75).
- King Open is in the 26th percentile of elementary schools statewide with a cumulative CPI of 74 for all students and 66 for high needs students. It is in Level 3 because its African-American/Black students and low income students are among the lowest performing 20 percent of subgroups in the state.
- Cambridge has six schools in Level 2. Peabody, Baldwin, and Graham and Parks are in the 30th, 46th, and 65th percentile of elementary schools statewide. Amigos is in the 76th percentile of elementary-middle schools. Putnam Avenue and Vassal Lane are in the 35th and 54th percentile of middle schools.
- Cambridge has nine schools in Level 1. Fletcher/Maynard, Martin Luther King, Jr., Cambridgeport, Tobin, Morse and Haggerty are in the 24th, 37th, 42nd, 47th, 53rd, and 67th percentile of elementary schools statewide. Cambridge Street and Rindge Avenue are in the 38th and 61st percentile of middle schools. Cambridge Rindge and Latin is in the 37th percentile of high schools.

The district met its math and science targets with respect to the 2013 Composite Performance Index (CPI). It did not meet its CPI target for ELA.

- The district's Math CPI was 80.9 in 2013, within 1.25 points of the district's target of 81.5.
- The district's Science CPI was 77.1 in 2013, above the district's target of 76.9.
- The district's ELA CPI was 85.9 in 2013, below the district's target of 87.5.

² See also student performance tables in Appendix B.

Math proficiency rates were equal to or above the state rate for the district as a whole and all tested grades except for the 5th and 7th grades. Math proficiency was higher in 2013 than 2010 for all students in the district and in every grade except for the 7th grade.

- Math proficiency for all students in the district was 55 percent in 2010 and 62 percent in 2013, 1 percentage point above the state rate of 61 percent.
 - Math proficiency was higher in 2013 than 2010 by 19 percentage points in grade 4, 13 percentage points in grades 6 and 8, 7 percentage points in grade 10, and 3 and 2 percentage points in grades 5 and 3, respectively.
- Math proficiency in grade 7 was 46 percent in 2013, 5 percentage points lower than the 2010 rate of 51 percent, and was below the 2013 state rate of 52 percent.

Science proficiency trends between 2010 and 2013 varied by grade.

- 5th grade science proficiency was 46 percent in 2010 and 44 percent in 2013, below the state rate of 51 percent.
- 8th grade science proficiency was 41 percent in 2013, 7 percentage points above the 2010 rate of 34 percent, and was above the state rate of 39 percent.
- 10th grade proficiency was 69 percent in 2013, 11 percentage points above the 2010 rate of 58 percent; it was below the state rate of 71 percent.

ELA proficiency rates in Cambridge were below the state rate in grades 5 through 10 and in the district as a whole. However, ELA proficiency was higher in 2013 than 2010 in most grades, especially in grade 10.

- ELA proficiency for all students in the district was 63 percent in 2010 and 68 percent in 2013, 1 percentage point below the state rate of 69 percent.
 - ELA proficiency rates were higher in 2013 than 2010 by 12 percentage points in grade 4, 5 percentage points in grade 5, 4 percentage points in grade 6, 2 percentage points in grade 8, and 20 percentage points in grade 10.
- ELA proficiency was 3 percentage points lower than the state rate in grades 5 and 6, 7 percentage points below the state in grade 7, and 1 percentage point lower than the state in grades 8 and 10.
 - ELA proficiency in grade 7 was 65 percent in 2013, 6 percentage points lower than the 2010 rate of 71 percent, and below the 2013 state rate of 72 percent.

Cambridge met its 2014 four year cohort graduation rate target of 80.0 percent and five year cohort graduation rate target of 85.0 percent.³

- The four year cohort graduation rate was 82.5 percent in 2013, 2.7 percentage points lower than the 2010 rate of 85.2 percent, and was below the 2013 state graduation rate of 85.0 percent.
 - English language learners (ELLs) were the district subgroup whose 2013 four year graduation rate (53.3 percent) was the farthest below the rate for the corresponding state subgroup (63.5 percent). The district's four year graduation rate for ELLs was 18.9 percentage points lower in 2013 than in 2010, when it was 72.2 percent.
- The five year cohort graduation rate was 88.9 percent in 2009 and 89.0 percent in 2012, above the 2012 state rate of 87.5 percent.
 - The annual dropout rate for Cambridge has been lower than the state dropout rate since 2010 and was 1.5 percent in 2013, below the statewide rate of 2.2 percent.

Student performance and growth vary widely among the JK-5 schools in the district.

- ELA proficiency rates at JK-5 schools in 2013 ranged from 39 percent (at Kennedy-Longfellow) to 71 percent (at Tobin).
 - ELA proficiency for students in the Low Income subgroup ranged from 21 percent (King Open) to 52 percent (King and Peabody).
 - ELA proficiency for students with disabilities ranged from 6 percent (Kennedy-Longfellow) to 42 percent (Tobin).
 - ELA proficiency for African American students ranged from 19 percent (King Open) to 50 percent (Cambridgeport).
 - ELA proficiency for Asian students ranged from 53 percent (Morse) to 100 percent (Cambridgeport).
 - ELA proficiency for Hispanic students ranged from 10 percent (Kennedy-Longfellow) to 69 percent (Graham and Parks).
 - ELA proficiency for white students ranged from 52 percent (Kennedy-Longfellow) to 92 percent (Tobin).
- ELA median Student Growth Percentiles (SGP) in 2013 ranged from 39.0 (at Peabody) to 74.0 (at Graham and Parks).

³ 2014 graduation 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 rates.

- The ELA SGP for students in the low income subgroup ranged from 27.0 (King) to 82.0 (Graham and Parks).
- The ELA SGP for students with disabilities ranged from 31.0 (Haggerty) to 64.0 (Baldwin).
- Math proficiency rates at JK-5 schools in 2013 ranged from 34 percent (at Kennedy-Longfellow) to 75 percent (at Haggerty).
 - Math proficiency for students in the Low Income subgroup ranged from 28 percent (Kennedy-Longfellow) to 65 percent (Haggerty).
 - Math proficiency for students with disabilities ranged from 14 percent (Morse) to 52 percent (Fletcher/Maynard).
 - Math proficiency for African American students ranged from 26 percent (Kennedy-Longfellow and Baldwin) to 59 percent (Haggerty).
 - Math proficiency for Asian students ranged from 53 percent (Morse) to 91 percent (King).
 - Math proficiency for Hispanic students ranged from 5 percent (Kennedy-Longfellow) to 82 percent (Baldwin).
 - Math proficiency for white students ranged from 52 percent (Kennedy-Longfellow) to 93 percent (King).
- Math median Student Growth Percentiles (SGP) in 2013 ranged from 39.0 (at King and Kennedy-Longfellow) to 77.0 (at Graham and Parks).
 - The Math SGP for students in the Low income subgroup ranged from 26.0 (King Open) to 82.0 (Graham and Parks).
 - The Math SGP for African-American students ranged from 31.0 (King) to 67.5 (Morse).
 - The Math SGP for white students ranged from 38.0 (Haggerty) to 79.5 (Cambridgeport).
- Science proficiency rates at JK-5 schools in 2013 ranged from 12 percent (at King) to 69 percent (at Haggerty).

Cambridge Public Schools District Review Findings

Strengths

Leadership and Governance

1. Using a broad-based process, the superintendent led the district’s transition from a two-level JK-8⁴, 9-12 system of schools to a three-level, JK-5, 6-8, 9-12 system.⁵ The district’s new structure and educational programs for grades 6-8 represent a bold change with the goal of promoting districtwide equity and improving student achievement.

A. On entering the system in 2009, the superintendent, along with the school committee, took steps to address the quality and equitability of education and low student achievement, particularly in grades 6-8.

1. In 2011, district leaders developed and began to implement the *Innovation Agenda (IA)*, which created a network of four upper schools for grades 6-8.
2. The development of the Innovation Agenda took one and one-half years and was a collaborative, community-based, “grassroots” effort. It involved more than a dozen parent meetings and community meetings to discuss issues of equity, social justice, excellence and the need for increased rigor; visioning and planning meetings with school leaders; community hearings by school committee sub-committees; superintendent-led parent and teacher committees; and collaboration with the Cambridge Education Association (CEA).
3. The overarching goal of the Innovation Agenda is to support the district’s core values of academic excellence and social justice by “improving learning outcomes for ALL students and accelerating achievement gains to reduce gaps in proficiency, meeting specified state and district-identified outcome measures each year.”
4. The final recommendation created a district configuration with four small middle schools – called a network of upper schools. Three upper schools draw students from three elementary schools; one upper school draws students from two elementary schools. The Amigos School, the district’s Spanish dual-language school, remains K-8. The goal was to create, in effect, one unified middle school program housed in four different locations, with each of the four schools led by a principal. This was intended to create a more consistent middle school experience while maintaining smaller schools, which have historically been valued in Cambridge.

⁴ The district uses JK, short for “Junior Kindergarten,” instead of the more common Pre-K or PK.

⁵ The Amigos School, with its bilingual education program, continues to be a K-8 school.

5. After 18 months of planning, the superintendent proposed and the school committee adopted this plan in March 2011 after decades of dissatisfaction and previous attempts to improve the middle grades.
- B.** The configuration of middle schools represents a substantial change in the city and district.
1. It challenged long-held preferences for K-8 schools, which typically enrolled only one or two classrooms per grade for grades 6–8.
 2. By combining students from two or three feeder JK-5 schools into a nearby upper school, students and teachers each formed a larger critical mass. This design was intended to provide a wider range of resources and programs at each school. It was also designed to benefit teachers’ practice by establishing a larger group of colleagues for collaboration at the middle school level.
 3. Several stakeholders noted the significance of this change.
 - a. A teacher noted that “to actually [implement the Innovation Agenda] required a lot of leadership and vision.”
 - b. A district leader described the new model as a “culture shock.”
- C.** The district is continuing to address priorities for improvement as it implements the Innovation Agenda.
1. The Agenda comprises six strategic objectives:
 - a. Develop an Upper School Program that prepares middle grades students for high school success, reduces gaps, and develops 21st century skills;
 - b. Build high-performing professional learning communities that provide professional development and collaboration/teaming for middle grades educators;
 - c. Create a Cambridge wraparound zone, in collaboration with community partners, that supports families and students, and narrows achievement and opportunity gaps;
 - d. Align district resources with the academic program, making the best and most efficient use in serving students;
 - e. Renovate CPS facilities to support the academic program and district configuration; and
 - f. Improve elementary programs, with targeted improvements aligned with the Upper School Program and strategies to address socio-economic inequities between schools.
 2. The district has identified goals and outcome measures to benchmark the implementation and impact of the Innovation Agenda.

- a. Planning documents identify outcome measures of progress and achievement in meeting goals for the current school year, 2014. Outcome measures are tracked and documented by district leaders and reported to the school committee at various intervals during the year.
3. The district also established two other Implementation Priorities for 2012-2013: changes to the ELL program and planning and use of the educator evaluation system.

Impact: By developing the Innovation Agenda using a community-based, collaborative process, the superintendent initiated and modeled a bold, collaborative approach to improving educational quality and student outcomes. By transforming the school configuration and identifying accountability measures to determine progress, leaders signaled their commitment to effecting real change in the district.

Curriculum

2. There has been good progress districtwide aligning ELA and mathematics curricula to the 2011 MA Curriculum Frameworks. In addition, as part of the Innovation Agenda emphasizing a more rigorous curriculum aligned to Common Core state standards, the district designed and implemented new ELA and math curricula in the upper schools and provided anchor standards for science and history/social science.

- A. The district developed and implemented a three-year plan to align the math curriculum to the 2011 MA Curriculum Frameworks for mathematics.
 1. The rollout began in grades K-2. Interviewees told the team that 42 teachers built curriculum maps and assessments. During the 2013 school year, teachers aligned curriculum maps for grades 3-8.
 - a. Curriculum maps include pacing guides, unit notes, standards, scope of standards, and supplemental resources. Current maps are aligned to the *Investigations* math program, but as the district adopts *Math In Focus*, now being piloted in multiple grades, they will require additional alignment.
 2. In grades 9-12, the K-12 math coordinator identified “point” people for each math subject (geometry, pre-calculus, Algebra, and Algebra II). The math curriculum dean formed a team of ten math teachers and led workshops over the summer to discuss math strategies, standards, and assessments. Although the work for all courses has been completed, interviewees described the maps as “works-in-progress” with changes imminent to align with PARCC assessments.
 - a. When asked about mathematics curriculum resources, interviewees stated that they had pacing guides and common assessments, but had to seek online resources aligned

to the Common Core. Interviewees told the team that Assigned Professional Collaboration (APC) time, scheduled by course, is “invaluable to finding good resources and materials.”

- B.** The ELA curriculum is being continually aligned to the 2011 MA Frameworks.
1. In 2012-2013, 15 new writing units for grades 1-5 were implemented with district and school coaches providing professional development. In 2013-2014, 15 new reading units were introduced in the same grades.
 - a. A literacy coaching model began in 2010-2011. There are three district and 14 school literacy coaches. Coaches were trained in guided reading and in the Literacy Collaborative model (Lesley University).
 2. In grades 9-12, the English curriculum dean and an instructional coach aligned ELA objectives and held a three-day workshop for a core group of teachers who then re-aligned the curriculum “line by line” and “chunk by chunk.” From that workshop, teachers finalized pacing guides in 2012-2013. Interviewees noted that there is “ongoing tweaking” while APCs constantly look at curriculum and give feedback. The department has aligned pacing guides and assessment rubrics for grade 9-11 courses, but not for grade 12 electives.
 3. A K-12 ELA team is scheduled to begin in-depth training in the UbD format during a ten-day period from late May through August 2014.
- C.** Providing grade 6-8 students with a rigorous curriculum is a district priority. As part of the Innovation Agenda, the district designed and implemented new curricula, resources, and assessments in ELA, mathematics, science and history/social science at all four upper schools.
1. During the 2012-2013 school year the district piloted *Math in Focus* (Singapore Math) along with curriculum maps and a grade 8 Algebra course.
 2. In ELA, the district implemented 16 new units of study in reading and writing in grades 6-8. In addition, to increase rigor, vertical conversations with 9th grade teachers resulted in adding *The House on Mango Street* and *Of Mice and Men* to grade 8 core extended texts.
 3. In 2012-2013, the science department implemented a new grade 6 curriculum based on the Next Generation Science Standards and in 2013-2014, a grade 7 standards-based science curriculum. The science curriculum includes anchor standards to ensure cross-disciplinary literacy expectations.
 4. In history/social sciences, in all three grades, upper school teachers piloted Document-Based Questions that required students to analyze and incorporate evidence. Grade 6 teachers are piloting performance assessments while in grade 8 teachers trained in *Facing History and Ourselves* are piloting a new unit on school desegregation in Little Rock.

5. Interviewees, including the superintendent, noted that the district will continually revisit upper school curricula to ensure that it is sufficiently rigorous.

D. Literacy and math coaches play an important role in helping to implement ELA and mathematics curricula districtwide.

1. Interviewees told the team that coaches are helping teachers to supplement content to include Common Core state standards.

2. When the team asked coaches what responsibilities they all shared, they indicated that they were all responsible for implementation of the common core standards, and that this process is different in each school.

Impact: By aligning the ELA and mathematics curriculum with 2011 MA Curriculum Frameworks, and creating new and aligned curricula for the upper schools, the district is helping to ensure that students experience rigorous, coherent content and instruction that can lead to improved achievement.

3. The district has recently created a plan for curriculum review and renewal, including a regular and timely research-based review and revision of curricula in all disciplines, analysis of MCAS and other assessment results, and input from district and school leaders and teachers. Given that the district has sufficient curriculum leadership at all levels to support successful implementation of the curriculum review cycle, components are in place for effective implementation if these efforts are well-coordinated.

A. The new assistant superintendent for curriculum and instruction created the *Curriculum Review Cycle* (January 2014) and presented it to the school committee. This was a response to the need to have a comprehensive, rigorous, districtwide curriculum aligned to 2011 MA Curriculum Frameworks.

1. In interviews, district leaders including the superintendent, school leaders, teachers and school committee members described the need to have a more coherent approach to curriculum districtwide. District leaders described the new review cycle as a “bold move” representing a significant change.

a. The district has a history of school autonomy in regard to curriculum. Interviewees cited the current lack of a common elementary school report card as an example. A theme in interviews was the need to have more cohesive structures for decision-making and in the academic program.

b. While recognizing the uniqueness of the district’s schools, interviewees also cited the need to move toward a full standard-based curriculum.

2. The *Curriculum Review Cycle* outlines a comprehensive framework for the review, development and implementation of new district curriculum that links curriculum, instruction and assessment practices to ensure alignment and coherence. The four phases of

the review span a six-year progression. Eventually, each discipline will be simultaneously engaged in one of the four phases. For example, while ELA is in phase 4, science is in phase 1.

- a. In phase 1, departments assess current program effectiveness and alignment with the 2011 MA Curriculum Frameworks and district goals.
 - b. In phase 2, curriculum departments redesign and update curriculum units aligned to state curriculum frameworks using the Understanding by Design (UbD) format focused on learning outcomes, performance assessments and classroom instruction. Units will include differentiated instructional strategies, WIDA standards, Universal Design for Learning, enrichment opportunities and instruction for inclusive classes. Each curriculum committee will select common formative, summative and performance assessments. Professional development needs will also be identified.
 - c. In phase 3, the district will implement the new curriculum, including the purchase of instructional materials and required technology. Staff will be supported to ensure successful implementation.
 - d. In phase 4, the committee will evaluate curriculum effectiveness using a thoughtful process that examines longitudinal data of student achievement outcomes.
- B.** The district recognized the need to develop a common vision and understanding of the goals and objectives of a curriculum review cycle.
1. District leaders described this effort as a “big attempt to bring everyone on the same page.”
 2. Information about the curriculum review cycle was disseminated and explained to all stakeholders including the school committee, K-12 curriculum coordinators, principals, curriculum teams, assistant principals, teachers, coaches and parents.
- C.** Implementation of the curriculum review cycle is underway and has begun with the science and world languages curricula.
1. Documents and interviews confirmed that a K-12 science curriculum committee of teachers, coaches, principals and special education and ELL teachers began phase 1 in January 2014. They will meet during the school year and summer to evaluate the curriculum and work on the UbD format.
 2. World languages are also in phase 1. Interviewees told the team that the world languages committee will “unpack the frameworks” and receive UbD training from Grant Wiggins, one of the co-creators of UbD.
 3. School administrators and coaches are also scheduled to have training in the UbD format with Grant Wiggins in November 2014.

- D.** Sufficient curriculum leadership exists at the district level and school levels to ensure the successful outcome of the curriculum review cycle.
1. The superintendent reorganized the district's administrative structure and redesigned new positions for an assistant superintendent for curriculum and instruction and assistant superintendent for student services to work in a Teaching and Learning Team (TLT) with the existing deputy superintendent and assistant superintendent for elementary education. The TLT was charged with developing and implementing an improved and more coherent educational program.
 - a. The full TLT attended the Harvard Institute for Urban School Leaders 2013 summer institute and developed a mission and vision statement for review with the curriculum coordinators. These statements were shared with school and district administrators at the start of the school year. The review team did not find evidence that this statement has yet been made public.
 2. The superintendent told the review team that his job was to supervise the TLT and help them forge ahead. His support for the curriculum review cycle was evident by the allocation of resources for it included in the budget and the hiring of a capable curriculum leader.
 3. At the district level, the assistant superintendent for curriculum and instruction provides curricular leadership. She works closely with K-12 coordinators for ELA, math, science, social studies and bi-lingual education.
 4. There are four deans of curriculum in core subjects at the high school, assistant principals at the high school and upper school, as well as a cadre of literacy and math coaches (supervised by coordinators) in all schools who play a pivotal role in curriculum development and implementation.
 5. While elementary principals need to ensure implementation of curriculum, information sharing about curriculum between K-12 coordinators and principals is not yet formalized. Principals and district leaders noted the need for principals to know more about curriculum and its renewal.
- E.** There are established collaborative structures districtwide to support a major shift in curriculum design and development.
1. At the high school, department-based Assigned Professional Collaboration (APC) teams meet weekly by course for 80 minutes. Interviewees reported that valuable curriculum work is done during these scheduled meetings. In addition, teachers also collaborate during 35 hours of afterschool professional development organized by department.
 2. At the new upper schools, teachers have daily common planning time for grade-level teams. Monthly, there are school-based vertical team meetings by department, as well as department meetings with all four upper schools.

3. At the elementary level, the coaching model is the major conduit for implementing the ELA and math curriculum in the district. There is no regularly scheduled common planning time other than at faculty meetings or when students are attending “specials.”

Impact: The district is changing the paradigm for how curriculum is developed, reviewed, and implemented throughout the schools with the introduction of the new research-based curriculum review cycle. By using a cohesive format to develop and continually improve curricula that is rigorous and aligned to the state frameworks, the district can ensure that a high-quality curriculum is guaranteed and viable for all students.

Instruction

4. A network of school-based and district-level coaches that provides targeted support to classroom teachers in elementary and upper school grades (K-8) is focused on improving instruction and is valued by teachers.

- A. Each school has its own literacy and mathematics coaches. In addition, there are four districtwide coaches for literacy, mathematics, and science who, along with coordinators, help supervise and support school-based coaches.
 1. Coaches perform a variety of functions at each school and their roles are prescribed by each principal. Nevertheless, there are several functions that are common to most coaches:
 - a. At the upper schools, school-based coaches also serve as half-time interventionists. Coaches reported that each interventionist operates somewhat differently in each school, but that all use student performance data to identify students in need of support in ELA and mathematics. At the K-5 schools, literacy coaches work with grade 3 students in intervention groups, a new practice this year.
 - b. All school-based coaches collaborate with their district-level coaches, meet with district coaches monthly, participate in weekly meetings, and debrief about what has happened in their schools each week and plan ahead for the next week.
 - c. Coaches also work with the district’s assessment specialist to gather and analyze student performance data. They work within their schools to share and analyze student assessment data in literacy and mathematics. One coach said that her role with data was ongoing and the largest part of her job. Coaches noted the role that data plays in helping convince teachers who are reluctant to change to try something new and then compare the data. In addition, coaches reported helping teachers take responsibility for their own data.
 - d. Coaches told the review team that they are a part of the teams that discuss students and performance assessments. They facilitate or participate in weekly K-5 meetings

where student needs are discussed. They are part of school data teams and participate in literacy, instructional, and review teams. They also assist teachers with analyzing student work.

- e. Under the direction of principals, coaches provide school-based professional development and have also received special training. In discussing how teachers improve skills for topics such as differentiating instruction, coaches described multiple approaches geared to teacher and school needs. Coaches embed professional development in their work with individual teachers.
2. Mathematics coaches offer an “aspiring leader” program for JK-12 teachers to experience and learn from instructional rounds. Open to everyone, they help teachers observe best practices and discuss what they have seen in rounds.
 - a. Coaches told the review team, and teachers confirmed, that coaches are responsible for the implementation of the 2011 Massachusetts Curriculum Frameworks and support teachers in curricular areas.
 3. Coaches reported that they try to build consistency of practice across schools. However, this is challenging in light of the differing instructional goals among principals and the variation in school improvement plans. They noted that while they have been addressing instructional practices for many years through professional development, the implementation of these practices is dependent upon the focus of each school’s leader.

B. Teachers value school-based coaches.

1. Teacher-coach collaboration is often individualized based on teacher and school needs.
2. Elementary teachers told the team that coaches are helpful to new teachers and that they offer critical feedback that enables teachers to grow.

Impact: The network of coaches provided by the district to schools results in a tightly-knit level of targeted support to classroom teachers – one that is based on teacher and student needs. It builds strong instructional practices which raise the quality of teaching and learning in all K-5 and 6-8 schools.

Assessment

5. The district is developing a culture of data-informed decision making. Multiple stakeholders have access to data and other information to better understand student achievement trends, guide resource allocation, and inform decisions to improve teaching and learning.

- A.** The school committee uses a variety of data and other information to allocate resources and inform policy decisions. For example,

1. The school committee receives MCAS results, class size data, graduation rates, demographic data, SAT results, and Honors and AP reports to guide budget and policy decisions.
 2. The school committee commissioned several external studies to inform the committee, district and school leaders about programs and services.
 - a. Recent reports include *Perspectives on the Schools* (June 2012), based on a school climate survey; *An Integrated Approach to Library Media, Educational Technology, MIS and Media Arts* (March 2011), on upgrading or expanding educational technology and library and media services; *Middle Grades Instruction in Nine Cambridge Public Schools* (January 2013), a study of grade 6-8 instruction; and *Cambridge Public Schools Special Education Program Review* (April 2011) (which was separate from ESE's 2009 Coordinated Program Review report).
- B.** District leaders share multiple forms of student achievement and demographic data at all levels to guide decision-making.
1. District leaders provided demographic and achievement data to the school committee and the community to give context and rationale to support the Innovation Agenda.
 2. District leaders also designed an accountability system with multiple measures to determine and report on the impact of 2012-2014 district priorities and strategic objectives.
 3. District leaders routinely provide documents and presentations to inform principals and others about instructional and assessment initiatives.
 4. The Teaching and Learning Team prepares a yearly comprehensive MCAS Report that presents multiple analyses of MCAS results to the school community as well as commentary from the superintendent and MCAS-related priorities to improve student outcomes. The office also assists with other data reporting for the coaches' school-based improvement efforts.
- C.** In the 2014 school year, principals created data analyses guided by a new Data Protocol Outline. The protocol helped standardize data analyses and presentations in SIPs for all schools to provide context and rationale for improvement priorities. It also helped principals access MCAS results and other data from Edwin Analytics and use TestWiz for analysis.
- D.** Subject coordinators collaborate with coaches to better understand district, school, and individual student data. These conversations set the stage for the various meetings coaches have with teachers, principals and others at their assigned school(s) to improve instruction.
- E.** A number of stakeholders present and discuss data for instructional improvement with teachers and others at the schools.

1. Coaches present MCAS analyses and other assessment results to individual teachers and grade-level teams at the elementary and upper schools. Principals sometimes attend coach-teacher meetings. Principals also present and discuss MCAS results and other assessment data with teachers at grade-level meetings or in one-on-one meetings with teachers.
 2. Some schools' Instructional Leadership Teams and other schools' data teams also present data analyses to their school communities and teachers.
 3. At the high school, some deans of curriculum, subject coordinators and coaches provide MCAS analyses and common assessment results to teachers and others. In addition, high school teachers analyze results from Ready Step, the PSAT and SAT for college readiness and preparedness.
- F. All teachers and principals have access to TestWiz. Some were described as having good capacity to access and analyze student achievement and other data to inform curricular and instructional decisions.

Impact: The availability and use of data at the governance, district, school, and classroom levels increases the likelihood that decisions made at all levels are based on the needs of students. This can continually improve educational quality and student outcomes.

Human Resources and Professional Development

6. The district is making a genuine effort to thoughtfully implement the state's new educator evaluation policy.

- A. Throughout the past two school years the district has taken important steps to meet the requirements and support the full implementation of the state's new educator evaluation program.
1. Interviewees confirmed that the district had provided both teachers and administrators with educator evaluation training programs well beyond those specified by state law ([Chapter 131 of the Acts of 2012](#)). Using a combination of external consultants and internal trainers, the district has provided all staff members with a comprehensive and on-going series of workshops and programs in support of the new evaluation system.
 2. Using RTTT funds, the district purchased a software program (*TeachPoint*) to replace the former paper-driven process and to more efficiently manage the extensive volume of documents and data generated by the new evaluation system. Both teachers and administrators were further supported with targeted training in *TeachPoint*. Additionally, all evaluators have received iPads to facilitate their efforts to record, access, and monitor all evaluative documentation.

3. The district created the Joint Labor Management Evaluation Subcommittee to oversee and monitor the implementation of the new educator evaluation system and “advise the superintendent and Cambridge Education Association (CEA) on evaluation procedures with an eye towards making improvements, as necessary, that lead towards quality teaching and learning.” This standing committee is co-chaired by the district’s Human Resources Director and CEA president and composed of both teacher and administrator representatives.

Impact: The state’s new educator evaluation system is designed to provide teachers and administrators with meaningful feedback and the continuous support needed to improve classroom instruction, enhance professional competencies, and promote student academic achievement. If the superintendent and district leaders remain committed to the full and faithful implementation of the new evaluation system, holding themselves and all members of the school community accountable for meeting their respective responsibilities, then continuous and comprehensive improvements in learning opportunities and academic outcomes for all Cambridge students should result.

7. The district invests significant resources to support its professional development programs and services and provides a broad range of learning opportunities and experiences for all adult members of the school community.

- A. The district has historically provided strong financial support for its professional development (PD) programming. According to ESE data, district professional development spending in 2012-2013 was \$9,684 per teacher.
- B. The district endeavors to improve student achievement by creating and supporting multiple, differentiated opportunities for adult learning that specifically include teachers, administrators, paraprofessionals, substitutes, support personnel, and parents.
 1. Among the wide variety of PD programs provided by the district are skill- and content-based workshops, courses, seminars, and conferences. Interviewees explained that the district makes internal and external opportunities available through formal collaborations with local colleges and universities.
 2. The district reimburses teachers for coursework and the human resources department informs and encourages teachers to take advantage of enrichment opportunities at local colleges (e.g., Lesley University, Harvard Extension School, and Simmons College).
 3. The district also supports “homegrown” PD programs by encouraging and reimbursing teachers who develop course offerings for colleagues.
 4. The Teacher Resource Center at Cambridge Rindge and Latin High School serves as a locale for district staff to share ideas on best practices, access information about PD opportunities, and display examples of their own professional learning.
 5. The district created the CLIP Program (Cambridge Licensure in District), an ESE-approved teacher preparation program that allows Cambridge teachers with Massachusetts

preliminary licenses at the 5-8 or 9-12 grade levels to earn an initial license while serving as a “teacher of record.”

- C. In order to enhance the design and overall effectiveness of the current PD model, the district has very recently formed the Professional Development Committee (PDC), a joint collaboration between the administration and the CEA whose charge, according to interviewees, is to identify deficiencies in present PD structures and systems and make appropriate recommendations for improvement.
 - 1. The PDC is co-chaired by the assistant superintendent for curriculum and instruction and the Cambridge Education Association president, and consists of over 20 teacher and administrator representatives from across the district. Although only one meeting had been held at the time of this review, committee members reported they were encouraged by initial progress and hopeful about future outcomes.

Impact: By providing a PD program focused on ongoing professional growth and shared responsibility for student learning, the district is taking steps to bring about improvements in instructional practices, curriculum, and student academic opportunities.

Student Support

8. Since 2012, the district has made personnel, structural and programmatic changes to ensure greater access, equity, participation, and continuity within JK-12 special education programs and for 9-12 English language learners.

- A. In spring 2013, the district created the position of assistant superintendent for student services to broaden oversight and ensure consistent delivery of student support services and programs. The new position was recommended by a 2011 Special Education Program Review by WestEd and replaced the role of executive director of special education. It was also a priority in the Innovation Agenda.
 - 1. In the 2014 school year, the office of student services provided a comprehensive overview of its vision, mission, goals and expected outcomes. This included current data about students with disabilities, as well as data collected from families, teachers, principals, administrators and school staff.
 - a. The vision of the office of student services is to ensure that students receive high-quality education in the least restrictive environment through specialized services and supports. Staff reported gaining clarity about this vision as a result of recent work with the upper schools.
 - b. The office reassigned four special education teachers in charge (TIC) to school clusters rather than to specific programs, as in previous assignments. This was intended to streamline oversight of services and supervision of school-based staff.

- B.** A May 2013 report summarized the district’s progress in making key program improvements. It included a description of work accomplished by the office of special education within the four target areas identified by the WestEd report:
1. Improve the continuum of services for fully mainstreamed students: The decision was made to reinstate the position of Inclusion Specialists beginning in the 2013-2014 school year.
 2. Develop a language-based learning disabilities classroom: In 2012-13, a language-based learning disabilities class opened at Cambridgeport School.
 3. Improve communication between parents and the Office of Special Education: The office of special education established meetings with C-PAC co-chairs, as well as several other meetings and workshops with parents and frequent written communication. The C-PAC was actively involved in the search and hiring process for the new assistant superintendent. The report also noted that the new configuration of middle schools meant that students in substantially separate classrooms were not required to transition between schools as frequently as they had in the past.
 4. Create a consistent protocol to develop, write, and implement Section 504 Plans: The 504 TIC conducted districtwide workshops for administrators, staff and parents to ensure compliance and consistency with Section 504.
- C.** The new assistant superintendent outlined a three-and-a-half year phase-in plan to integrate kindergarten students into the least restrictive environment starting in school year 2014. The Haggerty School, currently housing a transitional kindergarten, is targeted in Phase 1 (2015). Phase 2 (2016) and Phase 3 (2017) target five and six schools respectively.
- D.** The district has also prioritized professional development in RETELL and ACCESS and improving instruction for ELLs.
1. The coordinator for bilingual and English language acquisition became a certified ESE trainer and trained ESL, SEI teachers, and the ESL Coach. During the 2013 school year, 60 general education teachers were trained in WIDA. About 33 administrators and ELA and science coaches were trained in RETELL. Additionally, ESL teachers had Tier I training on targeted strategies using ACCESS and almost all JK-5 ESL teachers were trained in Leveled Literacy Intervention. ESL and SEI teachers learned to use ELlevation, a data management system.
 - a. ESL teachers serve on school RtI teams. ESL teachers have received UbD training to enhance participation on district curriculum review teams.
 - b. Over the past year, the district developed a SEI curriculum taught by ESL teachers at CRLS. An academic challenge specialist assists in facilitating ELL placements in honors and advanced placement courses at CRLS and eliminating potential obstacles to access.

Impact: By clarifying its vision for student services, making concrete program improvements, increasing access to supports and services, and providing targeted professional development, the district is delivering a broadened and more coordinated approach to student services that ensures more effective and systemic oversight of programs, services, and support along a coherent JK-12 continuum. This can support all learners, but is especially critical for the district's students with disabilities and English language learners.

Financial and Asset Management

9. Cambridge has supported its schools at levels well above the state average but with modest increases, and the district has been able to reallocate its resources to provide for needed new programs and services.

A. The city is in a strong financial position.

1. According to FY2014 Department of Revenue data and interviews with city officials, the city had excess levy capacity of \$117 million, free cash funds totaling \$142 million and a residential tax rate that is among the lowest city rates in the state.

B. ESE data indicate FY2012 per pupil expenditures of \$27,018, which was nearly twice the state average. This provides a variety of services and supports as well as reasonable class size.

1. The district's FY2014 spending is 111 percent higher than the required net school spending amount.
2. Student-teacher ratios were 11:1 in 2013, compared to 13.5:1 for the state, and ratios for paraprofessionals, administrators and clerical staff are also below average.
3. District budget documents indicate that the district tries to maintain class sizes of 17 to 20.
4. ESE data indicate higher than average per pupil expenditures for all areas, especially administration, professional development, instructional materials, benefits, and operations and maintenance.
5. Interviews with staff and students indicated that the district has substantial resources for instruction and student supports, including multiple instructional coaches in every school, curriculum coordinators and deans, psychologists, adjustment counselors, tutoring, post secondary planning, and security as well as ELL and special education services.
6. The district does not charge fees to participate in extracurricular activities.
7. There are over 4,000 computers in the district, and a six-year plan to improve technology in schools and classrooms is being implemented by: purchasing 85 classroom suites consisting

of document cameras and interactive whiteboards; purchasing 800 new computers; expanding wireless access in FY2013; and continuing improvements into FY2014.

- a. However, some elementary teachers reported needs for technology in their classrooms.
- C. Annual increases in the district budget have been modest, but the district has implemented some major new initiatives by reallocating its resources.
1. The increase for the FY2014 budget is 4.1 percent and the increase in net school spending is 2.9 percent. Increases over the previous four years have been comparable, even with a 10 percent increase in enrollment since 2009.
 2. The FY2013 budget funded the reorganization of K-8 schools into elementary and upper schools as part of the Innovation Agenda. Costs of the reorganization were absorbed into the budget with a modest increase of only 3 percent.
 3. The FY2014 budget included 15 initiatives such as Response to Intervention (RtI), expanded upper school instructional coaching, additional sheltered English instruction and special education services, upper school athletics, and a program evaluator. These initiatives totaled \$1.4 million, and were offset by \$1.4 million in five cost savings, such as staff reductions for special education, operations, and administration.
 4. City officials reported that the school committee has recently been able to absorb new initiatives into its bottom line.

Impact: The funding provided by the city to the district has enabled it to offer many services and programs to its children and to make adjustments and improvements as needed. When implementing new initiatives, budget increases have been reasonable and in line with increases in city revenues and other municipal budgets.

10. The district’s budget development process is transparent with many opportunities for input from stakeholders, and the two Level 3 schools are given consideration for additional resources during the development of the budget. Documentation of the budget is comprehensive, detailed, and well publicized.

- A. City and school administrators communicate closely about available revenues and school needs.
 1. City and district officials reported that they begin making revenue estimates in September–November.
 2. District administrators meet frequently with city officials to review city revenues and school enrollments, collective bargaining obligations, and other needs, and they develop a preliminary “maintenance of effort” budget to present to the school committee and the public in December–January.

- B.** After stakeholder input the superintendent proposes a budget in March.
1. The school committee prepares guidelines reflecting its goals for the budget and provides additional input into the proposed budget.
 - a. The guidelines for FY2014 included improving student achievement, implementation of the district Innovation Agenda and New England Association of Schools and Colleges (NEASC) recommendations, family engagement, special population needs, and long-range capital plans.
 - b. The FY2015 guidelines included consideration of world language programs at the elementary level, ongoing support for upper school programs, high school class size and NEASC recommendations, as well as some other programs noted for FY2014.
 - c. The school committee provides additional input into the proposed budget at budget subcommittee meetings and at budget retreats of the full committee.
 - d. Minutes indicate and city officials confirmed that school committee members meet with the city council at round table meetings regarding facilities as well as long-range budget issues, and participate, along with parents, at the city council meeting when their budget is approved. School committee members also reported that union officers attend school committee meetings on the budget.
 2. Administrators reported that while developing the proposed budget they hold meetings more than once a week with principals and other administrators to seek their input for school and program needs. According to administrators teachers may give input into the budget through their principals. They noted that this year's meetings of principals and other administrators in groups (elementary, upper, high school, coordinators, etc.) were valuable because they could share problems and possible solutions.
 3. Administrators as a team prepared strategic objectives for the FY2015 budget. The objectives are: refine the upper school program, create an aligned curriculum and instruction system, develop inclusive schooling across the district, and develop effective educators and instructional leaders.
 4. Administrators reported that parents and community members give input into the proposed budget through meetings with the Cambridge School Advisory Council and at budget hearings. School committee members noted the importance of feedback from the public on the budget.
 5. Minutes and memos indicate that the school committee suggests budget adjustments throughout the process, and administrators respond to those whether or not they are included in the recommended budget.

- C. Level 3 schools are eligible for additional resources, and other special programs and needs are considered.
 - 1. Level 3 schools are eligible for additional Title I resources as well as school budget allocations.
 - 2. Administrators reported that additional resources are planned for the two Level 3 schools in the FY2015 budget.
- D. Budget documents and presentations are comprehensive, detailed, and clear about new initiatives, cost savings, and what is in the budget. The information is readily available to the public.
 - 1. The proposed and adopted budget documents include an executive summary; school committee guidelines; initiatives and cost savings; revenue sources; detail by school, category, and program; narratives, staffing and accomplishments for each program; and enrollment and class size data.
 - a. The budget presentation and document make clear the budget's alignment to district goals and priorities. The executive summary and proposed initiatives highlight school committee guidelines and the Innovation Agenda. Committee members commented on the importance of aligning the budget with district goals. Administrators stated that some requests for resources have been turned down based on their lack of alignment with goals.
 - b. Proposals not originally in the budget or unfunded later in the process, such as an elementary world language program and the expansion of the Kodaly music program, were addressed in the executive summary of the budget document and in subsequent public memos.
 - 2. The calculation of operations budgets for each school is based on a per pupil allocation and allotments for special programs, and the calculations and rationale are clearly presented in the documents.
 - 3. Budget information, including guidelines, proposed and adopted budgets, and a calendar of budget meetings is available to the public on the district website, and the district distributes a booklet describing school programs and the budget to all city residents.
 - 4. Administrators reported that after the NEASC report recommended giving high school staff more information about the budget, they met with the high school staff on the budget last year.

Impact: Cambridge places a high priority on education and its school programs. The inclusive and transparent budget process and the clear, comprehensive and readily available budget documentation

encourages public participation, makes clear to the community what occurs in its schools, and contributes to its generous support of the schools.

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.

Leadership and Governance

11. The school committee has not operated with a unified, long-term vision for the district. This problem is partially due to uncertainty caused by two-year election cycles of the entire school committee. The school committee has also directed the district to focus on too many unaligned and non-continuous goals, undermining an optimal collaboration with the superintendent to act proactively and strategically to improve student achievement.

- A. School committee members have not consistently demonstrated a spirit of collaboration within the committee.
 - 1. School committee members run for office every two years under a *Single Transferable Vote* (STV) system designed to achieve proportional representation through ranked voting. All school committee members run at-large in a proportional representation process in which voters indicate their first, second and third choices.
 - a. A former member of the school committee echoed information that others also shared with the team. In their view, the current election cycle results in a “dysfunctional committee structure.” Because members compete for frequent election cycles, their incentive to take highly visible positions often outweighs the need to cooperate or collaborate with each other.
 - 2. With elections held every two years for the entire committee, there is the potential of full turnover of the committee at the end of a term. No members serve on a staggered basis to provide governance stability and continuity.
- B. The school committee has not worked with the administration to develop and communicate a unified vision and a long-range plan for the district.
 - 1. A current member of the committee stated that, with seven members, the committee probably had many visions, making it difficult for the committee to have a cohesive message all could agree to.

2. School committee members have taken steps that exceed their role and authority in policy and decision-making or that do not appear to be aligned with the district's 2012-2014 priorities and objectives. For example:
 - a. The "School Committee Agenda" of July 30, 2013 included nine school committee motions. One motion required the administration to justify a decision to provide double blocks to offer Honors CP level Algebra I, Geometry and English courses. This level of involvement by the school committee usurped the authority of the superintendent and school leaders.
 3. At the December 3, 2013 meeting, a school committee motion required the superintendent to recommend a new program of second language instruction at one elementary school for the beginning of the next school year, noting that it would be a recruitment tool to make the school more diverse and respond to an interest in second languages by families at the school. This is unrelated to the previously-established district priorities, including the Innovation Agenda.
- C.** The school committee has not demonstrated optimal collaboration with the superintendent.
1. Rather than acting on a meeting agenda collaboratively developed by the superintendent and school committee chair, committee members create a second "School Committee Agenda" for each regular committee meeting.
 - a. The committee has two agendas: one for the superintendent to present what he needs the committee to vote on and one for the committee to present their own items for a vote.
- D.** A member reported that the School Committee Agenda sometimes includes motions submitted by a parent or community member to a school committee member.
1. Principals said that they spend many hours developing educational proposals, which are often changed in significant ways by the school committee without regard for educators' opinions.
 2. Teachers agreed that the school committee gets involved at a level which they characterized as "way too deep." They offered the example of a parent listserv of with a relatively small number of participants to whom committee members pay strong attention. Teachers believed that committee members focused on this small sample of parents rather than listening closely to the superintendent about what is happening in schools.

Impact: The school committee election structure in the district makes it difficult for members to collaboratively embrace a long-term vision for the district. In addition, the committee's fragmented approach results in a loss of focus on district priorities and inhibits the district's ability to plan and implement long-range strategies for improvement.

12. Recent district improvement planning has included goals and strategies to address within a two-year timeframe (2012-2014), rather than taking a longer-term view in an annually updated multi-year District Improvement Plan.

- A. Although the planning documents, *Cambridge Public Schools Goals, Objectives and Outcome Measures 2012-2014* and the Innovation Agenda (IA) identify goals for educational and program improvement, the district has not developed a long-range, strategic district improvement plan to guide improvement efforts over a three- to five-year period that is annually extended.
- B. School Improvement Plans (SIPs) are loosely aligned with district goals; some SIPs are based to varying extents on district goals, while others do not reference them.

Impact: The district is using data to analyze its progress toward specific goals. However, in the absence of a longer-range plan, it is unclear how current goals might be modified in the coming years or whether short-term decisions are aligned with the district's long-term vision. The uneven, loose alignment of SIP goals with district goals makes it difficult to ensure that work at the school level is moving the district toward achieving its vision.

13. Stakeholders perceive that school quality, consistency, and effective decision-making are unevenly ensured in schools. Student achievement, growth, and demographics vary widely.

- A. As discussed in the District Profile section of this report, student achievement, growth, and demographics vary widely across the district's schools. This could further the perception of inequities in school quality.
- B. In interviews, principals, central office administrators, teachers, parents and members of the school committee all indicated the need for the district to achieve greater consistency in curriculum and instructional practices across schools.
 1. The superintendent told the team that the culture of Cambridge encouraged a "marketplace of choice," and that previous administrations believed that curriculum decisions belonged at the school level. He noted that the district's recent shift toward a more consistent, standards-based approach has brought "... tension around how 'magnet schools' can exist within the context of common standards."
 2. Another central office administrator said that the district culture has been to emphasize each school's uniqueness and differences, and that there is now an effort to create a district in which students' school experiences are not as different.
 3. Some principals demonstrated that they had internalized the need to move toward more consistent processes to guarantee all students' equal opportunities to learn in order to attain excellence. One principal noted that there used to be multiple approaches to curriculum and instruction at the K-8 schools, and that the effects of this variation became evident at the high school. Another school leader informed the team of a need for all administrators to build consistency since "now, each principal is doing something on their

own, based on their skill set.” Principals said that it was important for schools to be more unified in a standards-based program so that the district can provide students with a more seamless and successful educational experience.

4. Another interviewee identified the tension between the need for standards-based education based on systemwide goals and the desire of the schools to remain independent. The schools were described as being disconnected from one another. “No one wants to make tough decisions to limit the schools’ independence,” the interviewee continued, “so the Common Core [2011 MA Curriculum Frameworks] is good for the district in that respect.”
 5. In separate interviews, both the superintendent and a teacher said that for some people, there is a need to clarify the difference between “standards- based education” and a “standardized” education. Both indicated that while there is a need for all students to meet expected state standards, there are many avenues to reach the same goals.
- C.** The district recognizes its responsibility to meet the diverse needs of all learners, yet stakeholders observed that the district is challenged in achieving equity.
1. The district’s vision statement emphasizes academic excellence and social justice.
 2. Staff ranging from district leaders to school personnel said that all educators do not hold uniformly high expectations and beliefs about all children being able to learn and that there were different experiences and expectations for some learners.
 - a. A district administrator expressed concern for “the need to shift belief systems” among school personnel regarding appropriate ways to support children. Another interviewee described staff as often “coddling students and not providing...enough academic rigor.”
 - b. In a focus group with teachers, interviewees agreed that there was not a uniform understanding in schools about what the district’s vision meant in practice. One interviewee noted, “Lots of what we see doesn't lead to [the district’s vision]... kids have different experiences; it’s not equitable.”
 3. Students in a focus group expressed concerns about the absence or under-representation of diverse populations in their Advanced Placement and honors level classes.

Impact: If school quality varies, and if the district does not address this variance in ways that are clear to its stakeholders, then the district’s stated commitment to equity and excellence is undermined. If there are inequitable opportunities among the schools, action must be taken at the district level in order to level the playing field by ensuring equal opportunities to learn and encouraging higher levels of excellence for all. For the district to achieve its vision, leaders must be empowered to implement

effective districtwide systems, with the support of other leaders from the governance level to the school level.

14. Although the newly adopted and implemented administrative structure has promise, it has not yet established the clarity and efficiency necessary to bring about greater consistency among schools or to effect systemwide change.

- A. The superintendent re-organized the administrative structure, effective with the 2014 school year.
- B. According to the organizational chart, the district has a multi-layered leadership structure among members of the superintendent’s central office team, called the “cabinet.”
 - 1. The deputy superintendent reports directly to the superintendent.
 - 2. The assistant superintendents for curriculum and instruction, student services and elementary education all report directly to the deputy superintendent as do all upper school and high school administrators.
 - 3. The assistant superintendent for elementary education is the direct supervisor for all elementary school administrators.
 - 4. The assistant superintendents for curriculum and instruction and for student services are not shown to have a supervisory connection to any school administrators, although their work is directly tied to school leaders’ responsibilities. Nor do these two assistant superintendents have a direct accountability relationship to the superintendent, even though they are responsible for the core educational systems and practices in the district.
 - a. The assistant superintendent for curriculum and instruction supervises curriculum coordinators and the assessment and grants specialists. The assistant superintendent for student services directly supervises special education and other student services staff.
- C. Given the current organizational structure, some interviewees expressed a lack of clarity about who is responsible for aspects of core systems in the district related to teaching and learning.
 - 1. In an interview, elementary principals noted that they have no involvement in curriculum development, although they are tasked with monitoring it and carrying it out. They described limited opportunities to meet with coordinators and noted that coaches deliver information about curriculum to them.
 - a. One principal stated that it was “extremely difficult to be an instructional leader when you are not involved in instructional decisions.”

- b. However, an interviewee described leaders' closer connections to curriculum work at the high school.
 - c. There are two or three structured opportunities each month for district leaders to convene with school and curriculum leaders. District leaders meet with curriculum coordinators once each month at the Instructional Council meeting. District leaders meet with principals and coordinators once each month at the Friday Administrators meetings planned by the TLT, and with elementary and upper school/high school principals in addition.
2. One administrator told the team that principals are unclear who to contact when they need support or have questions.
3. A district administrator also expressed a lack of clarity and continuity of job-specific responsibilities.
4. High school teachers said that they are confused about who is responsible for the instructional coaching program at the high school and who the instructional leaders are in the school and the district.
5. A district leader echoed the view of many during the week by stating that overall, there were no structures for consistency and there was a need to "sharpen up what district support should look like."
6. Teachers reported that there have been changes in the central office that haven't gone smoothly. They told the review team that there seem to be some instances when district-level decisions are not shared with all members of the cabinet and are not widely communicated to the rest of the district.
7. Evidence suggested that district-level decisions about curriculum and instruction could be circumvented at the school level without a clear rationale for not following through on district directives.
8. When asked if there were uniform expectations for all principals shared by district leaders, one principal replied that there was an idea of what was expected but no one had ever articulated it.

Impact: The lack of clearly defined responsibilities, lines of authority, and accountability structures are preventing the district from fully leveraging its new organizational structure. This is limiting the extent to which leaders can establish and strengthen districtwide systems that have the potential to make a positive impact on student achievement.

Curriculum

15. There are limited structured opportunities for grade-level elementary teachers to meet districtwide, which could help the district better address the need it recognizes to have more consistent curriculum implementation across schools. Literacy and math coaches play the pivotal role in bringing consistency to instructional practices across the district without the additional needed step of having grade-level teachers benefit from face-to-face conversations that could lead to stronger horizontal alignment in core subjects across elementary schools.

- A.** The district is struggling to balance the need to have greater consistency in instructional and curricular practices districtwide while preserving the unique qualities of the elementary schools.
1. District stakeholders, including the superintendent, district and school leaders and parents, repeatedly told the team that greater coherence in the delivery of a curriculum based on the 2011 MA Curriculum Frameworks across elementary schools was an overarching concern as a means to address the achievement gap.
 2. Interviewees expressed a concern that not all of the elementary school curricula were aligned horizontally in all core subjects.
 3. While math and literacy coaches, who are supervised by district curriculum coordinators, help achieve horizontal alignment in ELA and math across schools, interviewees report this is not happening in history/social science and science at the K-5 level. (See Strengths, Assessment Finding 5 for a more complete description of the role of coaches).
 - a. An example cited by interviewees was the lack of a common amount of instructional hours for science across elementary schools resulting in students having uneven preparation for MCAS science assessments, which students take in grade 5. (In 2013, science proficiency rates across the district's elementary schools ranged from 12 percent to 64 percent.)
 4. In small JK-5 elementary schools of approximately 300 students, grade-level teacher cohorts often consist of two teachers, not a critical enough mass to explore a variety of strategies and approaches.
 5. In interviews, teachers and parents expressed the need to encourage the unique qualities of elementary schools while providing more "cohesiveness" in the core subjects of math, ELA, science and social studies.
- B.** The upper schools and high school have structured opportunities for teachers to meet across classrooms at the same grade level and across sections of the same course to ensure horizontal alignment of curriculum and assessments.
1. In the upper schools, teachers meet daily by teams, weekly by content subjects and monthly in grade level districtwide department meetings. Interviewees credited the meetings with

- giving them a deeper understanding of Common Core state standards, as well as enabling alignment of curriculum districtwide.
2. At the high school, teachers in core subjects meet weekly in grade-level teams for 80 minutes to discuss instruction and align curriculum in commonly taught courses during Assigned Professional Collaboration (APC) teams.
- C. At the elementary level there are very limited opportunities for teachers of the same grade to meet districtwide.
1. In interviews, elementary teachers expressed the need for collaboration across the district. When it occurred, districtwide grade-level professional development in math was cited as a valuable experience.
 2. Interviewees and documents confirmed that other than the recent districtwide professional development in math, the district does not provide elementary teachers with consistent opportunities to meet districtwide by grade level to discuss and/or align curriculum. When asked how horizontal alignment between schools is achieved, interviewees told the team that “it isn’t.”

Impact: When teachers have limited opportunities to meet districtwide by grade level to align the curriculum and to share ideas and/or best practices for the delivery of curriculum, it makes it more difficult for the district to ensure that the taught curriculum across the district’s elementary classrooms is faithfully and consistently aligned to current Massachusetts frameworks and that best practices have been vetted and shared. In a district with a wide range in proficiency rates across elementary schools, it is critical that all students have equal access to aligned curriculum and high quality instruction.

Instruction

The team observed 113 classes throughout the district: 17 at the high school, 25 classes of grades 6-8 (including the four upper schools and the K-8 school), and 71 classes of grades JK-5 (including the 11 elementary schools and the K-8 school). The team observed 47 ELA classes, 29 mathematics classes, and 37 classes in other subject areas. Among the classes observed were 9 special education classes, 5 ELL classes, and one career/technical education class. 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. This data is presented by indicator, by grade span and for the district overall, in Appendix C.

16. The quality of observed instruction varied across the district. High quality teaching and learning was clearly evident in approximately half of classrooms visited. Most classrooms clearly demonstrated positive learning environments. The district has emphasized rigor and differentiation in instruction; the team found clear and consistent evidence of these practices in approximately half or less of all observed classrooms.

- A.** There was clear and consistent evidence of positive learning environments in all schools. The review team observed clear and consistent evidence of a positive and respectful tone between teachers and students (87 percent of all classes observed); behavioral standards were clearly communicated and disruptions, if any, were managed effectively and equitably in most classrooms (83 percent). Transitions occurred with minimal loss of instructional time (81 percent), classrooms were arranged to provide all students with access to learning activities (92 percent), and many classrooms (78 percent) had multiple resources available to meet students' diverse learning needs. Review team members observed clear and consistent evidence that students assumed responsibility for their own learning in 71 percent of classrooms.
1. In 56 percent of upper school classrooms, the team observed clear evidence of positive teacher-student and student-student interactions and effective classroom management practices, lower than the other two levels.
- B.** The review team found clear and consistent evidence of teachers providing lessons reflecting rigor and high expectations in 50 percent of classrooms. In 50 percent of classrooms, teachers provided multiple opportunities for students to engage in higher order thinking such as inquiry, exploration, application, analysis, synthesis, or evaluation of concepts. Teachers used questioning techniques requiring thoughtful responses to demonstrate understanding in 52 percent of classrooms.
1. Examples of instruction that reflected rigor and high expectations included:
 - a. An upper school ELA class that used a Socratic seminar method to analyze a reading selection
 - b. The use of probing questions that pushed students to think more deeply
 - c. The use of "turn-and-talk" to engage all students in discussion and analysis
 - d. Asking grade 1 students to independently determine fact from opinion in a nonfiction text
 - e. Bringing students together at the end of a lesson to synthesize their learning
 - f. Asking students in math and ELA classes to predict outcomes and draw conclusions or to evaluate someone else's answer
 - g. Posing questions that asked students to extend their new learning to real-life situations
 - h. Engaging students in modeling desired skills
- C.** Students were engaged in challenging academic tasks in 56 percent of classrooms at the elementary and middle schools and in 47 percent of classrooms at the high school. Students were asked to inquire, explore, apply, analyze, synthesize and or evaluate knowledge or

concepts in fewer than half of observed classrooms (44 percent). However, middle school teachers provided multiple opportunities (64 percent observed) for students to engage in higher order thinking skills. The team observed clear and consistent evidence of students elaborating about content and ideas when responding to questions in fewer than half (40 percent) of the district's classrooms. The team observed students applying knowledge or making connections to prior knowledge in 53 percent of observed classrooms.

1. Examples of instruction that did not sufficiently challenge students included:
 - a. Teachers reading information to students rather than challenging them to read it themselves
 - b. Teachers answering their own questions without sufficient wait time for students to respond
 - c. Failing to have a clear learning objective so that the activity did not have a clear purpose to students
 - d. Round-robin reading in the upper grades
 - e. Poor management of time and/or student behaviors
 - f. The use of factual type questions that did not challenge students to think analytically or were insufficient to reliably check on student understanding

D. Evidence of lessons meeting diverse learning needs was observed in slightly more than one third of K-8 classrooms and slightly more than half of 9-12 classrooms.

1. The team observed that approximately two thirds of teachers were able to communicate clear learning objectives to students (63 percent) and use appropriate instructional strategies well matched to the objectives (66 percent). However, the team observed far less evidence of modifications made for students with special learning or language needs. The team saw clear evidence of modifications in 34 percent of elementary lessons, 36 percent of upper school lessons and in 53 percent of high school lessons.
2. While the team observed classrooms with multiple resources available to meet students' diverse learning needs, the most clear and consistent evidence of resources was seen in the elementary schools (85 percent), as opposed to the upper (68 percent) and high schools (65 percent). Technology was rarely used for differentiation purposes. Throughout the district, the use of technology for instruction was seen in 36 percent of all classrooms, and students were observed using technology in 24 percent of observed classrooms.
3. Examples of practices that teachers used to meet the needs of diverse learners included:
 - a. The review of key vocabulary prior to a lesson or when confusion among students was evident (HS: "Can we do a vocabulary clarification first?")
 - b. Provision of back-up written materials for selected high school students

- c. Modification of the quantity of problems to be solved (e.g., “I want you to solve at least two problems, any two you want” and in a warm-up activity, “Pick a few quadratic equations to factor and check with those around you.”)
- d. Use of scaffolding (e.g., “I’m going to give you the main idea and you, with your partner, are going to give evidence to support it.”)
- e. Use of same topic in a lesson but with different levels of complexity for student work and the introduction of challenge questions to everyone (e.g., “I have one challenge question and I want you to think about it. Does the moon create its own light? Does it change shape or grow?”)
- f. Effective use of additional adults in the room to break class into groups for differentiation
- g. The use of technology by individual students

Impact: By creating a positive learning environment, students feel safe and encouraged to take risks as they learn. However, observation data suggests that many students are not being sufficiently challenged by rigorous content and instructional strategies. Further, students with specific language or learning needs, particularly at the elementary and middle grades, may not have full and equitable access to high level learning and content when curriculum, instruction and assessments are not appropriately modified or differentiated.

Assessment

17. Overall, the assessment system is structurally balanced and comprehensive and the district exhibits a culture of data-informed decision making. However, to make best use of the system, leaders and teachers noted the need for greater clarity and consistency in expectations and guidance in using data analyses to improve teaching and learning.

- A.** As described in documents and interviews, the assessment system shows structural balance and comprehensiveness. Each year, there are multiple formative, common benchmark and summative assessments in core academic subjects and in writing as well as teacher-designed classroom assessments.
- B.** The district is in the process of aligning common assessments to competencies included in 2011 MA Curriculum Frameworks as it develops and aligns curricula.
 - 1. Interviewees told the team of the need to create new common assessments aligned to 2011 MA Curriculum Frameworks as the new UbD curriculum units are developed.
 - 2. In an interview, another district leader pointed out that current end-of-unit assessments are not yet connected to competencies included in 2011 MA Curriculum Frameworks, which

incorporate Common Core standards. Even when aligned, some local assessments are reportedly insufficiently rigorous and do not meet required expectations for proficiency in new anchor standards. This was confirmed by a review of sample reading and writing assessments.

- C. There are systems, personnel, time, structures and a plethora of available data to support the use of data to inform instruction. However, district culture and strong individual school identities derived from a history of controlled choice have led to fragmentation in how assessments and data are used for improvement.
 - 1. Some interviewees noted that some educators' belief systems pose a challenge in developing a data-driven culture.
 - a. A district leader described some reluctance at the school level "to reduce education to tests."
 - b. An interviewee described the belief held by some educators that there are "some kids who will [succeed] and some that won't."
 - 2. Many described how each school had its own system for the use of data, including the time allocated to analyze data. There were no common, clear, high expectations set districtwide or for each school level. Individual schools sometimes lacked clarity regarding how assessment data can or should be used for improvement.
 - a. Some elementary schools have data walls, making data transparent for discussion; some do not. Some data walls are used more effectively than others, according to descriptions by interviewees.
 - b. One principal didn't think her school did formative assessments. Another principal described her school as "data rich and information poor."
 - c. A coordinator noted that although there was a common upper school writing rubric, there was a need for clarity and expectations on how to use it.
 - d. In addressing the differences across schools, one principal underscored the pattern of inconsistency in leadership, commenting that the district needs "all administrators [to move] in the same direction to help consistency. Right now, each principal is doing something on their own based on their skill set."
 - e. Administrators also described inconsistencies at the high school. A school leader described the struggle to use common assessments in like courses. The interviewee cited the use of common midterms, finals and projects in core classes, noting, however, that without careful monitoring educators tend to design assessment independently, and that the school had much work to do to achieve consistency in what students are asked to demonstrate on assessments.

- f. In some schools, teachers have taken ownership of data, analyzing it and writing action steps, according to a principal. However, another principal was unsure teachers were equipped to look at the most meaningful data, and said that teachers were unclear about the purpose of some assessments and overwhelmed by using data.
 3. Coaches were identified as being particularly useful in sharing data analyses with teachers after meetings with coordinators to preview results, trends and improvement strategies. Yet, sometimes there were conflicts in coaches' assignments. They might work with coordinators on one topic or strategy to support teachers as indicated by a data review, but then return to a school and be asked by the principal to do something different.
 - a. A district leader described the lack of clarity for coaches' work at the upper schools, underscoring the need for clearer delineation as to responsibility and authority for districtwide decision-making (as noted in Leadership and Governance finding 14).
- D.** The strategy of using student work as data to improve instruction was described as an uneven and sometimes counter-productive task.
1. While interviewees from most elementary schools considered student work as data and used Looking at Student Work (LASW) as an improvement strategy, protocols varied, as did the frequency with which teachers gathered to analyze and discuss student work. A district leader noted that all protocols were in a binder [so that principals could choose one to use].
 2. A principal described LASW as being implemented unevenly at her school, despite the volume of data available.
 3. In a focus group, a teacher shared a perspective on LASW. "Sometimes a teacher puts forth student work, and there needs to be an administrator there. People are picking apart the work and commenting. There is often a power structure and the people there will go with the most powerful person and what they say about the work. And, people leave totally dejected. I leave wondering what the benefit around this is."

Impact: Although the district has a great deal of data and resources, it is not yet maximizing the potential impact of using data to drive improvements to curriculum and instruction. Inconsistency in practices and expectations among schools inhibits the district's ability to build on the foundation it has established and systematically develop educators' capacity to analyze and use data. Variation among schools in the extent to which curriculum and instruction reflect student needs as illustrated in data results in uneven educational quality throughout the district.

Human Resources and Professional Development

18. An examination of the district's past approach to educator evaluation revealed a pattern of ineffective evaluative practices. The district has implemented its new evaluation system, but has not yet achieved consistency in implementation.

- A.** Review team members examined the personnel folders of 53 faculty members selected randomly from across the school district, as well as all 41 current district administrators and principals. A number of concerns were identified, including the timeliness, instructiveness, and overall quality of evaluations completed in the past.
1. In general, under the district's prior system, evaluations of professional status and non-professional status teachers were completed when due. With few exceptions, however, they were not instructive and seldom contained specific comments or concrete recommendations that would contribute in a meaningful way to improved classroom instruction, enhanced practice, or overall professional growth.
 2. Data from the district's recent TELL MASS surveys revealed dissatisfaction with evaluation practices on the part of some survey respondents.⁶ Many teachers at all grade levels, and especially at the high school, indicated concerns about the consistency and objectivity of evaluative practices, as well as whether the feedback they received could help them improve teaching.
 3. In almost 75 percent of administrator personnel folders reviewed, there was no evidence that administrator evaluations had been written during the previous five school years. Those that were on file demonstrated a level of quality very similar to that noted in the teacher evaluations (as described above).
- B.** The district has taken steps to introduce the new educator evaluation system in a way that meaningfully changes past practices, but inconsistencies exist in the implementation of the system among schools and in the quality of the feedback provided to teachers.
1. The district has assigned evaluative responsibilities and established systems for monitoring implementation.
 - a. Interviewees reported that evaluative responsibilities are divided within schools; for example, principals, deans of curriculum, and curriculum coordinators serve as evaluators. All evaluative documents (e.g., self assessment, goal setting, educator plans, evidence forms, formative and summative evaluations) are submitted directly to the

⁶ According to the TELL MASS Index (<http://www.tellmass.org/>), in 2012, 30% of survey respondents districtwide disagreed or strongly disagreed with the statement "Teacher performance is assessed objectively;" 29% disagreed or strongly disagreed with the statement "Teachers receive feedback that can help them improve teaching;" and 38% disagreed or strongly disagreed with the statement "The procedures for teacher evaluation are consistent." The results on the 2014 TELL MASS survey were similar (23%, 29%, and 38% disagreed or strongly disagreed with these statements, respectively).

teacher's evaluator. Interviewees explained that evaluators, including principals, were authorized to access evaluative data/documents only for those faculty members for whom they had direct evaluative responsibility.

- b. The HR department manages the submission of all electronic evaluative documents by both teachers and administrators. Utilizing *TeachPoint* software, HR oversees compliance with the many steps, stages, and timelines required by the new educator evaluation system.
 - c. HR periodically produces status reports of aggregated compliance data. These reports are subsequently provided to the deputy superintendent who supervises the secondary level, or the assistant superintendent for elementary education. Thereafter, the principal or the evaluator may be notified of other staff failure(s) to meet timelines.
 - d. Principals, therefore, are unable to monitor in real time the evaluative status of all members of their faculty, nor access quantitative or qualitative evaluation data for either their school or the district as a whole.
2. A review of *TeachPoint* data confirmed that significant differences existed across schools in their degree of implementation of the steps and stages required by the new evaluation system.
 3. Faculty's experiences under the new system vary.
 - a. In interviews, some teachers reported increased administrative visibility in classrooms, more and better feedback, and expanded conversations about teaching and learning with both administrators and colleagues. Other teachers, however, indicated that they were not seeing improvements in supervisory or evaluative practices in their schools.
 - b. Teachers noted that the quality and relevance of feedback varies among evaluators.

Impact: The district's new educator evaluation system has the potential to transform teaching and learning and to produce greatly enhanced academic opportunities and outcomes for students. However, the potential impact of the system as a powerful, districtwide lever for change is currently limited by inconsistencies in the degree of implementation among schools, as well as variation in the quality of feedback provided to teachers. The lack of a crucial feedback loop to ensure that principals, as instructional leaders, are fully informed in an ongoing way about the evaluation status of educators within their schools is also preventing the district from realizing the full potential of the educator evaluation system.

19. Many stakeholders described structures and systems to promote professional growth as too fragmented, isolated, and inefficient to adequately advance district goals and priorities.

- A. For the past ten years the district has relied upon a primarily decentralized, site-based professional development (PD) system whereby each school was provided its own PD funding

and largely allowed to independently determine those programs and services that it felt best served its own individual needs and goals.

1. Interviews with teachers and administrators as well as numerous district documents provided evidence of broad-based dissatisfaction with the effectiveness of the district's current PD model.
 - a. Results of the most recent TELL MASS survey revealed many areas of significant teacher concern about the district's approach to PD. These included inadequate or insufficient faculty input, internal communication, appropriate evaluation and follow-up activities for PD programs, new teacher/mentoring supports, and embedded common PD time for staff to regularly plan and collaborate.
 2. Administrators and teachers frequently described the current site-based PD structure as fragmented, disjointed, inconsistent, and disconnected, resulting in a high degree of isolation in the schools. Administrators explained that PD decentralization often resulted in PD programs and services that were needlessly repetitive and thus financially inefficient.
 - a. Principals and district administrators indicated that the absence of a comprehensive district improvement plan (DIP) contributed to the lack of unity and consistency of focus in the goals and objectives articulated in individual school improvement plans (SIPs) and, subsequently, in the school-based PD activities and programs designed to support them.
 - b. A review of SIPs confirms wide variation in school goals and PD content and strategies.
 - c. Interviewees explained that prior to 2003, the district had a more centralized and unified PD structure in place, but the superintendent at that time established the current decentralized, site-based PD model.
- B.** In response to an increasing level of concern and dissatisfaction with current PD structures, in January, 2014 the district created the Professional Development Committee (PDC), a joint task force of administrators and the teachers' association charged by the superintendent to "design a coherent city-wide PD program."
1. The committee's central mission is to answer six core questions, including:
 - a. To what extent do we believe all CPS teachers and leaders should share a common knowledge base?
 - b. What is the right balance between centralized and decentralized Professional Learning opportunities district-wide?
 2. Leaders and members of the PDC reported that although only in its very early stages, the PDC had begun to make progress in identifying problems, setting priorities, and developing some preliminary strategies to address them.

3. PDC leaders and members indicated, however, that they were still unclear about the formal role, responsibilities, and authority assigned to them, as well as to whom and when they would have the opportunity to present their report and recommendations (see Leadership and Governance finding 14).

Impact: Despite the district's commitment and strong support for quality PD, it is currently unable to realize the full potential of the extensive programs, services and resources it provides. It has lacked a well-defined, centralized, and coordinated leadership structure, a clear, sustained, and unified district focus, and sufficient time for regular and frequent horizontal and vertical collaborations for staff in all schools and grade levels. Consequently, despite positive intentions and substantial resources, the PD program is hindered in its ability to effectively enhance professional skills and meet the comprehensive needs of educators, and to systematically advance the district's core goals. Because there is no formal alignment of individual SIPs with a DIP, and only loose K-12 alignment with district goals, PD is not planned in a way that systematically supports and promotes district priorities.

Student Support

20. The district's approach to create an effective JK-12 multi-tiered system of academic and non-academic support is interpreted and implemented differently at each school. There are discrepancies between the district's stated guidelines and what occurs in practice to monitor students' progress and respond quickly to students' needs.

- A. In 2011, the district began piloting Response to Intervention (RtI) in ELA at the elementary level in three schools. The pilot's initial phase focused on four elements of RtI: screeners, assessments, interventions and data management. By 2013-2014, the initiative had expanded to all elementary schools, included mathematics, and comprised three levels of tiered academic interventions.
 1. The document *CPS RtI District-wide Implementation* (undated) outlined a districtwide RtI implementation plan for K-5 academic support in ELA and mathematics. It included plans for assessments and identified the staff members responsible for delivering specific tiered instructional interventions.
 2. RtI district trainings were held in May and June of 2013 for principals and school based teams from each of schools that were implementing RtI for the first time. As part of the training, each school team developed a plan for the first year of RtI implementation at their school. The focus of year 1 implementation was to implement screeners, conduct data meetings to identify students in need of intervention, develop and implement plans and monitor progress. All schools will submit a summary of RtI implementation at the end of the first year.

3. Based on a review of School Improvement Plans (SIPs), individual school plans for RtI training and implementation varied. Some schools did not include RtI specifically in their improvement plans even though this has been a district priority since 2011. Of the 12 elementary school plans, RtI is stated specifically in the action steps of nine of the plans.
 - a. A principal noted that there are discussions about creating intervention blocks at one school, while another school reported the need to develop benchmarks and timelines to progress monitor.
 - b. At a third JK-5 school, SIP goals included developing a clearer understanding of the distinctions between Tiers I and II and clarifying documentation practices for different tiers.
 - c. All upper school SIPs addressed tiered instruction in some way, although specific goals and implementation appeared to vary between schools.
 - d. The High School Extension Program (HSEP) and Advancement Via Individual Determination (AVID), for first generation of students attending college, are two 9-12 programs described as tiered interventions. Both rely on multiple data sources and early identification of students in need. They are not part of an articulated, robust multi-tiered system at CRLS.
3. Schools utilize different assessments and data storage tools.
 - a. In the 2014 school year, the district created an ELA screening and assessment schedule. Currently, eight JK-5 schools are using district-determined screeners; three schools are piloting FAST, a norm-referenced literacy assessment.
 - b. At present, three data management platforms are being used: EdPlan in the three FAST screener pilot schools, Google.docs, and TestWiz. The district reported recently using Aspen and is considering other platforms.
4. When asked, interviewees provided no specific description of interventions, and few were identified in any documents. Coaches and Title I staff were described as providing support to struggling and low-income students.

Impact: As the district seeks to establish a necessary and clearly defined structure for a JK-12 multi-tiered system of academic and non-academic support, the culture of school autonomy presents a challenge. While the district has provided a comprehensive overview of the structure of RtI, inconsistent interpretation and implementation at the school level limits the potential impact of this system to provide a coherent set of targeted supports to students districtwide. The lack of a robust system of tiered instruction with timely provision of incremental supports to help students overcome academic, behavioral, social, and emotional impediments to learning interferes with improving student outcomes.

Financial and Asset Management

21. Some of the district's school buildings are in need of maintenance, renovation and upgrades. The district and the city have plans to improve some of these over the next ten years.

- A.** Reviewers found some district buildings in need of updating and renovations.
 - 1. Some elementary and upper school buildings were aged and poorly maintained, with missing ceiling panels, inadequate lighting, and noise due to uncovered concrete walls in some classrooms. Some spaces are not conducive to learning.
 - 2. The administration building has uneven heating, a drab working environment with aging facilities, disjointed office spaces, and some areas that are not accessible for persons with disabilities. Some spaces are not as pleasant for work and meetings as they could be and do not present a favorable image of the district to the community and visitors.
 - 3. The district spent \$832 per pupil on building maintenance in FY12, four times the state average of \$207.

- B.** The district and the city have a capital plan that includes school renovations.
 - 1. Administrators reported that an \$80-100 million renovation of the King/Putnam Ave School is underway, with expected completion in 2015.
 - 2. City and school administrators reported that city officials included the King Open/Cambridge Street building in the city's capital plan, with design expected to begin in 2015.
 - 3. School committee minutes and administrators indicated that other schools are also under consideration for improvements, including the Tobin/Vassal Lane school building to be completed in approximately ten years.
 - 4. Officials reported that the city has a Public Investment Plan, funded as part of its annual budget, in addition to its capital plan. It has funded roofs, HVAC repairs, windows, and security projects in schools and the school garage.
 - 5. The FY2015 school committee guidelines include exploring a permanent location for the district administrative offices.

- C.** The city has funded school projects in spite of a lack of MSBA support for school building projects in Cambridge.
 - 1. Administrators and city officials reported applying for MSBA assistance for the King/Putnam Ave school renovation but being told that the application did not meet MSBA criteria.

2. School committee minutes indicate that the district plans to submit a statement of interest to the MSBA for assistance with the King Open/Cambridge Street school renovation project and possibly the Tobin/Vassal Lane school building.

Impact: Some of the district's schools are not as bright, clean, accessible, well maintained, and quiet as others, and are less conducive to student attention and serious learning as a result. The long timeline for renovating these buildings will require ten or more years for them to be brought up to expected standards, and this will require the attendance of almost a generation of Cambridge's children in spaces that are not equitable or supportive of the excellent education to which the district aspires.

Cambridge Public Schools District Review Recommendations

Leadership and Governance

- 1. The school committee, within the scope of its responsibilities under the 1993 Educational Reform Act, together with the superintendent, should create a more collaborative culture that encourages all stakeholders to work together to support higher levels of student achievement.**
 - A.** The school committee should delegate to the superintendent the educational and operational leadership of the district, foregoing direct involvement in the administration of the school system and in the administration of individual schools.
 1. School committee members should recognize that the superintendent is the educational leader for the school system; the superintendent provides administrative leadership for all school staff in operational matters and in proposing and implementing policy changes. The school committee should communicate with the superintendent before bringing any independent motions to school committee meetings.
 2. The school committee should reconsider the appropriateness of individual members' uninvited visits to schools.
 - B.** The school committee's work to provide high-level oversight of the district should include annually evaluating the superintendent based on mutually agreed-upon district goals and current state laws and regulations, including the new educator evaluation framework. The evaluation process should include a review of the rubric to be used, in order to help the superintendent and school committee members clarify and agree on roles, responsibilities, and expectations.
 - C.** The district and the city may wish to convene a study group to reconsider the continued viability of the Single Transferable Vote (STV) system and the concurrent, two-year term of office for all school committee members, and contemplate instituting a different approach that could provide more stable district governance and leadership continuity.

Recommended resources include:

- The Massachusetts Association of School Committees (MASC) (<http://www.masc.org/>), which provides training and information to school committees. In particular, the examples listed and described in MASC's member publication *Protocols and Best Practices for Effective School Committees* could be useful in the school committee's assessment of its strengths and areas for growth.
- *Setting and Monitoring District Goals: The School Committee's Role* (<http://www.doe.mass.edu/research/success/2014-0516EdEvalCommittee.pdf>) is a concise synthesis of guidance about the school committee's role in district planning and educator evaluation.

- DESE's *Implementation Guide for Superintendent Evaluation* (<http://www.doe.mass.edu/eval/model/PartVI.pdf>) describes recommended tools and processes to guide the evaluation of superintendents.
- DESE's *Guide to Rubrics and Model Rubrics for Superintendent, Administrator, and Teacher* (<http://www.doe.mass.edu/eval/model/PartIII.pdf>) describes the structure and design of educator evaluation rubrics, and provides guidance about how they can be adapted and used.

Benefits: By adopting these recommendations, the school committee can clarify its role and increase its focus on improving instruction and student achievement for every student based on collaboratively agreed-upon guidelines and on the guidance of district leadership. This will lead to more efficient use of time for the administration and teaching staff and more focused leadership by the school committee. By implementing the new educator evaluation system in evaluating the superintendent, the committee will meaningfully lead continuous improvement in the district.

2. The district should collaboratively develop a multi-year District Improvement Plan (DIP) that is annually extended.

- A.** The district should develop a DIP that lays out improvement efforts over a three- to five-year period and that includes such elements as clear measurable objectives, action steps with clear timeframes, benchmarks to measure progress, the person(s) responsible, and resources needed.
 1. The district's Innovation Agenda has several components of a DIP and can serve as the starting point for a more comprehensive improvement plan.
 2. The school committee should publicly review and approve the DIP and the superintendent should share it with school staff and the community. The superintendent should make periodic reports to the school committee on the district's progress in meeting the goals outlined in the DIP.
- B.** The district's existing plans and initiatives for curriculum, instruction, assessment, student services, professional development and resource allocation (e.g., time, staffing, funding) should serve as the educational core of the DIP.
- C.** The DIP should become a template for all principals to develop School Improvement Plans (SIPs), aligning each school's vision, mission and goals with key district goals while also providing goals and plans for school-specific priorities. Although the schools developed more cohesive SIPs this year, they do not have a DIP with which to align important initiatives and goals.
 1. The principal should use the SIP to inform his/her self-assessment and goal setting process when creating the Educator Plan as part of the educator evaluation system, and as evidence during implementation.

2. As with the DIP, SIPs should include specific, measurable, rigorous and time-bound student performance goals, based on an analysis of relevant performance data, the assessment tools that will be used to gauge progress and needed resources. SIPs should be aligned with the DIP.
 3. SIPs should form a framework for raising achievement for all learners.
 4. Each SIP should be presented to the school committee.
- D. District and school leaders should continue to regularly review and analyze student assessment results, student growth data, other district determined measures and internal and external reviews to prioritize improvement goals, maximize effectiveness in allocating human and financial resources and initiate, modify or discontinue programs and services.
- E. The district should continue to seek the appropriate balance between fidelity to district systems while honoring the autonomies of its schools.
1. As it develops improvement plans, the district should use a collaborative process to identify what constitutes non-negotiable systems that support student achievement and what systems support autonomy in the district.
 2. District leaders should promote equal opportunities to learn by distinguishing among the needs of individual schools' populations and allocating adequate resources to schools and students with greater needs.

Recommended resources include:

- ESE's *District Self-Assessment and Conditions for School Effectiveness Self-Assessment* (<http://www.doe.mass.edu/apa/review/district/district-self-assessment.pdf> and <http://www.doe.mass.edu/apa/ucd/CSESelf-Assesment.pdf>) are tools for districts to assess their systems, processes, and practices as part of ongoing inquiry for continuous improvement.
- *Focused Planning for Accelerating Student Learning* (<http://www.doe.mass.edu/apa/sss/dsac/FocusedPlanning.pdf>) provides guidance for Level 3 districts to accelerate achievement for all students through the development of a focused, actionable and sustainable Accelerated Improvement Plan (AIP).
- *What Makes a Goal Smarter?* (<http://www.doe.mass.edu/eval/resources/presentations/SMARTGoals/Handout5.pdf>) is a description of SMART goals with accompanying examples. The handout was designed to support educators in developing goals as part of the educator evaluation system, but would also be a useful reference as the district develops a more focused DIP and SIPs.
- *District Accelerated Improvement Planning - Guiding Principles for Effective Benchmarks* (<http://www.doe.mass.edu/apa/sss/turnaround/level4/AIP-GuidingPrinciples.pdf>) provides information about different types of benchmarks to guide and measure district improvement efforts.

Benefits: The process of establishing a clearly articulated District Improvement Plan will help the district to ensure that its current work is aligned with long-term goals, and will help to balance the need for standards and consistency while maintaining appropriate school autonomy. It should also help clarify responsibilities and empower administrators to work toward the district's goals.

3. The superintendent should review the new organizational structure and consider revisions that eliminate ambiguity about responsibilities, authority, and accountability.

- A.** The roles and responsibilities of each administrative position should be clearly communicated to all staff members districtwide.
 - 1. The relationship of the assistant superintendent for student services and the assistant superintendent for curriculum and instruction to the principals and other building leaders should be clarified to ensure that there is alignment between district level and building level leadership in meeting the goals of these two key educational functions.
 - 2. The superintendent should establish explicit expectations for principals.
 - 3. The roles and responsibilities of curriculum and bilingual coordinators should be clarified in order to make it possible for them to ensure fidelity of implementation of emerging curricular initiatives.
- B.** The district should articulate the relationships among the assistant superintendents, deputy superintendent, and superintendent. This would provide more clarity districtwide about responsibility and decision-making and could help to ensure more efficient follow-through and provision of support to school-based staff.

Benefits: As the district transitions to a more systematic, standards-based educational program while retaining some level of school autonomy, clarifying administrator responsibilities, authority and accountability can reduce ambiguity. It will also make it more feasible for the district and its leaders to successfully implement district plans and school plans that will make a positive impact on student achievement, including the ongoing initiatives of the Innovation Agenda.

Curriculum

4. Given the autonomous nature of the schools, the district should create a systematic plan to ensure the faithful delivery and horizontal alignment of the curriculum to the 2011 MA Curriculum Frameworks. This should include structured opportunities for districtwide teacher collaboration as well as building-based professional development. The success of the new multi-year curriculum review cycle will require augmented and ongoing teacher collaboration across schools.

- A.** The new curriculum design format provides a focus to guide the development of curriculum units in all disciplines while including essential elements for all learners to access curriculum: WIDA standards, UbD and UDL frameworks, differentiation, inclusion and enrichment strategies and new assessments.

1. It is imperative for all grade levels and contiguous grade levels to convene periodically (for example, two to four times per year), to develop a shared understanding of new curriculum initiatives, the essential elements required in all unit designs, and implications for instruction.
 2. As the district initiates work on the UbD format for unit planning in ELA, science and world languages, it should provide opportunities for elementary and upper school teachers to work in teams with grade-level teachers from other schools to gain a thorough understanding of the UbD process, and to collaborate in unit development.
- B.** The district should consider providing a balanced approach to professional development that includes both districtwide meetings by school level and/or grade level or grade clusters and school-based professional development to ensure continual alignment to the 2011 MA Curriculum Frameworks, consistent delivery of the core curriculum across all schools, and sharing of best practices.
- C.** As the district continues to implement the new math program, *Math in Focus*, grade-level teachers should meet districtwide for the professional development required to successfully implement the program across all schools.
1. As the implementation plan extends over the next two years, districtwide grade level meetings should be planned accordingly.
 2. Periodic meetings could be scheduled with contiguous grades to further clarify and refine the implementation of the program to ensure that it is implemented with fidelity vertically and horizontally across schools.

Recommended resources include:

- The *Massachusetts Curriculum Development Project* video (<http://www.youtube.com/watch?v=rzpeLQMKLKc>) provides an overview of the UbD process.
- *Classroom Connections: Professional Development Curriculum* (<http://www.doe.mass.edu/STEM/mlc/ClassConnections/>) is a collection of materials that examines the intersection of the Standards for Mathematical Content and the Standards for Mathematical Practice. There are two modules provided at each grade band.
- *Mathematics Framework Exploration Activities* (<http://www.doe.mass.edu/candi/commoncore/mathexplore/default.html>) are a growing set of activities designed by the Department of Elementary and Secondary Education mathematics staff and educators. The activities can be accessed and used to promote discussion and collaborative inquiry.
- *Writing Standards in Action* (<http://www.doe.mass.edu/candi/wsa/>) provides examples of high-quality student writing with annotations that highlight how each piece demonstrates competence in learning standards at each grade level.

Benefits: By implementing this recommendation, the district will help to ensure that teachers districtwide will have a shared understanding of the new curriculum initiatives and the process and benefits of the UbD format for unit design. This will also help to develop and reinforce common expectations for student learning aligned to 2011 MA Curriculum Frameworks across every grade in all schools, which can contribute to better transitions for students at key points. If the district achieves consistency in the delivery of rigorous curriculum aligned to the 2011 MA Curriculum Frameworks, it is likely to raise the level of student achievement.

Instruction

- 5. The district should provide the necessary support and accountability to ensure that teachers consistently provide high quality and appropriately differentiated instruction, maintain high and rigorous learning expectations, and develop higher order thinking skills for all students. As part of this process, the district should ensure sufficient instructional time and supports so that all students have equal access and opportunities to attain proficiency and high levels of achievement.**
 - A.** District and school leaders should clarify their vision and expectations for high quality instruction and differentiation to ensure that all teachers share a common understanding of what constitutes rigorous teaching and learning and how to infuse higher order thinking skills into lessons.
 1. The district's work in the curriculum review cycle should include establishing higher order questioning skills to develop students' understanding of UbD's essential questions. Curriculum documents should include written samples of questions that scaffold content and challenge learning districtwide.
 2. To ensure that all students have access to a rigorous curriculum, the curriculum review cycle should include identifying differentiation strategies to assist teachers in their ability to maintain high standards while meeting the diverse needs of all learners.
 3. The district should assess whether sufficient instructional time is allotted, based on analysis of student achievement and other data, to enable all students to reach proficiency in core content areas and whether support services are well integrated into the instructional cycle.
 - B.** District leaders should compile the recommendations of the many program studies and reports conducted in the past several years (i.e., the NEASC report; *Middle Grade Instruction in Nine Cambridge Public Schools*; the WestEd study) and prioritize the recommendations which apply to increasing program rigor and ensuring high quality instruction and learning for all students. These could inform the district's vision and expectations for common practice by all teachers.
 - C.** The district should identify practices that enable district and school leaders as well as teachers to observe classrooms where instruction is rigorous and where students are engaged in developing higher order thinking skills. This includes reinstating instructional rounds (currently limited to the mathematics Aspiring Leaders program). The district should consider compiling a

repertoire of effective teaching practices as part of an induction program, and identify ways to disseminate these throughout the district.

- D. The district should consider increasing the use of technology at all levels for both teachers and students to enrich and individualize learning at all levels.

Recommended resources include:

- 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>), provides a common language or reference point for looking at teaching and learning.
- **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.

Benefits from implementing these recommendations include: extension to a greater number of classrooms the positive practices which lead to improved student learning; the expansion of teachers' skills to modify instruction to meet the needs of all learners; and more effective use of technology by teachers and students to improve teaching and learning.

Assessment

6. The district should establish and communicate consistent expectations regarding the analysis and use of assessments for curricular and instructional improvement by ensuring communication and providing the support needed to continually build staff capacity to use data.

- A. To promote more effective and consistent practices, the assistant superintendent for curriculum and instruction and principals should communicate regularly and frequently about assessment and data analysis.
1. Currently, principals are unclear as to whom they should go for direction and support regarding assessment and the use of assessment data. This could be due to the fact that for goal setting, improvement planning, and performance accountability, some principals report to the deputy superintendent (upper and high schools) and others to the assistant superintendent for elementary education (elementary schools).

- B.** The assistant superintendent for curriculum and instruction should convene veteran and new principals to assess current status and professional development needs related to assessment and data analysis systems and practices.
- B.** The assistant superintendent for curriculum and instruction should convene a task force comprised of the assessment specialist and representative principals, coordinators, coaches and teachers to address questions people have about assessments and the use of assessment data. For example:
- What good practices are already in use that can be shared and replicated in other schools? How should principals, coordinators and coaches collaborate to improve achievement? How can all who support instructional improvement be most helpful to teachers in the analysis and use of assessment data?
 - What is the role of principals, coordinators and coaches in the new curriculum review cycle, particularly in the assessment design aspect of the UbD format (which very much determines what is taught and how it is taught)?
 - Should *Looking at Student Work* be a districtwide improvement strategy? If so, how shall the schools manage and monitor this strategy? What professional development training or updating is needed so that teachers and leaders are informed and comfortable in engaging in this strategy?
 - How should informal, non-evaluative classroom observations provide instructional data for improvement? Will Instructional Rounds and Learning Walks continue? If so, how will they be managed? What will be districtwide protocols for conducting them and providing feedback to teachers?

Recommended resources include:

- 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. It could be helpful as the district reflects on its use of data and develops more consistent districtwide expectations.

Benefits from implementing this recommendation will include greater clarity and consistency to engage in assessment and use assessment data and other data and information for improvement. Many teachers and administrators are already effectively using data well; others will benefit from additional support in implementing effective assessment and data analysis practices. Increased communication about data will help to ensure that principals know how they should engage in new UbD curriculum and assessments based on 2011 MA Curriculum Frameworks, and will more clearly understand their role in the use of other data and information to drive instructional improvement initiatives. With increased clarity, communication, and support, the district's assessment system can be more useful and consistent and contribute more effectively to improving achievement for all students.

Human Resources and Professional Development

7. The district should carefully examine the policies, practices, and procedures it currently utilizes to implement the new educator evaluation program. Lines of responsibility, communication, and accountability should be redefined and internal communication systems simplified and expedited.

- A.** The superintendent should initiate a comprehensive review of all systems and structures currently employed in the implementation of the new educator evaluation regulations to determine if all district policies and practices are efficient, effective, and integrated in a manner that ensures that the multiple goals of the new evaluation system are fully realized. Specific attention should be given to the following issues:
1. The roles and shared responsibilities among district administrators, school principals, and staff evaluators should be carefully analyzed. Logical and coordinated lines of authority and accountability should be established or clarified so that efficient, systematic, and timely monitoring of all components of the educator evaluation program is facilitated.
 2. Protocols for accessibility to TeachPoint data should be revisited so that all district and building level administrators are provided with real-time access to all appropriate evaluative documents and data, as well as both school and districtwide summary status reports. As instructional leaders, principals should be aware of the status of all educators in their schools related to the evaluation system. They should be provided with all the technical supports and procedural authority necessary to accurately determine that all contractual requirements and timelines are being met. They should subsequently be held accountable for ensuring that all of their faculty members are provided with appropriate support and supervision and are receiving evaluations that are timely, instructive, and capable of promoting meaningful professional growth.
 3. The superintendent should ensure that all administrators are evaluated according to the procedures established in the Massachusetts educator evaluation system.

Recommended resources include:

- Quick Reference Guide: The 5-Step Cycle (<http://www.doe.mass.edu/eval/resources/QRG-5StepCycle.pdf>) is a concise summary of the evaluation cycle, including key ESE resources associated with each step. It could be helpful for principals as they track teachers' progress through the stages of evaluation.

Benefits: Massachusetts' new educator evaluation system is designed to promote student learning and academic achievement by providing educators and educational leaders with timely and relevant feedback for improvement, enhanced opportunities for professional growth, and clear structures for accountability. By developing and consistently implementing effective and efficient district systems, procedures, and practices that facilitate and promote the full implementation of the system, the district will increase the likelihood of improved outcomes for all students and staff. By ensuring that a feedback

loop fully informs principals about the evaluation status of teachers, the district will strengthen principals' role as educational leaders, and will create the conditions necessary for them to improve teaching so that students receive the very best learning experiences possible.

8. The district is encouraged to develop a new data-driven professional development model that creates an appropriate balance and alignment between the professional development objectives and interests of each school with the overarching educational goals and priorities of the district.

- A.** The efforts of the professional development committee should be fully supported by the district. When completed, its recommendations should be presented and reviewed by the superintendent and cabinet and subsequently implemented.
1. The professional development committee, or a similar successor committee composed of both administrator and teacher representation, should be empowered to serve as the directing body for all professional development in the district. It should assume overall responsibility for the design, scheduling, delivery, and coordination of all districtwide professional development programs.
 2. The professional development committee should serve as the central clearinghouse for approval of all professional development programming, whether at the building or district level, to maintain systemic coherence and consistent alignment. It could also be tasked with ensuring that all resources are expended in direct support of well-defined district priorities and needs.
 3. A subcommittee of the professional development committee is presently working to develop an improved mentoring system for the district. The new program should align with *ESE's Guidelines for Induction Programs*, be designed to meet the different needs of first-year teachers and those new to the district, and extend throughout a beginning teacher's second and third years of service.
 - a. The district should also develop an appropriate induction program for all administrators in their first year of practice.
- B.** The district should fully support the professional development committee's efforts to address the identified need for additional collaborative time for districtwide professional development programs and activities.

Recommended resources include:

- *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 *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.
- ESE's Educator Induction web page (<http://www.doe.mass.edu/educators/mentor/>) provides guidelines and resources for teacher and administrator induction programs.

Benefits: The district invests considerable financial resources to support its professional development programs. By expanding central coordination and creating a more unified structure and focus, the district will increase the potential for full benefit from this investment. Alignment and coordination of professional development programs, services, and resources in direct support of data-driven district goals and priorities will maximize resources and greatly increase the likelihood of successful outcomes for staff and students.

Student Support

9. The district should ensure that a JK-12 multi-tiered system of academic and non-academic support is implemented consistently at all schools.

- A.** All SIPs should include goals and plans related to Response to Intervention (RtI).
 1. District leaders should review SIPs to ensure consistent interpretation of RtI expectations.
 2. Expectations related to assignment of interventions should be widely communicated.
- B.** The district should build consistency in screening and diagnostic assessments, and in data management platforms, across schools.
- C.** The district should build on-going cycles of program evaluation of its system of support.
 1. It should continue to review policies and practices at all levels and make adjustments to guarantee equitable access for all students to academic programs and appropriate services and supports.
 2. It should analyze data from interventions and other assessments to inform decision-making.

Recommended resources include:

- 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. It includes a Self-Assessment tool and related guidance (<http://www.doe.mass.edu/mtss/sa/>).
- The *Behavioral Health and Public Schools Framework* (<http://bhps321.org/viewframework.asp>) is a guidance document to help schools establish supportive environments with collaborative services to enable all students—including those with behavioral health needs—to achieve at their highest potential.

Benefits from implementing this recommendation include providing a transparent, thoughtful, collaboratively agreed-upon approach to delivering systemic multi-tiered supports that can be comprehensively and collaboratively designed, implemented, monitored, and reviewed with the necessary urgency. By improving its capacity to ensure data-driven interventions in academic and non-academic areas, the district will provide programs and supports that are more directly targeted to students' needs.

Finance and Asset Management

10. The city and the district should follow through on plans to renovate schools and improve the environment for its administrative offices. It should schedule the renovations as soon as practical, even if unsuccessful in getting MSBA assistance.

- A.** The district's plan calls for renovating and updating its three older school buildings over the next ten years. These renovations would create brighter and updated facilities more conducive to learning and would reduce some of the inequities among school buildings. Finding a reasonable way to accelerate these plans would improve the education of many children who will be attending those facilities over the next ten years or so. The plans include:
1. The plan includes completion of an \$80-100 million renovation of the King/Putnam Ave building in 2015, already underway.
 2. City officials as well as the school committee have included a renovation of the King Open/Cambridge St. building in their capital plans for 2016-18, which will provide an updated facility for those students.
 3. School officials have also included renovations of the Tobin/Vassal Lane building in their long-range plan.
- B.** The district has applied for MSBA support of the King/Putnam Ave facility without approval and plans to submit statements of interest for the other projects as well.
1. School and city officials are to be commended for proceeding with this first project, even though state assistance has not been approved.
 2. Funding opportunities, guidelines, and resources related to school buildings is available: <http://www.doe.mass.edu/finance/sbuilding/>
 3. City support for the other school projects with or without MSBA support is encouraged.
- C.** The school committee has proposed developing a plan for updated or relocated administration offices, and this is also needed. A study of possible locations, including spaces in school buildings (new or renovated), is an important first step toward making the needed improvements.

Benefits from implementing this recommendation will include updated, clean, and bright facilities more conducive for learning and working and more equitable for all children. It will also provide more accessible, functional, welcoming, and pleasant administrative environment for staff and the public.

Appendix A: Review Team, Activities, Site Visit Schedule

Review Team Members

The review was conducted from February 24-27, 2014 by the following team of independent ESE consultants.

1. Richard S. Silverman, Ed. D, leadership and governance
2. Suzanne Kelly, curriculum
3. Christine Brandt, instruction
4. Linda L. Greyser, Ed. D., assessment and review team coordinator
5. Frank Sambuceti, Ph. D., human resources and professional development
6. Marilynne Smith Quarcoo, Ph. D., student support
7. George Gearhart, Ed. D., financial and asset management

Laura Richane served as the ESE representative on the review team.

District Review Activities

The following activities were conducted during the review:

The team conducted interviews with the following financial personnel: chief operating officer, chief financial officer, grants specialist, assistant city manager for financial affairs, city budget director, payroll manager, senior budget analyst, assistant director for budget and financial operations.

The team conducted interviews with the following members of the School Committee: mayor/chair, vice-chair and five school committee members.

The review team conducted interviews with three representatives of the teachers' association.

The team conducted interviews/focus groups with the following central office administrators: superintendent, deputy superintendent, assistant superintendent for elementary education, assistant superintendent for curriculum and instruction, assistant superintendent for student support services, executive director of human resources, assessment specialist, Title I coordinator, bilingual coordinator, health/EEI coordinator, learning partnerships coordinator, academic challenge manager, chief operating officer, chief financial officer, chief planning officer, mathematics coordinator, ELA coordinator, and assistant director of educational technology.

The team visited the following schools: Amigos School (grades K-8), Cambridgeport School (grades JK-5), Fletcher/Maynard Academy (grades JK-5), Graham and Parks School (grades JK-5), Haggerty School (grades JK-5), John M. Tobin School (grades JK-5), Kennedy-Longfellow School (grades JK-5), King Open

School (grades JK-5), Maria L. Baldwin School (grades JK-5), Martin Luther King, Jr., School (grades JK-5), Morse School (grades JK-5), Peabody School (grades JK-5), Cambridge Street Upper School (grades 6-8), Putnam Avenue Upper School (grades 6-8), Rindge Avenue Upper School (grades 6-8), Vassal Lane Upper School (grades 6-8), Cambridge Rindge and Latin School (grades 9-12), High School Extension Program (grades 9-12).

During the site visit, the team conducted interviews with 13 principals and focus groups with ten elementary school teachers, five upper school teachers, and eight high school teachers.

The team observed 113 classes in the district: 17 at the high schools, 25 at the four upper school[s], and 71 at the 11 elementary schools. (Tabulation of classroom observations at the Amigos K-8 school was allocated to elementary and upper school totals.)

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

<p>Monday 02/24/2014</p>	<p>Tuesday 02/25/2014</p>	<p>Wednesday 02/26/2014</p>	<p>Thursday 02/27/2014</p>
<p>Orientation with district leaders and principals; interviews with district staff and principals; document reviews; interview with teachers' association.</p>	<p>Interviews with district staff and principals; interviews with city finance personnel; interviews with school committee members; review of personnel files; teacher focus groups; parent focus group; student focus group; and visits to Cambridge Rindge and Latin School and Morse School for classroom observations.</p>	<p>Interviews with district and school leaders; visits to Graham Parks School, Amigos School, Peabody School, Fletcher/Maynard Academy, Vassal Lane Upper School, Martin Luther King School, Rindge upper School, King Open School, for classroom observations.</p>	<p>Interviews and follow-up interviews with district leaders; district review team meeting; visits to Tobin School, Cambridgeport School, Kennedy-Longfellow School, Putnam Upper School, Haggerty School, Cambridge Street Upper School, Maria L. Baldwin School for classroom observations; emerging themes meeting with district leaders and principals.</p>

Appendix B: Enrollment, Performance, Expenditures

**Table B1a: Cambridge
2013-2014 Student Enrollment by Race/Ethnicity**

Student Group	District	Percent of Total	State	Percent of Total
Afr. Amer./Black	1834	28.8%	82990	8.7%
Amer. Ind. or Alaska Nat.	32	0.5%	2209	0.2%
Asian	779	12.2%	58455	6.1%
Hispanic/Latino	883	13.9%	162647	17.0%
Multi-race, Non-Hisp./Lat.	399	6.3%	27803	2.9%
Nat. Haw. or Pacif. Isl.	15	0.2%	1007	0.1%
White	2419	38.0%	620628	64.9%
All Students	6361	100.0%	955739	100.0%

Note: As of October 1, 2013

**Table B1b: Cambridge 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	1360	37.2%	20.9%	164336	34.8%	17.0%
Low Income	2885	78.8%	45.4%	365885	77.5%	38.3%
ELLs and Former ELLs	332	9.1%	5.2%	75947	16.1%	7.9%
All high needs students	3660	100.0%	56.2%	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 6,518; total state enrollment including students in out-of-district placement is 966,360.

**Table B2a: Cambridge 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	458	85.4	82	86.5	83.5	83.3	-1.9	-3
	P+	458	59.0%	60.0%	64.0%	58.0%	57.0%	-1.0%	-6.0%
4	CPI	417	76.9	76.4	78.1	81.2	78.9	4.3	3.1
	P+	417	47.0%	47.0%	51.0%	59.0%	53.0%	12.0%	8.0%
	SGP	374	45	47	48.5	52	49	7	3.5
5	CPI	446	80.8	84.8	82	83.7	84.7	2.9	1.7
	P+	446	58.0%	62.0%	59.0%	63.0%	66.0%	5.0%	4.0%
	SGP	402	49	49	56.5	53.5	52	4.5	-3
6	CPI	372	81.6	82.3	83	84.1	85.1	2.5	1.1
	P+	372	60.0%	62.0%	63.0%	64.0%	67.0%	4.0%	1.0%
	SGP	337	56	51	53	62	52	6	9
7	CPI	374	89	86.9	87.4	84.6	88.4	-4.4	-2.8
	P+	374	71.0%	70.0%	71.0%	65.0%	72.0%	-6.0%	-6.0%
	SGP	336	63	52	59	45	48	-18	-14
8	CPI	363	89.3	91.4	87.4	88.8	90.1	-0.5	1.4
	P+	363	75.0%	81.0%	71.0%	77.0%	78.0%	2.0%	6.0%
	SGP	324	59	60	50	54	50	-5	4
10	CPI	405	88.3	92.1	95.1	96.4	96.9	8.1	1.3
	P+	405	70.0%	81.0%	86.0%	90.0%	91.0%	20.0%	4.0%
	SGP	314	41	44	48	46	57	5	-2
All	CPI	2835	84.4	85	85.4	85.9	86.8	1.5	0.5
	P+	2835	63.0%	66.0%	66.0%	68.0%	69.0%	5.0%	2.0%
	SGP	2087	52	51	52	51	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 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: Cambridge 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	455	84.5	82	84.6	84.7	84.3	0.2	0.1
	P+	455	65.0%	59.0%	65.0%	67.0%	66.0%	2.0%	2.0%
4	CPI	424	76.2	79.2	77.7	83.8	80.2	7.6	6.1
	P+	424	43.0%	49.0%	47.0%	62.0%	52.0%	19.0%	15.0%
	SGP	373	47	55.5	57	61	54	14	4
5	CPI	441	74.3	76.2	77.9	76.9	80.6	2.6	-1
	P+	441	53.0%	51.0%	54.0%	56.0%	61.0%	3.0%	2.0%
	SGP	399	54	54	51	49	54	-5	-2
6	CPI	370	72.5	75.5	77	81.2	80.3	8.7	4.2
	P+	370	48.0%	53.0%	56.0%	61.0%	61.0%	13.0%	5.0%
	SGP	334	49	46	54	54	50	5	0
7	CPI	376	75.6	66.8	74.8	70.1	74.4	-5.5	-4.7
	P+	376	51.0%	45.0%	52.0%	46.0%	52.0%	-5.0%	-6.0%
	SGP	339	59	49.5	56	47	46	-12	-9
8	CPI	365	68.8	73.6	71.2	75.8	76	7	4.6
	P+	365	45.0%	51.0%	50.0%	58.0%	55.0%	13.0%	8.0%
	SGP	325	54	56	60	58	50	4	-2
10	CPI	402	89.3	89.1	93.2	92.5	90.2	3.2	-0.7
	P+	402	76.0%	77.0%	83.0%	83.0%	80.0%	7.0%	0.0%
	SGP	315	57	61.5	71	56	51	-1	-15
All	CPI	2833	77.4	77.8	79.6	80.9	80.8	3.5	1.3
	P+	2833	55.0%	55.0%	58.0%	62.0%	61.0%	7.0%	4.0%
	SGP	2085	53	55	58	55	51	2	-3

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: Cambridge 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	443	74.1	70.3	73.6	74.3	78.5	0.2	0.7
	P+	443	46.0%	38.0%	45.0%	44.0%	51.0%	-2.0%	-1.0%
8	CPI	362	66.3	65.8	64.4	70.6	71	4.3	6.2
	P+	362	34.0%	36.0%	38.0%	41.0%	39.0%	7.0%	3.0%
10	CPI	373	81.1	81.1	83.9	86.8	88	5.7	2.9
	P+	373	58.0%	60.0%	64.0%	69.0%	71.0%	11.0%	5.0%
All	CPI	1178	73.6	72.3	73.9	77.1	79	3.5	3.2
	P+	1178	46.0%	44.0%	49.0%	51.0%	53.0%	5.0%	2.0%

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: Cambridge 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	1667	76.5	76.9	77.7	78.2	1.7	0.5
		P+	1667	46.0%	49.0%	49.0%	51.0%	5.0%	2.0%
		SGP	1174	50	48	49	49	-1	0
	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	1379	78	77.6	78.2	78.6	0.6	0.4
		P+	1379	49.0%	50.0%	50.0%	51.0%	2.0%	1.0%
		SGP	978	51	49	48	50.5	-0.5	2.5
	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	696	66.4	66.2	68.1	66.9	0.5	-1.2
		P+	696	27.0%	27.0%	30.0%	31.0%	4.0%	1.0%
		SGP	502	48	45	49	45	-3	-4
	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	187	62.8	61.2	62.8	66.7	3.9	3.9
		P+	187	27.0%	27.0%	26.0%	33.0%	6.0%	7.0%
		SGP	72	59	55	52	66	7	14
	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	2835	84.4	85	85.4	85.9	1.5	0.5
		P+	2835	63.0%	66.0%	66.0%	68.0%	5.0%	2.0%
		SGP	2087	52	51	52	51	-1	-1
	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: Cambridge 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	1663	67.6	67.6	69.5	70.9	3.3	1.4
		P+	1663	37.0%	37.0%	40.0%	44.0%	7.0%	4.0%
		SGP	1168	49.5	52	52	48	-1.5	-4
	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	1375	69.1	69.1	70.5	71.3	2.2	0.8
		P+	1375	40.0%	40.0%	41.0%	44.0%	4.0%	3.0%
		SGP	973	50	52.5	54	48	-2	-6
	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	693	56.7	56.7	59.1	59.8	3.1	0.7
		P+	693	20.0%	20.0%	24.0%	26.0%	6.0%	2.0%
		SGP	494	48	49	48	46	-2	-2
	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	188	60.5	60.5	62.2	66.5	6	4.3
		P+	188	29.0%	30.0%	32.0%	36.0%	7.0%	4.0%
		SGP	72	60	54	53	59.5	-0.5	6.5
	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	2833	77.4	77.8	79.6	80.9	3.5	1.3
		P+	2833	55.0%	55.0%	58.0%	62.0%	7.0%	4.0%
		SGP	2085	53	55	58	55	2	-3
	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: Cambridge 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	651	62.5	61.2	62.1	64.9	2.4	2.8
		P+	651	26.0%	26.0%	29.0%	30.0%	4.0%	1.0%
	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	549	62.4	61.4	62.5	65.7	3.3	3.2
		P+	549	26.0%	26.0%	30.0%	32.0%	6.0%	2.0%
	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	272	54.4	52.1	54.2	52.8	-1.6	-1.4
		P+	272	12.0%	14.0%	17.0%	11.0%	-1.0%	-6.0%
	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	59	42.6	43.2	42.9	54.7	12.1	11.8
		P+	59	12.0%	14.0%	12.0%	20.0%	8.0%	8.0%
	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	1178	73.6	72.3	73.9	77.1	3.5	3.2
		P+	1178	46.0%	44.0%	49.0%	51.0%	5.0%	2.0%
	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: Cambridge 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	1.7	1.8	2.2	1.5	-0.2	-11.8%	-0.7	-31.8%	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: Cambridge 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	324	81.9%	77.1%	79.3%	77.8%	-4.1	-5.0%	-1.5	-1.9%	74.7%
Low income	273	82.0%	79.6%	82.6%	81.0%	-1.0	-1.2%	-1.6	-1.9%	73.6%
Students w/ disabilities	141	73.5%	66.4%	69.5%	68.8%	-4.7	-6.4%	-0.7	-1.0%	67.8%
English language learners & Former ELLs	30	72.2%	72.2%	78.6%	53.3%	-18.9	-26.2%	-25.3	-32.2%	63.5%
All students	457	85.2%	82.7%	83.2%	82.5%	-2.7	-3.2%	-0.7	-0.8%	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: Cambridge 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	323	87.1%	85.3%	84.0%	86.4%	-0.7	-0.8%	2.4	2.9	78.9%
Low income	281	89.4%	85.5%	86.9%	88.6%	-0.8	-0.9%	1.7	2.0	77.5%
Students w/ disabilities	131	79.4%	77.0%	77.1%	79.4%	0.0	0.0%	2.3	3.0	73.8%
English language learners & Former ELLs	42	90.7%	86.1%	77.8%	88.1%	-2.6	-2.9%	10.3	13.2	68.5%
All students	447	89.9%	88.5%	87.6%	89.0%	-0.9	-1.0%	1.4	1.6	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: Cambridge 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	94.0%	93.4%	94.0%	93.9%	-0.1	-0.1%	-0.1	-0.1%	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: Cambridge 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	4.7%	3.4%	3.8%	1.8%	-2.9	-61.7%	-2.0	-52.6%	2.2%
Out-of-School Suspension Rate	7.1%	6.4%	5.4%	2.3%	-4.8	-67.6%	-3.1	-57.4%	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: Cambridge 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	\$137,492,275	\$179,493,610	\$140,719,260	\$160,315,841	\$144,987,705	\$153,248,150
By municipality	\$25,018,418	\$29,232,657	\$26,736,295	\$31,826,066	\$28,033,791	\$34,123,781
Total from local appropriations	\$162,510,693	\$208,726,267	\$167,455,555	\$192,141,907	\$173,021,496	\$187,371,931
From revolving funds and grants	--	\$13,006,597	--	\$13,691,308	--	\$14,192,445
Total expenditures	--	\$221,732,864	--	\$205,833,215	--	\$201,564,376
Chapter 70 aid to education program						
Chapter 70 state aid*	--	\$8,596,971	--	\$8,643,123	--	\$8,892,163
Required local contribution	--	\$70,899,052	--	\$70,070,141	--	\$68,855,555
Required net school spending**	--	\$79,496,023	--	\$78,713,264	--	\$77,747,718
Actual net school spending	--	\$149,863,284	--	\$157,142,414	--	\$161,894,375
Over/under required (\$)	--	\$70,367,261	--	\$78,429,150	--	\$84,146,657
Over/under required (%)	--	88.5%	--	99.6%	--	108.2%

*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, FY13 District End-of-Year Reports, Chapter 70 Program information on ESE website
Data retrieved June 25, 2014

**Table B9: Cambridge Public Schools
Expenditures per In-District Pupil
Fiscal Years 2010-2013**

Expenditure Category	2010	2011	2012	2013
Administration	\$1,100	\$1,204	\$1,307	\$1,227
Instructional leadership (district and school)	\$1,725	\$1,902	\$1,791	\$1,942
Teachers	\$7,239	\$7,635	\$7,275	\$7,260
Other teaching services	\$2,437	\$1,780	\$2,172	\$2,214
Professional development	\$732	\$952	\$923	\$935
Instructional materials, equipment and technology	\$906	\$912	\$918	\$898
Guidance, counseling and testing services	\$576	\$669	\$835	\$735
Pupil services	\$1,902	\$1,935	\$1,916	\$2,177
Operations and maintenance	\$2,345	\$2,287	\$2,544	\$2,543
Insurance, retirement and other fixed costs	\$5,130	\$5,506	\$5,816	\$6,021
Total expenditures per in-district pupil	\$24,094	\$24,781	\$25,495	\$25,953

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	1	1	69	#	4	11	98
	MS	2	9	14	%	4%	10%	87%
	HS	1	1	15			---	---
2. Behavioral standards are clearly communicated and disruptions, if present, are managed effectively and equitably.	ES	0	4	67	#	5	14	94
	MS	3	8	14	%	4%	12%	83%
	HS	2	2	13	---	---	---	---
3. The physical arrangement of the classroom ensures a positive learning environment and provides all students with access to learning activities.	ES	0	2	69	#	3	6	104
	MS	2	1	22	%	3%	5%	92%
	HS	1	3	13	---	---	---	---
4. Classroom rituals and routines promote transitions with minimal loss of instructional time	ES	5	4	62	#	10	11	92
	MS	3	5	17	%	9%	10%	81%
	HS	2	2	13	---	---	---	---
5. Multiple resources are available to meet all students' diverse learning needs.	ES	4	7	60	#	10	15	88
	MS	2	6	17	%	9%	13%	78%
	HS	4	2	11	---	---	---	---

(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	3	7	61	#	6	8	99
	MS	1	1	23	%	5%	7%	88%
	HS	2	0	15	---			
7. The teacher plans and implements a lesson that reflects rigor and high expectations.	ES	15	24	34	#	24	33	56
	MS	7	5	13	%	21%	29%	50%
	HS	4	4	9	---	---	---	---
8. The teacher communicates clear learning objective(s) aligned to 2011 Massachusetts Curriculum Frameworks. SEI/language objective(s) are included when applicable.	ES	16	11	44	#	25	17	70
	MS	5	3	17	%	22%	15%	63%
	HS	4	3	9	---	---	---	---
9. The teacher uses appropriate instructional strategies well matched to learning objective(s) and content.	ES	8	17	46	#	14	24	75
	MS	3	2	20	%	12%	21%	66%
	HS	3	5	9	---	---	---	---
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	31	16	24	#	48	23	42
	MS	13	3	9	%	42%	20%	37%
	HS	4	4	9	---	---	---	---
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	16	21	34	#	29	27	57
	MS	7	2	16	%	26%	24%	50%
	HS	6	4	7	---	---	---	---

(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	13	23	35	#	23	31	59
	MS	6	2	17	%	20%	27%	52%
	HS	4	6	7	---			
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	14	14	43	#	25	21	67
	MS	7	2	16	%	22%	19%	59%
	HS	4	5	8	---	---	---	---
14. The teacher paces the lesson to match content and meet students' learning needs.	ES	8	15	48	#	19	24	66
	MS	6	4	11	%	17%	22%	61%
	HS	5	5	7	---	---	---	---
15. The teacher conducts frequent formative assessments to check for understanding and inform instruction.	ES	7	25	39	#	17	33	63
	MS	5	5	15	%	15%	29%	56%
	HS	5	3	9	---	---	---	---
16. The teacher makes use of available technology to support instruction and enhance learning.	ES	44	10	17	#	55	17	41
	MS	6	4	15	%	49%	15%	36%
	HS	5	3	9	---	---	---	---

(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	6	25	40	#	17	34	62
	MS	4	7	14	%	15%	30%	55%
	HS	7	2	8	---	---	---	---
18. Students articulate their thinking orally or in writing.	ES	9	20	42	#	22	26	65
	MS	8	1	16	%	19%	23%	58%
	HS	5	5	7	---			
19. Students inquire, explore, apply, analyze, synthesize and/or evaluate knowledge or concepts (Bloom's Taxonomy).	ES	20	22	29	#	35	28	50
	MS	8	2	15	%	31%	25%	44%
	HS	7	4	6	---	---	---	---
20. Students elaborate about content and ideas when responding to questions.	ES	25	20	26	#	39	29	45
	MS	7	5	13	%	35%	26%	40%
	HS	7	4	6	---	---	---	---
21. Students make connections to prior knowledge, or real world experiences, or can apply knowledge and understanding to other subjects.	ES	25	11	35	#	35	18	60
	MS	5	2	18	%	31%	16%	53%
	HS	5	5	7	---	---	---	---
22. Students use technology as a tool for learning and/or understanding.	ES	47	6	18	#	77	9	27
	MS	18	2	5	%	68%	8%	24%
	HS	12	1	4	---	---	---	---
23. Students assume responsibility for their own learning whether individually, in pairs, or in groups.	ES	7	9	55	#	15	18	79
	MS	3	5	17	%	13%	16%	71%
	HS	5	4	7	---	---	---	---
24. Student work demonstrates high quality and can serve as exemplars.	ES	38	14	19	#	62	21	30
	MS	13	4	8	%	55%	19%	27%
	HS	11	3	3	---	---	---	---