Comprehensive District Review Report

Plymouth Public Schools

Review conducted March 6–9, 2017

Office of District Reviews and Monitoring

Massachusetts Department of Elementary and Secondary Education

Organization of this Report

This document was prepared by the
Massachusetts Department of Elementary and Secondary Education

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Published August 2017

Executive Summary

Plymouth is a large Level 2 district in southeastern Massachusetts that is well resourced and has had consistent school and district leadership for several years. All the secondary schools and 5 of the 8 elementary schools with reportable data are designated Level 2 because these schools have not met certain cumulative progress and performance targets in narrowing achievement gaps in ELA, math, or science.

The town of Plymouth has made a strong financial commitment to the district as evidenced by consistent increases in net school spending over the last five years. This support has enabled the district to allocate resources to hire central office staff, principals, and teachers to support the academic, social-emotional, health, and safety needs of students.

The district has implemented a collaborative leadership model that is marked by stability in academic and management positions at the district and school levels. This has resulted in the consistent implementation of improvement initiatives at the district and school levels. Positive practices and programs that the district has developed include aligned and documented curricula in ELA and math, a balanced system of assessments to measure students' progress, and a high-quality professional development system.

The district is not without challenges, however. The educator evaluation system in Plymouth has not been implemented consistently. More work is needed to improve the consistency and quality of supervisory practices and evaluative procedures and documents. All evaluations should include written feedback to improve educators' practice and to enrich students' learning. In addition, the district and schools do not have a consistent multi-tiered approach to supporting students at various stages of learning.

Instruction

The team observed 107 classes throughout the district: 36 at the 2 high schools, 27 at the 2 middle schools, and 44 at the 8 elementary schools. The team observed 43 ELA classes, 42 mathematics classes, and 22 classes in other subject areas. Among the classes observed were 7 special education classes and 3 career/technical education classes. The observations were approximately 20 minutes in length. All review team members collected data using ESE's Instructional Inventory, a tool for recording observed characteristics of standards-based teaching. This data is presented in Appendix C.

In observed classrooms throughout the district, the team found the quality and rigor in instructional practices was inconsistent from level to level across the district. At the elementary level, review team members observed more consistent implementation of effective instructional practices. Observers noted a wide variation in the degree to which student engagement and critical thinking was evident districtwide and found that differentiated instruction was the least developed instructional practice districtwide.

Strengths

- The district has key leadership personnel and collaborative district practices in place to ensure that the district's strategic plan and School Improvement Plans are implemented with fidelity across the district.

- An effective leadership model supports the vertical and horizontal alignment of the curriculum, which is consistently reviewed and revised.

- Districtwide, teachers of math, ELA, and science use documented curricula, which are aligned with the Massachusetts 2011 curriculum frameworks. At the time of the onsite in March 2017, the district was in the process of aligning the science curriculum K–12 with the 2016 Massachusetts Science and Technology/Engineering Framework.

- The district has a balanced system of assessments that staff use to modify curriculum and instruction and to provide interventions to struggling students. The district has established a department to manage student information and assessment data.

- The district provides a comprehensive professional development program to support teachers and paraprofessionals at all stages of their careers. The program is based on district and school priorities, staff interests and needs, and student achievement data.

- The district has in place programs and practices to support students' academic and social-emotional needs.

- The district has a well-staffed system to ensure student safety that was developed with the Plymouth Police Department.

Challenges and Areas for Growth

- The districts' strategic plan and School Improvement Plans do not consistently include measurable benchmarks based on student achievement data.

- The district has not achieved consistency in the implementation of its educator evaluation system. For example, about one-third of the teachers whose personnel folders were reviewed by the team had not received a formative assessment/evaluation or a summative evaluation during the two school years before the review. Evaluations were informative,[1] but did not include recommendations that promoted professional growth. In addition, interviews and a document review indicated that principals had not received formative assessments/evaluations

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[1] An informative evaluation is factual and cites instructional details such as methodology, pedagogy, Standards and Indicators of Effective Teaching Practice or instruction of subject-based knowledge that is aligned with the state curriculum frameworks. It does not commit to improvement strategies. An instructive evaluation includes comments intended to improve instruction.

or summative evaluations during the two years before this review. Also, the district has not taken action on the more recent components of the state Educator Evaluation Framework.

- The district has not established a consistent and coherent approach to scheduling common planning time across the district. Regular structured time for teachers to collaborate varies from grade to grade, from school to school, and from level to level.

- Also, the district does not have in place a coordinated, multi-tiered system of support. Efforts are inconsistent and vary from school to school and level to level.

Recommendations

- District planning documents should include measurable benchmarks for success**.**

- The district should ensure that there is a common understanding of high-quality instructional practices characterized by rigor and well-structured lessons aligned to learning objectives, giving students opportunities to develop critical thinking skills and responsibility for their own learning while providing lessons that include classroom formative assessments that support opportunities for differentiation.

- The district should implement all components of the state educator evaluation regulations. Attention should focus on the need to improve the consistency and quality of supervisory practices and evaluative procedures and products, as well as the development of appropriate systems for the collection and use of multiple sources of evidence to inform the evaluation process.

- The district should evaluate the school schedule and develop opportunities for common planning and time for interventions at all levels.

- The district should develop a consistent multi-tiered system of support.

Plymouth Public Schools Comprehensive District Review Overview

Purpose

Conducted under Chapter 15, Section 55A of the Massachusetts General Laws, comprehensive 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 2016–2017 school year include districts classified into Level 2, Level 3, or Level 4 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.

Site Visit

The site visit to the Plymouth was conducted from March 6–9, 2017. The site visit included 32 hours of interviews and focus groups with approximately 80 stakeholders, including school committee members, district administrators, school staff, high-school students, and teachers' association representatives. The review team conducted three focus groups with nine elementary-school teachers, two middle-school teachers, and two high-school teachers.

A list of review team members, information about review activities, and the site visit schedule are in Appendix A, and Appendix B provides information about enrollment, student performance, and expenditures. The team observed classroom instructional practice in 107 classrooms in 12 schools. The team collected data using ESE's Instructional Inventory, a tool for recording observed characteristics of standards-based teaching. This data is contained in Appendix C.

District Profile

Plymouth has a town manager/selectmen form of government and the chair of the school committee is elected. The seven members of the school committee meet twice a month during the school year.

The current superintendent has been in the position since July 1, 2008. The district leadership team includes the superintendent, the assistant superintendent for administration and instruction, the assistant superintendent for human resources, and the school business administrator. Central office positions have been mostly stable in number over the past eight years. The district has 13 principals and 1 director leading 13 schools. The early childhood center is in a middle school and the high schools have a vocational program. There are 16 other school administrators, including assistant principals who are members of a bargaining unit. In the 2016–2017 school year, there were 630 teachers in the district.

In the 2016–2017 school year, 7,552 students were enrolled in the district's 13 schools:

Table 1: Plymouth Public Schools
Schools, Type, Grades Served, and Enrollment*, 2016–2017

School Name	School Type	Grades Served	Enrollment
Mount Pleasant Early Childhood Center	EES	Pre-K	116
South	ES	K–4	549
Federal Furnace	ES	K–5	412
Cold Spring	ES	K–5	248
Hedge	ES	K–5	210
Indian Brook	ES	K–5	566
Manomet	ES	K–5	304
Nathaniel Morton	ES	K–5	591
West	ES	K–5	389
Plymouth Common Intermediate	MS	6–8	997
Plymouth South Middle	MS	6–8	837
Plymouth South High	HS	9–12	1,026
Plymouth North High	HS	9–12	1,307
Totals	**13 schools**	**Pre-K–12**	**7,552**
*As of October 1, 2016			

The district encompasses 100 square miles and 400 miles of roadway, which presents logistical challenges related to student transportation and weather.

Between 2012 and 2017 overall student enrollment decreased by 5.6 percent. Enrollment figures by race/ethnicity and high needs populations (i.e., students with disabilities, students from economically disadvantaged families, and English language learners (ELLs) and former ELLs) as compared with the state are provided in Tables B1a and B1b in Appendix B.

Total in-district per-pupil expenditures were higher than the median in-district per pupil expenditures for 35 K–12 districts of similar size (5,000–7,999 students) in fiscal year 2015: $14,504 as compared with $12,947. Actual net school spending has been above what is required by the Chapter 70 state education aid program, as shown in Table B6 in Appendix B.

Student Performance

Plymouth is a Level 2 district because 5 of its 8 elementary schools with reportable data, as well as both middle schools and both high schools, are in Level 2 for not meeting their gap narrowing targets for all students and high needs students.

Table 2: Plymouth Public Schools
District and School PPI, Percentile, and Level 2013–2016

School	Group	Annual PPI				Cumulative PPI	School Percentile	Accountability Level
		2013	2014	2015	2016			
Mount Pleasant	All	--	--	--	--	--	--	--
	High Needs	--	--	--	--	--		
Cold Spring	All	90	115	--	50	74	43	1
	High Needs	94	100	100	38	74		
Hedge	All	20	90	--	60	63	17	2
	High Needs	38	56	56	50	52		
Federal Furnace	All	35	55	--	85	69	41	2
	High Needs	30	50	50	45	46		
Indian Brook	All	55	65	--	60	61	44	2
	High Needs	60	60	60	50	56		
Manomet	All	75	90	--	65	74	75	1
	High Needs	100	50	--	94	82		
Morton	All	25	65	60	65	60	47	2
	High Needs	40	45	--	65	56		
South	All	75	63	--	100	86	49	1
	High Needs	69	56	--	94	80		
West	All	65	50	--	55	55	50	2
	High Needs	63	50	--	56	55		
Plymouth South Middle	All	50	35	55	55	51	39	2
	High Needs	35	35	--	55	46		
Plymouth Intermediate	All	50	35	--	55	49	38	2
	High Needs	50	45	--	70	60		
Plymouth North High	All	107	50	50	82	69	23	2
	High Needs	111	39	39	54	52		
Plymouth South High	All	75	75	79	61	70	32	2
	High Needs	82	43	57	46	52		
District	All	50	54	--	64	59	--	2
	High Needs	46	50	--	61	56		

Between 2015 and 2016, the percentage of students meeting or exceeding expectations improved by 4 percentage points in ELA and in math.
- The percentage of high needs students meeting or exceeding expectations improved by 1 percentage point in ELA and by 3 percentage points in math.
- The percentage of students from economically disadvantaged families meeting or exceeding expectations improved by 1 percentage point in ELA and by 3 percentage points in math.
- The percentage of ELL and former ELL students meeting or exceeding expectations did not improve in ELA and improved by 3 percentage points in math.

- The percentage of students with disabilities meeting or exceeding expectations improved by 2 percentage points in ELA and in math.

Table 3: Plymouth Public Schools
ELA and Math Meeting or Exceeding Expectations (Grades 3–8) 2015–2016

Group	ELA			Math		
	2015	2016	Change	2015	2016	Change
All students	55%	59%	4	48%	52%	4
High Needs	34%	35%	1	27%	30%	3
Economically Disadvantaged	42%	43%	1	33%	36%	3
ELL and former ELL students	22%	22%	0	19%	22%	3
Students with disabilities	13%	15%	2	12%	14%	2

Between 2013 and 2016, the percentage of students scoring proficient or advanced in science declined by 2 percentage points for all students, and by 7 and 2 percentage points for high needs students and students with disabilities, respectively. In 2016, the percentage of students scoring proficient or advanced in science was 2 percentage points above 2016 the state rate for the district as a whole and by 1 to 8 percentage points for high needs students, students from economically disadvantaged families, and students with disabilities.

Table 4: Plymouth Public Schools
Science Percent Proficient or Advanced by Subgroup 2013–2016

Group		2013	2014	2015	2016	4-Year Trend	Above/Below State (2016)
All students	District	58%	59%	58%	56%	-2%	2
	State	53%	55%	54%	54%	1	
High Needs	District	41%	40%	35%	34%	-7%	3
	State	31%	33%	31%	31%	0	
Economically Disadvantaged	District	--	--	40%	40%	--	8
	State	--	--	34%	32%	--	
ELL and former ELL students	District	--	18%	--	6%	--	-13
	State	19%	18%	19%	19%	0	
Students with disabilities	District	24%	25%	21%	22%	-2%	1
	State	21%	21%	22%	21%	0	

The district did not reach its 2016 Composite Performance Index (CPI) targets in ELA, math, and science for all students and each group that makes up the high needs population with reportable data.

Table 5: Plymouth Public Schools
2016 CPI and Targets by Subgroup

Group	ELA			Math			Science		
	2016 CPI	2016 Target	Rating	2016 CPI	2016 Target	Rating	2016 CPI	2016 Target	Rating
All students	87.3	94.1	Improved Below Target	81.6	89.2	Improved Below Target	81.0	90.0	No Change
High Needs	75.3	88.6	Improved Below Target	66.7	81.8	Improved Below Target	68.4	83.1	No Change
Economically Disadvantaged[2]	78.8	80.5	Improved Below Target	71.4	72.9	Improved Below Target	71.1	74.2	No Change
ELLs	62.3	81.3	Improved Below Target	59.9	77.9	Improved Below Target	--	--	--
Students with disabilities	64.8	83.1	Improved Below Target	53.3	76.0	Improved Below Target	60.8	78.2	Improved Below Target

In 2016, students' growth in ELA and math was moderate in math compared with their academic peers across the state for all students, high needs students, and students from economically disadvantaged families. Growth for students with disabilities was low in ELA and was moderate in math compared with their academic peers statewide.

Table 6: Plymouth Public Schools
2016 Median ELA and Math SGP by Subgroup

Group	2016 Median ELA SGP			2016 Median Math SGP		
	District	CPI Rating	Growth Level	District	CPI Rating	Growth Level
All students	45.0	On Target	Moderate	45.0	Below Target	Moderate
High Needs	43.0	Below Target	Moderate	43.5	Below Target	Moderate
Econ. Disad.	43.0	Below Target	Moderate	42.0	Below Target	Moderate
ELLs	--	--	--	--	--	--
SWD	40.0	Below Target	Low	41.0	On Target	Moderate

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[2] The economically disadvantaged subgroup does not have a CPI target and rating because 2015 is the first year that a CPI was calculated for the economically disadvantaged group; this CPI will serve as a baseline for future years' CPI targets.

In 2016, the district's out-of-school suspension rates were lower than the 2016 state rates for all students, high needs students, students from economically disadvantaged families, and English language learners. In-school suspension rates were more than twice the 2016 state rate for all students, high needs students, students from economically disadvantaged families, English language learners, and students with disabilities.

Table 7: Plymouth Public Schools
Out-of-School and In-School Suspension Rates by Subgroup 2013–2016

Group	Type of Suspension	2013	2014	2015	2016	State (2016)
High Needs	ISS	1.2%	1.4%	7.3%	8.3%	2.9%
	OSS	7.4%	7.2%	4.5%	4.7%	4.9%
Economically disadvantaged*	ISS	1.3%	1.5%	7.3%	8.1%	3.2%
	OSS	8.3%	7.9%	4.3%	4.6%	5.6%
ELLs	ISS	--	--	--	8.3%	1.9%
	OSS	--	--	--	1.0%	4.0%
Students with disabilities	ISS	1.6%	1.4%	9.1%	10.1%	3.5%
	OSS	8.4%	8.2%	6.1%	6.5%	5.9%
All Students	ISS	0.7%	0.8%	5.0%	5.2%	1.9%
	OSS	4.2%	4.3%	2.4%	2.7%	2.9%

*Suspension rates for students from low-income families used for 2013 and 2014

Between 2013 and 2016, the district's four-year cohort graduation rate declined by 0.4 percentage point for all students and by 0.2 percentage point for students from low-income families and students with disabilities, and improved by 1.0 percentage point for high needs students. The district reached the four-year cohort graduation target for all students.[3]

Table 8: Plymouth Public Schools
Four-Year Cohort Graduation Rates 2013–2016

Group	Number Included (2016)	Cohort Year Ending				Change 2013–2016		Change 2015–2016		State (2016)
		2013	2014	2015	2016	Percentage Points	Percent Change	Percentage Points	Percent Change	
High needs	324	80.5%	80.7%	79.3%	81.5%	1.0	1.2%	2.2	2.8%	79.1%
Low income	248	82.1%	77.9%	79.7%	81.9%	-0.2	-0.2%	2.2	2.8%	78.4%
ELLs	7	--	--	--	71.4%	--	--	--	--	64.1%
SWD	147	72.3%	77.1%	75.0%	72.1%	-0.2	-0.3%	-2.9	-3.9%	71.8%
All students	633	90.0%	88.9%	89.1%	89.6%	-0.4	-0.4%	0.5	0.6%	87.5%

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[3] The four-year cohort graduation rate target is 80 percent for each group and refers to the 2015 graduation rate. Students from low-income families did not receive a 2016 accountability rating because of the change to the economically disadvantaged measure.

Between 2012 and 2015, the district's five-year cohort graduation rate improved by 3.8 percentage points for all students, and by 5.0 to 6.6 percentage points for high needs students, students from low- income families, and students with disabilities. The district reached the five-year cohort graduation target for all students.[4]

Table 9: Plymouth Public Schools
Five-Year Cohort Graduation Rates 2012–2015

Group	Number Included (2015)	Cohort Year Ending				Change 2012–2015		Change 2014–2015		State (2015)
		2012	2013	2014	2015	Percentage Points	Percent Change	Percentage Points	Percent Change	
High needs	285	77.5%	84.6%	85.2%	82.5%	5.0	6.5%	-2.7	-3.2%	82.0%
Low income	212	76.8%	86.4%	82.9%	82.5%	5.7	7.4%	-0.4	-0.5%	81.6%
ELLs	5	--	--	--	--	--	--	--	--	70.2%
SWD	136	73.5%	78.8%	80.9%	80.1%	6.6	9.0%	-0.8	-1.0%	74.5%
All students	598	87.2%	91.9%	91.2%	91.0%	3.8	4.4%	-0.2	-0.2%	89.4%

In 2016, the district's drop-out rate for all students was below the 2016 state rate and was also below the state rate for high needs students, students from economically disadvantaged families, and English language learners, and was above the 2016 state rate for students with disabilities.

Table 10: Plymouth Public Schools
Drop-out Rates by Subgroup 2012–2015

Group	2013	2014	2015	2016	State (2016)
High Needs	3.3%	2.8%	2.1%	3.4%	3.7%
Econ. Disad.[5]	4.0%	3.2%	2.0%	4.0%	4.1%
ELLs	11.1%	7.7%	5.9%	0.0%	6.6%
SWD	2.5%	3.1%	2.1%	3.4%	3.1%
All students	1.7%	1.6%	1.1%	1.4%	1.9%

Grade and School Results

Between 2013 and 2016, ELA CPI for all students declined by 1.2 points, from 88.5 in 2013 to 87.3 in 2016, and declined in the 3rd, 5th, 6th, 7th, and 10th grades.
- ELA CPI improved by 0.4 point in the 4th and 8th grades.
- ELA CPI declined by 2.0 points in the 3rd grade, by 0.2 point in the 5th grade, by 3.0 points in the 6th grade, by 2.0 points in the 7th grade, and by 1.2 points in the 10th grade.
  - o ELA CPI in the 10th grade was 97.1 in 2016, 0.4 point above the 2016 state CPI of 96.7.

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[4] The five-year cohort graduation rate target is 85 percent for each group and refers to the 2014 graduation rate. Students from low-income families did not receive a 2016 accountability rating because of the change to the economically disadvantaged measure.

[5] Drop-out rates for students from low-income families used for drop-out rates for students from economically disadvantaged families for 2012, 2013, and 2014.

Table 11: Plymouth Public Schools
ELA Composite Performance Index (CPI) by Grade 2013–2016

Grade	Number	2013	2014	2015	2016	State (2016)	4-Year Trend	2-Year Trend
3	610	85.3	82.5	80.2	83.3	--	-2.0	3.1
4	649	81.8	83.7	78.8	82.2	--	0.4	3.4
5	550	85.3	86.6	84.5	85.1	--	-0.2	0.6
6	546	88.0	86.9	85.3	85.0	--	-3.0	-0.3
7	570	90.0	91.5	86.3	88.0	--	-2.0	1.7
8	571	91.9	92.5	91.1	92.3	--	0.4	1.2
10	578	98.3	96.8	97.8	97.1	96.7	-1.2	-0.7
All	4,140	88.5	88.7	85.9	87.3	87.2	-1.2	1.4

In 2016, the percentage of students meeting or exceeding expectations in ELA ranged from 43 percent to 71 percent in the 3rd grade, from 44 percent to 75 percent in the 4th grade, and from 49 percent to 70 percent in the 5th grade. The percentage of students meeting or exceeding expectations in ELA in the 6th, 7th, and 8th grades was 63 percent, 59 percent and 57 percent, respectively, at Plymouth South Middle, and 55 percent, 66 percent, and 61 percent, respectively, at Plymouth Intermediate. The percentage of students scoring proficient or advanced in ELA in the 10th grade was 91 and 94 percent, respectively, at Plymouth North and Plymouth South.

Table 12: Plymouth Public Schools
ELA Meeting or Exceeding Expectations by School and Grade 2015–2016[6]

School	3	4	5	6	7	8	10	Total
Mount Pleasant	--	--	--	--	--	--	--	--
Cold Spring	55%	44%	57%	--	--	--	--	52%
Hedge	43%	50%	50%	--	--	--	--	47%
Federal Furnace	49%	66%	59%	--	--	--	--	57%
Indian Brook	48%	75%	53%	--	--	--	--	61%
Manomet	71%	74%	70%	--	--	--	--	72%
Morton	64%	67%	63%	--	--	--	--	64%
South	47%	63%	--	--	--	--	--	55%
West	61%	55%	62%	--	--	--	--	59%
Plymouth South Middle	--	--	49%	63%	59%	57%	--	58%
Plymouth Intermediate	--	--	--	55%	66%	61%	--	61%
Plymouth North High	--	--	--	--	--	--	91%	91%
Plymouth South High	--	--	--	--	--	--	94%	94%
District	54%	63%	56%	58%	63%	59%	92%	--

Between 2013 and 2016, ELA CPI declined by 2.4 to 5.7 points in 4 of the 8 elementary schools with reportable data, and declined by 0.4 point at Plymouth South Middle and by 2.9 points at Plymouth Intermediate. ELA CPI improved by 1.8 points at Plymouth North, and declined by 0.9 point Plymouth South.

- ELA CPI for high needs students declined by 2.9 to 12.6 points at 5 of the 8 elementary schools with reportable data, and declined by 0.4 point at Plymouth South Middle and by 2.9 points at

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[6] 10th grade results are MCAS and refer to the percentage of students scoring proficient or advanced.

Plymouth Intermediate.   ELA CPI for high needs students declined by 4.9 points at Plymouth North and by 3.2 points at Plymouth South.

- ELA CPI for students with disabilities declined by 1.5 to 21.1 points at 5 of the 8 elementary schools with reportable data, and declined by 1.5 points at Plymouth South Middle and by 7.5 points at Plymouth Intermediate. ELA CPI for students with disabilities declined by 6.2 and 2.9 percentage points, respectively, at Plymouth North and Plymouth South High.

Table 13: Plymouth Public Schools
ELA Composite Performance Index (CPI) by School and Subgroup 2013–2016

School	2013	2014	2015	2016	4-Year Trend
Mount Pleasant	--	--	--	--	
Cold Spring	85.6	87.7	79.3	80.1	-5.5
High Needs	79.5	81.9	70.5	67.5	-12.0
Econ. Disad.	--	--	80.3	69.7	--
ELLs	--	--	--	59.1	--
SWD	76.4	76.1	52.8	55.3	-21.1
Hedge	80.7	81.6	76.3	75.0	-5.7
High Needs	78.7	76.8	69.2	66.1	-12.6
Econ. Disad.	--	--	70.7	67.5	--
ELLs	--	--	--	--	--
SWD	60.5	61.8	51.8	51.0	-9.5
Federal Furnace	80.0	80.6	78.7	82.2	2.2
High Needs	62.2	63.9	63.8	67.0	4.8
Econ. Disad.	--	--	63.5	67.7	--
ELLs	--	--	--	--	--
SWD	52.0	57.2	57.2	60.3	8.3
Indian Brook	85.3	85.2	84.1	86.9	1.6
High Needs	75.6	74.3	71.5	72.7	-2.9
Econ. Disad.	--	--	75.8	79.4	--
ELLs	--	--	--	--	--
SWD	62.9	64.1	63.2	61.4	-1.5
Manomet	87.3	89.1	84.3	89.1	1.8
High Needs	81.4	82.7	69.2	82.1	0.7
Econ. Disad.	--	--	72.5	87.8	--
ELLs	--	--	--	--	--
SWD	63.0	70.2	55.8	71.1	8.1
Morton	85.3	84.2	84.3	86.3	1.0
High Needs	72.0	70.7	70.6	74.6	2.6
Econ. Disad.	--	--	74.7	76.3	--
ELLs	--	--	--	59.1	--
SWD	58.9	59.5	55.2	60.3	1.4
South	83.9	82.6	74.8	81.5	-2.4
High Needs	70.4	68.3	59.9	67.3	-3.1
Econ. Disad.	--	--	67.3	77.6	--
ELLs	--	--	--	--	--
SWD	60.2	54.6	37.5	52.8	-7.4

West	86.9	87.0	84.1	82.8	-4.1
High Needs	77.3	74.2	67.7	70.1	-7.2
Econ. Disad.	--	--	74.3	78.7	--
ELLs	--	--	--	--	--
SWD	72.9	65.9	58.9	57.2	-15.7
Plymouth South Middle	88.8	89.3	87.0	88.4	-0.4
High Needs	78.9	79.2	74.2	75.2	-3.7
Econ. Disad.	--	--	80.9	80.7	--
ELLs	--	--	--	--	--
SWD	67.2	69.3	62.9	65.7	-1.5
Plymouth Intermediate	91.0	90.9	88.1	88.1	-2.9
High Needs	82.5	83.4	77.0	75.7	-6.8
Econ. Disad.	--	--	83.0	79.1	--
ELLs	--	59.1	65.4	66.1	--
SWD	69.8	70.8	59.8	62.3	-7.5
Plymouth North High	98.8	97.6	97.8	97.0	1.8
High Needs	96.5	94.8	94.0	91.6	-4.9
Econ. Disad.	--	--	97.1	93.1	--
ELLs	--	--	--	--	--
SWD	91.7	90.1	93.9	85.5	-6.2
Plymouth South High	98.5	96.5	98.1	97.6	-0.9
High Needs	96.1	90.6	94.0	92.9	-3.2
Econ. Disad.	--	--	95.5	93.6	--
ELLs	--	--	--	--	--
SWD	92.3	83.9	91.1	89.4	-2.9

Between 2013 and 2016, math CPI declined by 0.2 point for all students, from 81.8 in 2013 to 81.6 in 2016. Math CPI also declined in the 6th, 7th, 8th, and 10th grades.

- Math CPI declined by 1.5 points in the 6th grade, by 2.6 points in the 7th grade, by 7.4 points in the 8th grade, and by 1.9 points in the 10th grade.

- Math CPI improved by 0.6 point in the 3rd grade, by 2.5 points in the 4th grade, and by 2.0 points in the 5th grade.
  - o Math CPI in the 10th grade was 90.4 in 2016, 0.7 points above the 2016 state CPI of 89.7.

Table 14: Plymouth Public Schools
Math Composite Performance Index (CPI) by Grade 2013–2016

Grade	Number	2013	2014	2015	2016	State (2016)	4-Year Trend	2-Year Trend
3	606	86.9	88.0	86.3	87.5	--	0.6	1.2
4	651	79.5	80.0	77.2	82.0	--	2.5	4.8
5	550	78.7	79.6	80.7	80.7	--	2.0	0.0
6	545	81.3	76.7	77.2	79.8	--	-1.5	2.6
7	569	74.3	72.9	71.5	71.7	--	-2.6	0.2
8	377	79.4	80.5	68.2	72.0	--	-7.4	3.8
10	573	92.3	91.8	90.3	90.4	89.7	-1.9	0.1
All	4,127	81.8	81.5	80.1	81.6	81.5	-0.2	1.5

In 2016, the percentage of students meeting or exceeding expectations in math ranged from 51 percent to 85 percent in the 3rd grade, from 32 percent to 76 percent in the 4th grade, and from 36 percent to 60 percent in the 5th grade. The percentage of students meeting or exceeding expectations in math in the 6th, 7th, and 8th grades was 58 percent, 39 percent and 37 percent, respectively, at Plymouth South Middle, and 45 percent, 40 percent, and 39 percent, respectively,   at Plymouth Intermediate. The percentage of students scoring proficient or advanced in math in the 10th grade was 80 and 78 percent, respectively,   at Plymouth North and Plymouth South.

Table 15: Plymouth Public Schools
Math Meeting or Exceeding Expectations by School and Grade 2015–2016[7]

School	3	4	5	6	7	8	10	Total
Mount Pleasant	--	--	--	--	--	--	--	--
Cold Spring	53%	32%	50%	--	--	--	--	45%
Hedge	60%	40%	36%	--	--	--	--	48%
Federal Furnace	51%	40%	42%	--	--	--	--	45%
Indian Brook	60%	76%	45%	--	--	--	--	62%
Manomet	85%	65%	60%	--	--	--	--	69%
Morton	72%	72%	52%	--	--	--	--	66%
South	52%	59%	--	--	--	--	--	56%
West	74%	47%	58%	--	--	--	--	60%
Plymouth South Middle	--	--	42%	58%	39%	37%	--	49%
Plymouth Intermediate	--	--	--	45%	40%	39%	--	47%
Plymouth North High	--	--	--	--	--	--	80%	80%
Plymouth South High	--	--	--	--	--	--	78%	78%
District	63%	59%	47%	50%	40%	37%	78%	--

Between 2013 and 2016, math CPI improved by 0.1 to 6.1 points in 5 of the 8 elementary schools with reportable data, and declined by 1.9 points at Plymouth South Middle and by 1.5 points at Plymouth Intermediate. Math CPI declined by 4.1 points at Plymouth North and by 0.8 point at Plymouth South.

- Math CPI for high needs students declined by 2.8 to 8.7 points at 5 of the 8 elementary schools with reportable data, and declined by 8.2 points at Plymouth South Middle and by 4.5 points at Plymouth Intermediate. Math CPI for high needs students declined 11.9 points at Plymouth North and by 2.8 points at Plymouth South High.
- Math CPI for students with disabilities declined by 1.8 to 29.4 points at 7 of the 8 elementary schools with reportable data, and declined by 8.1 points at Plymouth South Middle and by 5.1 points at Plymouth Intermediate. Math CPI for students with disabilities declined by 13.8 and 2.0 points, respectively, at Plymouth North and Plymouth South High.

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[7] 10th grade results are MCAS and refer to the percentage of students scoring proficient or advanced.

Table 16: Plymouth Public Schools
Math Composite Performance Index by School and Subgroup 2013–2016

School	2013	2014	2015	2016	4-Year Trend
Mount Pleasant	--	--	--	--	--
Cold Spring	84.7	87.6	82.8	80.7	-4.0
High Needs	78.0	82.7	71.0	69.3	-8.7
Econ. Disad.	--	--	78.8	73.7	--
ELLs	--	--	--	61.4	--
SWD	83.3	80.7	54.2	53.9	-29.4
Hedge	77.0	77.5	76.3	76.6	-0.4
High Needs	73.0	70.8	67.9	67.8	-5.2
Econ. Disad.	--	--	69.7	69.6	--
ELLs	--	--	--	--	--
SWD	44.7	45.3	42.9	53.0	8.3
Federal Furnace	78.6	78.4	75.1	78.7	0.1
High Needs	62.7	61.3	56.7	59.3	-3.4
Econ. Disad.	--	--	53.6	57.8	--
ELLs	--	--	--	--	--
SWD	55.6	55.4	53.8	53.8	-1.8
Indian Brook	83.7	84.3	85.4	86.8	3.1
High Needs	73.3	73.0	72.6	74.5	1.2
Econ. Disad.	--	--	77.0	83.4	--
ELLs	--	--	--	--	--
SWD	65.6	65.5	66.4	62.7	-2.9
Manomet	88.4	88.8	88.6	90.5	2.1
High Needs	86.0	83.6	74.6	83.2	-2.8
Econ. Disad.	--	--	78.9	89.0	--
ELLs	--	--	--	--	--
SWD	80.4	77.5	62.5	70.3	-10.1
Morton	81.0	84.2	84.8	87.1	6.1
High Needs	71.6	70.0	71.0	73.0	1.4
Econ. Disad.	--	--	76.6	78.5	--
ELLs	--	--	--	65.9	--
SWD	59.3	60.3	55.6	55.0	-4.3
South	82.1	82.9	77.7	83.5	1.4
High Needs	69.9	69.2	62.0	70.7	0.8
Econ. Disad.	--	--	69.5	76.5	--
ELLs	--	--	--	--	--
SWD	64.0	60.7	41.7	61.1	-2.9
West	85.7	85.5	84.0	84.7	-1.0
High Needs	76.3	76.2	70.1	73.0	-3.3
Econ. Disad.	--	--	75.8	79.3	--
ELLs	--	--	--	--	--
SWD	74.0	72.6	59.8	62.2	-11.8
Plymouth South Middle	79.8	75.9	77.0	77.9	-1.9
High Needs	68.1	61.7	60.1	59.9	-8.2
Econ. Disad.	--	--	65.8	66.0	--
ELLs	--	--	--	--	--
SWD	54.8	49.9	47.3	46.7	-8.1

Plymouth Intermediate	78.5	78.3	75.6	77.0	-1.5
High Needs	64.9	65.6	60.3	60.4	-4.5
Econ. Disad.	--	--	67.2	65.1	--
ELLs	--	43.2	44.2	55.4	--
SWD	48.7	49.2	42.1	43.6	-5.1
Plymouth North High	95.1	91.6	90.4	91.0	-4.1
High Needs	88.0	81.9	78.7	76.1	-11.9
Econ. Disad.	--	--	86.8	81.2	--
ELLs	--	--	--	--	--
SWD	71.7	69.4	64.9	57.9	-13.8
Plymouth South High	91.6	93.4	91.6	90.8	-0.8
High Needs	82.3	84.1	76.1	79.5	-2.8
Econ. Disad.	--	--	86.4	84.8	--
ELLs	--	--	--	--	--
SWD	70.2	77.1	67.2	72.2	2.0

Between 2013 and 2016, science proficiency rates declined by 2 percentage points in the district as whole, from 58 percent in 2013 to 56 percent in 2016, 2 percentage points above the 2016 state rate of 54 percent.

- 5th grade science proficiency rates decreased by 5 percentage points from 49 percent in 2013 to 44 percent in 2016, 3 percentage points below the 2016 state rate of 47 percent.

- 8th grade science proficiency rates decreased by 3 percentage points from 48 percent in 2013 to 45 percent in 2016, 4 percentage points above the 2016 state rate of 41 percent.

- The 10th grade science proficiency rate was 79 percent in 2013 and 2016, 6 percentage points above the 2016 state rate of 73 percent.

Table 17: Plymouth Public Schools
Science Percent Proficient or Advanced by Grade 2013–2016

Grade	Number	2013	2014	2015	2016	State (2016)	4-Year Trend	2-Year Trend
5	556	49%	56%	54%	44%	47%	-5%	-10%
8	582	48%	43%	44%	45%	41%	-3%	1%
10	550	79%	78%	79%	79%	73%	0%	0%
All	1688	58%	59%	58%	56%	54%	-2%	-2%

In 2016, in the 5th grade the percentage of students scoring proficient or advanced in science ranged from 18 percent to 72 percent and was equal to or above the 2016 state rate of 47 percent at 5 of the 8 schools with a 5th grade. In the 8th grade science proficiency was 55 percent at Plymouth South Middle and 40 percent at Plymouth Intermediate, compared with the 2016 state rate of 41 percent. In the 10th grade science proficiency was 79 percent at Plymouth North and 82 percent at Plymouth South, above the 2016 state rate of 73 percent.

Table 18: Plymouth Public Schools
Science Percent Proficient or Advanced by School and Grade 2015–2016

School	3	4	5	6	7	8	10	Total
Mount Pleasant	--	--	--	--	--	--	--	--
Cold Spring	--	--	47%	--	--	--	--	47%
Hedge	--	--	18%	--	--	--	--	18%
Federal Furnace	--	--	55%	--	--	--	--	55%
Indian Brook	--	--	36%	--	--	--	--	36%
Manomet	--	--	72%	--	--	--	--	72%
Morton	--	--	47%	--	--	--	--	47%
South	--	--	--	--	--	--	--	0%
West	--	--	61%	--	--	--	--	61%
Plymouth South Middle	--	--	30%	--	--	55%	--	47%
Plymouth Intermediate	--	--	--	--	--	40%	--	40%
Plymouth North High	--	--	--	--	--	--	79%	79%
Plymouth South High	--	--	--	--	--	--	82%	82%
District	--	--	44%	--	--	45%	79%	56%
State	--	--	47%	--	--	41%	73%	54%

Between 2013 and 2016, science proficiency rates declined by 3 to 10 percentage points in 6 of the 7 elementary schools with reportable data, and improved by 4 percentage points at Plymouth South Middle and declined by 9 percentage points at Plymouth Intermediate. Science proficiency declined by 1 percentage point at Plymouth North, and improved by 1 percentage point Plymouth South.

- Science proficiency rates for high needs students declined by 2 to 29 percentage points at 6 of the 7 elementary schools with reportable data, and improved by 2 percentage points at Plymouth South Middle and declined by 8 percentage points at Plymouth Intermediate. Science proficiency rates for high needs students declined by 6 percentage points at Plymouth North and Plymouth South High.
- Science proficiency rates for students with disabilities improved by 2 and 15 percentage points at 2 of the 4 elementary schools with reportable data, and declined by 1 percentage point at Plymouth South Middle and improved by 2 percentage points at Plymouth Intermediate. Science proficiency rates for students with disabilities declined by 6 and 2 percentage points, respectively, at Plymouth North and Plymouth South High.

Table 19: Plymouth Public Schools
Science Percent Proficient or Advanced by School and Subgroup 2013–2016

School	2013	2014	2015	2016	4-Year Trend
Mount Pleasant	--	--	--	--	--
Cold Spring	50%	66%	73%	47%	-3%
High Needs	31%	55%	56%	31%	0%
Econ. Disad.	--	--	55%	36%	--
ELLs	--	--	--	--	--
SWD	--	--	--	--	--
Hedge	26%	53%	27%	18%	-8%
High Needs	25%	45%	33%	8%	-17%
Econ. Disad.	--	--	31%	9%	--
ELLs	--	--	--	--	--
SWD	--	--	--	--	--
Federal Furnace	65%	65%	48%	55%	-10%
High Needs	37%	22%	21%	29%	-8%
Econ. Disad.	--	--	22%	19%	--
ELLs	--	--	--	--	--
SWD	29%	13%	11%	31%	2%
Indian Brook	45%	61%	57%	36%	-9%
High Needs	22%	48%	41%	19%	-3%
Econ. Disad.	--	--	45%	20%	--
ELLs	--	--	--	--	--
SWD	10%	58%	26%	25%	15%
Manomet	75%	88%	78%	72%	-3%
High Needs	79%	81%	65%	50%	-29%
Econ. Disad.	--	--	73%	45%	--
ELLs	--	--	--	--	--
SWD	--	--	--	50%	--
Morton	51%	48%	50%	47%	-4%
High Needs	30%	29%	24%	18%	-12%
Econ. Disad.	--	--	29%	27%	--
ELLs	--	--	--	--	--
SWD	7%	6%	15%	4%	-3%
South	--	--	--	--	--
High Needs	--	--	--	--	--
Econ. Disad.	--	--	--	--	--
ELLs	--	--	--	--	--
SWD	--	--	--	--	--
West	60%	55%	60%	61%	1%
High Needs	50%	29%	13%	48%	-2%
Econ. Disad.	--	--	--	53%	--
ELLs	--	--	--	--	--
SWD	33%	15%	0%	29%	-4%
Plymouth South Middle	43%	40%	50%	47%	4%
High Needs	26%	27%	23%	28%	2%
Econ. Disad.	--	--	29%	38%	--
ELLs	--	--	--	--	--
SWD	12%	22%	11%	11%	-1%

Plymouth Intermediate	49%	48%	41%	40%	-9%
High Needs	31%	27%	26%	23%	-8%
Econ. Disad.	--	--	31%	28%	--
ELLs	--	--	--	--	--
SWD	13%	15%	7%	15%	2%
Plymouth North High	80%	78%	78%	79%	-1%
High Needs	62%	58%	55%	56%	-6%
Econ. Disad.	--	--	63%	62%	--
ELLs	--	--	--	--	--
SWD	37%	34%	37%	33%	-4%
Plymouth South High	81%	80%	83%	82%	1%
High Needs	67%	62%	57%	61%	-6%
Econ. Disad.	--	--	68%	76%	--
ELLs	--	--	--	--	--
SWD	45%	42%	43%	43%	-2%

Leadership and Governance

Contextual Background

The district's superintendent has served 9 years as superintendent, 19 years in the district, and 28 years in the field of education. The superintendent displays a strong sense of pride in the district which he characterizes as "a good system striving to become great."

The superintendent fosters a cooperative, communicative, and transparent relationship with the school committee. The school committee maintains a high level of confidence in the superintendent and evaluates the superintendent annually. The seven-member school committee elects and governs based on a locally developed policy manual. All school committee members have participated in "Charting the Course" training conducted by the Massachusetts Association of School Committees. Both school committee members and town selectmen characterize themselves as having a cooperative relationship to best serve town residents and the school system's students, families, and teachers. The district administration maintains a positive, mutually cooperative, and professional relationship with the town administration and the teachers' association. Parent and constituent concerns are forwarded to the superintendent for research and follow through. The citizens of Plymouth top the district's organizational chart.

The district is well-staffed; the assistant superintendent for administration and instruction, the assistant superintendent of human resources, the school business administrator, the special education/Title I director, the director of student support, principals, assistant principals, K–12 academic coordinators, and department heads provide leadership and support to teachers and other personnel.

School Improvement Plans (SIPs), which are based on the four goals in the district's 2016–2020 strategic plan, are presented to the school committee along with mid-cycle updates of each plan. Both the district's strategic plan and the SIPs were developed with input from representative stakeholders. While goals in the district's strategic plan and the SIPS concern the development of the whole student, they do not consistently include specific student achievement targets.

The town and the district are concerned about the current opioid crisis and a reduction in tax revenue once the local nuclear plant has been closed, as well as the increasing population in coming years because of the development of two major housing subdivisions. During the onsite in March 2017, district and town leaders expressed confidence that by continuing to collaborate and work with community organizations to achieve district and school goals, the district and the town would be able to maintain their high standards and level of service.

Strength Finding

1. **The district has key leadership personnel and collaborative district practices in place to ensure commitment and fidelity to the implementation of the district's improvement initiatives.**

    A. The district leadership team includes the superintendent, the assistant superintendent of administration and instruction, the assistant superintendent for human resources, the special education/Title I director, and the school business administrator.

        1. These five central office administrators, with an average of 12 years each in the district, provide a high degree of stability, have historical knowledge of the district, and work collaboratively to meet district goals and objectives. The superintendent reports to the school committee and the other four members of the leadership team report to the superintendent.

        2. The district works to ensure quality school-level and programmatic support to teachers and students with a collaboratively structured team with clear lines of responsibility.[8]

    B. The district has a vision, a mission, and a multi-year strategic plan, which guide the district and the schools in the development and delivery of programs and services to students and families.

        1. The superintendent, with input from representative stakeholders, developed a 2016–2020 district strategic plan continuing the goals from the 2010–2015 strategic plan.   The superintendent provides annual updates and progress reports to the school committee in public session. The superintendent posts his goals and progress reports on the district's website.

        2. A document review indicated that SIP goals are based on the four goals of the strategic plan.

            a. SIPS are developed for two-year time periods with mid-cycle updates, except for the Plymouth South Middle School SIP, which is dated 2016–2019, and the Plymouth South High School SIP, which is dated 2015–2016. All SIPs and mid-cycle reviews are presented in public session to the school committee based on a schedule developed by the superintendent.

        3. To promote the vision, mission, and strategic goals of the district, the superintendent uses a variety of strategies including: postcards, periodic "Voyager" magazine publications, email, social media, website postings, as well as sending information home with students.

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[8] Six K–12 academic coordinators in the twelve schools, principals, the vocational/technical education principal, the alternative program director, the athletic directors, the educational technology director, the student health services director, the student support director, and the visual and performing arts coordinator all report to the assistant superintendent for administration and instruction. The assistant special education director and the pre-school director report to the special education director. A director of accountability and measurement reports to the assistant superintendent for human resources. The facilities director and the food services director report to the school business administrator.[8]

4. In order to keep the school committee and public informed about districtwide student achievement on state assessments, the assistant superintendent for administration and instruction provides periodic updates during school committee meetings. In addition, all academic coordinators and non-academic directors present programmatic updates in public session to the school committee based on a schedule developed by the superintendent. All school committee meetings are televised via cable television and available for replay from a link on the district's website.

C. The school committee promotes a sense of collaboration and support in the school district and with the town, which encourages all stakeholders to work together to support the goals of the district and the well-being of students and their families.

1. The town selectmen, school committee, and finance committee meet in joint session to determine "guidelines" and the availability of resources to support the programmatic needs and goals of the district.

2. School committee members advocate for the needs of the district by attending precinct caucuses in support of town meeting articles relating to the district, as well as attending numerous school-based student and parent events.

D. District and school leaders collaborate to achieve district and school goals.

1. While the principals are the instructional and managerial leaders of their respective schools, the academic coordinators provide strong collaborative support and consistency.

   a. Principals stated that they relied on the academic coordinators to provide curriculum expertise, guidance, and consistency for both the principals and teachers across the district. Further, the principals stated that they worked closely with the academic coordinators to ensure that the written curriculum was the taught curriculum.

   b. Principals and content-area coordinators stated that the coordinators and principals met to review student achievement data and adjust curricula and instruction.

   c. One group of principals stated that "the district has done a very good job of pulling everyone together across the district," noting that Plymouth has allocated its resources to its improvement initiatives. These principals also said that relationships were "big" and created an "educationally sound journey for teachers."

E. The district has established partnerships with social service agencies to foster the well-being of students and families, especially in relation to the current opioid crisis.

1. The district has established partnerships with various agencies and organizations, including Beth Israel Deaconess Hospital, Plymouth Child and Family Services, South Bay Community Services, the Department of Children and Families, Bay State Community Services, and the Castle Program.

Impact: When district and town leaders work together in harmony and establish partnerships within the broader community, they model a commitment to the district's vision, mission, and strategies and support a shared responsibility for student achievement and well-being.

Challenge Finding

2. **The district's strategic plan and School Improvement Plans do not consistently identify benchmarks, measurable evidence, and specific student performance goals based on student achievement data to indicate that priorities have been met.**

    A. The district's strategic plan has four overarching goals for 2016–2020:

        1. Enhance student social and emotional growth, health and welfare, and demonstration of civic responsibility

        2. Increase family engagement

        3. Enhance academic achievement of all students at all levels

        4. Provide strong district and school leadership

    B. The goals are not SMART goals.[9]

        1. Only four of the eight objectives/actions associated with the goals focus on student-centered actions; the others focus on administrators' and teachers' actions. For example, an objective connected to goal 3 is "Increase academic performance for all students."

        2. The goals are not measurable.

Impact: Without planning documents with SMART goals, the district, schools, and community are unable to systematically implement, monitor, and refine continuous, coordinated improvement initiatives. The district cannot ensure that the work at each level is intentionally designed to accomplish the district's short- and long-term goals.

Recommendation

1. **The district should ensure that all district and school improvement plans have measurable targets, including student achievement goals.**

    A. Representative stakeholders, including teachers, principals, coordinators, school council members, and central office personnel should assist in developing ambitious, measurable

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[9] SMART goals are Specific and Strategic; Measurable; Action Oriented; Rigorous, Realistic, and Results Focused; and Timed and Tracked.

targets for each strategic plan goal at each school and across the district. The achievement targets in each plan should be based on the district's vision, with priority placed on increasing student achievement and narrowing proficiency gaps.

1. The targets should be in the form of SMART goals (Specific and Strategic; Measurable; Action Oriented; Rigorous, Realistic, and Results Focused; and Timed and Tracked).

2. As a part of presentations to the school committee, the superintendent, assistant superintendent, principals, and coordinators should also provide updates about progress toward achieving the measurable goals in each plan.

3. The superintendent and assistant superintendent should periodically review with each principal the progress toward SIP goals.

   a. Each principal should use the SIP to inform his/her self-assessment and goal setting process when creating the Educator Plan, and progress toward Educator Plan goals should be used as evidence during implementation.

4. The superintendent and the school committee should consider aligning some goals in the Superintendent's Educator Plan (as part of the district's educator evaluation system) with strategic plan goals.

Benefits: By implementing this recommendation the district can achieve the accelerated improvement of teaching practice and student learning that comes from specific and ambitious goal setting and progress monitoring. The district and school plans will provide guidance and ensure that the work at each level is intentionally designed to accomplish the district's short- and long-term goals.

Recommended resources:

- ESE's *Planning for Success* tools (http://www.doe.mass.edu/research/success/) support the improvement planning process by spotlighting practices, characteristics, and behaviors that support effective planning and implementation and meet existing state requirements for improvement planning.

- *District Accelerated Improvement Planning - Guiding Principles for Effective Benchmarks* (http://www.mass.gov/edu/docs/ese/accountability/turnaround/level-4-guiding-principles-effective-benchmarks.pdf) provides information about different types of benchmarks to guide and measure district improvement efforts.

- *What Makes a Goal Smarter?* (http://www.doe.mass.edu/edeval/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 could also be a useful reference for the district as it develops or refines its DIP and SIPs.

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Curriculum and Instruction

Contextual Background

Overall, the district has established collaborative curriculum leadership which promotes effective curricular practices at the district and school levels. At every level, curriculum leaders provide leadership and support to teachers to ensure that the curriculum is aligned with the state curriculum frameworks. The assistant superintendent for administration and instruction has district responsibility for the curriculum, while K–12 curriculum coordinators provide curriculum leadership in content-specific subjects and oversight to ensure that the curriculum is aligned vertically and horizontally across the district. At the school level, principals, department heads, and coaches at the elementary- and middle-school levels help to ensure that the taught curriculum is aligned with written curriculum.

For K–5 literacy, the district uses Reading and Writing Workshop, a research-based reading and writing model. For K–5 mathematics, the district uses the Everyday Mathematics program. Literacy and math coaches at the elementary level help teachers to implement both programs.

At the middle-school level in grades 6–8 and at the high-school level in grades 9–12, teachers in ELA, math, science and other subject areas follow a documented curriculum aligned with the state standards. Teachers have access to all curriculum documents online. While the district has an established curriculum cycle for review and revision, the shift to an online curriculum has resulted in a curriculum that is continuously revised. At the time of the review in March 2017, the district was systematically addressing the alignment of the science curriculum with the 2016 Massachusetts Science and Technology/Engineering Framework.

The district provides a wide range of academic courses as well as career/vocational/technical/education (CVTE) programs.   At both high schools, students have access to a four-year science and technology education (STE) pathway in bio-medical studies offered through the district's science department. Also, 19 CVTE programs are offered at the two high schools.

The quality and rigor of observed instruction was inconsistent among levels in the district. While the district provides training in researched-based instructional practices to all teachers completing their second year of employment in the district, in observed classrooms elementary teachers used high-quality, rigorous instructional practices more consistently than teachers at the middle- and high-school levels. In addition, the team expressed concern about how effectively class time in the 10-minute communication break and the 25-minute K block at the high-school level was used to maximize learning.

Strength Findings

1. **The district has developed a collaborative curriculum leadership model at the district and school levels that supports effective curricular practices, promoting alignment with the state curriculum frameworks as well as vertical and horizontal alignment of curriculum across the district.**

   A. At the district level, the assistant superintendent for administration and instruction provides oversight and leadership to all aspects of the district's curriculum, including planning, coordination, and evaluation. The assistant superintendent meets regularly with content curriculum coordinators as well as the district's principals.

      1. A document review indicated that the assistant superintendent's responsibilities for the curriculum include oversight of vertical and horizontal alignment and of all curriculum guides and materials. He reviews and evaluates instructional programs and all instructional materials and coordinates all curricula, committees, and professional development.

      2. The assistant superintendent meets twice monthly with the district's six content curriculum coordinators and monthly in a three-hour meeting with the district's curriculum council which includes the district's principals (including the principals of career/vocational/technical/education programs at both high schools) as well as the six curriculum coordinators.

         a. The district has K–12 curriculum coordinators for math, ELA and library media, science, social studies, media and technology, and visual and performing arts.

         b. During the monthly curriculum council meeting, elementary principals meet during the first hour of the meeting with the curriculum coordinators along with the assistant superintendent; during the second hour, a joint meeting takes place with the secondary principals; and in the third hour, secondary principals, coordinators, and the assistant superintendent meet.

         c. Principals reported that in addition to curriculum council meetings principals meet with coordinators throughout the year during elementary teachers' common prep periods, school-based professional development offerings, and individually. For example, the science coordinator has met with principals to review the science and technology education standards.

   B. The curriculum coordinators are recognized districtwide curriculum leaders and are responsible for the curriculum in their content areas.

      1. District and school leaders and teachers consistently identified the curriculum coordinators as curriculum leaders in their content areas.

         a. Teachers reported that they had sufficient access to the curriculum coordinators at all levels.

2. Curriculum coordinators oversee the curriculum documentation in their content areas. The team was told that the coordinator's primary role is to ensure that the content-specific curriculum is faithful to the standards.

3. Coordinators told the team that they provide an overarching view of their subject-specific content areas and ensure that curriculum is vertically articulated among the three school levels and horizontally aligned across the district's schools.

   a. Principals stated that they relied on coordinators for content support and to provide vertical articulation between the middle school and high school curricula.

4. Coordinators stated that they wanted to ensure that students across the district have equal access to the curriculum.

C. At both high schools, department heads for mathematics, ELA, science, and other subjects also provide content support and consistency to teachers.

   1. When high-school teachers were asked who they go to for curriculum leadership and support, they identified their department heads.

   2. Department heads stated that their primary role with respect to the curriculum was to ensure that the taught curriculum was aligned with the written curriculum. They conduct walkthroughs to ensure curriculum fidelity to the state standards. They also lead department meetings and professional development.

      a. Department heads meet with curriculum coordinators several times monthly and with principals weekly.

      b. Coordinators collaborate with department heads during jointly led departmental meetings that include teachers from one school or from both schools.

         i. For example, the science coordinator led a joint department meeting of teachers from both schools on the implementation of the 2016 Massachusetts Science and Technology/Engineering Framework.

D. The district's literacy coaches and math coaches and the consulting teachers of reading at each elementary school also help elementary- and middle-school teachers to implement the curriculum with fidelity.

   1. Four literacy coaches and two math coaches serve the district's eight elementary schools. The team was told that elementary literacy and math coaches observe teachers, model lessons, help teachers analyze data, and provide embedded professional development at the school level and across the district. The coachers also help teachers "unpack" the standards so that the curriculum is implemented with fidelity.

   2. At the middle-school level, two literacy coaches provide support to ELA teachers and provide interdisciplinary curriculum support to help teachers implement the literacy standards.

3. Teachers identified consulting teachers of reading, who serve the district's elementary schools, as key people they also turn to for curriculum support.

Impact: By establishing clearly defined curriculum leadership roles at the district and school levels, the district is ensuring the consistent use, alignment, and delivery of the district's curricula. A comprehensive curriculum underpinning which includes levels of collaboration by district and school leaders likely leads to a more coherent learning experience for students.

2. **Teachers of math, ELA, and science use a documented, districtwide curriculum, which is aligned with the 2011 Massachusetts curriculum frameworks and is consistently revised. The district is in the process of documenting and aligning the K–12 science curriculum with the 2016 Massachusetts Science and Technology/Engineering Framework.**

   A. The district's curriculum coordinators in ELA, math, and science oversee the district's online and written curriculum, ensuring that written curriculum is aligned with their subject-specific standards and aligned vertically between grades and levels in the district.

      1. The curriculum coordinators in ELA, math, and science stated that their role was to ensure that the written curriculum was aligned with the state standards and aligned vertically between grades.

      2. Districtwide, ELA, math, and science teachers share curriculum documents and resources online through Google docs, the Aspen platform, and the district's shared drive. The team's review of curriculum documents showed that teachers follow a common format for curriculum documentation.

         a. Course syllabi include a course description, essential questions, instructional objectives, concepts covered, resources, and instructional materials.

         b. Teachers use a unit template based on Understanding by Design (UbD). Elements include: a timeline, standards, objectives, course essential questions, unit essential questions, the learning plan (resources, learning tasks, and activities), and formative and summative assessments.

   B. The ELA curriculum at the elementary-, middle-, and high-school levels is fully documented and aligned with the 2011 Massachusetts curriculum frameworks.

      1. Interviews and a document review indicated that K–5 teachers use a balanced approach to literacy and units of study from the Reading and Writing Workshop which are aligned with the standards. Teachers have access to a wide range of online curriculum resources.

      2. Middle- and high-school ELA teachers work with calendar overviews and the curriculum standards to develop units which are submitted to coordinators or department heads for review. The team was told that each high-school course has anchor texts and choice texts. Units are shared online. Teachers use the units to design lessons.

   C. The district has a documented math curriculum at the elementary, middle-, and high-school levels.

1. The Everyday Mathematics program is used K–5 districtwide. Teachers reported that units of study were aligned with the curriculum frameworks.

2. Mathematics teachers at the middle- and high-school levels use scope and sequence documents aligned with the curriculum frameworks, pacing guides, syllabi, and units of study to plan instruction.

D. The science department is in the process of aligning curriculum with the 2016 Massachusetts Science and Technology/Engineering Framework. Science teachers at all levels have been addressing the shift to the new standards.

1. The team was told that the science department began addressing the shift to the new standards in 2015. To that end, the science curriculum coordinator met with every grade-level team in every school.

   a. Science teachers are collaborating on the science curriculum revisions during department time, professional development time, and during summer curriculum development work. For example, in the summer of 2016, chemistry and physics teachers worked on unit development.

2. The existing science curriculum consists of scope and sequence documents, course syllabi, and units of study. The team reviewed a representative sample of science units from the elementary-, middle- and high-school levels. Units follow the UbD format and address the three stages of learning.

E. District leaders described the district's curriculum as being continuously revised.

1. When the superintendent was asked about a curriculum review cycle, he told the team that the curriculum had been in a state of constant revision since it went online.

2. District leaders affirmed that curriculum revisions were ongoing with teachers collaborating on the revisions during professional development times and during department time.

Impact: Using a documented, aligned curriculum and having opportunities to collaboratively develop and revise curriculum enables teachers to develop a deeper understanding of the standards and to be well-equipped to deliver comprehensive, coherent curricula in classrooms. When teachers use a written plan for instruction that is fully aligned with the standards, students are likely to experience greater rigor in classrooms and higher achievement.

Challenges and Areas for Growth

Instruction

The team observed 107 classes throughout the district: 36 at the 2 high schools, 27 at the 2 middle schools, and 44 at the 8 elementary schools. The team observed 43 ELA classes, 42 mathematics classes, and 22 classes in other subject areas. Among the classes observed were seven special education classes, and three career/technical education classes. The observations were approximately 20 minutes in length. All review team members collected data using ESE's Instructional Inventory, a tool for recording observed characteristics of standards-based teaching. This data is presented in Appendix C.

3. **In observed classrooms throughout the district, the team found that the quality and rigor of instruction was inconsistent. At the elementary level, the team observed more consistent implementation of effective instructional practices.**

    A. **Focus Area #1-Learning Objectives & Instruction.** Overall, in most observed classrooms, teachers demonstrated knowledge of the subject matter and content. At the same time, there was variation among levels in the use of clear learning objectives, of lessons reflecting high expectations aligned to learning objectives, and of instructional strategies well-matched to the learning goals.

        1. In observed classes, team members found moderate and strong evidence of teachers providing and referring to clear learning objectives (characteristic # 2) in 71 percent of elementary classes, in 78 percent of middle-school classes, and in 50 percent of high- school classes.

            a. For example, in a grade 11 English class, the team noted a clear objective that was posted and referred to throughout the observation. The objective stated, "Students will be able to read, comprehend and discuss the elements of characterization, plot and point of view in *The Great Gatsby*."

            b. In contrast, the team noted multiple examples of agendas used rather than clear learning objectives. In one grade 11 science class, the teacher did not provide an objective or offer an agenda to the class.

        2. Review team members observed moderate and strong evidence of teachers implementing lessons reflecting high expectations aligned to learning objectives (characteristic # 3) in 71 percent of elementary classes, in just 48 percent of middle-school classes, and in 53 percent of high-school classes.

            a. The team noted that in observed middle- and high-school classes expectations aligned with the learning objectives were not consistently present. For example, in a grade 10 science class, the teacher said that students would see a video and did not set any academic expectations.

      b.   Observers also noted that expectations for the timely start of classes were not consistently followed at the high-school level. In these classes, students arrived late, resulting in lost instructional time and disrupting the lesson.

3.   The team observed moderate and strong evidence that most instructional strategies were well matched to the learning objectives so that students could access and engage with the content (characteristic # 4) in 82 percent of observed elementary classes, in 66 percent of middle-school classes, and in only 47 percent of high-classes.

      a.   At the high-school level, the team noted that teacher-led lectures were the dominant instructional strategy and students had limited opportunities to engage with content.

      b.   In an example of instructional strategies well-matched to learning objectives, in a science class for grades 9–10, students moved from station to station collaboratively conducting 8 soil erosion experiments, all aligned with the learning objectives on flood plains' erosion.

B. **Focus Area #2-Student Engagement & Critical Thinking**.   Interviewees identified fostering student engagement and active student participation as a paramount goal of the district, and interviews and a document review indicated that district and school leaders had conducted an initial learning walk focused on student engagement. However, the team noted a wide variation in the degree to which student engagement and critical thinking were evident districtwide.

1.   In observed classes, the review team found moderate and strong evidence that most students were motivated and engaged, participating in activities and volunteering responses (characteristic # 5), in 84 percent of elementary classes, in 55 percent of middle-school classes, and in only 44 percent of high-school classes.

      a.   At the elementary level, the team observed most students actively participating in structured activities throughout the observation. For example, students worked independently in small groups or with partners while teachers facilitated students' tasks.

      b.   In contrast, a low incidence of student participation and student engagement took place at the high-school level and classes were primarily teacher directed. For example, in one grade 9 class, the teacher lectured and students took notes for 25 minutes. In these classes, questioning strategies such as cold calling on students to maintain their attention and keep them involved were not evident.

2.   The team found moderate and strong evidence of most students engaged with tasks that require critical thinking, analysis, or application of new knowledge throughout the observation (characteristic # 6) in 73 percent of observed elementary classes, in 52 percent of middle-school classes, and in only 42 percent of high-school classes.

      a.   In classes where there was limited evidence of tasks requiring critical thinking, students were not consistently expected to answer questions fully and to explain their answers.

In these classes, "why" or probing questions were not evident and students were not encouraged to think critically.

C. **Focus Area #3-Differentiated Instruction & Classroom Culture**. District leaders stated that effective instruction should be differentiated. Although the district has provided professional development in differentiation, the team found that in observed classrooms differentiated instruction was the least developed instructional practice districtwide. Classroom observations showed variation in how conducive the environment was to learning. Although teachers had established a positive academic environment in 83 percent of observed classes, of concern were the 36 percent (13 of 36) of observed high-school classes where teachers had not firmly established rituals and routines. Of additional concern was the variation among levels of the effective use of formative assessment strategies.

1. The team found moderate and strong evidence that lessons were structured to be accessible to most learners, accounting for differences in learning needs, interests, and levels of readiness (characteristic # 8) in 50 percent of observed elementary classes, in only 15 percent of middle-school classes, and in just 31 percent of high-school classes.

   a. At the elementary level where the team observed the workshop model in place, they noted appropriately differentiated instruction. However, in most classes in the middle- and high-school grades all students were doing the same task

   b. When the team observed effectively differentiated lessons at the middle- and high-school levels, students were involved in collaborative small-group work that appealed to students' multiple modalities. For example, in a multi-grade science class at the high-school level, students worked in small groups on range of experiments that varied as students moved from station to station.

2. In observed classrooms, team members saw moderate and strong evidence that teachers had firmly established rituals, routines, and positive responses (characteristic # 10) in 93 percent of elementary classes, in 89 percent of middle-school classes, and in 64 percent of high-school classes.

   a. The team noted that in more than one-third (36 percent) of observed high-school classes teachers did not set behavioral expectations. Students arrived late following the ten-minute communication break, shouted out, were off task or not engaged in the lesson, and talked among themselves even when the teacher was speaking.

3. The team found moderate and strong evidence of teachers consistently checking for student understanding (characteristic # 11) in 77 percent of observed elementary classes, in 48 percent of middle-school classes, and in 50 percent of high-school classes.

   a. In most observed elementary classes teachers consistently checked for student understanding by questioning, moving about the room from group to group asking questions and providing feedback to students, or by using formative assessment strategies such as "Thumbs up, thumbs down" to check for understanding.

b. By contrast, in many observed middle- and high-school classes, the team noted limited checking for student understanding. For example, not one of the team's observations noted the use of common formative assessment strategies such as the use of exit tickets or think-pair-share to determine whether students understood the lesson. In many observed high- school classes, few clarifying questions were asked to check for understanding.

Impact: When routines and proactive responses to ensure a positive learning environment are not consistently established at all levels, the district is not providing all its students with an essential condition for learning. Without consistently establishing and communicating clear learning objectives, providing students with tasks that require critical thinking and analysis, and checking for understanding and structuring lessons to account for differences in learning needs, the district is not providing students with the instruction and support they need to achieve at higher levels.

4. **The district has not established a coherent approach to scheduling common planning time districtwide. Regular structured time for teachers to collaborate varies from grade to grade, from school to school, and from level to level.**

   A. At the elementary level, common planning time varies among the eight elementary schools, depending on the scheduling of specialists, and most often coincides with common preparation time.

      1. The team was told that most elementary teachers use their personal preparation time to collaborate with other teachers. Teachers do not have a time during the school day set aside for collaboration.

      2. When school leaders were asked about opportunities for elementary teachers to collaborate apart from professional development time, they cited monthly staff meetings, before-school, grade-level meetings, and teacher preparation time which is the same for all grade-level teams.

      3. In one elementary school, interviewees reported that teachers had two hours weekly of common planning time that was separate from personal preparation time.

   B. At the middle-school level, regularly scheduled time for teachers to collaborate varies and coincides with personal preparation time.

      1. Interviewees reported that some middle-school teachers met weekly as a team and this team time was scheduled during their personal preparation time.

      2. The team was told that middle-school teachers met as vertical content teams four times during the school year.

   C. At the high-school level, teachers in grades 10 through 12 do not have regularly scheduled common planning time for collaboration.

1. At both high schools, grade 9 teachers who are part of the freshmen academy share a daily common planning period, as well as personal preparation time. Teachers told the team that only grade 9 teachers had common planning time.

2. When the team asked district leaders about formal opportunities for high-school teachers to collaborate, they cited departmental meetings and professional development opportunities, such as summer curriculum work.

3. Teacher leaders at the school and district level expressed a need for common planning time districtwide.

Impact: When teachers do not have structured time to collaborate, apart from their personal preparation time, they miss the consistent opportunities to align their curriculum with effective instructional practices, to analyze relevant data, and to strategize about instructional improvements that accelerate student learning.

Recommendations

1. **The district should take steps to ensure that educators at all levels consistently use high-quality instructional practices, particularly real-time formative assessment and differentiated instructional strategies and practices that challenge students to meaningfully participate in lessons and think critically about lesson content.**

   A. The assistant superintendent, curriculum coordinators, directors, principals, assistant principals, department heads, and coaches should collaboratively develop and articulate the district's expectations for high-quality teaching and learning practices.

      1. High-quality instructional practices should be clarified for teachers in faculty meetings, department meetings, common planning time, and during professional development meetings.

      2. The district should build upon the training that all teachers and administrators receive through Research for Better Teaching and provide ongoing professional development so that teachers and administrators have continual support to systematically address the elements of research based pedagogy in instructional practices with attention to classroom management.

   B. The district should continue to develop instructional rounds to observe the quality of instruction across the district and to identify opportunities for improvement.

      1. Instructional rounds should include department heads, coaches, and teachers.

      2. Instructional rounds should be conducted periodically and should include structured reflection and planning focused on districtwide strengths and areas for growth.

C. The district should continue to provide ongoing professional development in differentiated instruction and should also provide ongoing professional development on classroom formative assessment practices, which are inextricably linked to effective differentiation.

D. The district should maximize the use of its classroom observation tool to systematically observe high-quality instructional practices and to provide feedback and support to teachers to ensure their full implementation.

1. District and school leaders should use data collected from the observation tool to identify the instructional needs and strengths of the staff and provide appropriate professional development offerings based on the data culled from observations.

E. District and school leaders should identify teachers whose instructional practice could serve as an exemplar for other teachers. These exemplar educators could open their classrooms for peer observations and could provide professional development offerings to teachers.

Benefits from implementing this recommendation may include a shared understanding of high-quality, research-based teaching and learning practices at all levels so that high expectations aligned to learning objectives will be consistently present districtwide. Students will have the opportunity to assume responsibility for their learning in tasks that require critical thinking. Teachers will use frequent formative assessments to consistently create learning environments that are appropriately differentiated to effectively meet the needs of all learners.

Recommended resources:

- ESE's *Learning Walkthrough Implementation Guide* (http://www.mass.gov/edu/government/departments-and-boards/ese/programs/accountability/tools-and-resources/district-analysis-review-and-assistance/learning-walkthrough-implementation-guide.html) 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. (The link above includes a presentation to introduce Learning Walkthroughs.)

- Appendix 4, *Characteristics of Standards-Based Teaching and Learning: Continuum of Practice* (http://www.mass.gov/edu/docs/ese/accountability/dart/walkthrough/continuum-practice.pdf) is a framework that provides a common language or reference point for looking at teaching and learning.

- ESE's *Calibration Video Library* (http://www.doe.mass.edu/edeval/resources/calibration/) is a collection of professionally created videos of classroom instruction produced by the School Improvement Network. These videos depict a range of practice (this is NOT a collection of exemplars) to support within-district calibration activities that promote a shared understanding of instructional quality and rigor.

2. **The district should develop an appropriate and effective plan to provide teachers at all levels with regular, structured opportunities for collaboration during the school day.**

   A. The district should develop a coherent districtwide plan to address common planning time for teachers at all levels that is separate from regularly scheduled teacher preparation time.

      1. The district might begin this process by researching common planning time practices and schedules used successfully in comparable districts to use as examples for establishing structured time for teachers to meet at all levels districtwide.

Benefits: Regular, structured common planning time can provide teachers with increased opportunities to regularly collaborate on student learning, instructional expectations, curriculum, assessment practices, and continuous student improvement.

Recommended resource:

- *Time for Teachers: Leveraging Time to Strengthen Instruction & Empower Teachers* (http://www.timeandlearning.org/sites/default/files/resources/timeforteachers.pdf) describes the systems and practices implemented at 17 schools to provide students with more time for learning and teachers with more time to collaborate, reflect, and plan.

Assessment

Contextual Background

The district has in place a balanced system of formative, summative, and benchmark assessments at all levels. Teachers, coordinators, and coaches at the elementary, middle, and high schools use multiple ELA, math, and science formative and summative assessments to measure academic progress, to inform curriculum and instruction, and to determine appropriate interventions for struggling students.

Although the structure of data teams varies across schools, teachers, academic coordinators, and coaches meet regularly to review assessment data and to plan how to use data to inform instruction and develop interventions for struggling students. Because common planning time is not an established practice across the district, staff review and discuss data during grade-level, common-prep, professional development, and faculty meetings. Academic coordinators, coaches, and teachers also review assessment results. The district has developed an assessment calendar and protocols for teachers to use when reviewing data. The district uses early Warning Indicator System (EWIS) data to track students at risk of missing key academic milestones and analyzes data to evaluate and improve programs. For example, a review of data led to changes in the grade 9 science curriculum.

The use of assessment data in the district is enhanced by the accountability and measurement department. The accountability and measurement department staff of five, including a director and assistant director, manage assessment and student information data. Department staff also help central office and school personnel prepare reports using student data, including data related to assessments, behavior, and attendance. The department also prepares reports for ESE. Department staff use the Aspen and TestWiz data management systems to store and report data.   TestWiz and Aspen are not linked and data from other commercial assessment data bases such as Star Math and Everyday Math are not linked to either data system.[1]

Strength Finding

1. **The district has a balanced system of assessments that district leaders and school staff use to inform curriculum and instruction and to provide interventions to struggling students. The district has established a department to manage student information and assessment data.**

   A. Interviews and a review of the district's assessment inventory indicated that the district has implemented a balanced system of diagnostic, formative, and summative commercial and locally developed assessments at all schools.

      1. At the elementary level, the Dynamic Indicators of Basic Early Literacy Skills is administered in kindergarten two times a year and in grade 1 once a year. The Fountas and Pinnell ELA benchmark assessment system is administered in grades 1–3 three times a year and in kindergarten once or twice a year. The Qualitative Reading Inventory is administered in grades 4–5 at least twice annually. Other ELA assessments such as the Words their Way

spelling inventory and silent reading and narrative writing assessments are administered at various elementary grades multiple times a year. In math, Everyday Math pre-and post-assessments are administered in grades 1–5 multiple time per year and other locally developed pre-and post-assessments are administered in kindergarten through grade 5 once or twice a year. In school year 2015–2016, the PARCC assessment was administered to grades 3–8.

2. At the secondary level, the Scholastic Reading Inventory is administered in grades 6–9 three times a year and the Star Math assessment is administered in grades 6–8 two times a year. Mid-year and final common exams are administered in ELA, math, and science in grades 9–12; a writing-to-text assessment is administered in grades 7–11; and a narrative writing assessment is given in grades 9–12 two times a year. Common assessments are administered two times a year in science and an experimental design common science assessment is administered in grades 7–12 two times a year.

3. At the high school, numerous students take AP tests and all students take the PSAT and SAT tests. At the high school, most seniors take the SAT on a regular school day referred to as "senior SAT day." Progress in vocational programs is measured using a competency tracking report aligned with the six strands in the career clusters.

4. Interviewees told the team that students with disabilities were assessed individually and staff compared the results of various assessments to determine further support.

B. K–12 coordinators, coaches, principals, and teachers collaborate regularly to review data and to plan and modify curriculum and instruction.

1. A review of information provided by district and school administrators showed that schools have data/grade/department/teams that meet regularly to review student assessment data and to adjust instruction.

   a. The structure of data meetings is not standardized across schools. Interviewees told the team that teachers, sometimes with curriculum coordinators, coaches, principals, or specialist teachers, review student assessment results in department meetings, grade-level team meetings, faculty meetings, grade-level meetings (before or after school), and during common prep time. Interviewees told the team that schools had a variety of ways of looking at and using data, depending on the level of new staff and their comfort with using data.

   b. Interviewees stated that ELA and math coordinators worked with coaches on data at the elementary schools. At the middle and high schools, coordinators work directly with teachers on data at monthly meetings. Data is reviewed with new teachers as part of the new teacher literacy academy.

   c. Coordinators told the team that they met with principals every other week to discuss data and data was reviewed during summer retreats. Principals stated that they

      reviewed assessment data and compared their analysis to what coordinators were seeing to identify gaps in curriculum and instruction.

C. District leaders use data strategically to evaluate programs.

1. Interviewees stated that the district used the Reading Recovery teachers to support grade 1 students, noting that Reading Recovery data validated the need for and success of the program. They characterized Reading Recovery as a "powerful program" and said that because of the program students made consistent gains and showed more interest in reading.

2. After a review of science data, the district replaced the grade 9 integrated science course with a biology course that previously was taught in grade 10.

3. Child study teams use EWIS data to determine whether students are on track to meet academic goals.

D. The district's accountability and measurement department supports academic and administrative staff with the collection, analysis, and dissemination of student data.

1. The accountability and measurement department is composed of a director, an assistant director, three data processing education staff members, and one special education staff member.

   a. The director has responsibility for managing the Aspen student information system districtwide and reports to the assistant superintendent of human resources. The director's responsibilities include: performing statistical analysis of test results; preparing and formatting reports for academic and administrative staff; and using TestWiz and other software programs to analyze student achievement data.

   b. Interviewees told the team that the first focus of the accountability and measurement department was to submit the required student data reports to ESE and the second was to ensure that assessment data was uploaded into the TestWiz assessment management system. The department also helps with data extraction and report formatting and provides professional development to staff on how to use data and run reports.

E. The district has data management systems to store and manage student data.

1. The accountability and measurement department manages data in the Aspen student information system, which is a central platform for managing student data. The district's website states that data such as "demographic information for students and staff, student contact information, grades, attendance, and other academic data and resources" are uploaded to Aspen.

2. The department also manages the TestWiz assessment management system, which stores data from numerous assessments administered by teachers, such as common assessments.

Teachers can enter data into TestWiz using a drop-down menu, enter data from bubble sheets, or scan answer sheets. Data dashboards can be developed for individual students.

F. The district has developed data review protocols and assessment calendars with dates for all assessments.

Impact: The balanced system of assessments used by district and school leaders and teachers to identify student strengths and challenges, to identify and implement appropriate interventions for struggling students, to make necessary adjustments to curriculum and instruction, and to evaluate programs and courses likely contributes to improved instruction and programming and strengthens student achievement.

Human Resources and Professional Development

Contextual Background

The district has developed a comprehensive and coordinated professional development (PD) program. It seeks to promote adult learning through ongoing and differentiated programming, effective communication, professional collaboration, and a broad range of structured and coordinated opportunities for educators to learn and grow. Interviewees reported that a number of monthly grade-level, departmental, and faculty meetings are allocated for particular PD work. They said that regularly scheduled common planning time (CPT) is provided in some grade levels and schools and indicated that extending CPT equitably across the district would do much to promote productive faculty collaboration.

The state's Educator Evaluation Framework is designed to provide teachers and principals with the kind of evidence-based, growth-oriented, and continuous feedback necessary to significantly improve pedagogical practice and to expand professional competencies.   The review team believes that the district should focus on improving the consistency and quality of supervisory practices and evaluative procedures and documents and should identify common assessments to measure student learning, growth, and achievement and to inform judgments about educator impact.

Strength Finding

1. **The district has developed a comprehensive professional development program that supports teachers and paraprofessionals at all stages of their careers and is informed by district and school priorities, staff interests and needs, and student achievement data.**

    A. Interviews and a document review indicated that the district's professional development (PD) program was well developed, carefully planned, and adequately supported.

        1. The assistant superintendent for administration and instruction serves as the de facto PD director. School and district leaders said that he regularly met and collaborated with key stakeholder groups, including school principals, K–12 academic coordinators, and the teacher advisory council to plan and coordinate PD programs and services across the district.

            a. Interviewees reported that all PD programs and opportunities were carefully aligned with the goals and objectives articulated in the district's strategic plan. They further indicated that goals in School Improvement Plans and individual teacher professional goals were aligned with goals in the district's strategic plan.

                i.   Examples of the close and deliberate alignment of PD programming at grade, department, school, and district levels, with the four strategic goals in the strategic plan include programs dealing with at-risk students, students' social-emotional needs, special education/co-teaching strategies, newly designed reading and writing units, and instructional technologies.

2. The district compiles and publishes on its PD website (Smart PD) a comprehensive "In Service Schedule" which provides staff with information about all PD programming scheduled throughout the school year. The schedule includes detailed information, including: dates; target audience; program title and description; time, location, and presenter; and the number of PDPs earned.

3. Interviewees stated that decisions about PD programs were increasingly informed by student assessment data.[10]

4. Reviewers were told that systematic efforts were made to compile data from staff for planning and evaluating PD programming. The district distributes a comprehensive online PD needs assessment each spring to solicit staff input for PD offerings. The interests and needs of teachers, support staff, paraprofessionals, and specialists are collected and analyzed as part of the district's coordinated planning process. The district uses online teacher feedback surveys to assess the effectiveness of all PD programs. Teachers must complete these evaluations to receive their PDPs.

5. The district has provided a substantial amount of PD time in its annual calendar and created a wide variety of additional opportunities for teachers to learn and grow individually and collaboratively. The district calendar provides eight early release days and one full day of PD. Programming is appropriately differentiated and balanced to provide districtwide, school-level, and individual teacher options during designated PD time.

   a. PD opportunities are provided in a variety of additional settings and formats. These include: in-district credit and non-credit courses available throughout the year; after-school, summer, and on-line classes; professional conferences; study groups; and in-service workshops with academic coordinators.

   b. The district reimburses faculty and paraprofessionals for approved college courses.

B. The district's PD offerings include a mentoring and induction program; it is aligned with ESE's "Guidelines for Induction and Mentoring" (revised April 2015).

   1. The district's mentoring and induction program is directed by a joint administrator teacher steering committee. It is a three-year program designed to enhance the professional development and retention of new teachers, to promote reflective practice and collegiality, to increase awareness of diversity in the schools, and to establish norms for continual professional learning.

      a. Interviewees reported that all new staff were assigned trained mentors and received formal orientation, coaching, and a broad range of structured and continuous supports

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[10] Sources of student assessment data included: Fountas & Pinnell, DIBLES, MCAS, "Words Their Way" and QRI; in the elementary grades; SRI, "Writing to Text" assessments, Star Math, and the annual state assessments at the middle schools; and common departmental mid-term and final examinations, PSAT/SAT, MCAS/PARCC, and AP data, and a range of locally developed formative and summative common assessments, at the high schools.

that systematically focus on well-defined and relevant topics, including instructional practices, classroom management, home-school partnerships, and district policies and priorities. During year two of the program, all mentees must participate in the Research for Better Teaching (RBT) course "The Skillful Teacher," which the district provides at no cost.

2. In separate interviews, administrators and teachers described the Mentoring and Induction Program in highly positive terms. One teacher, who has served as a mentor, spoke of its value to new staff as well as it being an opportunity for experienced teachers to assume greater responsibility for instructional leadership.

3. Interviewees reported that new administrators were also assigned a mentor, a principal or a coordinator, and that the district provided a structured, well-defined full-year support program which includes training in the RBT course "Observing and Analyzing Teaching."

Impact: The district has developed a comprehensive and coordinated PD program with the ability to support all educators, to advance district priorities, and to focus on student achievement. If sustained, this can likely create a culture of continuous professional growth and an increased recognition of shared responsibility for student learning. Ultimately, this can result in significant and lasting improvements in classroom practices, professional competencies, the curriculum, and enriched learning opportunities and increased academic achievement for all students.

Challenges and Areas for Growth

2. **The district has not achieved consistency in implementing its educator evaluation system. The district has not taken action on the more recent components of the state Educator Evaluation Framework.**

   A. Although the district has endeavored to meet the requirements and support the full implementation of the state's Educator Evaluation Framework, overall implementation practices and procedures vary widely in consistency and quality as do the formal evaluations of teachers and administrators.

      1. The team reviewed the evaluation folders of 31 teachers randomly selected across the district.

         a. Reviewers found that although supporting documents (e.g., self-assessments, goal setting, educator plans, etc.) were generally timely and complete, the evaluations themselves were not instructive,[11] and provided teachers little feedback for improved

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[11] An informative evaluation is factual and cites instructional details such as methodology, pedagogy, Standards and Indicators of Effective Teaching Practice or instruction of subject-based knowledge that is aligned with the state curriculum frameworks. It does not commit to improvement strategies. An instructive evaluation includes comments intended to improve instruction.

      classroom practice that was specific, measurable, or actionable. Nor did they generally contain clear, concrete recommendations with the ability to significantly improve instruction or contribute to meaningful professional growth.

    b.   Over one third of the teachers whose folders were reviewed had not received a formative assessment/evaluation or a summative evaluation during the two school years before this review, as required by state regulations and the Plymouth teachers' collective bargaining agreement.

2.   The team's review of the evaluative folders of all the district's principals indicated---and principals acknowledged---that principals had not received formative assessments/evaluations or summative evaluations during the two years before this review.

3.   In the district's self-assessment submitted in advance of the onsite, the district rated district and school leadership as "not at all well" described by the indicator "District and school leaders are evaluated annually using a process consistent with state law and regulations about educator evaluation."

B. As of the 2015–2016 school year, the educator evaluation regulations (603 CMR 35.07) require all Massachusetts districts to collect and use student feedback as evidence in the teacher evaluation process. Similarly, staff feedback is to be collected and used as evidence in administrators' evaluations. Feedback may also be used to inform an educator's self-assessment, goal setting, and as evidence to demonstrate changes in practice over time. The district is currently out of compliance with this regulatory requirement.

1.   School and district leaders told the review team that the district has not taken action to implement this component of the state Educator Evaluation Framework.

C. The educator evaluation regulations also require the identification of common assessments to assess student learning, growth, or achievement and to inform judgments about educator impact. These assessments are intended to provide reliable feedback about student learning and educator efficacy across all grade levels and content areas. They are also to serve as a component of an educator's summative performance rating. [12] The district is also out of compliance with this regulatory requirement.

1.   Interviewees indicated that the district did not plan to include evidence of student learning as a component of educators' evaluations.

Impact: The state designed the Educator Evaluation Framework to provide teachers and administrators with the evidence-based, growth-oriented feedback and continuous support necessary to significantly

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[12] On Tuesday, February 28, 2017, after collecting public comment since November 2016, the Board of Elementary and Secondary Education voted 9-1 to amend the educator evaluation regulations. The most significant change in the regulations is the elimination of a separate student impact rating. Under the amended regulations, evaluators do not have to make a separate judgment about an educator's impact on student learning. Instead, student learning is embedded as an indicator within one of the Massachusetts Educator Evaluation Framework's four standards.

enhance pedagogical practice and to expand professional competencies. Without consistent supervisory practices, evaluative procedures, and documentation, the district is missing the opportunity to help teachers achieve their full potential, which ultimately limits students' learning and achievement.

Recommendation

1. **The district should take prompt steps to improve the consistency and quality of supervisory practices and evaluative procedures and products, as well as the development of appropriate systems for the collection and use of multiple sources of evidence to inform the educator evaluation process.**

    A. The district should develop systems and procedures, consistent with state regulations and the requirements of the bargaining agreement, to ensure that all teachers and administrators receive regular evaluations, and that those evaluations are uniformly high-quality documents that provide meaningful feedback and contribute directly to continuous professional growth.

        1**.** Effective systems and procedures should be established at both the school and district levels to monitor the implementation of all components of the state's Educator Evaluation Framework.

        2. Evaluators and supervisors should be provided with formal training, coaching, and other appropriate support to improve their overall evaluative competencies. Attention should be given to calibration activities to enhance quality, accuracy, and consistency among all evaluators in their observations, analyses, ratings, and feedback.

        3. All formative and summative evaluations should be reviewed to ensure that they are high quality and that they provide instructive feedback and recommendations that are specific, actionable, and promote improvement and professional growth.

        4. The superintendent should provide regular and specific feedback to principals, both verbal and written.

    B. The district should implement the two newest components of the state's Educator Evaluation Framework that require the collection and use of multiple sources of evidence to inform the evaluations of teachers and administrators.

        1. The district should collaboratively develop policies and procedures to collect and appropriately incorporate student and staff feedback as evidence in teachers' and administrators' evaluations.

        2. The district should develop an effective process, consistent with state guidelines, whereby the results of common student assessments and other statewide growth measures are factored as a component of educators' evaluation rating.

Benefits: The state's Educator Evaluation Framework is designed to provide teachers and administrators with evidence-based, growth-oriented feedback and continuous, individualized support. By improving the quality, consistency, and usefulness of supervisory practices and evaluative procedures and products, the district can enhance educators' practice and ultimately improve students' learning experiences and outcomes. The adoption of the new components of the state's Educator Evaluation Framework that require the collection and use of multiple measures of evidence can significantly improve the district's capacity to provide educators with a comprehensive and accurate description of their overall effectiveness. This will enable teachers and administrators to reflect more objectively on their professional efficacy and thereby identify areas of strength and opportunities for improvement.

Recommended resources:

- Educator Evaluation Implementation Surveys for Teachers (http://www.doe.mass.edu/edeval/resources/implementation/TeachersSurvey.pdf) and Administrators (http://www.doe.mass.edu/edeval/resources/implementation/AdministratorsSurvey.pdf) are designed to provide schools and districts with information about the status of their educator evaluation implementation. Information from these surveys can be used to target district resources and supports where most needed to strengthen implementation.

- ESE's *Online Calibration Training Tool* (http://www.doe.mass.edu/edeval/resources/calibration/tool/) uses videos of classroom instruction from ESE's Calibration Video Library to simulate brief, unannounced observations. Groups of educators, such as a district leadership team, watch a video together and then individually assess the educator's practice related to specific elements from the Model Classroom Teacher Rubric and provide the educator with written feedback. Through real-time data displays, the group members can then see how their conclusions compare to each other, as well educators throughout the state.

Student Support

Contextual Background

The district has allocated human and financial resources to support programs. The district has trained teachers in various intervention strategies at the elementary level including Reading Recovery, Wilson Reading, and the Fountas and Pinnell Leveled Literacy Intervention program. Five of the eight elementary schools are Title I schools. At the middle school, subject area coaches provide some interventions. At the high school, the "K block" is a 25-minute block when students can receive extra help or make up work. At all levels, teachers provide after-school support to students.

Students are identified for interventions through the analysis of data and by child study teams. Team structure varies from level to level and from school to school, but all teams analyze data and determine appropriate interventions for students. The special education department is moving toward an inclusion model, but many special education services in the elementary and middle schools are provided using a pull-out model.

A full-time attendance officer works closely with teachers and administrators and liaises with the courts and the department of children and families. The district's discipline philosophy is to keep students in school as much as possible to receive academic and social-emotional support. To this end the district has developed in-school suspension programs. The district's 2016 in-school suspension rates were more than twice the 2016 state rate for all students, high needs students, students from economically disadvantaged families, English language learners, and students with disabilities. The district is participating in a professional learning network called "Rethinking Discipline" facilitated by ESE.

The district has made social-emotional support of its students a priority in its strategic plan. The elementary schools have various social-emotional curricula under the umbrella of Positive Behavioral Interventions and Supports (PBIS). The district has hired adjustment counselors and has made a commitment to hire a family engagement liaison to increase positive communication with families. The district has partnerships with many community organizations, including the YMCA, Beth Israel Hospital, and South Bay Community Services, which provides counseling to students during the school day.

The district has a comprehensive safety plan which also includes evacuation in case of a nuclear incident at the Entergy nuclear power plant. The district has four school resource officers and has a strong relationship with the Plymouth Police Department.

The community of Plymouth, along with many communities in Massachusetts, has been affected by the opioid epidemic. There have been a significant number of overdose deaths among the parents and relatives of students. The district is working with outside agencies, including Beth Israel Hospital, to clarify its role in a community effort to cope with this public health issue.

Strength Findings

1. **The district has allocated personnel and programmatic resources to provide academic support for struggling students.**

    A. The district has created the position of director of student support. The development of this position emphasizes the importance that the district places on providing support to general education students.

    B. The special education director supervises all special education services and has taken over the duties of the Title I director. The elimination of the Title I position has enabled the district to designate more funds for direct student services.

        1. The district views special education as a student support system and not separate from general education supports. District officials stated that they wanted to "blur the lines between special education and general education."

        2. The model for the delivery of special education is primarily pull-out at the elementary and middle-school levels. School officials stated that over 50 percent of services followed this pattern but that it was their desire to move to a more inclusive method of service delivery. The district has introduced the co-teaching model, which it plans to expand. The high schools follow an inclusive model with limited pull-out.

    C. Two literacy coaches and two math coaches serve the eight elementary schools. The middle schools each have one literacy coach and one math coach. They provide coaching, planning help, and data analysis to teachers and have a role in direct services to students. The literacy coaches also have a homepage with links to curriculum resources, pacing guides, and report card benchmarks to support teachers with planning.[13]

        1. School officials indicated that elementary coaches spend approximately 70 percent of their time working with teachers and 30 percent of their time providing direct services to students.
        2. At the middle school, the literacy coaches support teachers by providing lesson plan and data analysis as well as classroom support. The mathematics coaches work with teachers and provide direct services to students.

    E. The district has hired consulting teachers of literacy in the elementary schools.

        1. There are two consulting teachers of literacy in each elementary school. They are certified reading teachers and work with teachers and students. Several teachers stated that they viewed the consulting teachers as their instructional leaders in reading.

    F. More than 250 paraprofessionals support teachers in the classroom. The paraprofessionals work in both special education and general education settings. Previously the paraprofessional

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[13] www.ppsliteracycoachconnect.com

position had been part-time, but several years ago the district made most of the positions full time to reduce staff turnover.

G. The district has programs in place to serve the specific need of various groups of students in need of academic support. These include Title I, Wilson Reading, Reading Recovery, services to English language learners, and a freshman academy.

1. The Title I program provides academic support in five of the eight elementary schools. The middle school does not have a Title I program although there was one in the past.

   a. The Title I program is staffed by certified, retired teachers who work 19.5 hours a week at an hourly rate and do not collect benefits. This stretches grant dollars further and does not add positions to the seniority list.

2. The elementary schools have teachers trained in Reading Recovery and Wilson Reading to provide additional support to students who are lagging benchmarks in reading.

   a. Seventeen teachers have been trained in Reading Recovery. The program is delivered to grade 1 students over a period of 12 to 18 weeks. The trained teacher works with the student for 30 minutes a day, one on one, every day for the duration of the program.

   b. Teachers trained in Wilson Reading use the program with students with disabilities and general education students. The program is designed for students who require intensive remediation in phonics.

3. District officials indicated that the population of students who are learning English has increased over the last few years and has required the district to review ELL services and add resources.

   a. The district has designated three elementary schools, one middle school, and one high school as ELL schools. District officials stated that the number of ESL (English as a second language) teachers had been increased from the original three teachers to the current five teachers. All ESL teachers are certified and all classroom teachers are certified in Sheltered English Immersion.

   b. The district has added a translator to the staff of the Hedge Elementary School which has the largest number of English language learners enrolled. This person aids in the translation of documents and is available for parent meetings as well as taking part in community outreach.

4. The high school's freshman academy is designed to ease the transition of students from middle school to high school. The freshman class is divided into "teams" of approximately 100 students. Each team has an interdisciplinary group of teachers whom the students see all year. The academy is based on the concept of small learning communities. In addition students have a "K block" daily. During this 25-minute block they can meet with teachers,

visit the library or math lab, get caught up with assignments, and on scheduled days take part in teacher-student advisories.

Impact: The district's investment in staffing and programs to support students and teachers may helps meet students' needs and increase student achievement.

2. **The district has in place programs and practices to support students' social-emotional needs.**

   A. Interviews and a document review indicated that the district has made social-emotional support the first goal in its strategic plan and has hired staff and introduced programs at all levels.

      1. District officials stated that the district has added adjustment counselors in three elementary schools. The larger elementary schools also have psychologists. In addition, the two middle schools share three adjustment counselors and each school has a psychologist. Each high school has a psychologist and an adjustment counselor.

      2. Teachers have been trained in Positive Behavioral Interventions and Supports (PBIS) and each elementary school has adopted a social-emotional curriculum. Curricula vary from school to school. For example, Cold Spring Elementary is using Second Step and Steps to Respect; Hedge Elementary is using Responsive Classroom; and Indian Brook Elementary has a schoolwide social thinking program.

      3. The district has hired four board certified behavior analysts (BCBAs). These staff members assist teachers and administrators by conducting functional behavioral analyses, conferring with teachers and administrators, and meeting with students. These are districtwide positions.

      4. In keeping with its emphasis on keeping students in school as much as possible to receive academic and social-emotional support, the district has introduced in-school suspension at the high schools.

      5. The district has an alternative school which operates outside of the school day. It currently has 75 students and a waiting list. Students can attain a Plymouth High School diploma by completing this program.

Impact: Social-emotional issues can be a barrier to learning for students. By acknowledging the prevalence of social-emotional challenges in the student body and by investing in programs to support students, the district may lessen the pressures on students that interfere with academic success.

3. **The district has a coordinated appropriately staffed system to ensure students' safety.**

   A. The district has been assigned four school resource officers in collaboration with the Plymouth Police Department.

B. The officers are based in each of the two high schools and each of the two middle schools. They have offices in the schools and are available to staff and students. The officers' responsibilities include evacuation practices and active intruder drills.

C. Two officers are funded by the Town of Plymouth and two are funded by the school district.

D. Although the officers are based in the middle and high schools, they routinely visit the elementary schools and are on-call for the elementary principals.

E. The district has internal and external cameras in all schools.

1. District officials indicated that the cameras are connected to the Plymouth Police Department which can monitor them in real time.

2. District officials indicated that school administrators had a "panic fob." This was purchased with the town as part of a grant. When activated, the fob alerts the police department of an incident and provides the location of the camera closest to the incident.

3. Team members noted that the exterior doors of all schools visited were locked during school hours. Teachers used a keypad to enter the schools. There were procedures in place to check in visitors.

F. District officials stated that for the last 20 years, the district has had a full-time attendance officer whose task was to respond to the requests of school administrators to investigate students' absence and tardiness.

1. The attendance officer works with the courts and files Child Requiring Assistance forms (CRAs) for students in need of court intervention. He has filed criminal complaints against parents when that was deemed necessary. He is the primary contact with the Department of Children and Families.

2. District officials said the attendance officer produces a detailed log with the issue being investigated, actions taken, and results, noting that administrators can access the attendance officer's log.

G. Interviews and a document review indicated that the district had comprehensive emergency plans that were implemented in the schools and were reviewed by the police and fire departments each year.

1. The plans are specific to each school and include transportation to secondary sites. District officials indicated that the school resource officers supervised drill practice in each school.

H. The district has a coordinated plan in case of a nuclear accident at the neighboring Entergy nuclear power plant. This plan includes transportation arrangements and evacuation routes and is coordinated with the Town of Plymouth and the Entergy Corporation.

1. Parents and students expressed the view that the schools in the Plymouth school district were safe places to learn.

Impact: Feeling and being safe is essential for student and staff well-being. The comprehensive and coordinated safety structure of the Plymouth Public Schools ensures that teachers are trained in emergency response techniques, that students learn in an environment where they feel safe and are safe, and that administrators know how to respond to emergencies.

Challenges and Areas for Growth

3. **The district has not developed a coordinated system of tiered instruction. Efforts are inconsistent and vary from school to school and level to level.**

   A. Interviewees stated that tiered instruction took place in the classroom. Some interviewees said that classroom teachers taught Tier 1; others said that classroom teachers taught Tier 2 and that Title I and special education were Tier 3.

   B. Teachers referred to flexible grouping, Title I, Reading Recovery, and Wilson Reading as classroom interventions, noting that the district has not developed a coordinated system of support.

   C. At the elementary level, tiered instruction varies from school to school.

      1. Title I, however, is offered in five of the eight elementary schools. The review team did not find evidence that similar support was provided in the three schools that did not have Title I.

   D. The team did not find evidence of tiered instruction at the middle school.

      1. District leaders stated that intervention was a "challenge." They said that they were evaluating ways to change the schedule to create an "intervention block" to allow time for Tier 2 intervention. District leaders noted that the district was attempting to reduce pull-out intervention services to students with disabilities through the training in and implementation of the co-teaching model.

   E. At the high school, students are enrolled in academic streams: college prep 1, college prep 2, honors, and advanced placement.

      1. District leaders stated that Tier 2 instruction was delivered in some classrooms by a co-teacher who modified content for both students with disabilities (Tier 3) and general education students (Tier 2) while the classroom teacher delivered Tier 1 instruction. Review team members observed some Tier 2 instruction being delivered during the 25-minute K block.

Impact: The absence of an effective system of tiered instruction has hampered the ability of the district to effectively address students' unique needs and to improve their achievement.

Recommendation

1. **The district should consider reallocating resources to develop an organized system of tiered support informed by student assessment results.**

    A. The district should develop a systematic approach to identifying students' needs, providing appropriate supports, and evaluating their progress.

        1. This should include identifying the interventions already in place and determining gaps in services.

        2. District personnel should be provided training and ongoing communication to ensure a shared understanding of the district's system for tiered supports.

    B. The district should take steps to ensure that all schools provide Tier 2 services.

        1. The district should provide additional intervention services to the schools that do not have Title I services. Although academic support services are present in those schools, the absence of full-time intervention teachers may affect those students who need interventions but are not currently receiving them.

        2. The district should use its rich student performance data to identify students who are lagging in the core subjects and ensure that they receive the academic support they need.

        3. The district should implement strategies to develop interventions at the middle school.

            a. This could include a change in the schedule to allow for flexible grouping in core subjects.

            b. The middle school could also include an increase in the number of classes using the co-teaching model.

            c. Academic teams at the middle school should have common planning time to review student work, analyze data, and determine appropriate interventions for students.

Benefits: The district is delivering academic support in many ways to its students. By developing a systematic approach to tiered support for students and training teachers in its implementation, the district can leverage its investment in student support services to improve student achievement.

Recommended resources:

*   The *Massachusetts Tiered System of Support (MTSS)* (www.mass.gov/ese/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. The MTSS website includes links to a self-assessment and a variety of helpful resources.

- The *Educator Effectiveness Guidebook for Inclusive Practice* (http://www.doe.mass.edu/edeval/guidebook/) includes tools for districts, schools, and educators that are aligned to the MA Educator Evaluation Framework and promote evidence-based best practices for inclusion following the principles of Universal Design for Learning, Positive Behavior Interventions and Supports, and Social and Emotional Learning.

Financial and Asset Management

Contextual Background

In recent years, the district has consistently exceeded required net school spending: by 18.8 percent in fiscal year 2014, by 24.5 percent in fiscal year 2015, and by 29.2 percent in fiscal year 2016. The town has approved increasing operating budgets for the district. The fiscal year 2017 budget is $90,102,258 and the fiscal year 2018 budget will be $94,211,170, an increase of 4.6 percent.

Town officials and residents have demonstrated a strong fiscal commitment to the schools with the construction of two high schools, repair of an exterior middle-school wall, upgrading of fire suppression and safety systems, and most recently the implementation of full-day kindergarten. In 2006, town meeting voters approved the construction of two high schools. The Massachusetts School Building Authority (MSBA) split the two projects: Plymouth North High School was completed in 2012 and Plymouth South High School is to be completed in 2017. The town and MSBA also supported Green Repair programs at Plymouth Community Intermediate School and West Elementary School.

According to ESE data, between 2012 and 2017 enrollment in the Plymouth Public Schools declined by 5.6 percent, from 7,998 to 7,552. District administrators expressed concern about the loss of students to a local charter school that has added grades over the years and now offers grades 5–12. According to ESE data, the number of Plymouth students attending the charter school has increased from 344 in 2011 to 533 in 2015. Interviewees told the team that the town was expected to experience residential growth in the coming years when two residential developments have been completed.   Town officials expressed the belief that the district might need to construct an elementary school in West Plymouth to accommodate growth in the school-age population.

Strength Findings

1. **The goals in district and school planning documents guide the development of the district's budget. The budget development process is transparent and includes input from district and town stakeholders.**

    A. The goals of the district's strategic plan and School Improvement Plans are instrumental in the development of the annual budget.

        1. The district's 2016–2020 strategic plan includes four goals. District budgets have addressed components of these goals in recent years. Examples include:

            Goal 1: Enhance student social and emotional growth, health and welfare and demonstration of civic responsibility.

a. The district has hired adjustment counselors and board certified behavior analyst s in some schools.

b. The CARE Program at the high school offers support to students with social-emotional needs.

c. Professional development includes programs about at-risk students and social-emotional issues.

Goal 2: Increase family and community engagement.

a. The district has funded a liaison for family and community engagement with Title I grant money.

Goal 3: Enhance academic achievement of all students at all levels.

a. Fifteen reading recovery specialists serve eight elementary schools.

b. A freshman academy at both high schools helps freshmen transition into high school.

c. The district added a credit-recovery program at the high school to help 10th graders receive credit after not receiving a passing grade in freshman English.

d. Additional Title I services are provided to lower performing and qualifying schools. The special education director assumed the responsibilities of the previous Title I director and the district used the savings to provide direct services to students.

e. An example of a new education initiative with large budget implications was the proposal to move to full-day kindergarten in fiscal year 2017. This initiative was financially supported by the school committee and town officials, and was approved at annual town meeting.

Goal 4: Provide strong district and school leadership.

a. The district has curriculum coordinator and coach positions at the district and school levels.

b. SIPs for several schools included budgetary impacts for supplies, materials, and personnel that were addressed in approved budgets:

   i. One middle school requested funds for software licenses. The district spent over $41,800 on these licenses over the fiscal year 2015–2017 budget years.

   ii. One high school requested $20,000 for the Mass Insight Initiative which the district procured in fiscal year 2016.

   iii. Many schools, at all levels, requested Chromebook and other classroom technology. The district purchased Chromebook for six schools and spent $274,636 on technology

hardware in fiscal year 2016 that included iPads, laptops, scanners, and projectors. An additional $169,286 was spent on instructional technology in fiscal year 2016.

B. The district's budget development process begins in August and follows a clearly outlined schedule of meetings which include district stakeholders.

1. The business services office staff begins the budget process by projecting a budget for the following year, primarily based on major district initiatives and on contractual obligations.

2. After the development of a projected budget, in early September a joint meeting takes place with district administrators, school committee members, and town officials.

   a. At this meeting, the town manager outlines the town's financial resources and the district administrators explain the estimated budget as well as any needs, requests, or special issues.

   b. After a discussion between school department and town officials, the town manager sets budget guidelines. In fiscal years 2017 and 2018, the guideline called for the school department to prepare a level-service budget.

      i. A district administrator described the budget discussions with town officials as "a good back and forth."

3. Principals, department directors, and coordinators receive the budget guidelines and timeline as well as their school or department staff lists and are responsible for review of and corrections to the budget. They also prepare and submit their requests for staff and non-staff expenses that exceed level service.

4. During three days of budget workshops involving school committee members, the town's finance committee, and district administrators, administrators explain their budgets and additional requests.

5. Once the school committee has approved the proposed budget, town's finance director, the town manager, and the board of selectmen review the budget.

6. Before annual town meeting, community members receive a spiral-bound budget book and a summary report. The budget is posted on the district's website.

Impact: By developing an annual budget that is guided by the goals of strategic and School Improvement Plans and includes all stakeholders in an open and transparent process, the district ensures that parents, staff, town officials, and community members have a clear picture of how resources are allocated to support district priorities and how they might be effectively reallocated to meet students' needs. Also, the process may help cultivate trust and generate increased support for the district's budget.

2. **District administrators and the school committee have developed positive, constructive relationships with town officials, local community groups, agencies, and businesses to leverage resources and to provide support and services to Plymouth students and families**.

   A. The superintendent and the business manager meet and communicate regularly with town officials.

      1. The superintendent speaks regularly with the town manager and participates in the town's weekly department meetings.

         a. A town official stated that the superintendent is very responsive to town officials.

         b. The superintendent told the team that the school department had an open line of communication with the town.

      2. The school business administrator meets monthly with the town's finance director to discuss budget updates and other issues.

         a. A town official described the working relationship with the school department's business office as "great." The official stated that all financial items such as payroll and accounts payable were submitted on a timely basis. The school business office and town employees have received training about the town's accounting software.

   B. School committee members have established a positive relationship with town officials.

      1. School committee members described their relationship with the town as "very good and very strong." Some members described the relationship as improved from previous years when it had been adversarial.

      2. The school committee chair meets several times a year with the town manager to discuss the budget. The chair also has informal meetings and an occasional lunch with other town department chairs to maintain a cordial relationship.

   C. The town and the school department regularly review and revise the Agreement for Indirect Cost Allocation of Municipal Expenses in Support of Education.

      1. The agreement is reviewed annually; most recently in November 2016 the town manager and the superintendent revised and signed the agreement.

   D. District administrators work closely with many community agencies to meet the social and emotional needs of its students and families.

      1. The superintendent is working with Beth Israel Hospital in Plymouth to provide training for teachers in social-emotional issues.

2. The district works with North River Collaborative, in partnership with Old Colony YMCA in Plymouth, to offer substance abuse recovery through its Independence Academy. The YMCA also offers a summer reading program targeted to Plymouth's at-risk students.

3. At the time of the review in March 2017, the district was in its third year of working with South Bay Community Services whose counselors and therapists provide behavioral health services to elementary- and middle-school students in the schools.

4. School district personnel, along with other community members, started the Plymouth Youth Development Collaborative to help students and families foster healthy living and decision making. Through a grant, the Collaborative also works on substance-abuse issues.

E. Several community groups, organizations, and businesses provide financial support to Plymouth schools through grants and the direct purchase of supplies and equipment.

1. The Plymouth Education Foundation is a non-profit organization dedicated to the support of Plymouth education. In 2017, the organization will approve grants totaling $15,000. Some of the projects approved for grants include an elementary school robotics program, a music immersion program, and an elementary school garden.

2. A district family donated books, 20 Chromebooks, and a Chromebooks cart to one elementary school in honor of a teacher who once taught there.

3. A local women's group, working with an adjustment counselor at one of the schools, has donated almost $100,000 to Plymouth students and families in need. The group makes insurance payments for families; purchases laptops, clothing, and food; and pays heating bills.

4. A local company has donated new playing fields for South Elementary School.

Impact: Cooperative and constructive relationships and partnerships with community agencies and other local groups enable the district to provide necessary services and supplies to its students and families at a lower cost than would otherwise be possible.

Appendix A: Review Team, Activities, Schedule, Site Visit

Review Team Members

The review was conducted from March 6–9, 2017, by the following team of independent ESE consultants.

1. Dr. Charles Burnett, Leadership and Governance

2. Sue Kelly, Curriculum and Instruction

3. James L. Hearns, Assessment, and *review team coordinator*

4. Frank Sambuceti, Ed.D., Human Resources and Professional Development

5. John Retchless, Student Support

6. Marge Foster, Financial and Asset Management

District Review Activities

The following activities were conducted during the review:

The team conducted interviews with the following financial personnel: school business manager and four school finance department support personnel, the Plymouth town manager, and the director of finance.

The team conducted interviews with the following members of the school committee: the chair, the vice chair, and four members.

The review team conducted interviews with the following representatives of the teachers' association: the president and two vice-presidents.

The team conducted interviews/focus groups with the following central office administrators: the superintendent, the assistant superintendent for administration and instruction, the assistant superintendent for human resources, school business administrators, 6 K–12 coordinators, the special education director, the student support services director, the director of accountability and measurement, the director of alternative programming, the supervisor of attendance, and the senior district school resource officer.

The team visited the following schools: South Elementary (K–4), Federal Furnace (K–5), Cold Spring Elementary (K–5), Hedge Elementary (K–5), Indian Brook Elementary (K–5), West Elementary (K–5), Manomet Elementary (K–5), Nathaniel Morton Elementary (K–5), Plymouth Common Intermediate (6–8), Plymouth South Middle (6–8), Plymouth North High School (9–12), and Plymouth South High School (9–12).

During school visits, the team conducted focus groups with nine elementary-school teachers, two middle-school teachers, and two high-school teachers.

The team observed 107 classes in the district: 36 at the 2 high schools, 27 at the 2 middle schools, and 44 at the 8 elementary schools.

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

o   Student and school performance data, including achievement and growth, enrollment, graduation, dropout, retention, suspension, and attendance rates.

o   Data on the district's staffing and finances.

o   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).

o   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.

o   All completed program and administrator evaluations, and a random selection of completed teacher evaluations.

Site Visit Schedule

Monday 03/06/2017	Tuesday 3/07/2017	Wednesday 03/08/2017	Thursday 03/09/2017
Orientation with district leaders and principals; interviews with district staff and principals; document reviews; interview with teachers' association; and visits to Hedge, Cold Spring, Federal Furnace, Plymouth South Middle, South Elementary, and Plymouth Common Intermediate for classroom observations.	Interviews with district staff and principals; review of personnel files; teacher focus groups; parent focus group; and visits to Nathaniel Morton, West Elementary, Plymouth North High School, Plymouth Common Intermediate, Indian Brook Elementary, and Plymouth South High School for classroom observations.	Interviews with town or city personnel; interviews with school leaders; interviews with school committee members; visits to Plymouth North High school, Plymouth South High School, Cold Spring, and West Elementary for classroom observations.	Interviews with school leaders; follow-up interviews; district review team meeting; visits to Manomet Elementary, Plymouth North High School, Plymouth South High School, and Plymouth South Middle for classroom observations; district wrap-up meeting with the superintendent.

Appendix B: Enrollment, Performance, Expenditures

Table B1a: Plymouth Public Schools
2016–2017 Student Enrollment by Race/Ethnicity

Student Group	District	Percent of Total	State	Percent of Total
African-American	147	1.9%	84,996	8.9%
Asian	89	1.2%	63,690	6.7%
Hispanic	328	4.3%	184,782	19.4%
Native American	18	0.2%	2,125	0.2%
White	6,666	88.3%	584,665	61.3%
Native Hawaiian	4	0.1%	855	0.1%
Multi-Race, Non-Hispanic	300	4.0%	32,635	3.4%
All Students	7,552	100.0%	953,748	100.0%

Note: As of October 1, 2016

Table B1b Plymouth Public Schools
2016–2017 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	1,472	53.0%	19.3%	167,530	38.4%	17.4%
Econ. Disad.	1,793	64.5%	23.7%	288,465	66.1%	30.2%
ELLs and Former ELLs	74	2.7%	1.0%	90,204	20.7%	9.5%
All high needs students	2,778	100.0%	36.4%	436,416	100.0%	45.2%

Notes: As of October 1, 2016. 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 2,049; total state enrollment including students in out-of-district placement is 964,514.

Table B2a: Plymouth Public Schools
English Language Arts Performance, 2013–2016

Grade and Measure		Number Included (2016)	MCAS Year			PARCC		Gains and Declines
			2013	2014		2015	2016	2-Year Trend
3	CPI	610	85.3	82.5	CPI	80.2	83.3	3.1
	P+	610	60%	57%	Lv 4&5	48%	54%	6
4	CPI	649	81.8	83.7	CPI	78.8	82.2	3.4
	P+	649	56%	62%	Lv 4&5	60%	63%	3
	SGP	620	50.0	55.0	SGP	53.0	60.0	7.0
5	CPI	550	85.3	86.6	CPI	84.5	85.1	0.6
	P+	550	64%	67%	Lv 4&5	56%	56%	0
	SGP	521	45.5	56.0	SGP	40.0	48.0	8.0
6	CPI	546	88.0	86.9	CPI	85.3	85.0	-0.3
	P+	546	72%	68%	Lv 4&5	54%	58%	4
	SGP	521	45.0	35.5	SGP	37.0	45.0	8.0
7	CPI	570	90	91.5	CPI	86.3	88.0	1.7
	P+	570	75%	78%	Lv 4&5	53%	63%	10
	SGP	533	51.0	52.0	SGP	39.0	41.0	2.0
8	CPI	571	91.9	92.5	CPI	91.1	92.3	1.2
	P+	571	82%	82%	Lv 4&5	59%	59%	0
	SGP	536	44.0	44.0	SGP	32.0	45.0	13.0

Table B2b: Plymouth Public Schools
English Language Arts Performance, 2013–2016[14]

Grade and Measure		Number Included (2016)	MCAS/Accountability Year				State (2016)	Gains and Declines	
			2013	2014	2015	2016		4-Year Trend	2-Year Trend
10	CPI	578	98.3	96.8	97.8	97.1	96.7	-1.2	-0.7
	P+	578	95%	91%	94%	92%	91%	-3%	-2%
	SGP	528	55.0	43.0	36.0	32.0	50.0	-23.0	-4.0
All	CPI	4,140	88.5	88.7	85.9	87.3	87.2	-1.2	1.4
	P+	--	72%	72%	--	--	--		
	SGP	3,266	48.0	47.0	39.0	45.0	50.0	-3.0	6.0

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[14] In the All category 2015 and 2016 CPI and SGP are based on MCAS and PARCC test scores.

Table B2c: Plymouth Public Schools
Mathematics Performance, 2013–2016

Grade and Measure		Number Included (2016)	MCAS Year			PARCC		Gains and Declines
			2013	2014		2015	2016	2-Year Trend
3	CPI	606	86.9	88	CPI	86.3	87.5	1.2
	P+	606	70%	73%	Lv 4&5	55%	63%	8
4	CPI	651	79.5	80	CPI	77.2	82.0	4.8
	P+	651	49%	51%	Lv 4&5	48%	59%	11
	SGP	616	44.0	47.0	SGP	40.0	47.0	7.0
5	CPI	550	78.7	79.6	CPI	80.7	80.7	0.0
	P+	550	56%	58%	Lv 4&5	48%	47%	0
	SGP	515	44.0	50.0	SGP	52.0	47.0	-5.0
6	CPI	545	81.3	76.7	CPI	77.2	79.8	2.6
	P+	545	60%	52%	Lv 4&5	41%	50%	9
	SGP	516	35.0	33.0	SGP	37.0	44.0	7.0
7	CPI	569	74.3	72.9	CPI	71.5	71.7	0.2
	P+	569	49%	50%	Lv 4&5	42%	40%	-2
	SGP	531	42.0	50.0	SGP	51.0	44.0	-7.0
8	CPI	377	79.4	80.5	CPI	68.2	72.0	3.8
	P+	377	59%	60%	Lv 4&5	32%	37%	5
	SGP	347	68.0	68.0	SGP	50.0	63.0	13.0

Table B2d: Plymouth Public Schools
Mathematics Performance, 2013–2016[15]

Grade and Measure		Number Included (2016)	MCAS/Accountability Year				State (2016)	Gains and Declines	
			2013	2014	2015	2016		4-Year Trend	2-Year Trend
10	CPI	573	92.3	91.8	90.3	90.4	89.7	-1.9	0.1
	P+	573	83%	81%	79%	78%	78%	-5	-1
	SGP	523	48.0	41.0	40.0	27.0	50.0	-21.0	-13.0
All	CPI	4,127	81.8	81.5	80.1	81.6	81.5	-0.2	1.5
	P+	--	61%	61%	--	--	--	--	--
	SGP	3,239	46.0	48.0	44.0	45.0	50.0	-1.0	1.0

[15] In the All category 2015 and 2016 CPI and SGP are based on MCAS and PARCC test scores.

Table B2e: Plymouth Public Schools
Science and Technology/Engineering Performance, 2013–2016

Grade and Measure		Number Included (2016)	Spring MCAS Year					Gains and Declines	
			2013	2014	2015	2016	State (2016)	4-Year Trend	2-Year Trend
5	CPI	556	79.0	82.4	81.5	75.0	76.4	-4.0	-6.5
	P+	556	49%	56%	54%	44%	47%	-5	-10
8	CPI	582	77.8	76.2	76.1	75.8	71.3	-2.0	-0.3
	P+	582	48%	43%	44%	45%	41%	-3	1
10	CPI	550	92.1	90.7	90.8	92.4	88.9	0.3	1.6
	P+	550	79%	78%	79%	79%	73%	0	0
All	CPI	1,688	82.9	83.1	82.6	81.0	78.7	-1.9	-1.6
	P+	1,688	58%	59%	58%	56%	54%	-2	-2

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

Table B3a: Plymouth Public Schools
English Language Arts (All Grades)
Performance for Selected Subgroups Compared to State, 2013–2016[16]

Group and Measure			Number Included (2016)	Accountability					2-Year Trend	4-Year Trend
				MCAS			PARCC			
				2013	2014		2015	2016		
High Needs	District	CPI	1,570	79.4	79.6	CPI	74.2	75.3	1.1	-4.1
		P+	--	53%	54%	Lv 4&5	--	--	--	--
		SGP	1,169	46.0	47.0	SGP	36.0	43.0	7.0	-3.0
	State	CPI	222,707	76.8	77.1	CPI	76.3	77.1	0.8	0.3
		P+	--	48%	50%	Lv 4&5	--	--	--	--
		SGP	165,487	47.0	47.0	SGP	47.0	47.0	0.0	0.0
Econ. Disad.	District	CPI	1,036	--	--	CPI	78.7	78.8	0.1	--
		P+	--	--	--	Lv 4&5	--	--	--	--
		SGP	754	--	--	SGP	37.0	43.0	6.0	--
	State	CPI	152,877	--	--	CPI	77.6	78.2	0.6	--
		P+	--	--	--	Lv 4&5	--	--	--	--
		SGP	114,361	--	--	SGP	46.0	46.0	0.0	--
SWD	District	CPI	852	68.0	68.8	CPI	63.0	64.8	1.8	-3.2
		P+	--	30%	32%	Lv 4&5	--	--	--	--
		SGP	636	44.0	44.0	SGP	33.0	40.0	7.0	-4.0
	State	CPI	91,177	66.8	66.6	CPI	67.4	68.2	0.8	1.4
		P+	--	30%	31%	Lv 4&5	--	--	--	--
		SGP	66,633	43.0	43.0	SGP	43.0	43.0	0.0	0.0
ELL or Former ELLs	District	CPI	57	68.5	61.9	CPI	57.6	62.3	4.7	-6.2
		P+	--	39%	30%	Lv 4&5	--	--	--	--
		SGP	29	--	--	SGP	--	--	--	--
	State	CPI	52,960	67.4	67.8	CPI	68.9	70.7	1.8	3.3
		P+	--	35%	36%	Lv 4&5	--	--	--	--
		SGP	35,109	53.0	54.0	SGP	53.0	54.0	1.0	1.0
All students	District	CPI	4,140	88.5	88.7	CPI	85.9	87.3	1.4	-1.2
		P+	--	72%	72%	Lv 4&5	--	--	--	--
		SGP	3,266	48.0	47.0	SGP	39.0	45.0	6.0	-3.0
	State	CPI	491,267	86.8	86.7	CPI	86.8	87.2	0.4	0.4
		P+	--	69%	69%	Lv 4&5	--	--	--	--
		SGP	388,999	51.0	50.0	SGP	50.0	50.0	0.0	-1.0

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[16] 2015 and 2016 CPI and SGP are based on MCAS and PARCC test scores.

Table B3b: Plymouth Public Schools
Mathematics (All Grades)
Performance for Selected Subgroups Compared to State, 2013–2016[17]

Group and Measure			Number Included (2016)	Accountability					2-Year Trend	4-Year Trend
				MCAS			PARCC			
				2013	2014		2015	2016		
High Needs	District	CPI	1,563	70.3	69.3	CPI	65.1	66.7	1.6	-3.6
		P+	--	41%	40%	Lv 4&5	--	--	--	--
		SGP	1,154	45.0	45.0	SGP	37.0	43.5	6.5	-1.5
	State	CPI	222,349	68.6	68.4	CPI	67.9	68.8	0.9	0.2
		P+	--	40%	40%	Lv 4&5	--	--	--	--
		SGP	165,191	46.0	47.0	SGP	46.0	46.0	0.0	0.0
Econ. Disad.	District	CPI	1,030	--	--	CPI	70.4	71.4	1.0	--
		P+	--	--	--	Lv 4&5	--	--	--	--
		SGP	741	--	--	SGP	40.0	42.0	2.0	--
	State	CPI	152,560	--	--	CPI	69.2	70.0	0.8	--
		P+	--	--	--	Lv 4&5	--	--	--	--
		SGP	114,091	--	--	SGP	46.0	45.0	-1.0	--
SWD	District	CPI	846	58.4	58.3	CPI	52.2	53.3	1.1	-5.1
		P+	--	23%	23%	Lv 4&5	--	--	--	--
		SGP	627	44.0	40.0	SGP	30.0	41.0	11.0	-3.0
	State	CPI	91,049	57.4	57.1	CPI	57.3	58.1	0.8	0.7
		P+	--	22%	22%	Lv 4&5	--	--	--	--
		SGP	66,511	42.0	43.0	SGP	43.0	44.0	1.0	2.0
ELL or Former ELLs	District	CPI	58	58.1	53.6	CPI	59.0	59.9	0.9	1.8
		P+	--	23%	26%	Lv 4&5	--	--	--	--
		SGP	30	--	--	SGP	--	--	--	--
	State	CPI	53,048	63.9	63.8	CPI	64.5	65.8	1.3	1.9
		P+	--	35%	36%	Lv 4&5	--	--	--	--
		SGP	35,290	53.0	52.0	SGP	51.0	50.0	-1.0	-3.0
All students	District	CPI	4,127	81.8	81.5	CPI	80.1	81.6	1.5	-0.2
		P+	--	61%	61%	Lv 4&5	--	--	--	--
		SGP	3,239	46.0	48.0	SGP	44.0	45.0	1.0	-1.0
	State	CPI	490,612	80.8	80.3	CPI	80.7	81.5	0.8	0.7
		P+	--	61%	60%	Lv 4&5	--	--	--	--
		SGP	388,423	51.0	50.0	SGP	50.0	50.0	0.0	-1.0

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[17] 2015 and 2016 CPI and SGP are based on MCAS and PARCC test scores.

Table B3c: Plymouth Public Schools
Science and Technology/Engineering (All Grades)
Performance for Selected Subgroups Compared to State, 2013–2016

Group and Measure			Number Included (2016)	Spring MCAS Year				Gains and Declines	
				2013	2014	2015	2016	4-Year Trend	2-Year Trend
High Needs	District	CPI	619	73.3	72.7	69.1	68.4	-4.9	-0.7
		P+	619	41%	40%	35%	34%	-7	-1
	State	CPI	89,857	66.4	67.3	66.3	65.4	-1.0	-0.9
		P+	89,857	31%	33%	32%	31%	0	-1
Econ. Disad.	District	CPI	384	--	--	71.9	71.0	--	-0.9
		P+	384	--	--	40%	40%	--	0
	State	CPI	61,476	--	--	67.1	65.8	--	-1.3
		P+	61,476	--	--	33%	29%	--	-4
Students w/ disabilities	District	CPI	361	62.7	63.6	59.0	60.8	-1.9	1.8
		P+	361	24%	25%	21%	22%	-2	1
	State	CPI	38,109	59.8	60.1	60.2	59.7	-0.1	-0.5
		P+	38,109	20%	22%	22%	21%	1	-1
English language learners or Former ELLs	District	CPI	17	--	50.0	--	60.3	--	--
		P+	17	--	18%	--	6%	--	--
	State	CPI	18,594	54.0	54.0	53.9	54.1	0.1	0.2
		P+	18,594	19%	18%	18%	19%	0	1
All students	District	CPI	1,688	82.9	83.1	82.6	81.0	-1.9	-1.6
		P+	1,688	58%	59%	58%	56%	-2	-2
	State	CPI	208,262	79.0	79.6	79.4	78.7	-0.3	-0.7
		P+	208,262	53%	55%	54%	54%	1	0

Notes: Median SGPs are not calculated for Science and Technology/ Engineering (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: Plymouth Public Schools

Annual Grade 9-12 Drop-Out Rates, 2012–2015

Group	School Year Ending				Change 2012–2015		Change 2014–2015		State (2015)
	2012	2013	2014	2015	Percentage Points	Percent Change	Percentage Points	Percent Change	
High Needs	3.0%	3.3%	2.8%	2.1%	-0.9	-30%	-0.7	-25%	3.4%
Econ. Disad.[18]	3.6%	4.0%	3.2%	2.0%	-1.6	-44%	-1.2	-38%	3.3%
Students w/ disabilities	3.5%	2.5%	3.1%	2.1%	-1.4	-40%	-1	-32%	3.5%
ELL	0.0%	11.1%	7.7%	5.9%	5.9	--	-1.8	-23%	5.7%
All students	1.6%	1.7%	1.6%	1.1%	-0.5	-31%	-0.5	-31%	1.9%

Notes: The annual drop-out 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. Drop outs 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 high school equivalency by the following October 1. Drop-out rates have been rounded; percent change is based on unrounded numbers.

Table B5: Plymouth Public Schools

Attendance Rates, 2013–2016

Group	School Year Ending				Change 2013–2016		Change 2015–2016		State (2016)
	2013	2014	2015	2016	Percentage Points	Percent Change	Percentage Points	Percent Change	
All students	94.8%	95.1%	94.8%	95.2%	0.4	0.4%	0.4	0.4%	94.9%

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.

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[18] Numbers for students from low-income families used for numbers for students from economically disadvantaged families for 2012, 2013, and 2014

Table B6 Plymouth Public Schools
Expenditures, Chapter 70 State Aid, and Net School Spending Fiscal Years 2014–2016

	FY14		FY15		FY16	
	Estimated	Actual	Estimated	Actual	Estimated	Actual
Expenditures						
From local appropriations for schools:						
By school committee	$75,224,077	$79,410,725	$80,900,750	$82,504,607	$84,166,901	$85,158,636
By municipality	$33,040,538	$37,499,205	$39,703,581	$44,449,634	$45,351,341	$54,561,574
Total from local appropriations	$108,264,615	$116,909,929	$120,604,331	$126,954,241	$129,518,242	$139,720,210
From revolving funds and grants	--	$9,911,032	--	$11,325,503	--	$11,238,871
Total expenditures	--	$126,820,961	--	$138,279,744	--	$150,958,991
Chapter 70 aid to education program						
Chapter 70 state aid*	--	$23,291,788	--	$23,670,917	--	$23,872,517
Required local contribution	--	$60,777,692	--	$61,240,645	--	$62,123,870
Required net school spending**	--	$84,069,480	--	$84,911,562	--	$85,996,387
Actual net school spending	--	$99,907,886	--	$105,690,060	--	$111,148,608
Over/under required ($)	--	$15,838,406	--	$20,778,498	--	$25,152,222
Over/under required (%)	--	18.8%	--	24.5%	--	29.2%

*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: FY14, FY15, and FY16 District End-of-Year Reports, Chapter 70 Program information on ESE website

Data retrieved 12/13/16 and 7/27/17

Table B7: Plymouth Public Schools
Expenditures Per In-District Pupil
Fiscal Years 2013–2015

Expenditure Category	2013	2014	2015
Administration	$483	$486	$532
Instructional leadership (district and school)	$937	$982	$1,060
Teachers	$4,849	$5,059	$5,289
Other teaching services	$763	$782	$859
Professional development	$245	$186	$312
Instructional materials, equipment and technology	$300	$356	$335
Guidance, counseling and testing services	$328	$371	$388
Pupil services	$1,558	$1,597	$1,633
Operations and maintenance	$987	$992	$1,018
Insurance, retirement and other fixed costs	$2,544	$2,788	$3,079
Total expenditures per in-district pupil	$12,993	$13,599	$14,504

Sources: Per-pupil expenditure reports on ESE website
Note: Any discrepancy between expenditures and total is because of rounding.

Appendix C: Instructional Inventory

Focus Area #1: Learning Objectives & Instruction		Insufficient	Minimal	Moderate	Strong	Avg Number of points
		(0)	(1)	(2)	(3)	(0 to 3)
1. The teacher demonstrates knowledge of subject matter and content.	ES	0%	9%	55%	36%	2.3
	MS	4%	7%	56%	33%	2.2
	HS	3%	31%	50%	17%	1.8
	Total #	2	17	57	31	2.1
	Total %	2%	16%	53%	29%	
2. The teacher provides and refers to clear learning objective(s) in the lesson.	ES	0%	30%	39%	32%	2.0
	MS	0%	22%	41%	37%	2.1
	HS	0%	50%	36%	14%	1.6
	Total #	0	37	41	29	1.9
	Total %	0%	35%	38%	27%	
3. The teacher implements a lesson that reflects high expectations aligned to the learning objective (s).	ES	2%	27%	57%	14%	1.8
	MS	0%	52%	37%	11%	1.6
	HS	6%	42%	42%	11%	1.6
	Total #	3	41	50	13	1.7
	Total %	3%	38%	47%	12%	
4. The teacher uses appropriate instructional strategies well matched to the learning objective(s).	ES	0%	18%	55%	27%	2.1
	MS	0%	33%	59%	7%	1.7
	HS	8%	44%	36%	11%	1.5
	Total #	3	33	53	18	1.8
	Total %	3%	31%	50%	17%	
Total Score For Focus Area #1	ES					8.2
	MS					7.7
	HS					6.5
	Total					7.5

Focus Area #2: Student Engagement & Critical Thinking		Insufficient	Minimal	Moderate	Strong	Avg Number of points
		(0)	(1)	(2)	(3)	(0 to 3)
5. Students are motivated and engaged in the lesson.	ES	0%	16%	45%	39%	2.2
	MS	0%	44%	33%	22%	1.8
	HS	3%	53%	36%	8%	1.5
	Total #	1	38	42	26	1.9
	Total %	1%	36%	39%	24%	
6. The teacher facilitates tasks that encourage students to develop and engage in critical thinking.	ES	5%	23%	50%	23%	1.9
	MS	4%	44%	33%	19%	1.7
	HS	8%	50%	31%	11%	1.4
	Total #	6	40	42	19	1.7
	Total %	6%	37%	39%	18%	
7. Students assume responsibility for their own learning whether individually, in pairs, or in groups.	ES	0%	16%	52%	32%	2.2
	MS	4%	37%	48%	11%	1.7
	HS	6%	42%	31%	22%	1.9
	Total #	3	32	47	25	
	Total %	3%	30%	44%	23%	
Total Score For Focus Area #2	ES					6.3
	MS					5.1
	HS					4.6
	Total					5.4

Focus Area #3: Differentiated Instruction & Classroom Culture		Insufficient	Minimal	Moderate	Strong	Avg Number of points
		(0)	(1)	(2)	(3)	(0 to 3)
8. The teacher appropriately differentiates instruction so the lesson content is accessible for all learners.	ES	18%	32%	25%	25%	1.6
	MS	37%	48%	11%	4%	0.8
	HS	33%	36%	28%	3%	1.0
	Total #	30	40	24	13	1.2
	Total %	28%	37%	22%	12%	
9. The teacher uses appropriate resources aligned to students' diverse learning needs. (e.g., technology, manipulatives, support personnel).	ES	2%	23%	45%	30%	2.0
	MS	0%	48%	41%	11%	1.6
	HS	3%	53%	39%	6%	1.5
	Total #	2	42	45	18	1.7
	Total %	2%	39%	42%	17%	
10. The classroom climate is characterized by respectful behavior, routines, tone, and discourse.	ES	2%	5%	32%	61%	2.5
	MS	0%	11%	63%	26%	2.1
	HS	8%	28%	53%	11%	1.7
	Total #	4	15	50	38	2.1
	Total %	4%	14%	47%	36%	
11. The teacher conducts appropriate formative assessments to check for understanding and provide feedback to students.	ES	9%	14%	61%	16%	1.8
	MS	4%	48%	33%	15%	1.6
	HS	11%	39%	36%	14%	1.5
	Total #	9	33	49	16	1.7
	Total %	8%	31%	46%	15%	
Total Score For Focus Area #3	ES					8.0
	MS					6.2
	HS					5.7
	Total					6.7