Targeted District Review Report

Minuteman Regional Vocational Technical High School

Review conducted May 9-11, 2016

Center for District and School Accountability

Massachusetts Department of Elementary and Secondary Education

Organization of this Report

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Executive Summary

Minuteman's 2013-2016 School Improvement Plan (SIP) has 9 goals that were originally developed in 2010; the plan was updated in 2014. The SIP includes goals to improve ELA and math achievement, to continue to analyze student performance and other data sources, and to create a professional development plan to train teachers of all academic and CVTE disciplines to adjust their practice to meet the needs identified; however, the plan does not set expectations for what high-quality instruction should look like in the school. The plan also has four school goals: reading consultancies, executive functioning, professional conversations, and integration [of the academic and vocational areas]. It appears that the school has 13 goals (9 SIP goals and 4 school goals). And while some of the 13 goals appear to be related to the school's initiatives, others do not seem central to the school's work.

There is little correspondence between Minuteman's SIP and the school's current activities. At the time of the onsite, numerous references in the SIP were out of date: staff members' roles had changed, committees no longer existed, some goals had been accomplished, and work toward others seemed limited. In effect, the school does not have an up-to-date planning document to guide and focus its work to improve instruction and ultimately student achievement.

The principal told the review team that he had inherited the SIP from his predecessor, was working to sharpen its focus, and planned with help from the school council "to develop a two-year plan by September or October 2016."

The targeted review by the Center for School and District Accountability (CDSA) focused on three standards: curriculum and instruction, assessment, and student support. The team observed 48 classes in the school; 9 ELA classes, 7 mathematics classes, 10 classes in other subject areas, and 22 career/technical education classes. An inclusion model was in place for special education. 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.

(For purposes of this report and for clarity the Minuteman Regional Vocational Technical High School district is referred to as "Minuteman" or "the school.")

Strengths

Stakeholders reported an informal, personalized approach to student support and strong student-teacher relationships at Minuteman. In observed classrooms the climate was characterized by respectful behaviors, routines, tone, and discourse. The school has numerous assessments in place---diagnostic, summative, and some formative. In the vocational areas, teachers are using the 2013 state vocational standards and implementing the formative and summative assessments built into the frameworks to determine each student's progress.

Challenges and Areas for Growth

At the time of the site visit, Minuteman was facing a serious challenge to securing support for a new facility. The New England Association for Schools and Colleges (NEASC) had made the renovation or replacement of the current facility a requirement for the school's continuing accreditation. The school's charter stipulates that for the school to go forward with a plan with major budgetary implications it must have the support of each of its 16 participating towns. At the time of the site visit, one member town had voted down approval of the building project and some approvals were pending. In effect, Minuteman's path to the future was unclear.[1]

School leaders and staff told the team that they want to replicate the Academy Model, which is followed by all schools in the Nashville, Tennessee Public School District. They expressed the view that adoption of the Academy Model likely would help further integrate Minuteman's academic and vocational areas and help teachers in the two areas to structure learning more collaboratively. District leaders reported that an Academy Development Team, composed primarily of teacher leaders, spent the better part of 18 months researching, visiting schools, and studying the efficacy of the Academy Model and its application to serving the learning needs of students at Minuteman High School. School officials indicated that plans for the implementation of the Academy Model would move ahead, with or without a new school.

The school has promoted the Research for Better Teaching (RBT) instructional model and trained its administrators and teachers in it, but interviewees did not have a common understanding of the school's model for effective instruction. In observed classrooms across the district, the characteristics of high-quality instruction were inconsistently implemented. Review team members noted that in observed classrooms differentiated instruction was the least well-developed characteristic of instruction. Time and training for analysis of assessment results and the implications of these results for instruction are limited. The school does not have sufficient regular, scheduled time or organizational structures for teachers to meet to review student work, discuss assessment results, and make decisions about instruction. District leaders reported that since the 2011-2012 school year the school has increased opportunities for common planning time through delayed school openings and early release days. These efforts followed a year-long needs assessment conducted by the superintendent in the 2010-2011 school year. In school year 2015-2016, 12 early release or delayed opening sessions were scheduled for professional development. Some interviewees referred to this professional learning time as common planning time.

[1] District leaders reported that on September 20, 2016, voters in Minuteman's member towns approved financing for a new $144.9 million facility.

Most attention to student work and data takes place informally between teachers. District leaders said that they planned to schedule early release time in 2016-2017 for common planning.[2] The team found little evidence of academic teachers' regular use of data to modify their instruction. Finally, the school has not established a comprehensive, coordinated support system to plan and provide interventions and monitor their effectiveness.

Recommendations

- As soon as possible, school leaders should update the SIP, establishing a small number of objectives that the school will promote and support to improve the achievement of students; these priorities could be drawn from the goals in the 2013-2016 SIP.
- They should further articulate the school's instructional model, especially skills associated with differentiated instruction and modifications to instruction, and support teachers in its implementation.
- Also, the school should develop uniform and integrated policies, structures, and practices for the continuous collection, analysis, and dissemination of student performance and other data sources.
- Building on existing practices, the school should develop a comprehensive tiered system of support schoolwide.
- The superintendent, principals, program leaders, and teachers should continue to collaborate about the use of the common planning time.

[2] District leaders reported that for the 2016-2017 school year, the school has finalized its Professional Development Calendar to support significant common planning time for the review of student work, including formative and summative assessments.

Minuteman RVTHS Targeted District Review Overview

Purpose

Conducted under Chapter 15, Section 55A of the Massachusetts General Laws, targeted 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 three district standards used by the Department of Elementary and Secondary Education (ESE). Targeted reviews address one of the following sets of three standards: **Governance and Administrative Systems** (Leadership and Governance, Human Resources and Professional Development, and Financial and Asset Management standards) or **Student-Centered Systems** (Curriculum and Instruction, Assessment, and Student Support standards). A targeted review identifies systems and practices that may be impeding improvement as well as those most likely to be contributing to positive results. In addition, the targeted district reviews is designed to promote district reflection on its own performance and potential next steps.

Districts whose performance level places them in Level 2 of ESE's framework for district accountability and assistance will typically participate in a targeted district review (Level 3 and Level 4 districts typically receive a comprehensive review). Other relevant factors are taken into consideration when determining if a district will participate in a targeted or comprehensive review.

Methodology

Reviews collect evidence for each of the three district standards identified as the focus of the targeted review. Team members also observe classroom instructional practice. A district review team consisting of independent consultants with expertise in the district standards reviews documentation, data, and reports for two days before conducting a three-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. 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 Minuteman was conducted from May 9-11, 2016. The site visit included 16 hours of interviews and focus groups with approximately 59 stakeholders, including school committee members, school administrators, staff, students, and teachers' association representatives. The review team conducted one focus group with four 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 48 classrooms. The team collected

data using an instructional inventory, a tool for recording observed characteristics of standards-based teaching. This data is contained in Appendix C.

District Profile

Minuteman has a school committee form of governance with membership from each of the 16 member towns. The chair of the school committee is elected by the committee. The 16 members of the school committee meet bi-weekly.

The current superintendent has been in the position since 2007. The school leadership team includes: an assistant superintendent; a director of career and technical education; a director of curriculum, instruction, and assessment; a principal; two assistant principals, and a guidance director. Central office positions have been mostly stable in number over the past 10 years. In 2015-2016 there were 74 teachers in the school.

In the 2015-2016 school year, 624 students were enrolled in grades 9-12.

Minuteman has the highest percentage of students with disabilities of any public school district in Massachusetts. Some 46.6 percent of its student body is classified as students with disabilities. The state average is 17.2 percent. For the most recent statewide figures, see 2015-16 Enrollment by Selected Populations Report (District).

Between 2012 and 2016 overall student enrollment increased by 3.7 percent. Enrollment figures by race/ethnicity and high needs populations (i.e., students with disabilities, economically disadvantaged students, 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 5 vocational/technical schools of similar size (<1,000 students) in fiscal year 2014: $26,455 as compared with $22,159 (see District Analysis and Review Tool Detail: Staffing & Finance). Actual net school spending has been well above what is required by the Chapter 70 state education aid program, as shown in Table B6 in Appendix B.

Student Performance

District and Subgroup Results

Minuteman is a Level 2 district because Minuteman Regional Vocational Technical High School did not meet its gap narrowing targets for all students with a cumulative PPI of 70 and 66 for high needs students; the target is 75.[3]

Table 2: Minuteman RVTSD
District and School PPI, Percentile, and Level 2012–2015

School	Group	Annual PPI				Cumulative PPI	School Percentile	Accountability Level
		2012	2013	2014	2015			
HS: Minuteman RVT	All	75	86	46	79	70	28	2
	High Needs	79	68	50	75	66		
District	All	75	86	46	79	70	--	2
	High Needs	79	68	50	75	66		

Between 2012 and 2015 ELA proficiency rates improved by 4 percentage points for the district as a whole, and by 6 and 11 percentage points for high needs students and students with disabilities, respectively.

Table 3: Minuteman RVTSD
ELA Proficiency by Subgroup 2012–2015[4]

Group		2012	2013	2014	2015	4-Year Trend	Above/Below State 2015
All students	District	93%	94%	85%	97%	4	6
	State	88%	91%	89%	91%	3	
High Needs	District	90%	93%	79%	96%	6	17
	State	76%	81%	79%	79%	3	
Economically Disadvantaged	District	--	--	--	98%	--	14
	State	--	--	--	84%	--	
ELL and former ELL students	District	--	--	--	--	--	--
	State	47%	57%	52%	58%	11	
Students with disabilities	District	88%	91%	74%	95%	7	28
	State	60%	66%	63%	67%	7	

Between 2012 and 2015 the percentage of students scoring proficient or advanced in math improved by 5 percentage points for all students, and by 3 and 4 percentage points for high needs students and students with disabilities, respectively.

[3] Minuteman was a Level 2 district in 2015 because Minuteman Regional Vocational Technical High School did not meet its gap narrowing targets for all students with cumulative PPIs of 70 for all students and 66 for high needs students; the target is 75. However, in 2016 the district regained its Level 1 accountability status for meeting its gap narrowing targets for all students and high need students with cumulative PPIs of 77 for all students and 79 for high need students.[3]

[4] State rate refers to the 10th grade state rate.

Table 4: Minuteman RVTSD
Math Proficiency by Subgroup 2012–2015[5]

Group		2012	2013	2014	2015	4-Year Trend	Above/Below State 2014
All students	District	68%	70%	69%	73%	5	-5
	State	78%	80%	78%	78%	0	
High Needs	District	63%	59%	59%	66%	3	8
	State	59%	61%	60%	58%	-1	
Economically Disadvantaged	District	--	--	--	63%	--	0
	State	--	--	--	63%	--	
ELL and former ELL students	District	--	--	--	--	--	--
	State	42%	39%	42%	41%	-1	
Students with disabilities	District	58%	55%	56%	62%	4	23
	State	41%	40%	40%	39%	-2	

Between 2012 and 2015 the percentage of students scoring proficient or advanced in science improved by 13 percentage points for the district as a whole and high needs students, and by 12 percentage points for students with disabilities.

Table 5: Minuteman RVTSD
Science Proficiency by Subgroup 2012–2015[6]

Group		2012	2013	2014	2015	4-Year Trend	Above/Below State 2015
All students	District	57%	66%	65%	70%	13	-1
	State	69%	71%	71%	71%	2	
High Needs	District	52%	54%	53%	65%	13	17
	State	46%	49%	49%	48%	2	
Economically Disadvantaged	District	--	--	--	60%	--	8
	State	--	--	--	52%	--	
ELL and former ELL students	District	--	--	--	--	--	--
	State	26%	28%	26%	27%	1	
Students with disabilities	District	52%	53%	50%	64%	12	29
	State	32%	33%	33%	35%	3	

The district reached its 2015 Composite Performance Index (CPI) targets for ELA and science for all students, high needs students, and students with disabilities but did not reach its CPI targets for math.

[5] State rate refers to the 10th grade state rate.
[6] State rate refers to the 10th grade state rate.

Table 6: Minuteman RVTSD
2015 CPI and Targets by Subgroup

	ELA			Math			Science		
Group	**2015 CPI**	**2015 Target**	**Rating**	**2015 CPI**	**2015 Target**	**Rating**	**2015 CPI**	**2015 Target**	**Rating**
All students	99.1	97.0	Above Target	88.7	92.9	Improved Below Target	88.6	88.3	On Target
High Needs	98.8	95.5	Above Target	85.2	91.1	Improved Below Target	87.0	85.1	Above Target
Economically Disadvantaged[7]	99.4	--	--	84.9	--	--	84.9	--	--
ELLs	--	--	--	--	--	--	--	--	--
Students with disabilities	98.4	94.9	Above Target	83.1	90.7	Improved Below Target	86.2	84.2	Above Target

Students' growth in ELA was low compared to their academic peers statewide for all students and high needs students, and moderate for students with disabilities. Students' growth in mathematics compared to their academic peers statewide was moderate for all students, high needs students, and students with disabilities.

Table 7: Minuteman RVTSD
2015 Median ELA and Math SGP by Subgroup

Group	Median ELA SGP			Median Math SGP		
	District	**State**	**Growth Level**	**District**	**State**	**Growth Level**
All students	40.0	50.0	Low	48.0	50.0	Moderate
High Needs	39.5	47.0	Low	48.0	46.0	Moderate
Econ. Disad.	--	--	--	--	--	--
ELLs	--	53.0	--	--	51.0	--
SWD	46.5	43.0	Moderate	50.0	43.0	Moderate

Minuteman's out-of-school suspension rate for all students was more than twice the state rate and the in-school suspension rate was more than four times the state rate. The in-school and out-of - school suspension rates for high needs students, economically disadvantaged students, and students with disabilities were higher than the state rates.

[7] 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 and will serve as a baseline for future years' CPI targets.

Table 8: Minuteman RVTSD
Out-of-School and In-School Suspensions by Subgroup 2013–2015

Group	Type of Suspension	2013	2014	2015	State 2015
High Needs	OSS	9.6%	6.4%	10.4%	4.8%
	ISS	3.8%	4.3%	8.8%	2.7%
Economically disadvantaged[8]	OSS	11.0%	7.7%	9.8%	5.4%
	ISS	4.3%	3.0%	13.8%	2.9%
Students with disabilities	OSS	10.9%	7.7%	12.1%	6.1%
	ISS	4.1%	6.0%	8.1%	3.4%
ELLs	OSS	--	--	--	3.8%
	ISS	--	--	--	1.8%
All Students	OSS	8.5%	4.9%	7.6%	2.9%
	ISS	3.0%	3.1%	8.2%	1.8%

Minuteman's four-year cohort graduation rate was higher than the state rate for all students, high needs students, low income students, and students with disabilities. Minuteman reached the four-year cohort graduation target for all students, high needs students, low income students, and students with disabilities.[9]

Table 9: Minuteman RVTSD
Four-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	134	89.0%	81.3%	85.2%	84.3%	-4.7	-5.3%	-0.9	-1.1%	78.5%
Low income	62	86.0%	78.1%	78.0%	80.6%	-5.4	-6.3%	2.6	3.3%	78.2%
SWD	105	87.2%	83.9%	88.5%	83.8%	-3.4	-3.9%	-4.7	-5.3%	69.9%
ELLs	--	--	--	--	--	--	--	--	--	64.0%
All students	175	89.6%	81.1%	86.5%	87.4%	-2.2	-2.5%	0.9	1.0%	87.3%

Minuteman's five-year cohort graduation rate was higher than the state rate for all students, high needs students, low income students, and students with disabilities. Minuteman reached the five-year cohort graduation target for all students, high needs students, low income students, and students with disabilities.[10]

[8] Low income students' suspensions used for 2013 and 2014.

[9] The four-year cohort graduation rate target is 80 percent for each group and refers to the 2014 graduation rate.
[10] The five-year cohort graduation rate target is 85 percent for each group and refers to the 2013 graduation rate. Low income students did not receive a 2015 accountability rating because of the change to the economically disadvantaged measure.

Table 10: Minuteman RVTSD
Five-Year Cohort Graduation Rates 2011-2014

Group	Number Included (2014)	Cohort Year Ending				Change 2011-2014		Change 2013-2014		State (2014)
		2011	2012	2013	2014	Percentage Points	Percent Change	Percentage Points	Percent Change	
High needs	108	90.5%	92.0%	88.8%	92.6%	2.1	2.3%	3.8	4.3%	80.3%
Low income	59	90.2%	90.0%	90.6%	86.4%	-3.8	-4.2%	-4.2	-4.6%	79.6%
SWD	78	90.4%	89.7%	88.7%	97.4%	7.0	7.7%	8.7	9.8%	73.5%
ELLs	--	--	--	--	--	--	--	--	--	69.8%
All students	155	92.1%	91.6%	90.1%	92.3%	0.2	0.2%	2.2	2.4%	88.5%

Minuteman's dropout rate for all students, high needs students, economically disadvantaged students, and students with disabilities were lower than the state rates for these groups.

Table 11: Minuteman RVTSD
Dropout Rates by Subgroup 2012–2015[11]

	2012	2013	2014	2015	State 2015
High Needs	1.4%	0.9%	1.4%	2.0%	3.4%
Econ. Disad.	2.6%	0.5%	2.1%	0.0%	3.3%
SWD	1.2%	0.9%	0.8%	2.0%	3.5%
ELLs	--	--	--	--	5.7%
All students	1.2%	0.9%	1.3%	1.5%	1.9%

Grade and School Results

Between 2012 and 2015 the ELA proficiency rate improved by 4 percentage points from 93 percent in 2012 to 97 percent in 2015, 6 percentage points above the state rate of 91 percent.

Table 12: Minuteman RVTSD
ELA Percent Proficient or Advanced by Grade 2012–2015

Grade	Number	2012	2013	2014	2015	State	4-Year Trend	2-Year Trend
10	174	93%	95%	85%	97%	91%	4%	12%
All	174	93%	95%	85%	97%	--	4%	12%

[11] Low income dropout rate used for the 2012, 2013, and 2014 economically disadvantaged dropout rate.

Between 2012 and 2015 the ELA proficiency rates improved for high needs students and students with disabilities.

- ELA proficiency for high needs students improved by 6 percentage points.
- ELA proficiency for students with disabilities improved by 7 percentage points 2015.

Table 14: Minuteman RVTSD
ELA Percent Proficient or Advanced by School and Subgroup 2012-2015

	2012	2013	2014	2015	4-Year Trend
HS: Minuteman RVT	93%	94%	85%	97%	4
High Needs	90%	85%	79%	96%	6
Economically disadvantaged	--	--	--	98%	--
ELL and former ELL	--	--	--	--	--
Students with disabilities	88%	91%	74%	95%	7

The math proficiency rate improved by 5 percentage points from 68 percent in 2012 to 73 percent in 2015, 6 percentage points below the state rate of 79 percent.

Table 15: Minuteman RVTSD
Math Percent Proficient or Advanced by Grade 2012-2015

Grade	Number	2012	2013	2014	2015	State	4-Year Trend	2-Year Trend
10	175	68%	70%	69%	73%	79%	5%	4%
All	175	68%	70%	69%	73%	--	5%	4%

Between 2012 and 2015 the math proficiency rate improved for high needs students and students with disabilities.

- Math proficiency for high needs students improved by 3 percentage points.
- Math proficiency for students with disabilities improved by 4 percentage points.

Table 17: Minuteman RVTSD
Math Percent Proficient or Advanced by School and Subgroup 2012-2015

	2012	2013	2014	2015	4-Year Trend
HS: Minuteman RVT	68%	70%	69%	73%	5
High Needs	63%	59%	59%	66%	3
Economically disadvantaged	--	--	--	63%	--
ELL and former ELL	--	--	--	--	--
Students with disabilities	58%	55%	56%	62%	4

The science proficiency rate improved by 11 percentage points from 58 percent in 2012 to 69 percent in 2015, 3 percentage points below the state rate of 72 percent.

Table 18: Minuteman RVTSD
Science Percent Proficient or Advanced by Grade 2012-2015

Grade	Number	2012	2013	2014	2015	State	4-Year Trend	2-Year Trend
10	154	58%	66%	65%	69%	72%	11%	4%
All	154	58%	66%	65%	69%	--	11%	4%

Between 2012 and 2015 the science proficiency rate improved for high needs students and students with disabilities.

- Science proficiency for high needs students improved by 13 percentage points.
- Science proficiency for students with disabilities improved by 12 percentage points.

Table 20: Minuteman RVTSD
Science Percent Proficient or Advanced by School and Subgroup 2012–2015

	2012	2013	2014	2015	4-Year Trend
HS: Minuteman RVT	57%	66%	65%	70%	13
High Needs	52%	54%	53%	65%	13
Economically disadvantaged	--	--	--	60%	--
ELL and former ELL	--	--	--	--	--
Students with disabilities	52%	53%	50%	64%	12

Curriculum and Instruction

Contextual Background

Minuteman has created a positive classroom environment through strong student-teacher relationships. The academic curriculum is almost complete and the vocational curriculum will be complete once the school has mapped out timelines for its 16 programs. With documented timelines for both the academic and vocational curricula, integration of both programs can be more easily planned. Further integration of the academic and vocational programs will be possible provided the school adopts the Academy Model.

When asked what characterized the school's instructional model, interviewees did not have a common understanding of the school's expectations for instruction. In observed classrooms across the district, while classroom climate was positive the characteristics of high-quality instruction were inconsistently implemented. Review team members noted that in observed classrooms differentiated instruction was the least well-developed characteristic of effective instruction.

Strength Finding

1. **In observed classrooms, classroom climate was characterized by respectful behavior, routine, tone, and discourse.**

   A. The review team found strong and moderate evidence of a positive classroom climate in 93 percent of classrooms overall.

   B. Members of the school community reported strong interpersonal relationships between faculty and students.

      1. Parents attested to how well teachers get to know students' strengths and challenges.
      2. Students reported that teachers treat them like adults.
      3. Students shared anecdotal examples of the caring attitude of the teachers.
      4. One teacher stated that students are "a joy!"
      5. Another teacher reported that the teachers help students feel that they belong, noting "We make them feel part of something."

Impact: Creating a positive school climate through strong student-teacher relationships lays a foundation for learning which likely leads to greater student confidence and ultimately to higher achievement.

Challenges and Areas for Growth

2. **In observed classrooms across the district, the characteristics of high-quality instruction were inconsistently implemented. Schoolwide in observed lessons instruction was not appropriately structured to account for differences in the learning needs of all students.**

   A. **Focus Area #1-Learning Objectives and Instruction** In most observed classrooms teachers demonstrated knowledge of subject matter and content. At the same time, there was variation in the provision and use of learning objectives, the presence of high expectations aligned to the learning objective, and the use of appropriate instructional strategies well matched to the learning objectives.

      1. In observed classrooms, team members saw moderate or strong evidence that teachers provided and reinforced a clear learning objective(s) in 68 percent of vocational classes (36 percent, strong evidence; 32 percent, moderate evidence) and in 54 percent of academic classes (23 percent, strong evidence; 31 percent, moderate evidence).

         a. An example of a clear learning objective that was posted and referred to was seen in an algebra class. The objective stated, "Students will set up and solve proportions to solve real-world problems."

         b. An example of a class in which a clear learning objective was not present and/or reflected was a biology class where a learning objective was not posted and the focus was review of material for the MCAS test.

   B. **Focus Area #2-Student Engagement and Critical Thinking** The team observed a wide variation in the quality of instruction in this focus area. For example, most students were engaged with tasks that required critical thinking, analysis, learning, and/or application of new knowledge, but a lower incidence of these characteristics was seen in academic classes (see Appendix C, the Instructional Inventory, characteristic # 6).

      1. Review team members observed strong or moderate evidence that most students were engaged with tasks that require critical thinking, analysis, learning, and/or application of new knowledge in 77 percent of vocational classes (36 percent, strong evidence; 41 percent, moderate evidence) but in just 57 percent of academic classes (19 percent, strong evidence; 38 percent, moderate evidence).

         a. An example of a class in which the teacher facilitated tasks that encouraged students to develop and engage in critical thinking was a grade 9 health class in which students were asked to explain their reasoning as they critiqued professional articles.

         b. In contrast, in a grade 10 science class the teacher lectured for the entire observation.

      2. In observed classrooms, students assumed responsibility for their own learning whether individually, in pairs, or in groups in 82 percent of vocational classes (59 percent, strong

evidence; 23 percent, moderate evidence) but in only 66 percent of academic classes (35 percent, strong evidence; 31 percent, moderate evidence).

a. An example of a lesson in which students assumed responsibility for their own learning was a grade 10 geometry class in which students worked independently and with a partner using calculators and individual white boards.

b. An example of a lesson in which students were not given the opportunity to assume responsibility for their own learning was a grade 9 math class in which the teacher did all the activities; students were "spectators and reported on what the teacher was demonstrating."

C. Review team members noted that in observed instruction differentiated instruction was the least well developed characteristic of effective instruction (see Appendix C, the Instructional Inventory, characteristic #8).

1. Teachers implemented lessons with appropriate differentiation in only 29 percent of classes overall (8 percent, strong evidence; 21 percent, moderate evidence).

   a. Observers found strong and moderate evidence of differentiation in only 16 percent of academic classes (8 percent, strong evidence; 8 percent, moderate evidence) and in only 45 percent of vocational classes (9 percent, strong evidence; 36 percent, moderate evidence).

      i. While the team noted examples of differentiation in vocational classes, the majority of academic classes had minimal or low examples of differentiation. Observers noted that often students were doing the same work. For example, in a grade 10 math class all students were completing the same sheet of problems with no evidence of the teacher differentiating the product, process, or content throughout the entire observation. Also, in a grade 9 biotechnology class students were in different groups but were all doing the same tasks.

      ii. The team noted examples of differentiation in a grade 9 health class in which students were given opportunities to practice skills with which they had difficulty. Also, in a grade 9 horticulture and landscaping class students were doing different tasks using previously learning skills as they "pruned and landscaped school beds."

Impact: When lessons are not consistently structured to be accessible by all learners in every classroom, Minuteman's students do not have the tools they need to achieve at higher levels and to succeed in college and careers.

Recommendation

1. **To focus its work to improve instruction and ultimately student achievement, as soon as possible the school should update the School Improvement Plan and further articulate the school's instructional model, especially skills associated with differentiated instruction and modifications to instruction, and support teachers in its implementation.**

   A. As soon as possible, school leaders should update the SIP, establishing a small number of objectives that the school will promote and support to improve the achievement of students; these priorities could be drawn from the goals in the 2013-2016 SIP.

   B. The school should continue to unpack elements of its Research for Better Teaching instructional model to deepen teachers' understanding of effective practice.

   C. The school might use grade level, department, and faculty meetings, common planning time, and professional development days for this purpose.

      1. One possible strategy for deep analysis of the instructional model is to use meeting time to watch videos of effective instructional strategies and then follow up with discussion. Teachers might also be invited to participate in walkthroughs and follow-up debriefing activities. Shared professional readings and subsequent discussions can also strengthen teachers' understanding of key instructional strategies.

      2. Administrators are encouraged to empower teachers by providing time for them to observe effective practice in classrooms.

      3. The school should support teacher leadership and growth by creating more opportunities for exemplary teachers to have responsibility for instructional leadership and mentoring.

   D. Teachers should be provided professional development to deepen their understanding of instructional strategies and school expectations.

      1. Job-embedded professional development should focus on elements of the instructional model, and especially skills associated with differentiation and modifications to instruction.

      2. Teachers should receive frequent, helpful feedback that helps them to continually improve their instruction.

      3. Principals, as instructional leaders, should ensure that teachers have the information and support necessary to meet the school's expectations for instruction.

Benefits: Implementing this recommendation will mean a common and deep understanding among educators of what constitutes effective teaching and well as increased student engagement, motivation, and confidence. When effective instructional strategies are adapted, learning outcomes are improved. A district that prioritizes high-quality instruction for all students develops and sustains a culture of continuous improvement that results in increased student achievement and growth.

Recommended resources:

- *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.)

- *The Massachusetts Standards for Professional Development* (http://www.doe.mass.edu/pd/standards.pdf) describe, identify, and characterize what high quality learning experiences should look like for educators.

- The *PLC Expansion Project* website (http://plcexpansionproject.weebly.com/) is designed to support schools and districts in their efforts to establish and sustain cultures that promote Professional Learning Communities.

- *PBS LearningMedia* (http://www.pbslearningmedia.org/) is a free digital media content library that provides relevant educational resources for PreK-12 teachers. The flexible platform includes high-quality content tied to national curriculum standards, as well as professional development courses.

- *Quick Reference Guide: Educator Evaluation & Professional Development* (http://www.doe.mass.edu/edeval/resources/QRG-ProfessionalDevelopment.pdf) describes how educator evaluation and professional development can be used as mutually reinforcing systems to improve educator practice and student outcomes.

- ESE's *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.

- 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.

Assessment

Contextual Background

Minuteman is in the early stages of regularly using assessment data to inform instruction and to develop interventions for struggling students. The school uses diagnostic assessments such as Star Math and the Scholastic Reading Inventory (SRI) to place incoming students in grade 9 levels as well as in reading and mathematics support programs. Career/Vocational Technical Education (CVTE) programs, based on the state frameworks, include formative assessments of competencies that students must meet as they move through the program. While the school administers numerous summative, formative, and diagnostic assessments, it does not have scheduled time or structures for teachers to meet in grade-level, subject, or integrated teams to review assessment results and to make curriculum and instructional changes.

The school does not have a data warehouse that enables teachers to access a dashboard of assessments for each student. The school has Aspen X2, a program primarily used by students and parents to access grades and assignments. District leaders reported that teachers can access students' lexile, math, MCAS, SAT, and ACT scores in Aspen. In addition, the school does not have a data team that oversees the analysis of performance data for school leaders and teachers.

The school does not have sufficient regular, scheduled time or organizational structures for teachers to meet to review student work, discuss assessment results, and make decisions about instruction. District leaders reported that since the 2011-2012 school year the school has increased opportunities for common planning time through delayed school openings and early release days. These efforts followed a year-long needs assessment conducted by the superintendent in the 2010-2011 school year. In school year 2015-2016, 12 early release or delayed opening sessions were scheduled for professional development. Some interviewees referred to this professional learning time as common planning time.

Most attention to student work and data takes place informally between teachers. Some interviewees reported that the school currently has common planning time, but they were referring to time set aside for monthly professional development. District leaders said that they planned to schedule early release time in 2016-2017 for common planning, but at the time of the site visit the structure for the use of the time was unclear.[12]

[12] District leaders reported that for the 2016-2017 school year, the school has finalized its Professional Development Calendar to support significant common planning time for the review of student work, including formative and summative assessments.

Strength Finding

1. Minuteman has a combination of diagnostic, summative, and formative assessments in place.

A. Interviews and a document review indicated that the school uses diagnostic assessments, recommendations from sending schools, and trial Career Technical Education (CTE) assignments to place students.

1. New students take the SRI and the Star Math assessments to inform placement in grade 9 ELA and mathematics classes.
    a. Students are placed in a reading support class such as Read 180 if they do not attain target scores on all assessments.
    b. The school uses Star Math assessments as well as recommendations from grade 8 teachers and guidance counselors to place students in Title I mathematics classes.
2. Beginning in 2015-2016 the progress of Title I students is monitored 5 times a year using Star Math assessments, and the reading proficiency of students in grades 9-12 is monitored 4 times a year with the SRI assessment.
3. Assessment results are supplemented by recommendations from sending districts, MCAS scores, and information included in Individualized Education Programs (IEPs) from sending districts. In some cases, results are discussed with the sending district.
    a. The school holds IEP transition meetings to place new students with disabilities.
    b. School leaders told the team that the school obtains additional placement data from approximately 80 percent of the 40 sending districts.
4. As part of CVTE program placement, new students participate in the mandatory Chapter 74 exploratory program.
    a. Students take an interest survey and spend a week in numerous programs.
    b. A rubric is used to assess the student in each program, and the student selects three programs on a trial basis for possible permanent placement.
    c. Permanent placement in a program is made at the end of the third term of grade 9.

B. Summative and formative assessments measure the progress and competency of academic and vocational students.

1. Academic departments administer common mid-term and final examinations.
    a. Departments reported analysis of common assessment results.

b. The school provided the review team with English department mid-year assessment summaries. These included the overall strengths and challenges seen in the results.

c. A review of the assessment inventory and information from interviewees indicated that some academic departments administer formative assessments.

2. Certification results, both summative and formative, measure the progress and competency of CVTE students.

   a. Because CVTE program success is typically measured by competency growth, students are regularly assessed and tracked against competency benchmarks.

   b. Minuteman uses the SkillsPlus vocational competency tracking system to monitor progress toward mastery of standards in the Massachusetts CVTE frameworks.

   c. A school administrator said that Minuteman educators are encouraged to track their students' progress quarterly and are required to track competencies using SkillsPlus annually. Monitoring begins in grade 9 and continues until graduation.

      i. Interviewees said that workforce-ready assessments are administered to sophomores and juniors. Program mid-term examinations are nationally normed and all seniors are required to complete a senior project.

3. Students in grades 11-12 take the Accuplacer assessments in mathematics, writing, and grammar in May.

Impact: Having diagnostic, formative, and summative assessments in place enables the school to begin to identify and provide support for struggling students. In the CVTE area, having an assessment system that is competency based and aligned to the state's CVTE standards provides students and teachers with feedback concerning their progress along the continuum of program skills.

Challenges and Areas for Growth

2. The school does not have sufficient regular, scheduled time or organizational structures for teachers to work collaboratively in grade level or content area teams to review and analyze assessment data and to make decisions concerning instruction.

A. The school does not have a data team that might review school assessment data, provide school leaders and teachers with analysis of the data, and help develop uniform and integrated policies, structures, and practices necessary for the continuous collection, analysis, and dissemination of student performance and other data sources.

B. In school year 2015-2016, 12 early release or delayed opening sessions were scheduled for professional development. Some interviewees referred to this professional learning time as common planning time.

C. Department meetings are held monthly and data is sometimes discussed.

D. Interviewees reported that discussions between and among teachers are informal and take place randomly.

E. Teachers indicated that they needed more time to learn with their colleagues.

1. A review of responses from the school's fall 2015 teacher survey on reading showed that teachers would like, among other things, lesson planning support, and teacher study groups to learn new strategies.

F. Aspen X2, the school's student information management system, includes demographic, grading, scheduling, attendance, assessment, and other data. Students and parents can access the system to view this data. District leaders reported that teachers can access students' lexile, math, MCAS, SAT, and ACT scores in Aspen.

1. School leaders, administrators, and teachers said that they do not use the system to its full potential as a comprehensive source of data.

Impact: Without scheduling time for staff to collaboratively review student work, discuss and analyze data, share best practices, and plan lessons, it is challenging for the school to enhance teacher competency and job satisfaction, boost integration between academic and vocational programs, and improve student achievement. The absence of a comprehensive and unified structure for the review and analysis of data seriously compromises the school's goal and policy development and its ability to make appropriate judgments and timely revisions to its programs, instruction, and PD offerings.

Recommendation

1. The school should develop uniform and integrated policies, structures, and practices for the continuous collection, analysis, and dissemination of student performance and other data sources.

A. The school should consider establishing a data team which would be responsible for the collection, analysis, and dissemination of student assessment and social-emotional data.

1. The data team should have a collaborative leadership structure in which staff and administrators work together formally and communicate regularly and systematically. The data team should have clearly defined authority and responsibilities and be provided with the resources and supports needed to support its efforts.

B. The superintendent, principals, and program leaders, in collaboration with teachers, should develop specific strategies, timelines, and clear expectations for the use of data schoolwide.

1. The school should ensure that educators use data strategically to inform instruction, ongoing curriculum revision, program evaluation, and the educator evaluation system.

C. Ongoing, targeted training in the collection, analysis, and use of student performance data should be provided for all staff.

D. School leaders should systematically incorporate student assessment results and other pertinent data into all aspects of policy, prioritization, and decision making, including budget development, the School Improvement Plan, and the evaluation of educational programs and services.

E. The data system should provide professional staff with convenient, real-time access to student performance data, as well as to other relevant academic ad demographic data, as appropriate.

F. Minuteman should plan carefully for the weekly common planning time now scheduled for the 2016-2017 school year.

1. The principal, the director of curriculum, instruction, and assessment, and the director of career and technical education should continue to collaborate about meeting structures and expectations.

2. Teachers should have input into the scheduling of common planning time.

Benefits: Implementing this recommendation will mean clarity and consistency in the school's use of data for decision making. It will help school leaders and teachers to understand and provide professional development for the analysis and use of data to improve instructional skills and raise student achievement. It will help all stakeholders to evaluate programs, texts, and services. It will enable the school to provide all students with greatly improved learning opportunities and academic outcomes.

Recommended resources:

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

- ESE's *District Data Team Toolkit* (http://www.mass.gov/edu/government/departments-and-boards/ese/programs/accountability/tools-and-resources/district-analysis-review-and-assistance/leadership-and-governance.html) is a set of resources to help a district establish, grow, and maintain a culture of inquiry and data use through a District Data Team.

- The *Edwin Analytics* web page (http://www.doe.mass.edu/edwin/analytics/) includes links to a Getting Started Guide, as well as a video tutorial series.

- *District-Determined Measures* http://www.youtube.com/playlist?list=PLTuqmiQ9ssquEalxpfpzD6qG9zxvPWl0c) is a series of videos featuring different aspects of the development and use of District-Determined Measures (DDMs).

Student Support

Contextual Background

Minuteman has established some programs to support students, especially students who are experiencing academic and social/emotional/behavioral challenges. However, the school does not have in place a comprehensive, coordinated system of supports that ensures that all students' academic and non-academic needs are met.

A school strength is Minuteman's informal and personalized approach to student support, especially in the CVTE classes. Services are provided to respond to the interests and development of all students, including guidance in choosing post-secondary education and career options. Such support creates an environment in which all students can identify what they want to do, develop related skills, and pursue their career goals.

Strength Finding

1. **The school has implemented supports to address the social, emotional, and health needs of students, encourage on-time graduation, and to ensure that students are ready for college and careers.**

    A. The superintendent told the review team that the school uses an informal and personalized approach to student support with staff and guidance and other student support collaborating closely.

        1. Student support personnel reported that curriculum and professional development on Executive Functioning has been implemented in various ways across the school to improve students' ability to organize and manage class assignments and materials.

        2. Student support personnel and students stated that the structure of CVTE classes, i.e., a full week at a time with the same teachers and essentially the same cohort of students over three years, engenders supportive and familial, relationships between students and teachers that deepen over time.

        3. School administrators and student support personnel reported that the school is currently introducing practices and policies that address problem behaviors and help struggling students who do not attend school regularly to re-enter daily classes at a pace that supports their needs.

            a. Students on in-school suspension (ISS) receive clear expectations for the work they need to complete (character work, academic work, and community service). A school policy of providing students a timetable and opportunities to make up academic work missed during ISS prevents students from being "penalized twice" for disciplinary offenses.

   b. The school has created the Re-entry from Extended Leave (REEL) room for students with high absence because of school phobia or extended hospital stays to rejoin general classes within six weeks of their return to school.

4. To support the inclusion of all students with disabilities, the school is in the early stages of using a co-teaching approach that pairs special education teachers and paraprofessionals with general education academic teachers in classes where a student on an Individualized Education Program (IEP) needs specific accommodations or modifications.

B. The school supports students in reaching graduation as well as in post-graduation planning and transitions to post-secondary education and career pathways.

1. Student support personnel said that students use Naviance, a career-interest assessment tool, to identify careers and majors in college.

2. Seniors and second semester juniors can participation in a "co-op" position that provides paid experience in the work place. Student support personnel reported that co-ops require that students have strong standing in both academic and shop courses, and act as a motivator for younger students to excel.

3. The school has agreements in place with various post-secondary institutions in the region that enable students in some CVTE areas to earn college credits.

   a. The school has recently established a dual-enrollment agreement with Middlesex Community College for six courses that will provide credits toward completion of a high-school diploma as well as providing post-secondary credits at a drastically reduced rate.

4. Recognizing a wide diversity in students' socio-economic status and parents' knowledge of and experience with post-secondary education, student support personnel provide students and families with information about financial aid, e.g., Free Application for Federal Student Aid (FAFSA) forms and deadlines, fee waivers, grants, and tuition-free community college options.

C. According to ESE data, in 2015 Minuteman's four-year graduation rate for all students was 87.4 percent, equal to the state rate, of 87.3 percent. The school's five-year graduation rate exceeded the state rate, 92.3 percent compared with 88.5 percent.

Impact: The "family approach" to student support fosters close teacher-student relationships, and delivers services to respond to the interests and development of all students, including guidance in choosing post-secondary education and career options. Such support creates an environment in which all students can identify what they want to do, develop related skills, and pursue their career goals.

Challenges and Areas for Growth

2. The school has not established an overarching, coordinated system of support to ensure that all students' academic and non-academic needs are met.

A. Minuteman does not have in place comprehensive systems to identify at-risk students, to analyze data from a variety of sources, and to plan and provide interventions and monitor their effectiveness.

1. The District Accommodation Plan (DCAP) lists academic and non-academic interventions available to all students. However, there is little coordination and horizontal articulation to ensure that academic interventions are allocated based on student and school data and need.

    a. Interviews and a document review showed that a Student Support Team (SST) is in place schoolwide to respond to the academic, social, emotional, and behavioral needs of at-risk students. However, the review team found little evidence that interventions are consistently evaluated and that timely, effective adjustments are made.

    b. The school uses a co-teaching instructional model to address the academic needs of students with Individualized Education Programs (IEPs) in general education classes. However, the school is in the beginning stages of implementing the model, with a limited number of trained staff.

2. Interviews and a document review indicated that the school is beginning to address the behavioral/social/emotional needs of students.

    a. An In-House Suspension Program to improve student behavior and engagement is in place with a new coordinator. The focus of the program is a character-based curriculum and continuation of academic work. District leaders reported that the school closely monitors the program and keeps detailed case files on all students who complete the program, including completed "character packets and recidivism rates."[13]

B. Interviewees indicated an absence of scheduled common planning time among grade- level teams, departments, and the academic/vocational components of the school to plan instruction

[13] District leaders reported that the In-House Suspension Program is closely aligned with 603 CMR 53.05. Alternatives to Suspension under M.G.L. c.71, § 37 H3/4, which reads: "In every case of student misconduct for which suspension may be imposed, a principal shall exercise discretion in deciding the consequence for the offense; consider ways to re-engage the student in learning; and avoid using long-term suspension from school as a consequence until alternatives have been tried. Alternatives may include the use of evidence-based strategies and programs such as mediation, conflict resolution, restorative justice, and positive interventions and supports."

for all students and to plan and provide interventions for at-risk students and to monitor their effectiveness.

Impact: The absence of a coordinated, comprehensive system of academic and non-academic services and supports has hampered the ability of the school to provide for all students' social, emotional, and physical well-being and to improve their achievement.

Recommendation

1. **Building on existing practices such as the Student Support Team and the In-House Suspension Program, school leaders, teachers, and staff should develop a well-defined tiered system of support across the school.**

   A. The school should consider convening a task force of school leaders and academic and Career/Vocational Technical Education (CVTE) teachers to review and extend its approach to providing additional supports to students, with the goal of establishing a coordinated, schoolwide system of tiered interventions.

   B. School leaders should analyze student performance data from multiple sources over time to better target supports and to plan improvements in programs and service delivery.

   C. All teaching and support staff should receive focused professional development in effectively using differentiation and accommodations to create classrooms where all students have equal access to high-quality curriculum.

Benefits: Implementing a tiered system of support will ensure that all students are able to fully participate in the academic program and improve their levels of achievement.

Recommended 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.

- The *Inclusive Practice Tool* (www.doe.mass.edu/edeval/guidebook/2a-rubric.pdf) is a guide for districts as administrators visit classrooms. It suggests what teaching practices to look for during observations.

- 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.

- ESE's *Early Warning Indicator System* (http://www.doe.mass.edu/edwin/analytics/ewis.html) is a tool to provide information to districts about the likelihood that their students will reach key academic goals. Districts can use the tool in conjunction with other data and sources of information to better target student supports and interventions and to examine school-level patterns over time in order to address systemic issues that may impede students' ability to meet academic goals.

- The *Early Warning Implementation Guide* (http://www.doe.mass.edu/edwin/analytics/2014ImplementationGuide.pdf) provides information on how to use early warning data, including the Massachusetts Early Warning Indicator System (EWIS), to identify, diagnose, support and monitor students in grades 1-12. It offers educators an overview of EWIS and how to effectively use these data in conjunction with local data by following a six-step implementation cycle.

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

Review Team Members

The review was conducted from May 9-11, 2016, by the following team of independent ESE consultants.

1. Dr. Linda Denault, curriculum and instruction
2. James Hearns, assessment
3. Maria Iglesias, student support
4. Dr. Janet Smith, student support
5. Patricia Williams, *review team coordinator*

District Review Activities

The following activities were conducted during the review:

The team conducted interviews with the following members of the school committee: chair and five members.

The review team conducted interviews with the following representatives of the teachers' association: president, treasurer, and DDMs coordinator.

The team conducted interviews/focus groups with the following central office administrators: the superintendent; the director of curriculum, instruction, and assessment; the director of career and technical education; the director of special education; the coordinator of college and career readiness; and the director of educational technology.

The team visited Minuteman Regional Vocational Technical High School (grades 9-12).

During school visits, the team conducted interviews with one principal and a focus group with four teachers.

The team observed 48 classes at the school.

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

- Student and school performance data, including achievement and growth, enrollment, graduation, dropout, retention, suspension, and attendance rates.
- Data on the district's staffing and finances.
- Published educational reports on the district by ESE, the New England Association of Schools and Colleges (NEASC), and the former Office of Educational Quality and Accountability (EQA).

- District documents such as district and school improvement plans, school committee policies, curriculum documents, summaries of student assessments, job descriptions, collective bargaining agreements, evaluation tools for staff, handbooks, school schedules, and the district's end-of-year financial reports.
- All completed program and administrator evaluations, and a random selection of completed teacher evaluations.

Site Visit Schedule

Monday **05/09/2016**	**Tuesday** **05/10/2016**	**Wednesday** **05/11/2016**
Orientation with district leaders and principals; interviews with district staff; document reviews; interview with teachers' association; and visits to classrooms for observations.	Interviews with district and school staff including principals, lead teachers, student support staff, and teachers; teacher focus group; parent focus group; school committee; and visits to classrooms for observations.	Student focus group; classroom observations; interviews with school administrators; visits to classrooms for observations.

Appendix B: Enrollment, Performance, Expenditures

Table B1a: Minuteman RVTSD
2015–2016 Student Enrollment by Race/Ethnicity

Student Group	District	Percent of Total	State	Percent of Total
African-American	38	6.1%	83,481	8.8%
Asian	13	2.1%	61,584	6.5%
Hispanic	70	11.2%	176,873	18.6%
Native American	1	0.2%	2,179	0.2%
White	485	77.7%	597,502	62.7%
Native Hawaiian	--	--	888	0.1%
Multi-Race, Non-Hispanic	17	2.7%	30,922	3.2%
All Students	624	100.0%	953,429	100.0%

Note: As of October 1, 2015

Table B1b: Minuteman RVTSD
2015–2016 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	291	79.1%	46.6%	165,559	39.4%	17.2%
Econ. Disad.	139	37.8%	22.3%	260,998	62.2%	27.4%
ELLs and Former ELLs	--	--	--	85,763	20.4%	9.0%
All high needs students	368	100.0%	59.0%	419,764	100.0%	43.5%

Notes: As of October 1, 2015. 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 2,170; total state enrollment including students in out-of-district placement is 964,026.

Table B2a: Minuteman RVTSD
English Language Arts Performance, 2012–2015

Grade and Measure		Number Included (2015)	Spring MCAS Year					Gains and Declines	
			2012	2013	2014	2015	State (2015)	4-Year Trend	2-Year Trend
10	CPI	174	98	98.4	95.1	99.1	96.7	1.1	4
	P+	174	93%	95%	85%	97%	91%	4%	12%
	SGP	137	50	53	50	40	51	-10	-10
All	CPI	174	98	98.4	95.1	99.1	--	1.1	4
	P+	174	93%	95%	85%	97%	--	4%	12%
	SGP	137	50	53	50	40	50	-10	-10

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

Table B2b: Minuteman RVTSD
Mathematics Performance, 2012–2015

Grade and Measure		Number Included (2015)	Spring MCAS Year					Gains and Declines	
			2012	2013	2014	2015	State (2015)	4-Year Trend	2-Year Trend
10	CPI	175	85.3	86.2	85.6	88.7	89.9	3.4	3.1
	P+	175	68%	70%	69%	73%	79%	5%	4%
	SGP	140	36	44	47	48	50	12	1
All	CPI	175	85.3	86.2	85.6	88.7	0	3.4	3.1
	P+	175	68%	70%	69%	73%	0%	5%	4%
	SGP	140	36	44	47	48	50	12	1

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

Table B2c: Minuteman RVTSD
Science and Technology/Engineering Performance, 2012–2015

Grade and Measure		Number Included (2015)	Spring MCAS Year					Gains and Declines	
			2012	2013	2014	2015	State (2015)	4-Year Trend	2-Year Trend
10	CPI	154	83.7	84.9	82.9	88.6	88.2	4.9	5.7
	P+	154	58%	66%	65%	69%	72%	11%	4%
All	CPI	154	83.7	84.9	82.9	88.6	79.4	4.9	5.7
	P+	154	58%	66%	65%	69%	54%	11%	4%

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: Minuteman RVTSD
English Language Arts (All Grades)
Performance for Selected Subgroups Compared to State, 2012–2015[14]

Group and Measure			Number Included (2015)	Spring MCAS Year				Gains and Declines	
				2012	2013	2014	2015	4-Year Trend	2-Year Trend
High Needs	District	CPI	104	97.0	97.7	93.0	98.8	1.8	5.8
		P+	104	90%	93%	79%	96%	6	17
		SGP	90	49.5	53.5	52.0	39.5	-10.0	-12.5
	State	CPI	28,061	91.0	93.1	91.5	92.1	1.1	0.6
		P+	28,061	76%	81%	79%	79%	3	0
		SGP	22,696	46.0	54.0	46.0	47.0	1.0	1.0
Econ. Disad.	District	CPI	42	--	--	--	99.4	--	--
		P+	42	--	--	--	98%	--	--
		SGP	37	--	--	--	31.0	--	--
	State	CPI	19,150	--	--	--	93.4	--	--
		P+	19,150	--	--	--	84%	--	--
		SGP	15,926	--	--	--	47.0	--	--
Students w/ disabilities	District	CPI	79	96.5	97.1	90.8	98.4	1.9	7.6
		P+	79	89%	91%	73%	95%	6	22
		SGP	68	51.5	57.0	50.0	46.5	-5.0	-3.5
	State	CPI	11,688	85.8	88.4	86.0	88.1%	2.3	2.1
		P+	11,688	60%	66%	63%	67%	7	4
		SGP	9,402	45.0	51.0	44.0	43.0	-2.0	-1.0
English language learners or Former ELLs	District	CPI	1	--	--	--	--	--	--
		P+	1	--	--	--	--	--	--
		SGP	0	--	--	--	--	--	--
	State	CPI	4,563	77.0	81.8	77.8	80.7	3.7	2.9
		P+	4,563	47%	57%	52%	58%	11	6
		SGP	2,514	59.0	65.0	52.0	59.0	0.0	7.0
All students	District	CPI	174	98.0	98.4	95.1	99.1	1.1	4
		P+	174	93%	95%	85%	97%	4	12
		SGP	137	50.0	53.0	50.0	40.0	-10.0	-10.0
	State	CPI	69,751	95.8	96.9	96.0	96.7	0.9	0.7
		P+	69,751	88%	91%	89%	91%	3	2
		SGP	61,218	50.0	57.0	50.0	51.0	1.0	1.0

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

[14] State refers to the 10th grade state results.

Table B3b: Minuteman RVTSD
Mathematics (All Grades)
Performance for Selected Subgroups Compared to State, 2012–2015[15]

Group and Measure			Number Included (2015)	Spring MCAS Year				Gains and Declines	
				2012	2013	2014	2015	4-Year Trend	2-Year Trend
High Needs	District	CPI	105	83.3	81.6	80.0	85.2	1.9	5.2
		P+	105	63%	59%	59%	66%	3	7
		SGP	92	39.0	44.0	44.0	48.0	9.0	4.0
	State	CPI	28,091	80.4	80.3	80.6	78.9	-1.5	-1.5
		P+	28,091	59%	61%	60%	58%	-1	-1
		SGP	22,925	48.0	45.0	47.0	47.0	-1.0	0.0
Economically Disadvantaged	District	CPI	43	--	--	--	84.9	--	--
		P+	43	--	--	--	63%	--	--
		SGP	40	--	--	--	49.0	--	--
	State	CPI	19,126	--	--	--	81.2	--	--
		P+	19,126	--	--	--	63%	--	--
		SGP	16,085	--	--	--	46.0	--	--
Students w/ disabilities	District	CPI	80	81.2	79.2	76.3	83.1	1.9	6.8
		P+	80	58%	55%	56%	63%	5	7
		SGP	70	31.0	44.5	44.5	50.0	19.0	5.5
	State	CPI	11,742	71.4	70.0	70.8	69.7	-1.7	-1.1
		P+	11,742	41%	40%	40%	39%	-2	-1
		SGP	9,549	47.0	42.0	45.0	46.0	-1.0	1.0
English language learners or Former ELLs	District	CPI	1	--	--	--	--	--	--
		P+	1	--	--	--	--	--	--
		SGP	1	--	--	--	--	--	--
	State	CPI	4,613	67.5	64.4	67.8	65.8	-1.7	-2.0
		P+	4,613	42%	39%	42%	41%	-1	-1
		SGP	2,589	59.0	45.0	53.0	53.0	-6.0	0.0
All students	District	CPI	175	85.3	86.2	85.6	88.7	3.4	3.1
		P+	175	68%	70%	69%	73%	5	4
		SGP	140	36.0	44.0	47.0	48.0	12.0	1.0
	State	CPI	69,766	90.0	90.2	90.0	89.9	-0.1	-0.1
		P+	69,766	78%	80%	78%	78%	0	0
		SGP	61,548	50.0	51.0	50.0	50.0	0.0	0.0

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

[15] State refers to the 10th grade state results.

Table B3c: Minuteman RVTSD
Science and Technology/Engineering (All Grades)
Performance for Selected Subgroups Compared to State, 2012–2015[16]

Group and Measure			Number Included (2015)	Spring MCAS Year				Gains and Declines	
				2012	2013	2014	2015	4-Year Trend	2-Year Trend
High Needs	District	CPI	96	80.9	79.7	76.0	87.0	6.1	11
		P+	96	52%	55%	53%	66%	14	13
	State	CPI	26,972	76.0	77.7	77.5	77.3	1.3	-0.2
		P+	26,972	46%	49%	49%	48%	2	-1
Econ. Disad.	District	CPI	38	--	--	--	84.9	--	--
		P+	38	--	--	--	61%	--	--
	State	CPI	18,419	--	--	--	78.6	--	--
		P+	18,419	--	--	--	52%	--	--
Students w/ disabilities	District	CPI	76	80.7	78.7	72.5	86.2	5.5	13.7
		P+	76	52%	53%	49%	64%	12	15
	State	CPI	11,625	68.8	70.3	70.0	71.2	2.4	1.2
		P+	11,625	32%	33%	33%	35%	3	2
English language learners or Former ELLs	District	CPI	1	--	--	--	--	--	--
		P+	1	--	--	--	--	--	--
	State	CPI	3,935	61.8	63.0	62.6	62.3	0.5	-0.3
		P+	3,935	26%	28%	26%	27%	1	1
All students	District	CPI	154	83.7	84.9	82.9	88.6	4.9	5.7
		P+	154	58%	66%	65%	69%	11	4
	State	CPI	67,732	87.0	88.0	87.9	88.2	1.2	0.3
		P+	67,732	69%	71%	71%	71%	2	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.

[16] State refers to the 10th grade state results.

Table B4: Minuteman RVTSD

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	1.4%	0.9%	1.4%	2.0%	0.6	42.9%	0.6	42.9%	3.4%
Econ. Disad.	--	--	--	0.0%	--	--	--	--	3.3%
Students w/ disabilities	1.2%	0.9%	0.8%	2.0%	0.8	66.7%	1.2	150%	3.5%
ELL	--	--	--	--	--	--	--	--	5.7%
All students	1.2%	0.9%	1.3%	1.5%	0.3	25.0%	0.2	15.4%	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: Minuteman RVTSD

Attendance 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	
All students	93.2%	92.1%	92.5%	92.4%	-0.8	-0.8%	-0.1	-0.1%	94.7%

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

Table B6: Minuteman RVTSD
Expenditures, Chapter 70 State Aid, and Net School Spending Fiscal Years 2012–2014

	FY12		FY13		FY14	
	Estimated	**Actual**	**Estimated**	**Actual**	**Estimated**	**Actual**
Expenditures						
From local appropriations for schools:						
By school committee	$16,451,608	$16,680,893	$17,264,423	$17,197,546	$18,547,098	$18,544,704
From revolving funds and grants	--	$3,123,699	--	$2,512,889	--	$2,593,779
Total expenditures	--	$19,804,592	--	$19,710,434	--	$21,138,483
Chapter 70 aid to education program						
Chapter 70 state aid*	--	$2,129,172	--	$2,146,052	--	$2,155,902
Required local contribution	--	$5,563,357	--	$5,635,287	--	$5,367,418
Required net school spending**	--	$7,692,529	--	$7,781,339	--	$7,523,320
Actual net school spending	--	$9,695,615	--	$10,416,366	--	$10,762,078
Over/under required ($)	--	$2,003,086	--	$2,635,027	--	$3,238,758
Over/under required (%)	--	26.0%	--	33.9%	--	43.0%

*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: FY12, FY13, and FY14 District End-of-Year Reports, Chapter 70 Program information on ESE website

Data retrieved 11/20/15

Table B7: Minuteman RVTSD
Expenditures Per In-District Pupil
Fiscal Years 2012–2014

Expenditure Category	2012	2013	2014
Administration	$1,662	$2,203	$2,100
Instructional leadership (district and school)	$1,737	$2,034	$1,835
Teachers	$8,733	$9,194	$10,091
Other teaching services	$791	$786	$755
Professional development	$92	$128	$125
Instructional materials, equipment and technology	$764	$815	$892
Guidance, counseling and testing services	$813	$956	$879
Pupil services	$3,591	$3,717	$3,358
Operations and maintenance	$2,432	$2,493	$2,527
Insurance, retirement and other fixed costs	$3,842	$3,950	$3,893
Total expenditures per in-district pupil	$24,456	$26,275	$26,455

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.	V/Tech.	0%	0%	27%	73%	2.7
	Acad.	0%	4%	38%	58%	2.5
	Total #	0	1	16	31	
	Total %	0%	2%	33%	65%	
2. The teacher provides and refers to clear learning objective(s) in the lesson.	V/Tech.	5%	27%	32%	36%	2.0
	Acad.	15%	31%	31%	23%	1.6
	Total #	5	14	15	14	
	Total %	10%	29%	31%	29%	
3. The teacher implements a lesson that reflects high expectations aligned to the learning objective (s).	V/Tech.	0%	27%	41%	32%	2.0
	Acad.	0%	42%	42%	15%	1.7
	Total #	0	17	20	11	
	Total %	0%	35%	42%	23%	
4. The teacher uses appropriate instructional strategies well matched to the learning objective(s).	V/Tech.	0%	18%	55%	27%	2.1
	Acad.	0%	35%	50%	15%	1.8
	Total #	0	13	25	10	
	Total %	0%	27%	52%	21%	
Total Score For Focus Area #1	V/Tech.					8.8
	Acad.					7.6

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.	V/Tech.	0%	14%	23%	64%	2.5
	Acad.	0%	19%	50%	31%	2.1
	Total #	0	8	18	22	
	Total %	0%	17%	38%	46%	
6. The teacher facilitates tasks that encourage students to develop and engage in critical thinking.	V/Tech.	5%	18%	41%	36%	2.1
	Acad.	8%	35%	38%	19%	1.7
	Total #	3	13	19	13	
	Total %	6%	27%	40%	27%	
7. Students assume responsibility for their own learning whether individually, in pairs, or in groups.	V/Tech.	14%	5%	23%	59%	2.3
	Acad.	12%	23%	31%	35%	1.9
	Total #	6	7	13	22	
	Total %	13%	15%	27%	46%	
Total Score For Focus Area #2	V/Tech.					6.9
	Acad.					5.7

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.	V/Tech.	23%	32%	36%	9%	1.3
	Acad.	35%	50%	8%	8%	0.9
	Total #	14	20	10	4	
	Total %	29%	42%	21%	8%	
9. The teacher uses appropriate resources aligned to students' diverse learning needs. (e.g., technology, manipulatives, support personnel).	V/Tech.	9%	14%	41%	36%	2.0
	Acad.	0%	23%	65%	12%	1.9
	Total #	2	9	26	11	
	Total %	4%	19%	54%	23%	
10. The classroom climate is characterized by respectful behavior, routines, tone, and discourse.	V/Tech.	9%	14%	14%	64%	2.3
	Acad.	0%	4%	42%	54%	2.5
	Total #	2	4	14	28	
	Total %	4%	8%	29%	58%	
11. The teacher conducts appropriate formative assessments to check for understanding and provide feedback to students.	V/Tech.	9%	23%	36%	32%	1.9
	Acad.	8%	27%	35%	31%	1.9
	Total #	4	12	17	15	
	Total %	8%	25%	35%	31%	
Total Score For Focus Area #3	V/Tech.					7.5
	Acad.					7.2