

Foxborough Public Schools

Measures of Student Achievement

Baselines and Benchmarks for Improvement

Introduction:

There are currently 2,584 students enrolled in the Foxborough Public Schools: 793 at Foxborough High School, 822 at the Ahern Middle School, 318 at the Burrell Elementary School, 380 at the Igo Elementary School, and 241 at the Taylor Elementary School. Included in that population are 66 English language learners whose first language is not English. Foxborough's per pupil expenditure for FY 2018 was \$15,983* compared to the statewide average per pupil expenditure of \$15,450*. The following information provides further background and context for our baselines and goals for student achievement:

**Source: MA DESE 2018 District Report Card*

Students Eligible for Free or Reduced Lunch	2014	2015	2016	2017	2018	2019
District-Wide (excludes preschool)	16.75%	16.62%	18.62%	*20.57%	18.29%	22.41%
Foxborough High School	15.10%	15.90%	18.38%	*21.29%	19.31%	24.09%
Ahern Middle School	18.11%	17.05%	20.47%	*21.97%	16.63%	21.65%
Burrell Elementary School (excludes preschool)	19.38%	15.98%	15.82%	*12.24%	19.20%	17.60%
Igo Elementary School	19.50%	18.73%	20.61%	*24.68%	24.04%	27.89%
Taylor Elementary School	12.31%	14.75%	12.35%	*14.77%	12.95%	18.26%

* USDA approved MA to use state Medicaid data for both free and reduced price eligibility by direct certification delivered through Virtual Gateway

Special Education Population	2014	2015	2016	2017	2018	2019
District-Wide (includes out of district placements)	15.62%	16.78%	17.60%	16.99%	18.98%	20.09%
Foxborough High School	16.72%	16.96%	18.14%	15.22%	15.62%	17.78%
Ahern Middle School	17.65%	18.13%	18.75%	20.67%	21.14%	21.16%
Burrell Elementary School (excludes preschool)	13.56%	16.80%	11.08%	12.66%	14.73%	15.87%
Igo Elementary School	13.50%	13.62%	16.54%	16.54%	19.13%	18.94%
Taylor Elementary School	11.94%	16.80%	13.58%	11.39%	16.52%	20.33%

Our process for identifying data to measure student achievement, establishing baselines, and setting future benchmarks for improvement has been in place for many years and continues to involve a team of administrators and coordinators throughout the district. As different groups of students are measured each year, variables can result in annual comparisons being unreliable; therefore, a “three-year rolling average” is utilized for most assessments. The process of creating baseline and benchmark goals for district assessments provides an opportunity to identify possible strengths and weaknesses of our curriculum and instructional programs. Multiple measures in addition to state standardized assessments will continue to be important for assessing student academic achievement.

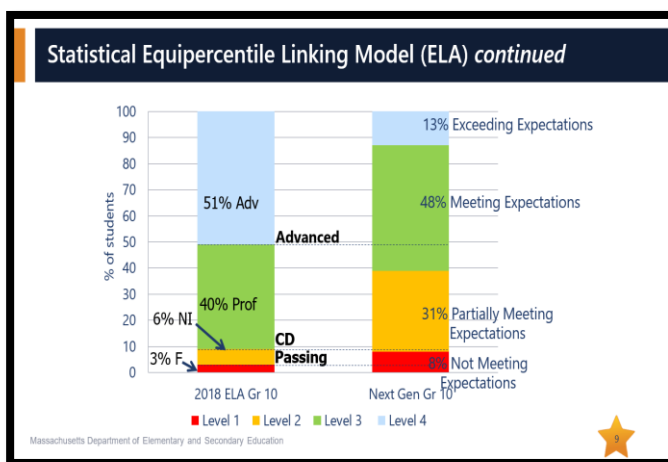
In 2019, the Next-Generation MCAS was administered in English language arts and math for grades 3-8. In 2019, this new test also replaced the Legacy MCAS assessment at the high school level for English language arts and math. This assessment is an updated version of the nearly 20-year-old MCAS assessment. It focuses on both the content standards presented in the curriculum frameworks, as well as critical thinking abilities, application of knowledge, and ability to make connections between reading and writing. Additionally, it gives a clearer signal of readiness for the next grade level or college and career. The Next-Generation MCAS was designed to be administered online, although paper versions are still available. Beginning in 2019, districts were expected to administer the test online for all students grades 3-10.

As a reminder, the transition to Next-Generation MCAS resulted in new the establishment of new baselines for all schools in Massachusetts. These achievement levels differ from the legacy MCAS. A detailed description and comparison of the achievement levels is provided below, however the new reporting categories are Exceeding Expectations, Meeting Expectations, Partially Meeting Expectations and Not Meeting Expectations. This is especially important as we are in a transitional phase with high school MCAS score reporting, and we also continue to administer legacy MCAS for middle and high school science. It is worthy of noting that the science tests remain paper and pencil and continue to have the legacy reporting categories of Advanced, Proficient, Needs Improvement and Warning.

MCAS Achievement Levels	
★ Legacy	★ Next-Generation
<p>Advanced Students at this level demonstrate a comprehensive and in-depth understanding of rigorous subject matter, and provide sophisticated solutions to complex problems.</p> <p>Proficient Students at this level demonstrate a solid understanding of challenging subject matter and solve a wide variety of problems.</p> <p>Needs Improvement Students at this level demonstrate a partial understanding of subject matter and solve some simple problems.</p> <p>Warning Students at this level demonstrate a minimal understanding of subject matter and do not solve simple problems.</p>	<p>Exceeding Expectations A student who performed at this level exceeded grade-level expectations by demonstrating mastery of the subject matter.</p> <p>Meeting Expectations A student who performed at this level met grade-level expectations and is academically on track to succeed in the current grade in this subject.</p> <p>Partially Meeting Expectations A student who performed at this level partially met grade-level expectations in this subject. The school, in consultation with the student's parent/guardian, should consider whether the student needs additional academic assistance to succeed in this subject.</p> <p>Not Meeting Expectations A student who performed at this level did not meet grade-level expectations in this subject. The school, in consultation with the student's parent/guardian, should determine the coordinated academic assistance and/or additional instruction the student needs to succeed in this subject.</p>

Other Important Notes:

- Spring 2019 is year three of the new Next-Generation MCAS assessment in grades 3-8 and year one for high school. We expect that over time, more students will score Meeting Expectations or above. When the original MCAS debuted in 1998, relatively few students scored Proficient, but that changed as students and teachers and students adjusted to the new expectations.
- Students in 10th grade took the computer-based Next Generation MCAS for the first time in Spring 2019.
- The next-generation MCAS is a new test with a different approach to assessing student performance in grades 3-10. Results are now intended to signal readiness for the next grade level or college and career as opposed to achievement in the grade level assessed.
- The updated assessment is not only computer-based, but has new question types.
- The MA DESE has developed transitional scores to determine proficiency levels for high school students as outlined below:



Interim CD Standard for the Classes of 2021 and 2022

	Legacy PASSING but requires an Educational Proficiency Plan (EPP)	Legacy PASSING and met the MCAS graduation requirement	Next Gen PASSING but requires an EPP	Next Gen PASSING and met the MCAS graduation requirement
ELA	220-238	240+	455-471	472+
Mathematics	220-238	240+	469-485	486+
STE	220	220+	TBD - Summer 2020	

Massachusetts Department of Elementary and Secondary Education

Current CD Requirements for ELA and Mathematics, by Class

Class	School Year						CD requirements
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	
Class of 2020	Grade 10	Grade 11	Grade 12				Legacy (240 or 220+EPP, per Board vote in October 2016)
Class of 2021	Grade 9	Grade 10*	Grade 11	Grade 12			Interim (standard on new test that represents similar level of achievement as 240, or 220+EPP)
Class of 2022		Grade 9	Grade 10	Grade 11	Grade 12		Interim (standard on new test that represents similar level of achievement as 240, or 220+EPP)
Class of 2023			Grade 9*	Grade 10	Grade 11	Grade 12	Future (to be determined after results of new tests are considered by the Board in the 2019-2020 school year)

* First administration of next-generation grade 10 tests with new CD requirement in ELA/Mathematics

Massachusetts Department of Elementary and Secondary Education

How will this appear on the Parent/Guardian Report?

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Note: Based on the passing standard in place during the transition to next-generation MCAS tests, your child's score meets the high school graduation requirement. However, your child requires an Educational Proficiency Plan (EPP). Information on EPP requirements is available at www.doe.mass.edu/correlp.

Massachusetts Department of Elementary and Secondary Education

- During this transitional phase the DESE is employing an equipercentile linking model to draw parallels to the previous reporting system. Because of this, it is possible that some students may score in the “not meeting expectations” category, but still achieve a “passing” score.

**Foxborough High School 2019 MCAS Results for
English Language Arts, Mathematics and Science &
Foxborough High School: BASELINE AND BENCHMARKS**

FOXBOROUGH HIGH SCHOOL						
NEXT GENERATION MCAS - ENGLISH LANGUAGE ARTS GRADE 10						
<i>(2019 percentages based on 171 students)</i>	<i>% Exceeding Expectations</i>	<i>% Meeting Expectations</i>	<i>% Exceeding & Meeting</i>	<i>% Partially Meeting Expectations</i>	<i>% Not Meeting Expectations</i>	<i>% Partially & Not Meeting</i>
2019	12	59	72	27	2	29
STATE	13	48	61	31	8	39

MULTI-YEAR COMPARISON						
LEGACY MCAS – ENGLISH LANGUAGE ARTS GRADE 10						
	% Advanced	% Proficient	% Adv. & Prof.	% Needs Improvement	% Failure	% NI & Fail.
2018	46	49	95	5	0	5
2017	53	44	97	2	1	3
2016	49	47	96	3	1	4
2015	50	48	98	1	0	1
2014	47	49	96	1	2	3
2013	53	41	95	4	2	6
2012	45	49	94	4	3	7
2011	48	46	94	5	0	5
2010	24	60	84	14	1	15
2009	35	55	90	10	1	11
2008	36	50	86	12	1	14
2007	21	59	80	15	5	20
2006	22	68	90	7	3	10
2005	31	47	78	18	3	21
2004	27	55	82	16	2	18
2003	35	49	84	14	2	16
2002	32	44	76	20	4	24
2001	26	39	65	26	9	35

Summary Data Statements – English Language Arts

GRADE 10:

In 2019, 72% of students at Foxborough High School were either exceeding or meeting expectations on the grade 10 ELA portion of the Next Generation MCAS exam. This continues to be above the state average of 61%.

Data to support:

- a. DESE Summary of State Results 2019
- b. MA DESE Summary of School Results 2019

Root Causes:

- a. While our curriculum is closely aligned with state standards and implemented at all levels, we have recently shifted our focus from delivering/assessing content to building transferable skills in reading, writing, speaking, and listening in all grades and levels.
- b. The test was new in several ways, including format (i.e. computer-based), length (i.e. two days vs. three days), and question types (e.g. two-part multiple choice, technology-enhanced questions).
- c. The placement and structure of the essay prompt/response sections on the computer-based assessment required focused attention for a longer period of time than on past assessments.
- d. Test design and resources for Next Generation MCAS were made available to teachers in October of 2018, (including only one practice test), which hindered teachers' ability to practice the new format with their students.

Action Steps:

- a. Increase opportunities to practice reading/writing skills across the disciplines.
- b. Increase students' exposure to contextual vocabulary instruction across the disciplines.
- c. Implement elements of project-based learning in all aspects of the English curriculum across all grades and levels.
- d. Develop and utilize a variety of authentic assessments to monitor students' knowledge and skills across grades and levels.
- e. Use Illuminate to design and implement computer-based common assessments that mimic the MCAS in question type and style to increase students' exposure to, and comfort with, computer-based assessments.
- f. Use Illuminate to analyze data across grade teams, assess students' skills, and make adjustments to instruction as needed.
- g. Engage in vertical alignment with the middle school in terms of skill-building and assessment.
- h. Utilize the Question Formulation Technique to engage students in critical thinking in all grades and levels.

FOXBOROUGH HIGH SCHOOL NEXT GENERATION MCAS - MATHEMATICS GRADE 10						
<i>(2019 percentages based on 170 students)</i>	<i>% Exceeding Expectations</i>	<i>% Meeting Expectations</i>	<i>% Exceeding & Meeting</i>	<i>% Partially Meeting Expectations</i>	<i>% Not Meeting Expectations</i>	<i>% Partially & Not Meeting</i>
2019	17	65	83	16	2	18
STATE	13	45	58	33	9	42

MULTI-YEAR COMPARISON LEGACY MCAS – MATHEMATICS GRADE 10						
	% Advanced	% Proficient	% Adv. & Prof.	% Needs Improvement	% Failure	% NI & Fail.
2018	65	26	91	6	3	9
2017	64	29	93	5	2	7
2016	65	25	90	8	2	10
2015	64	26	90	8	8	10
2014	61	26	88	9	4	13
2013	66	22	88	7	5	12
2012	55	31	86	8	6	14
2011	63	22	85	14	1	15
2010	59	25	84	13	3	16
2009	59	26	85	13	2	15
2008	52	34	86	10	3	13
2007	48	33	81	14	5	19
2006	52	31	83	11	6	17
2005	50	29	79	13	9	22
2004	38	35	73	22	5	27
2003	37	40	77	19	5	24
2002	31	34	65	25	9	34
2001	26	41	67	20	14	34

Summary Data Statements – Mathematics

GRADE 10:

In 2019, 83% of students at Foxborough High School were either exceeding or meeting expectations on the grade 10 Mathematics portion of the Next Generation MCAS exam. This remains above the state average of 58%.

Data to support:

- DESE Summary of State Results 2019
- MA DESE Summary of School Results 2019

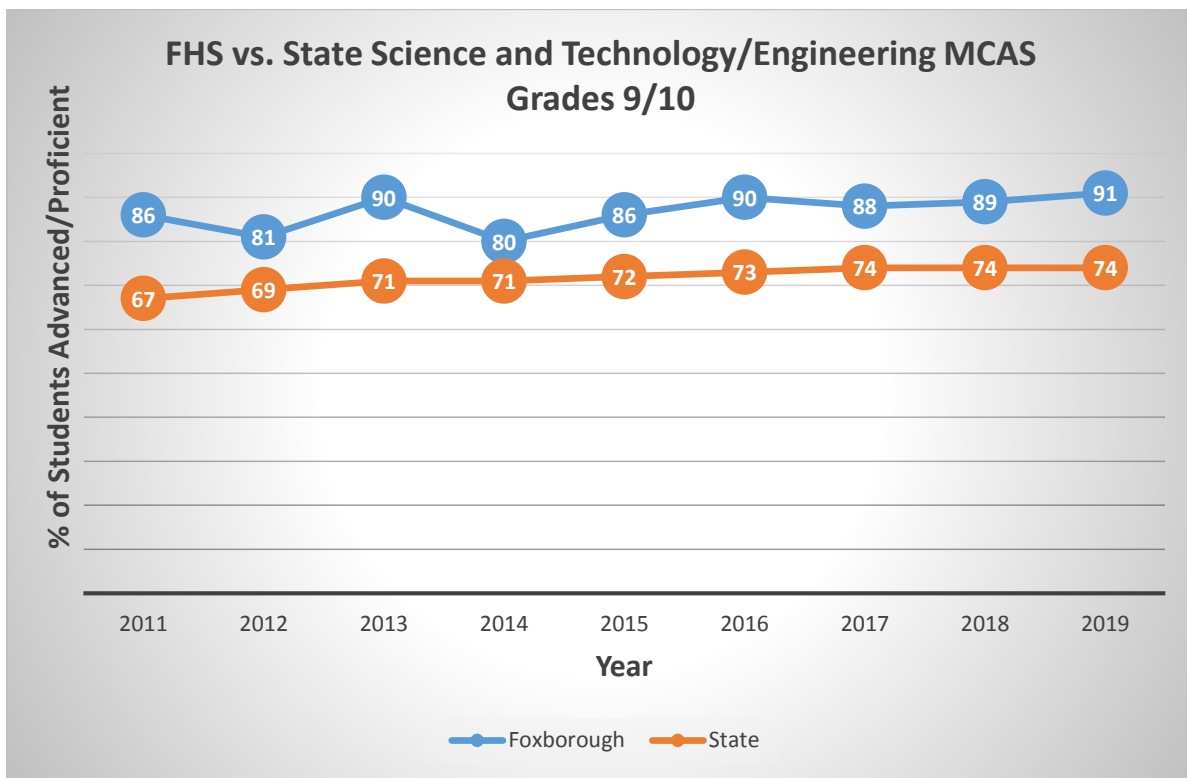
Root Causes:

- Use of formative assessments with frequent feedback given to students.
- Utilization of OECD levels of math proficiency when preparing lessons.
- Use of a rigorous task rubric, received through our partnership with OECD, to help evaluate classroom tasks.
- Half-day math boot camp for identified students who are at risk to provide strategies and content support.
- The new MCAS test was taken online and measured only the updated standards.
- Practice questions to use with the students were not available until January, 2019. There were a limited number of these questions provided by DESE and once a class had gone through them there were no others to access for practice so that students and teachers could become more familiar with expectations.
- New question types resulted in changes to the point distribution.

Action Steps:

- Provide frequent formative assessments that allow students with the opportunity to practice a variety of question types.
- Provide students with the opportunity to practice online assessments by using Illuminate.
- Engage in vertical alignment conversation with the middle school math teachers to increase consistency in curriculum content and pedagogy across grades 6-12.
- Provide students additional support through the online platform ALEKS.

MULTI-YEAR COMPARISON LEGACY MCAS – BIOLOGY GRADES 9/10						
(2019 percentag es based on 169 Students	% Advanced	% Proficient	% Adv & Prof.	% Needs Improvement	% Failure	% NI & Fail.
2019	36	55	91	9	1	10
2018	34	55	89	9	2	11
2017	46	42	88	8	3	11
2016	42	49	90	8	2	10
2015	35	51	86	12	1	13
2014	43	37	80	17	3	20
2013	42	47	90	8	2	10
2012	27	54	81	14	5	19
2011	32	54	86	12	2	14
2010	19	62	81	15	5	20
2009	20	58	78	19	3	22
2008	21	50	71	22	7	29
2007	11	45	56	28	17	45



***Note:** Due to curriculum shifts, beginning in 2017 primarily grade 9 students were tested on the Biology MCAS.

Summary Data Statements – Science & Technology/Engineering

GRADE 9/10: 2019 MCAS BIOLOGY EXAM

In 2019, 91% of Foxborough High School students achieved a rating of Proficient or Advanced on the grade 10 Science portion of the MCAS exam. This remains above the state average of 74%. High School students exceeded the state by 6% of students scoring Advanced in 2019. In 2019, 100% of the students who took the Biology exam were in grade 9.

Data to support:

- 2019 DESE Summary Report of State Results
- 2019 MCAS Science Item Analysis Report

Root Causes:

- Written Curriculum is in close alignment with 2006 state standards and transitioning to 2016 standards.
- Offered Biology Boot Camp for at risk students.

Action Steps:

- Fully realign curriculum to 2016 MA STE frameworks.
- Increase focus on scientific practices, and update assessments to reflect curricular changes.
- Increase use of formative assessments with immediate feedback e.g. Illuminate Education.
- Investigate and implement strategies to increase student motivation and create real-world relevance for classroom activities.

Foxborough High School: BASELINE AND BENCHMARKS GOALS

Advanced Placement Tests

Advanced Placement (AP) Data (Average Score)	BASELINE 2010-2012 3 Year Rolling Average	3 Year Report Fall 2015 Goal	3 YEAR REPORT FALL 2015 2013-2015	NEW BASELINE 2014-2016 3- year rolling average	BENCHMARK Fall 2019 3-year benchmark goal	3 YEAR REPORT FALL 2019 (2017-2019)	NEW BASELINE 2018-2020 3-year rolling average
# of AP students	128	143	165	192	203	201	
# of tests administered	241	305	321	374	430	443	
Percentage Scoring 3 or better (0-5 scale)	83%	83%	84%	78.6%	79%	78.4%	

Advanced Placement (AP) Data (Average Score)	2013	2014	2015	2016	2017	2018	2019
# of AP students	140	163	192	220	195	204	204
# of tests administered	299	303	362	458	427	432	470
# of AP students Scoring 3 or better (0-5 scale)	125	128	161	162	151	163	159
Percentage Scoring 3 or better (0-5 scale)	89.3%	78.5%	83.9%	73.6%	77.4%	79.9%	77.9%

Foxborough High School: BASELINE AND BENCHMARKS GOALS Cont'd.

SAT Data (Average Scores)	BASELINE 2010- 2012 3- year rolling average	BENCHMARK Fall 2015 3-year benchmark goal	3 YEAR REPORT FALL 2015 2013-2015	NEW BASELINE 2014-2016 3- year rolling average	BENCHMARK Fall 2019 3-year benchmark goal	3 YEAR REPORT FALL 2019 (2017-2019)	NEW BASELINE 2018-2020 3-year rolling average
CRITICAL READING	524.33	530	537	526	531	<i>*phased out in 2016</i>	N/A
CRITICAL WRITING	533.33	545	541	527	532	<i>*phased out in 2016</i>	N/A
EVIDENCE BASED READING& WRITING					Benchmark goal to be determined	566	
MATH	547.33	550	549	536	538	573	
ACT Data (Average Scores)	BASELINE 2011- 2013 3-year rolling average	BENCHMARK Fall 2015 3-year benchmark goal	3 YEAR REPORT FALL 2015 2013-2015	NEW BASELINE 2014-2016 3-year rolling average	BENCHMARK Fall 2019 3-year benchmark goal	3 YEAR* REPORT FALL 2019 (2017-2018 only as 2019 data is not yet available)	NEW BASELINE 2018-2020 3-year rolling average
ENGLISH	22.1	23.1	22.7	22.7	24	23.5	
MATH	23.1	24.1	23.3	23.2	24	24	
READING	22.8	23.8	23.8	24.0	24	24.5	
SCIENCE	22.0	23.0	22.6	22.9	24	23.5	
COMPOSITE	22.6	23.6	23.3	23.2	24	24	

Continuing Education	NEW BASELINE 2010- 2012 3- year rolling average	BENCHMARK Fall 2015 3-year benchmark goal	3 YEAR REPORT FALL 2015 2013-2015	NEW BASELINE 2014-2016 3- year rolling average	BENCHMARK Fall 2019 3-year benchmark goal	3 YEAR REPORT FALL 2019 (2017-2019)	NEW BASELINE 2018-2020 3-year rolling average
Total percentage of Continuing Education	91.67	92	90%	90%	92%	92%	

Middle School Combined BASELINE AND BENCHMARK GOALS

Developmental Reading Inventory (DRA): % of students meeting the grade level benchmark on the June DRA	NEW BASELINE DRA2 (only 2019 data used)	BENCHMARK Fall 2022 3-year benchmark goal	3 YEAR REPORT FALL 2022 (2020-2022)	NEW BASELINE DRA2 (2021-2023 Rolling average)
Grade 5 (DRA level 50)	70%			
Grade 6 (DRA level 60)	69%			

**DRA was introduced for the first time at the middle school during the 2018-2019 school year.*

Mathematics: % of students meeting grade level benchmarks on updated math assessments – June 2019	NEW ASSESSMENT & New BASELINE (only 2019 data used)		BENCHMARK Fall 2022 3-year benchmark goal	3 YEAR REPORT FALL 2022 (2020-2022)	NEW BASELINE (2021-2023 Rolling average)
Grade 7	Calculator	Non-Calc			
	84%	62%			
Grade 8	79%	79%			

During the 2018-2019 school year, middle school math assessments including benchmark assessments, were updated and revised to better reflect the rigor of Next-Generation MCAS. For this reason, a new baseline has been established.

Elementary Schools Combined BASELINE AND BENCHMARK GOALS

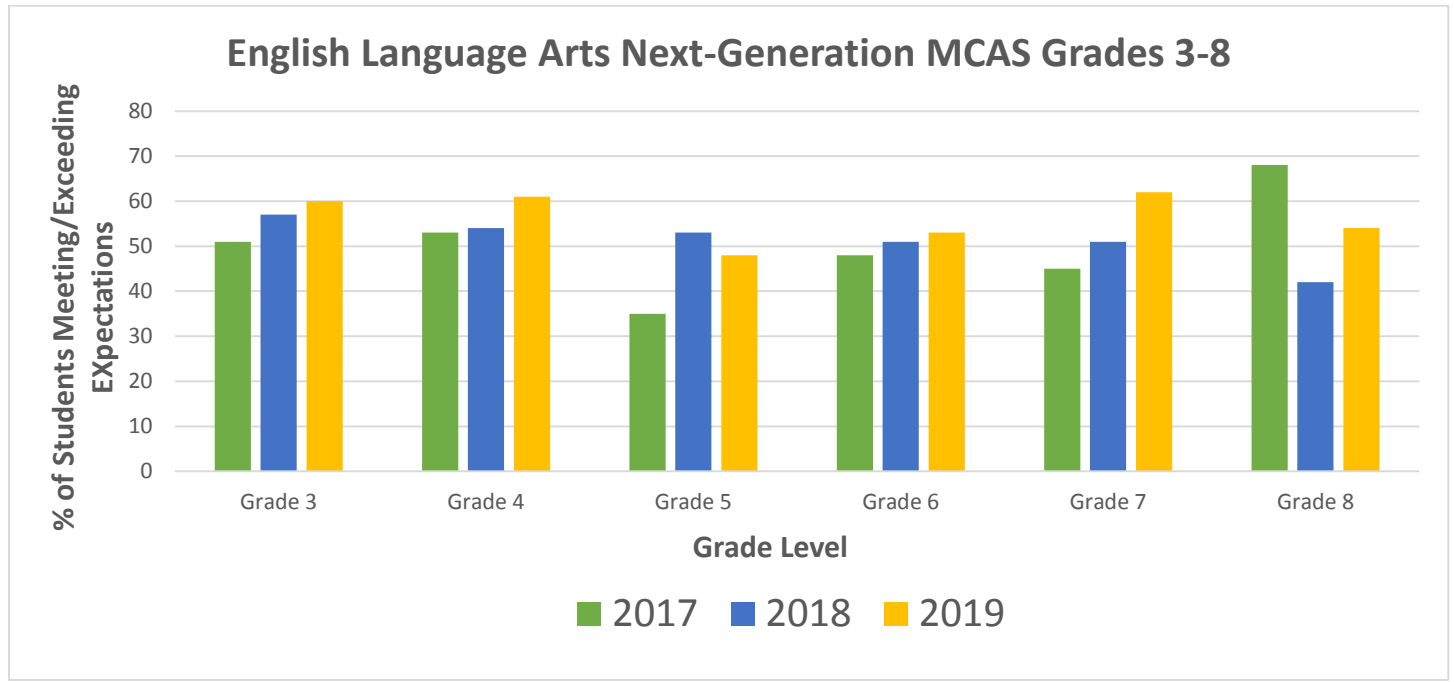
Developmental Reading Inventory (DRA): % of students meeting the grade level benchmark on the June DRA	NEW BASELINE DRA2 (only 2012 data used)	BENCHMARK Fall 2015 3-year benchmark goal DRA2	3 YEAR REPORT FALL 2015 (2013-2015)	NEW BASELINE DRA2 (2014-2016)	BENCHMARK Fall 2019 3-year benchmark goal DRA 2	3 YEAR REPORT FALL 2019 (2017-2019)	NEW BASELINE 2018-2020 3-year rolling average
Grade K (DRA level 3)	87	88	83.2	83.9	88	80	
Grade 1 (DRA level 16)	64	67	67.0	68.9	73	65	
Grade 2 (DRA level 28)	*58	*61	61.3	62.86	66.6	66	
Grade 3 (DRA level 38)	62	65	62.6	60.6	65	66	
Grade 4 (DRA level 40)	61	64	73.4	71.2	73.3	75	

***written component enters at grade 2**

Mathematics: % of students meeting grade level benchmarks on updated math assessments – June 2019	NEW ASSESSMENT & New BASELINE (2019 data used)	BENCHMARK FALL 2022 3-year benchmark goal (2020-2022)	3 YEAR REPORT FALL 2022	NEW BASELINE (2021-2023 Rolling average)
Grade K	85			
Grade 1	62			
Grade 2	58			
Grade 3	68			
Grade 4	73			

During the 2018-2019 school year, all elementary math assessments including benchmark assessments, were updated and revised to better reflect the rigor of Next-Generation MCAS. For this reason, a new baseline has been established.

Next-Generation MCAS Grades 3-8 ENGLISH LANGUAGE ARTS



2019 Next-Gen MCAS English Language Arts- Grades 3-8						
	%Foxborough Meeting/Exceeding Expectations			% Foxborough Not Meeting/Partially Meeting Expectations		
	2017	2018	2019	2017	2018	2019
Grade 3	51	→ 57	→ 60	49	→ 43	→ 41
Grade 4	53	54	61	48	46	39
Grade 5	35	53	48	64	↘ 47	52
Grade 6	48	↘ 51	53	51	49	↘ 47
Grade 7	45	51	↘ 62	55	49	↘ 38
Grade 8	68	42	54	53	57	46
Grades 3-8 avg	46	51	54	54	49	46

GRADES 3-8:

In most grades, the percent of students who met or exceeded the expectations on the 2019 Next Gen MCAS test was above the state level. The percent of students in grade 6 who met or exceeded expectations was just below the state, while there was a greater gap between our grade 5 students and the state. These overall percentages do not reflect the gains made on specific standards by grade level in comparison to last year nor do they reflect measures of student growth.

Data to support:

- MA DESE Summary of State Results 2019
- MA DESE Summary of District/School Results

Root Causes:

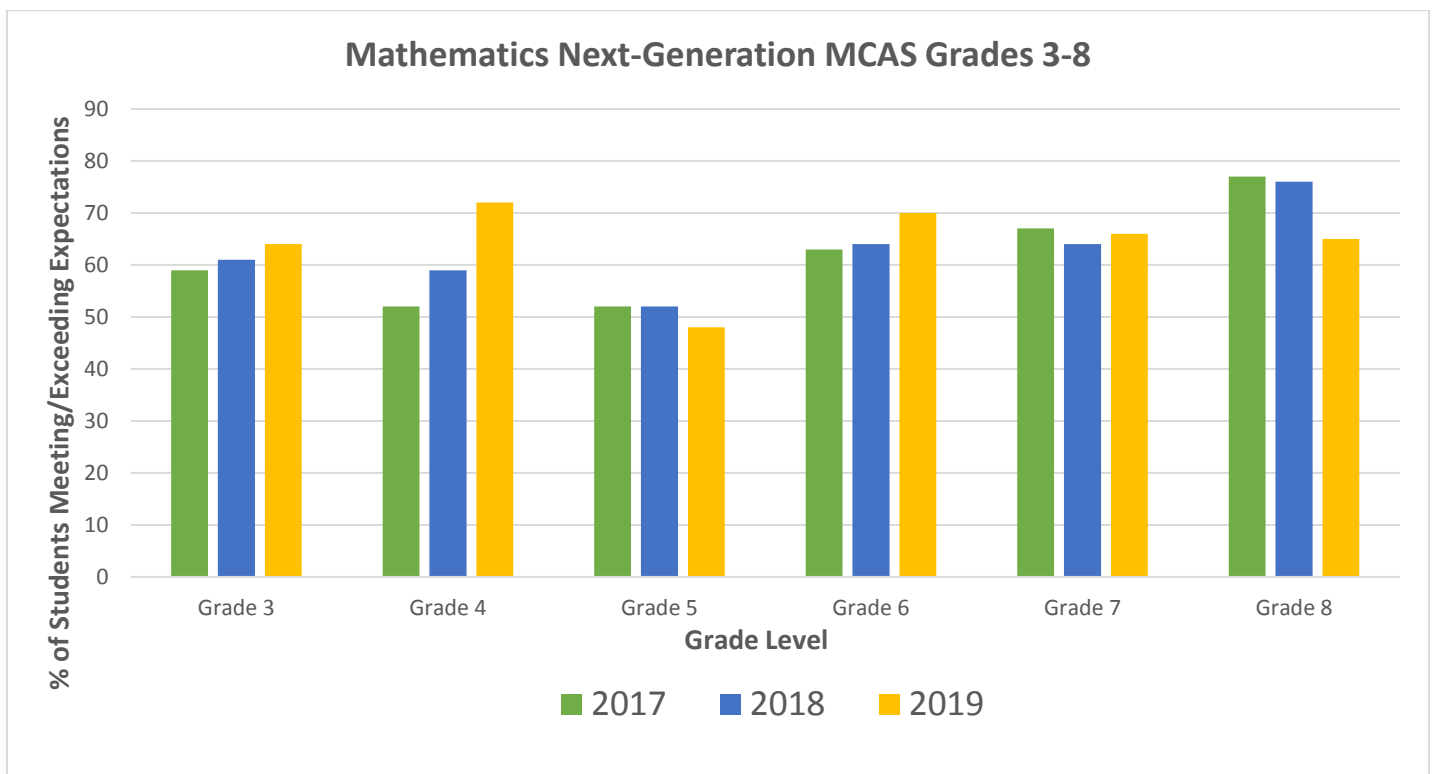
- Uniform collaborative planning and implementation of StudySync in grade 8.
- MCAS data analysis process supported grade level teams identifying gaps between instructional practices and assessment demands.
- Grade 5 is a transition year for students.
- Systematic implementation of online keyboarding program for grades 3, 4, and 5.

Action Steps:

- Work in collaboration with the elementary principals to achieve writing goals included within the school improvement plan.
- Utilize content, grade level and professional learning community structures to support uniform practices for writing instruction, K-8.
- Develop benchmark assessments to better align to the curriculum frameworks and the expectations of the NextGen MCAS.
- Utilize benchmark assessment data to address instructional deficits around identified standards.

Next-Generation MCAS Grades 3-8

MATHEMATICS



2019 Next-Gen MCAS Mathematics - Grades 3-8

	%Foxborough Meeting/Exceeding Expectations			% Foxborough Not Meeting/Partially Meeting Expectations		
	2017	2018	2019	2017	2018	2019
Grade 3	59	61	64	40	39	36
Grade 4	52	59	72	48	42	27
Grade 5	52	52	48	48	47	53
Grade 6	63	64	70	37	36	30
Grade 7	67	64	66	32	36	34
Grade 8	77	76	65	23	24	37
Grades 3-8 avg	62	63	62	38	31	38

Summary Data Statements – Grades 3-8 Next-Gen MCAS Mathematics

GRADES 3-8:

In all grades, Foxborough achievement in math is at or above the state average. In 2019 62% of Foxborough students in grades 3-8 met or exceeded expectations on MCAS compared to 49% of the state.

Data to support:

- a. 2019 DESE Summary Report of State Results
- b. 2019 MCAS Math Item Analysis Reports

Root Causes:

- a. Fidelity across grade levels with the Guided Math model to effectively meet individual student needs.
- b. Revision of district assessments to better reflect the rigor of the standards.
- c. Alignment of curricular resources to the standards.
- d. Grade 5 curriculum in the process of revision.

Action Steps:

- a. Professional development offerings to support Guided Math, math workshop and best practices.
- b. Pilot new math program in grade 5.
- c. Normalize computer usage, even at the youngest grades, through experiences such as Typing Club, Buzz, Red Bird and Illuminate for online math unit assessments.
- d. Revise district assessments using Illuminate Item Bank.
- e. Implement a Fact Fluency Block in grades K-4 to address strategies required for procedural fluency.
- j. Leverage common meeting times to collect and analyze data from common assessments and maximize the Guided Math model to empower teachers to best meet the individual needs of students.

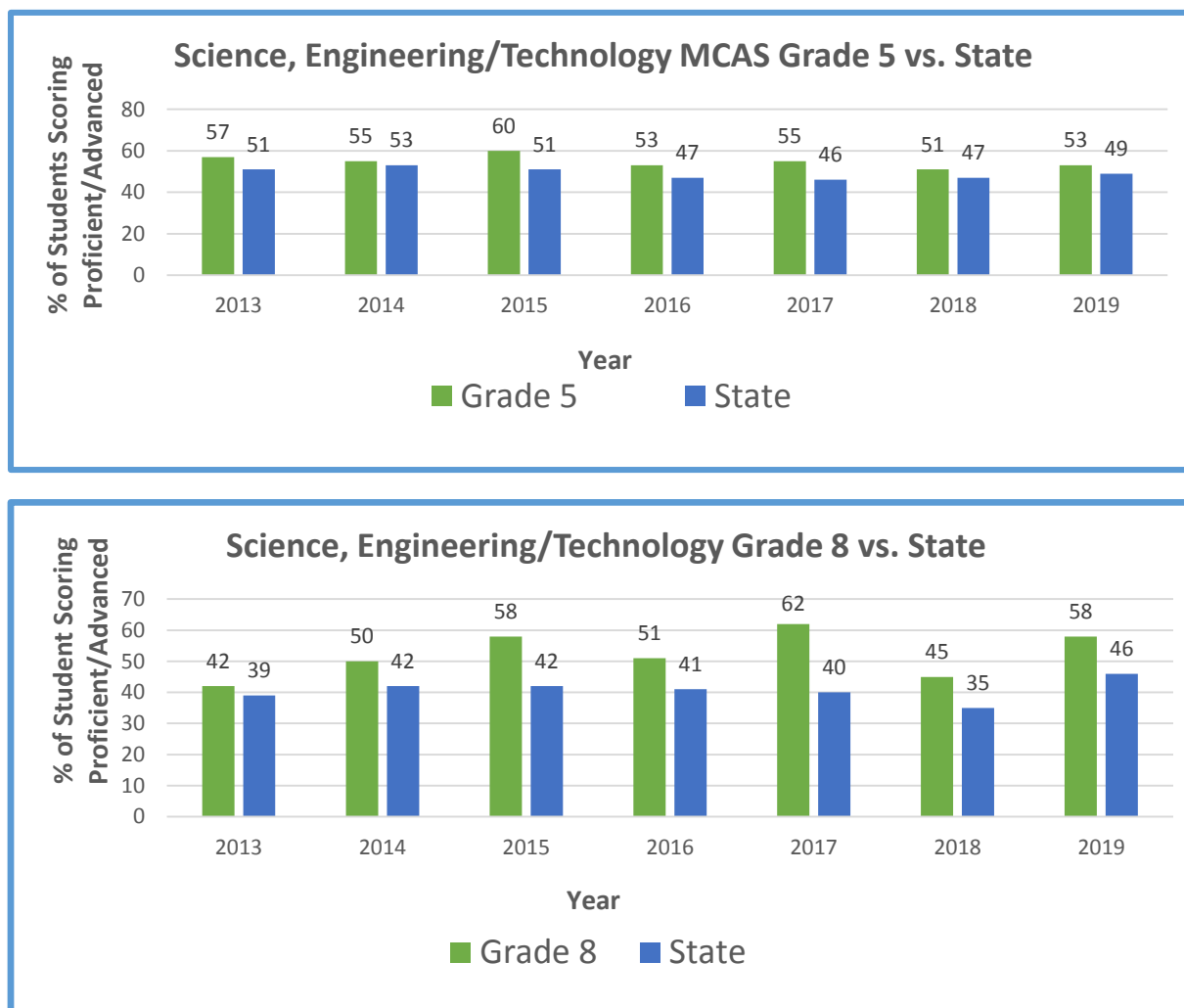
Summary Data Statements – Science Engineering Technology

GRADES 5-8:

Although the revised MA STE frameworks were formally published by the state in April, 2016, FPS has been implementing these standards since 2015. The Next Generation Science MCAS, reflecting the changes in these standards, was administered for the first time in Spring 2019. It is important to note that prior to 2019, the science MCAS assessed the 2001/2006 standards.

Data to support:

a. Legacy MCAS Performance Categories Multi-Year Comparison



Root Causes:

- The grade 5 MCAS assessment incorporates concepts taught in grades 3, 4, and 5.
- The grade 8 MCAS assessment incorporates concepts taught in grades 6, 7, and 8.
- The new standards were assessed for the first time on the spring 2019 assessment and Foxborough has fully transitioned to the new standards
- Professional development offerings in Science focus more heavily on the Practices, which emphasize critical thinking and inquiry versus discrete content. The 2019 MCAS has shifted to match this focus.

Action Steps:

- Focus on inquiry-based approach, practice standards, and 21st Century Skills.
- Upgrade assessments through the Illuminate platform.
- Utilize newly released updates to STEM Scopes program which now align to the Massachusetts curriculum frameworks as opposed to NGSS.
- Implementation of Project Lead the Way throughout middle school (In 2020, expand to grade 6; In 2021, expand to grade 5)