



MCAS 2018

An Update on Student Performance on the State Assessment Test

by Amy Clouter Assistant Superintendent for Curriculum, Instruction & Assessment

Introduction

This year the state of Massachusetts celebrated an important anniversary: 25 years ago, the Education Reform Act was passed, signaling bipartisan support and rising expectations for our public schools. Significant investments in the form of state aid and common learning outcomes soon followed. The Massachusetts Comprehensive Assessment System (or MCAS) was developed with the goal of making it easier to see where students were doing well and where improvements were needed. Over time, test results and refinements to the state's approach to assessment have shaped district decisions at the local level, with positive results. The alignment of curriculum with state standards and increased attention to student achievement and growth scores has resulted in rising rates of student achievement, particularly for students that had been historically low performing. Our state is leading the nation in educational excellence, and Shrewsbury continues to be a leader in the state.

As you know, the "next generation" MCAS test implemented was conceived to prepare students for the rigorous tasks they are likely to face in college and/or in their careers and to ensure that public schools return to using a common assessment tool. Importantly, the tests themselves were recalibrated to ensure consistency in scoring.

¹ Building on 20 Years of Massachusetts Education Reform Massachusetts Board of Elementary and Secondary Education Report M. D. Chester, Ed. D. Commissioner November 2014

Last year provided us a first look at these new benchmarks for students. The new version of

the test (MCAS 2.0) was successfully implemented in Grades 3-8 in English Language Arts (ELA) and Math, which means that this report will depict results from two different assessments, the original MCAS "legacy" test that students were given in Science & Technology in Grades 5, 8, and 10 and in ELA and Math in Grade 10, and the "Next Generation" assessment administered for the second time in 2018.



| Legacy MCAS vs. | "Next-Generation" MCAS |
|---|------------------------------|
| Only Grades 5 and 8 | MCAS 2.0: ALL Grades 3-8 |
| Science, Technology/Engineering test | English Language Arts & Math |
| ALL high school tests | |
| English Language Arts, Math, Science/Technology | |

MCAS 2.0 was designed to be given on a computer. Our investment in technology meant that Shrewsbury students in Grades 4-8 were able to use I pads to take a computer-based version of the test. However, students in Grade 3 took the paper-based version of the test last year. To ensure fairness regardless of test form (computer or paper) the DESE used the results from parts of the test that are similar to help adjust the scoring on parts of the test that vary by format. All students in Shrewsbury were able to successfully respond to expectations of the next generation of assessments. Going forward Grade 3 will also take the computer-based version of the test.

This is only the second year that most of our students took this version of the test. Given the wide number of variables that exist from district to district and the significant changes that happened in the transition, we should be cautious around drawing any conclusions or comparisons about the progress and growth of Shrewsbury students based on this data. Even at its best, the MCAS only provides a 'snapshot' of performance. It is an important signal of student success, but only one indicator.

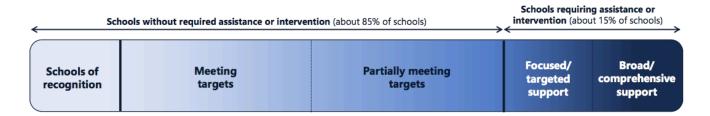
Another development resulting from the transition to a new test was a change in how the Department of Elementary and Secondary Education (DESE) determined accountability levels. Importantly, the DESE determined that, consistent with the Board's November 2015 vote, scores from last year's Next-Generation MCAS administration in grades 3-8 would not negatively impact accountability results.

What did this mean for Shrewsbury Public Schools? Districts with participation rates at 90% or higher with satisfactory graduation rates did not receive a Progress and Performance Index (PPI), the rating that was historically used to track progress. Since our current participation and graduation rates remain high, our initial district accountability level was: No Level.

2018 Official Accountability Report - Shrewsbury Organization Information DISTRICT NAME Shrewsbury (02710000) REGION West/Central Accountability Information Overall classification Partially meeting targets TITLE I STATUS Title I District GRADES SERVED PK,K,01,02,03,04,05,06,07,08,09,10,11,12 Elemental Classification Classification Education Classification Intervention Reason for classification Partially meeting targets

Rather than receiving a rating, this year districts have been given what the Department of Elementary and Secondary Education calls an 'overall classification'. Shrewsbury's classification is "not requiring intervention or assistance".

In other words, the majority of students in our schools are meeting expected targets.



More information about the DESE's accountability system can be found at this link: http://www.doe.mass.edu/accountability/lists-tools.html

Although we are proud of our results, we continue to attend to areas where our students are only partially meeting targets. Accordingly, this report will also detail suggested areas for further study. The link to Shrewsbury's district profile, including detailed information about subgroup performance reports, can be found here:

http://profiles.doe.mass.edu/accountability/report/district.aspx?linkid=30&orgcode=0271000 0&orgtypecode=5&

Shrewsbury Public Schools and State Results

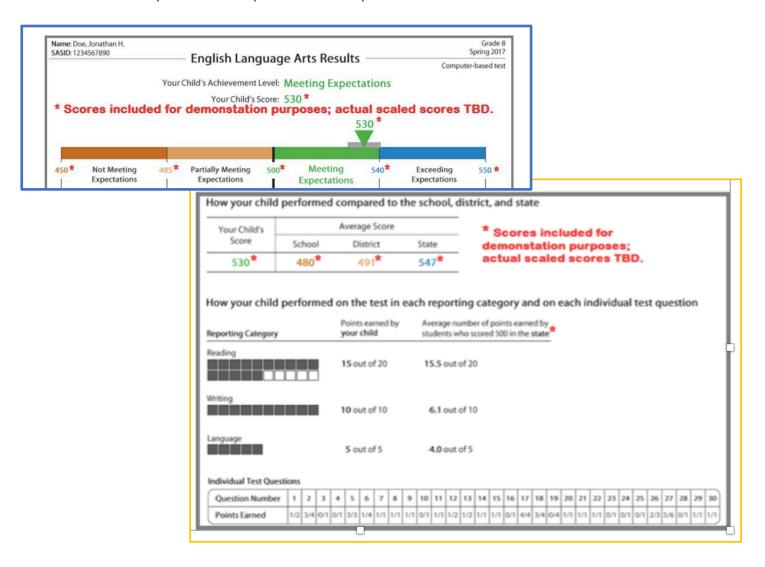
As before, this year districts received information about results in two areas, student achievement and student growth percentiles. The remainder of this report will provide information on both areas, in two different sections. The first section focuses on performance results, which is how Shrewsbury students performed in terms of achievement scores. The second section concerns student growth. Student growth, which was utilized on a full scale for the first time in Massachusetts in 2010, provides a metric for how students 'grow' in comparison to peers with similar testing histories. Taken together, strengths and goals in both

areas provide a snapshot of results for the district as a whole.

I. Student Achievement Scores

MCAS 2.0 achievement levels differ from those used with "legacy" MCAS ratings. The next generation MCAS does not use the *Advanced, Proficient, Needs Improvement and Warning* labels. Instead, the new levels are intended to signal a student's mastery of the subject matter for each particular grade level.

This is an example of what a parent score report looks like:



The new levels are represented as a continuum so that a student's achievement level and the score within the level can be clearly understood. This provides parents and teachers with a good sense of a child's strengths and needs within the content areas tested.

Students in high school will continue to receive "legacy" ratings, so understanding the different level systems is important.

NEW Achievement Levels

Legacy



"Next-Generation"

Advanced

demonstrated a comprehensive and indepth understanding of rigorous subject matter, and provide sophisticated solutions to complex problems.

Proficient

demonstrate a solid understanding of challenging subject matter and solve a wide variety of problems.

Exceeding Expectations

exceeded grade-level expectations by demonstrating mastery of the subject matter.

Meeting Expectations

met grade-level expectations and is academically on track to succeed in the current grade in this subject.

Needs Improvement

Students at this level demonstrate a partial understanding of subject matter and solve some simple problems.

Warning

Students at this level demonstrate a minimal understanding of subject matter and do not solve simple problems.

Partially Meeting Expectations

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.

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.

Groups of Massachusetts educators adjusted the scores to match the new purpose of the MCAS 2.0 assessment. Unlike the legacy ratings, which were developed over time, the ratings for the new assessment were calibrated simultaneously. The roughly equivalent proportion of students in each grade and subject area reflect a clear progression of learning expectations from grade to grade and panelists' consistent application of the standards. It's also important to note that the new standards for Meeting Expectations are more rigorous. For this reason, the Department of Education has cautioned against comparing "old" MCAS scores to the new baseline results.

For the first time this year we have a baseline comparison to guide our analysis. However, we only have two years of data to serve as a basis of comparison. Further, it's wise to remain cautious about relying overmuch on any one assessment of student progress to guide us.

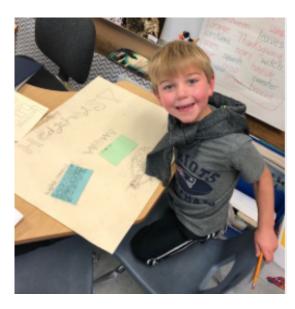
Student Achievement Scores in English Language Arts

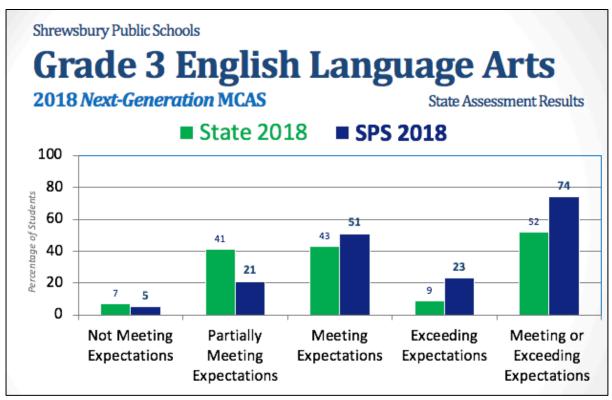
by Grade Level

This part of the report details our baseline scores by content area and by grade level. Looking back to last year allows some basis for comparison.

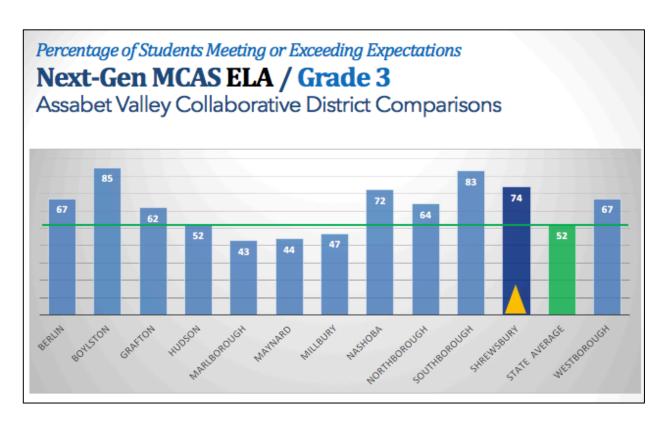
Grade 3

| % by level | 2017 | 2018 |
|-------------------|------|------|
| Exceeding | 25 | 23 |
| Meeting | 44 | 51 |
| Partially Meeting | 27 | 21 |
| Not Meeting | 4 | 5 |



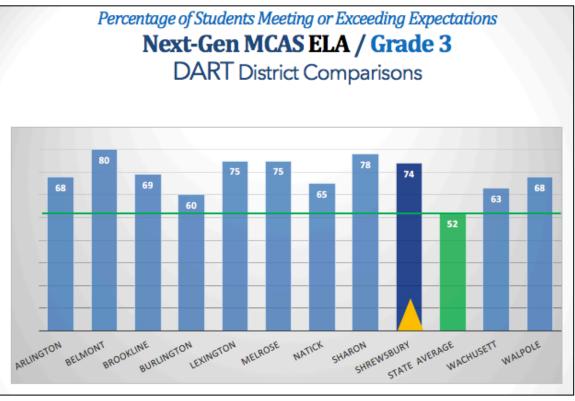


Looking at assessment information from area districts provides additional perspective on our results. As you can see from the chart below, Shrewsbury continues to be an educational leader in the area.



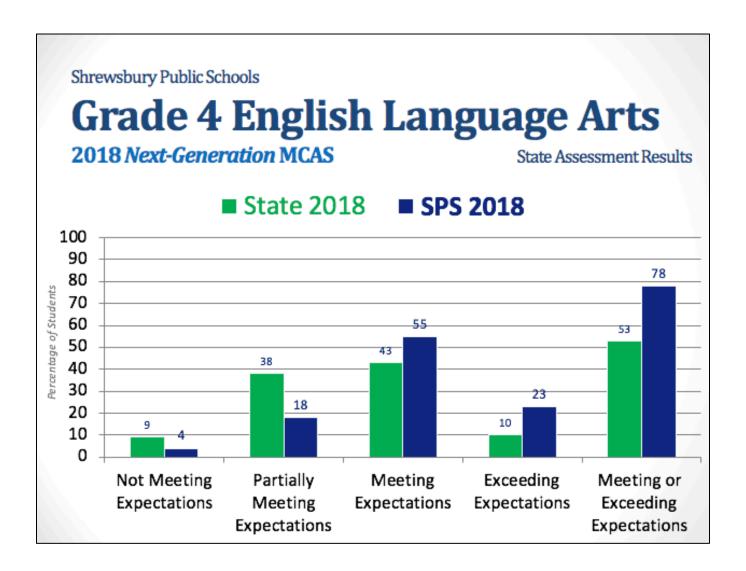
The Department of Secondary and Elementary education (DESE) also provides a wealth of comparative statistics. One helpful resource is DART, a district analysis and review tool.

Comparisons with DART districts allow us to see how our results compare to school systems with similar enrollment characteristics.

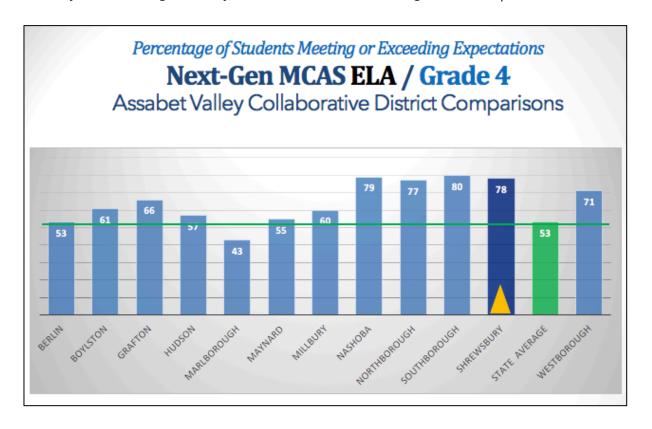


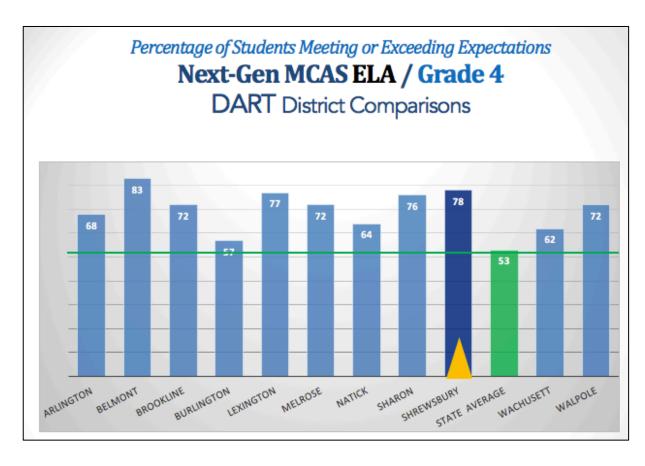
| % by level | 2017 | 2018 |
|-------------------|------|------|
| Exceeding | 20 | 23 |
| Meeting | 51 | 55 |
| Partially Meeting | 25 | 18 |
| Not Meeting | 3 | 4 |

Reading scores in Grade 4 improved over last year, with nearly 80% of our students meeting or exceeding grade level expectations.



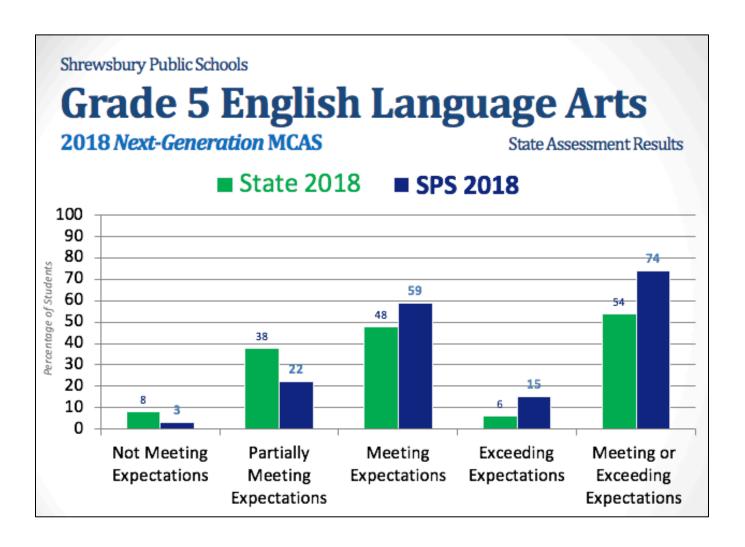
The graph below shows how our Grade 4 students compare with fourth grade readers in nearby districts. Significantly, our scores are also strong when compared with DART districts.



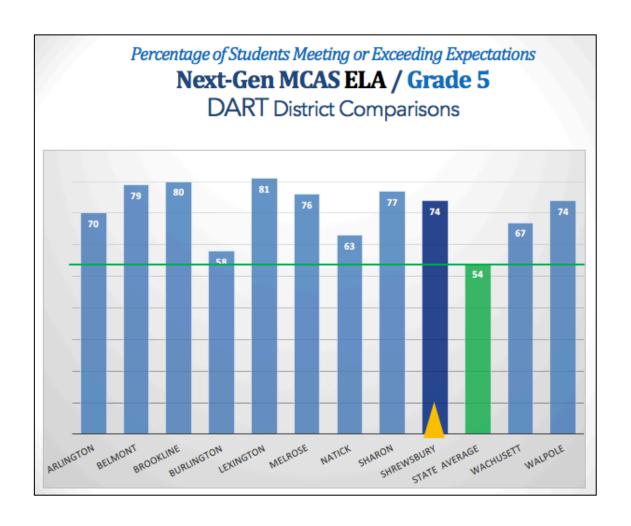


| % by level | 2017 | 2018 |
|-------------------|------|------|
| Exceeding | 10 | 15 |
| Meeting | 59 | 59 |
| Partially Meeting | 27 | 22 |
| Not Meeting | 4 | 3 |

Overall, English Language Arts results for students in Grades 3-5 look similar. In Grade 5, more students met the assessment benchmark this year.

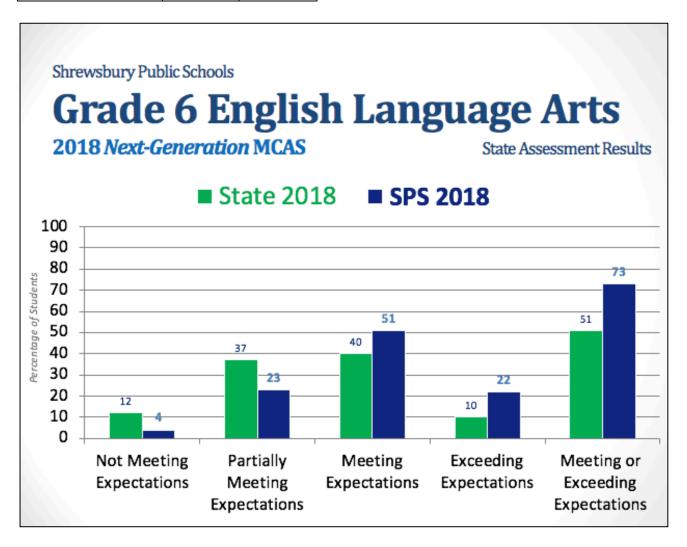


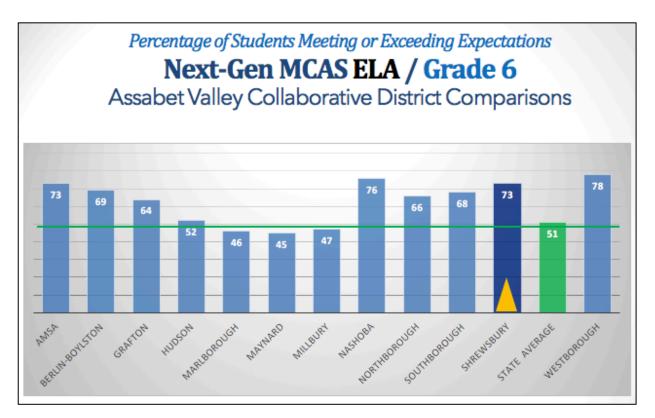
Shrewsbury's Grade 5 scores are higher than the state average and at the top of the range when compared to those of other districts.



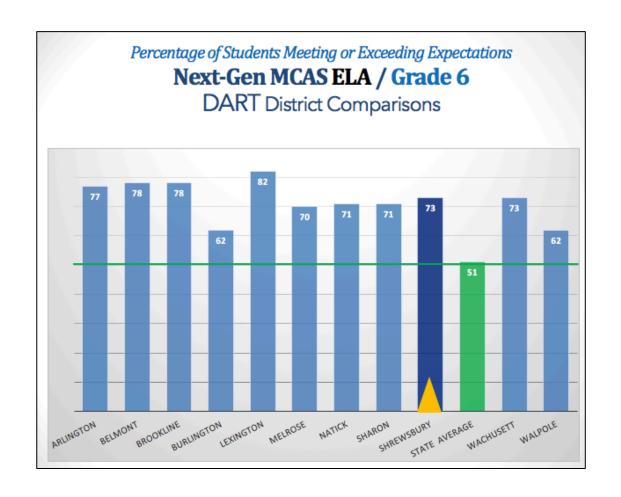
| % by level | 2017 | 2018 |
|-------------------|------|------|
| Exceeding | 14 | 22 |
| Meeting | 57 | 51 |
| Partially Meeting | 23 | 23 |
| Not Meeting | 6 | 4 |

Scores for English Language Arts in Grade 6 rose slightly over last year.



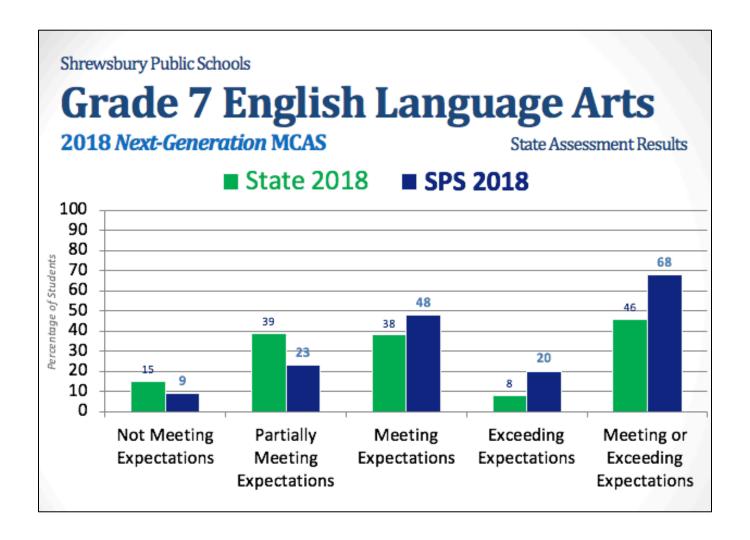


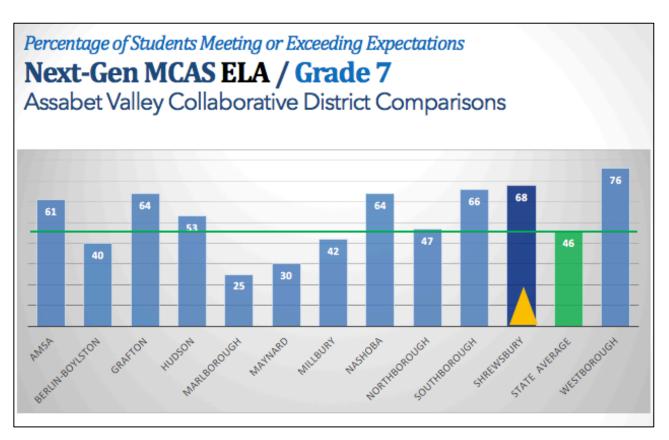
Again, Shrewsbury's results in Grade 6 put us among the highest performing school districts in the Assabet Valley Collaborative group and in our DART district comparison group.

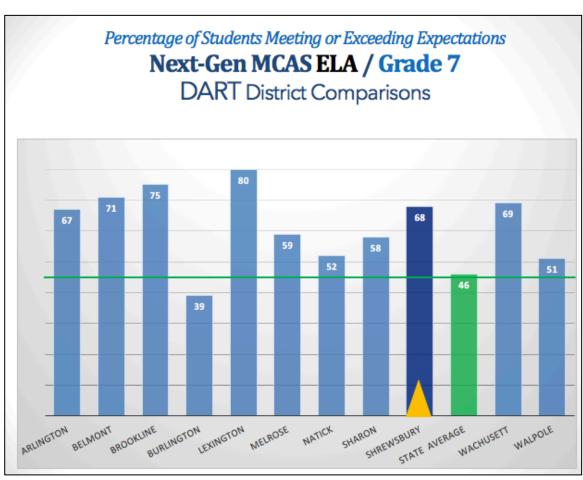


| % by level | 2017 | 2018 |
|-------------------|------|------|
| Exceeding | 9 | 20 |
| Meeting | 57 | 48 |
| Partially Meeting | 28 | 23 |
| Not Meeting | 6 | 9 |

Rates of student performance on the Grade 7 English Language Arts assessment rose slightly. However, scores for this grade span are lower across the state and lower at this grade level in Shrewsbury than scores at other grade levels.

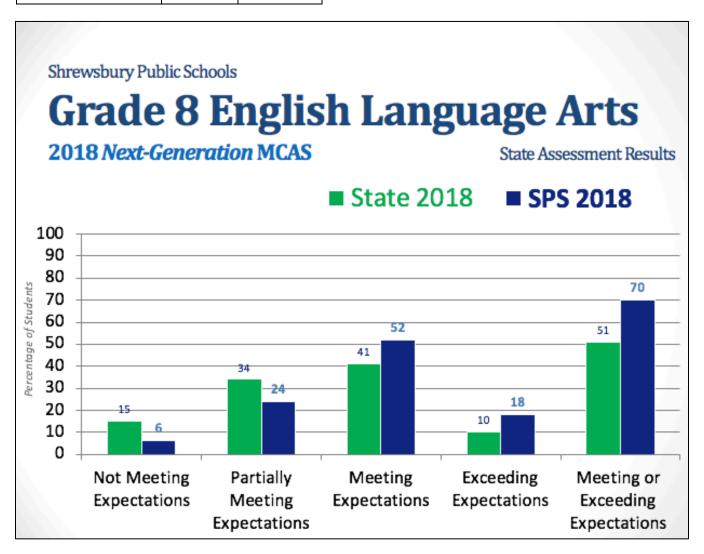


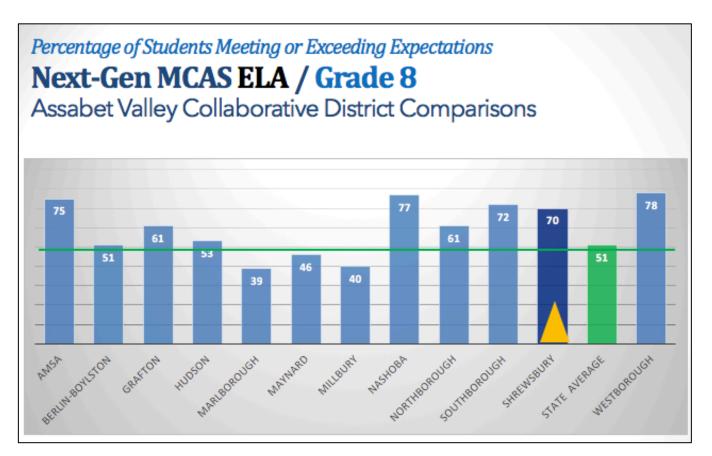


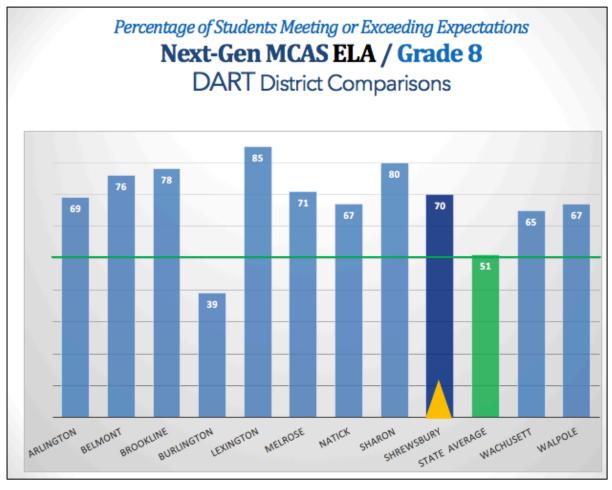


| % by level | 2017 | 2018 |
|-------------------|------|------|
| Exceeding | 15 | 18 |
| Meeting | 50 | 52 |
| Partially Meeting | 31 | 24 |
| Not Meeting | 5 | 6 |

Grade 8 scores in ELA also rose this year.







High School students will take the new test for English Language Arts and Math in 2019.

Achievement rates 2015-2018 for the "legacy" MCAS in English Language Arts

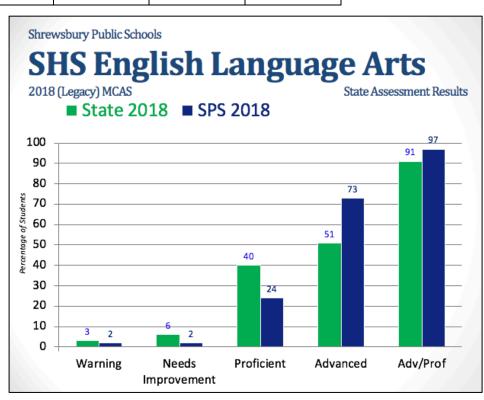
| | 2015 | 2016 | 2017 | 2018 |
|-------------|------|------|------|------|
| Advanced | 74 | 73 | 67 | 73 |
| Proficient | 23 | 23 | 29 | 24 |
| Needs | 1 | 2 | 2 | 2 |
| Improvement | | | | |
| Failing | 1 | 2 | 2 | 2 |

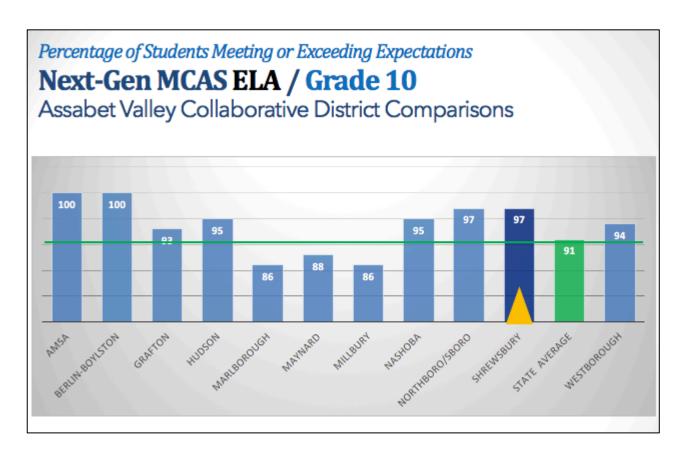


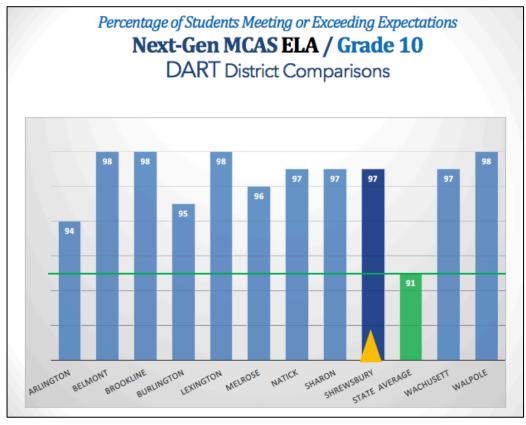
Grade 10 English Language Arts Scores: Legacy MCAS 5-year history

Percentage of Students Achieving at the Proficient / Advanced Levels

| Year | 2014 | 2015 | 2016 | 2017 | 2018 |
|------|------|------|------|------|------|
| % | 97 | 96 | 96 | 96 | 97 |







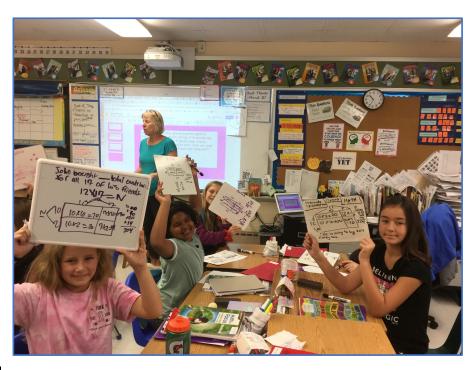
Indeed, overall our results are strong.

Percentage of Students Meeting or Exceeding Expectations, ELA 2018

| Grade and | Gr 3 | Gr 4 | Gr 5 | Gr 6 | Gr 7 | Gr 8 | Gr. 10 |
|---------------------------------------|------|------|------|------|------|------|--------|
| Subject | ELA | ELA | ELA | ELA | ELA | ELA | |
| | | | | | | | |
| Shrewsbury % Level M/E 2018 | 74% | 78% | 74% | 73% | 68% | 70% | 97%* |
| State Results | 52% | 53% | 54% | 50% | 46% | 51% | 91%* |

A summary of baseline ELA scores the Meeting / Exceeding range for students in grades 3-8.

Student Achievement Scores in Mathematics by Grade Level



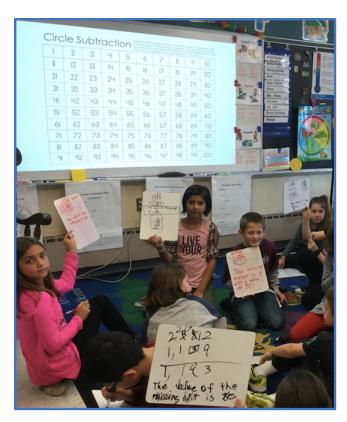
Shrewsbury adopted *Math in Focus* in 2015, withthe goal of aligning our instructional approach with best practice at the Elementary and Middle levels. This new curriculum emphasized the importance of modeling to depict thinking as a key Mathematics practice.

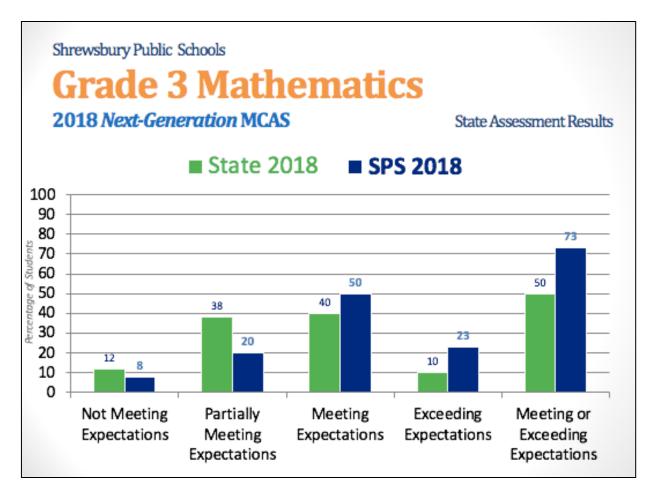
The transition to a new program helped our students to develop strategies for use on the MCAS. More importantly, children in Shrewsbury are able to strategize when solving problems in daily life.

^{*}Note: Gr 10 results from the "Legacy MCAS" version of the state assessment, not MCAS 2.0

| % by level | 2017 | 2018 |
|-------------------|------|------|
| Exceeding | 18 | 23 |
| Meeting | 57 | 50 |
| Partially Meeting | 22 | 20 |
| Not Meeting | 3 | 8 |

This year, fewer Grade 3 students met the assessment benchmark on the Mathematics assessment than last year. However, students in Grade 3 posted strong results overall, as evidenced on the charts that follow.

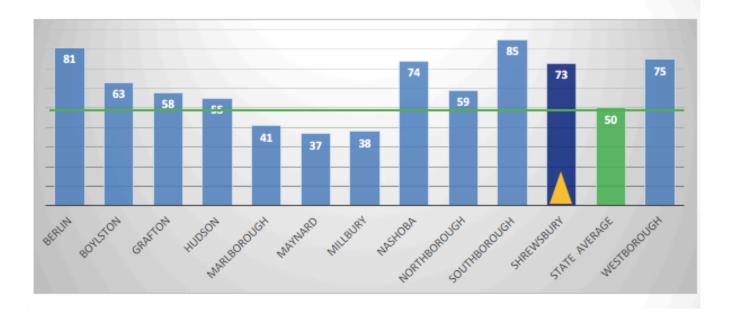




Percentage of Students Meeting or Exceeding Expectations

Next-Gen MCAS Mathematics / Grade 3

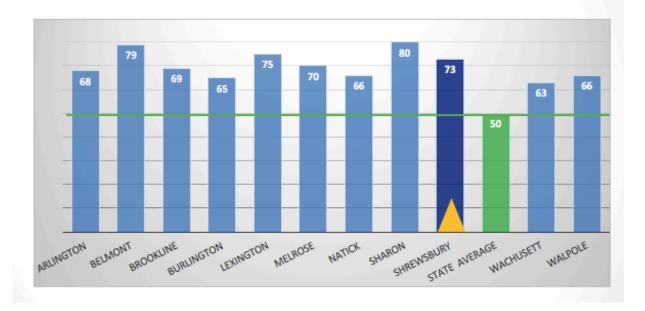
Assabet Valley Collaborative District Comparisons



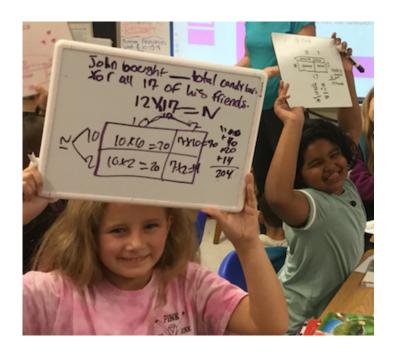
Percentage of Students Meeting or Exceeding Expectations

Next-Gen MCAS Mathematics / Grade 3

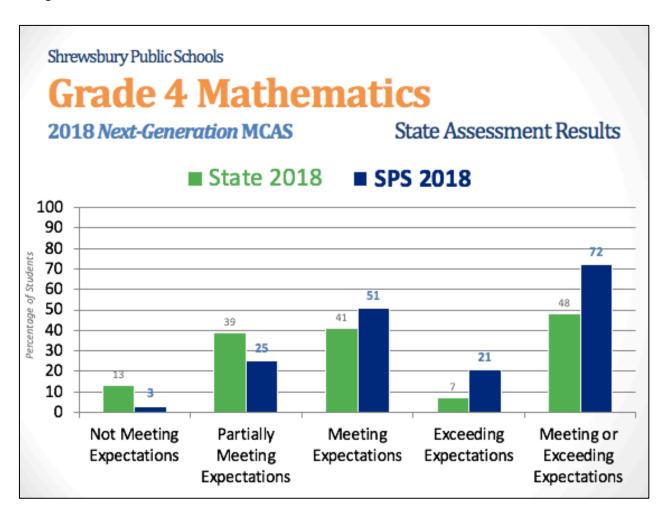
DART District Comparisons

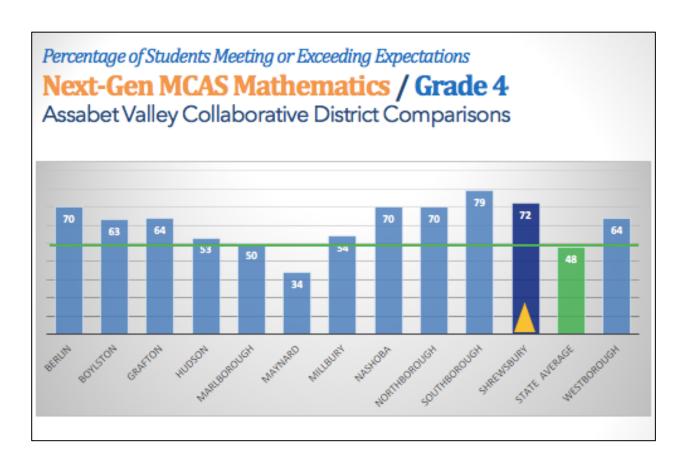


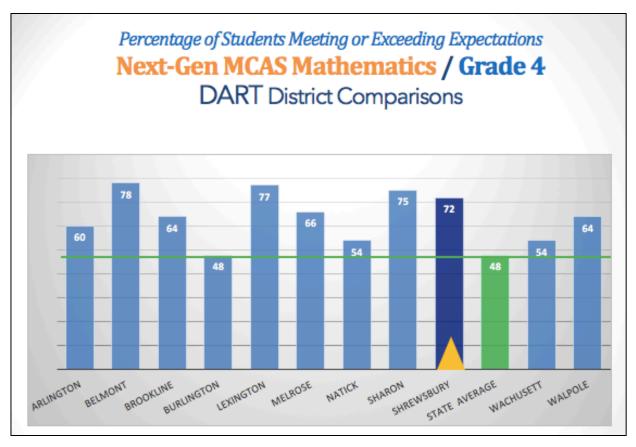
| % by level | 2017 | 2018 |
|-------------------|------|------|
| Exceeding | 21 | 21 |
| Meeting | 54 | 51 |
| Partially Meeting | 20 | 25 |
| Not Meeting | 5 | 3 |



Grade 4 student results in Math are similar to those of Grade 3. Our students consistently achieve higher scores on the MCAS assessment than most children in the state.



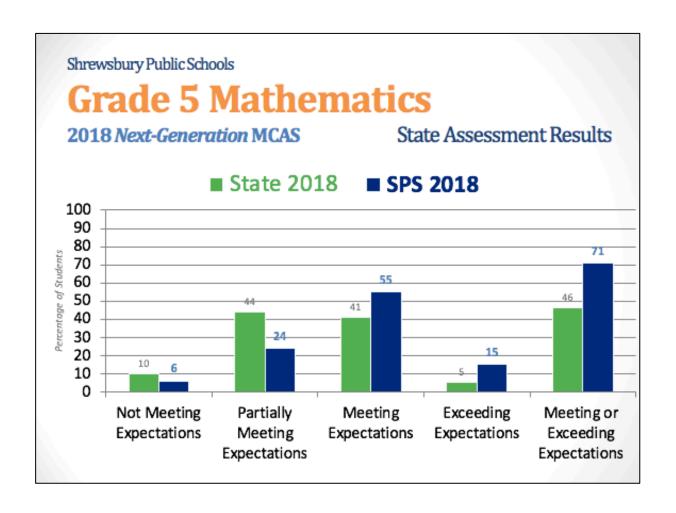




| % by level | 2017 | 2018 |
|-------------------|------|------|
| Exceeding | 20 | 15 |
| Meeting | 52 | 55 |
| Partially Meeting | 24 | 24 |
| Not Meeting | 5 | 6 |

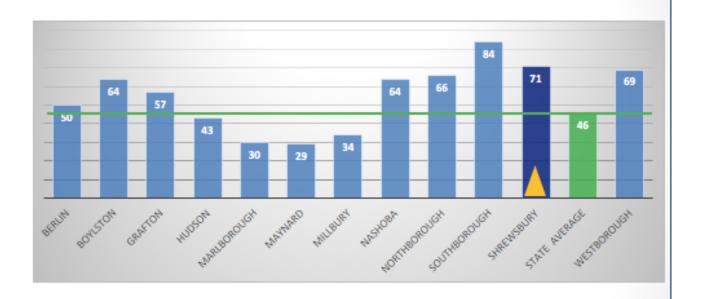
71% of Grade 5 students met the grade level benchmark for Math this year, which shows little change from last year.

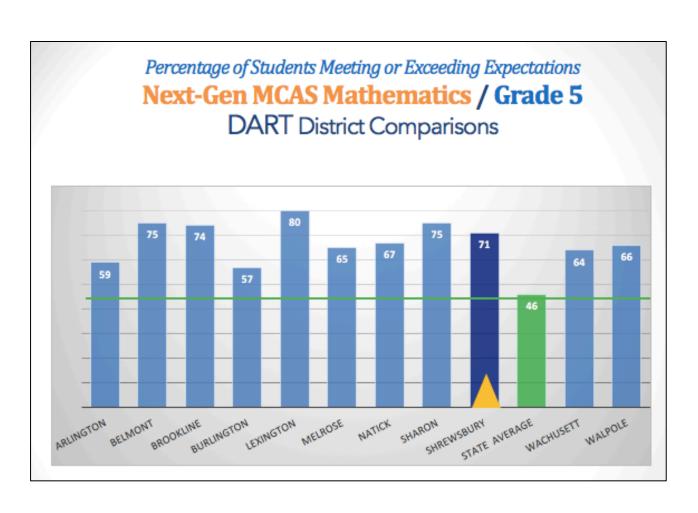
Note: Grade 5 DESE reports show a discrepancy worth noting. The total numbers for each category of performance do not match the overall total for Grade 5.



Percentage of Students Meeting or Exceeding Expectations

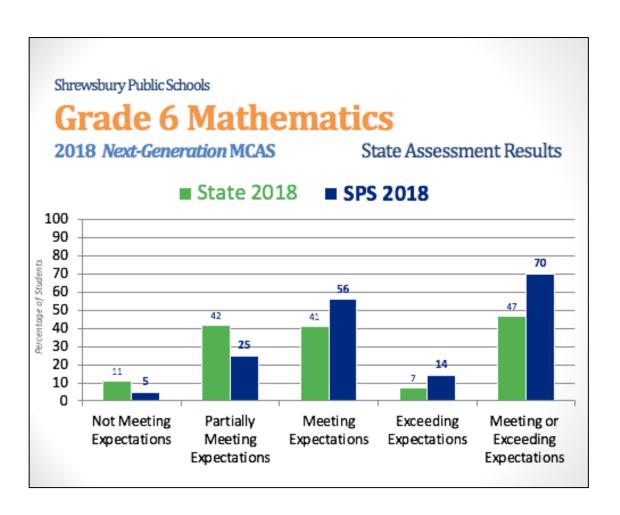
Next-Gen MCAS Mathematics / Grade 5 Assabet Valley Collaborative District Comparisons

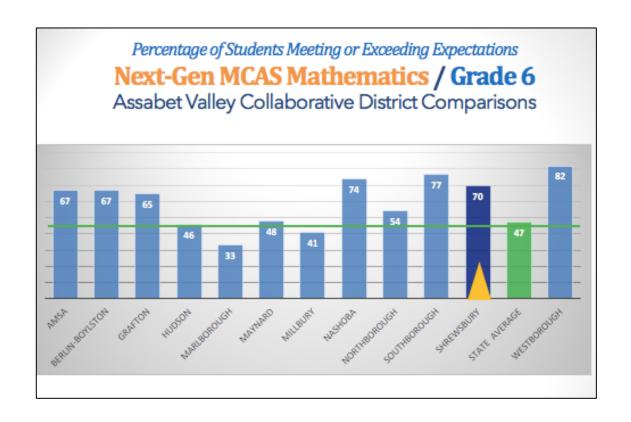


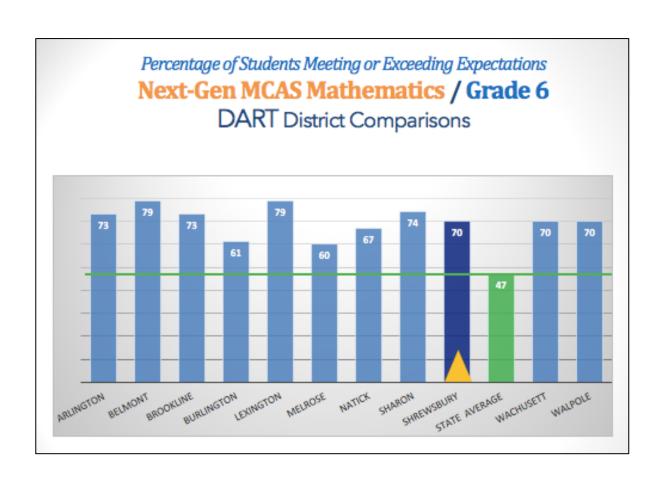


| % by level | 2017 | 2018 |
|-------------------|------|------|
| Exceeding | 11 | 14 |
| Meeting | 58 | 56 |
| Partially Meeting | 26 | 25 |
| Not Meeting | 6 | 5 |

Grade 6 Math scores rose slightly over last year. The charts that follow speak to our overall success in helping more students to master Math standards and practices at this level.

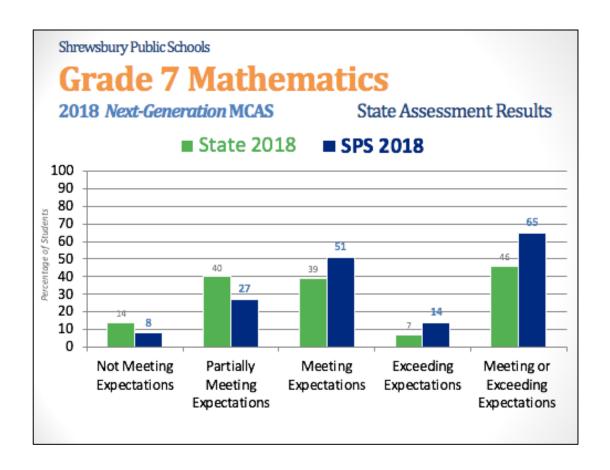


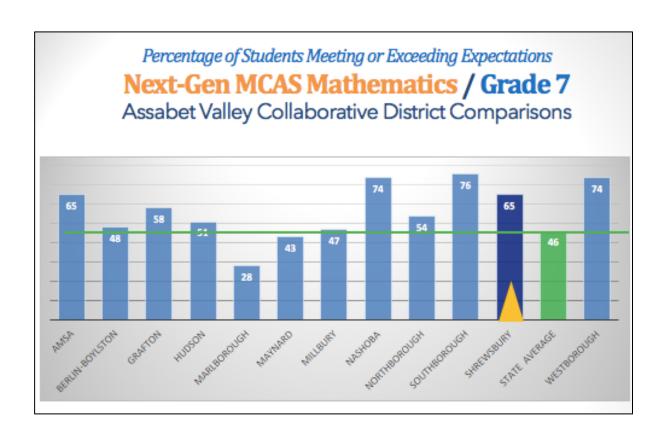


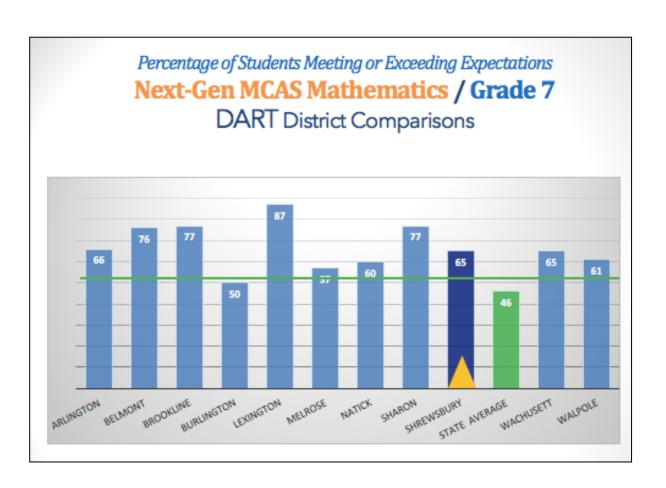


| % by level | 2017 | 2018 |
|-------------------|------|------|
| Exceeding | 15 | 14 |
| Meeting | 46 | 51 |
| Partially Meeting | 34 | 27 |
| Not Meeting | 6 | 8 |

Math scores for Grade 7 rose this year. Again, results for this grade span are lower overall across the state, which bears further study.

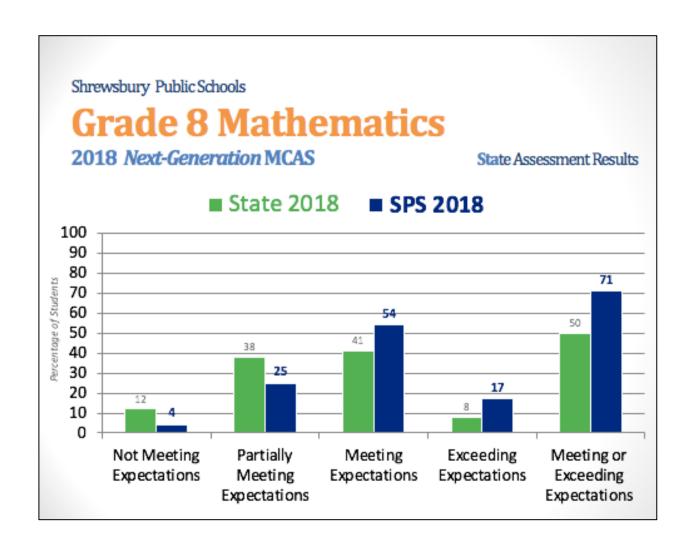


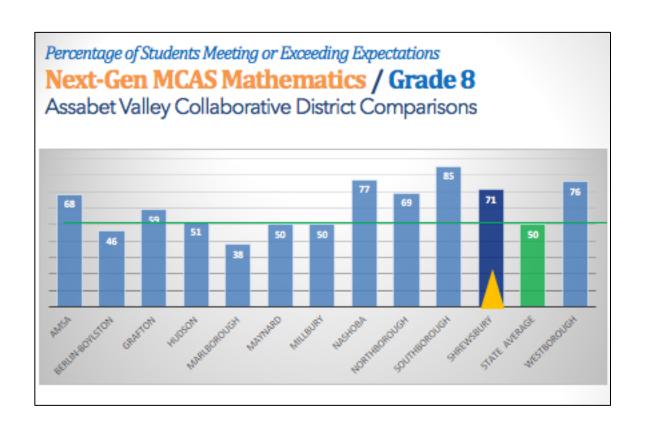


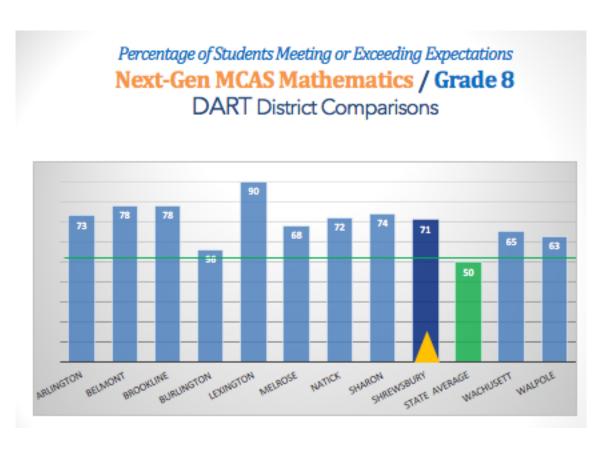


Math scores rose considerably over last year for Grade 8.

| % by level | 2017 | 2018 |
|-------------------|------|------|
| Exceeding | 17 | 17 |
| Meeting | 45 | 54 |
| Partially Meeting | 33 | 25 |
| Not Meeting | 4 | 4 |



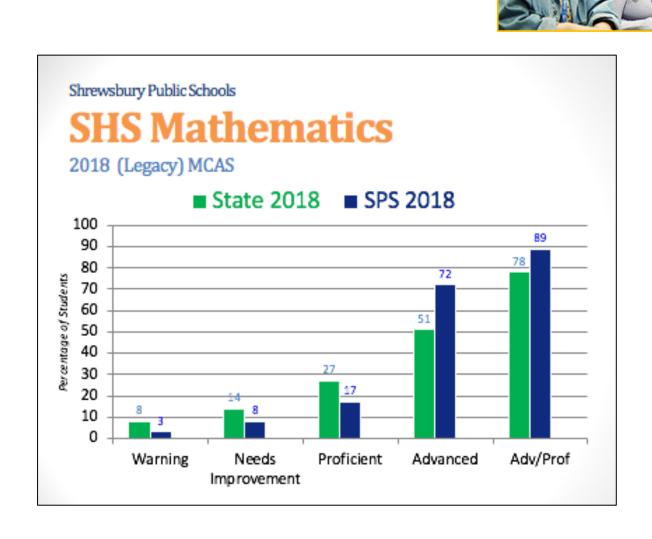


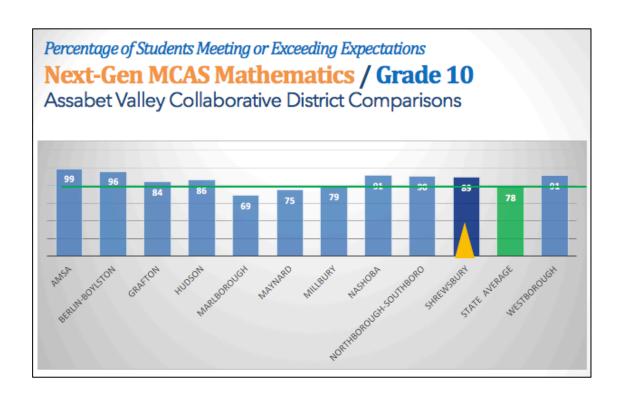


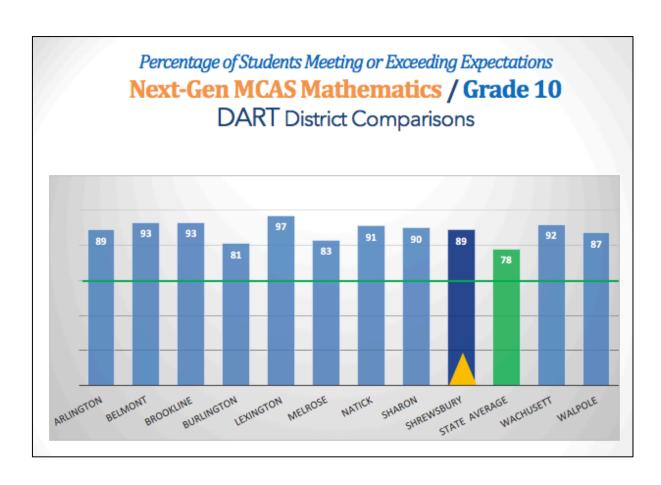
Grade 10Achievement rates 2015-2018 for the "legacy" MCAS in Mathematics

| | 2015 | 2016 | 2017 | 2018 |
|-------------|------|------|------|------|
| Advanced | 79 | 76 | 72 | 72 |
| Proficient | 13 | 17 | 19 | 17 |
| Needs | 6 | 4 | 6 | 8 |
| Improvement | | | | |
| Failing | 2 | 3 | 3 | 3 |

89% of Grade 10 students met the Proficiency benchmark this year. For the past three years, Grade 10 scores in Math at the high school level have dropped slightly. At the same time, Shrewsbury continues to post strong results overall.







Grade 10 Math Scores: Legacy MCAS 5-year history

Percentage of Students Achieving at the Proficient / Advanced Levels

| Year | 2014 | 2015 | 2016 | 2017 | 2018 |
|------|------|------|------|------|------|
| % | 95 | 92 | 93 | 91 | 89 |

| Grade and Subject | Gr 3 Math | Gr 4 Math | Gr 5 Math | Gr 6 Math | Gr 7 Math | Gr 8 Math | Gr. 10 |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------|
| Shrewsbury % Level M/E 2018 | 73% | 72% | 70% | 70% | 65% | 71% | 89%* |
| State Results | 50% | 48% | 46% | 48% | 46% | 49% | 78%* |

Percentage

of Students Meeting or Exceeding Expectations, Math 2018

A summary of baseline Math scores the Meeting / Exceeding range for students in grades 3-8. * Note: Gr 10 results from the "legacy" version



Student Achievement Scores in Science & Technology Grades 5, 8, & 10

Students in three grades took the Science Technology and Engineering test in 2018. It's important to note that these assessments are "legacy" tests.

Assessment levels generally indicate how each student is achieving relative to the state

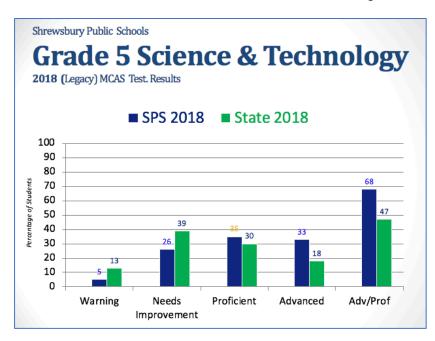
standards for that grade level. Here is a snapshot of how our students performed over time by grade:

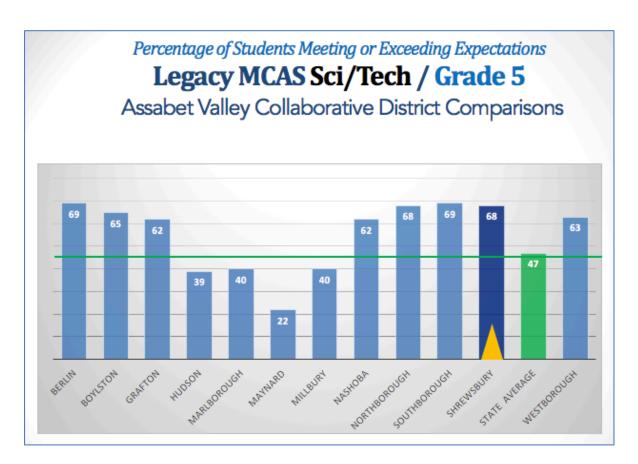
Grade 5

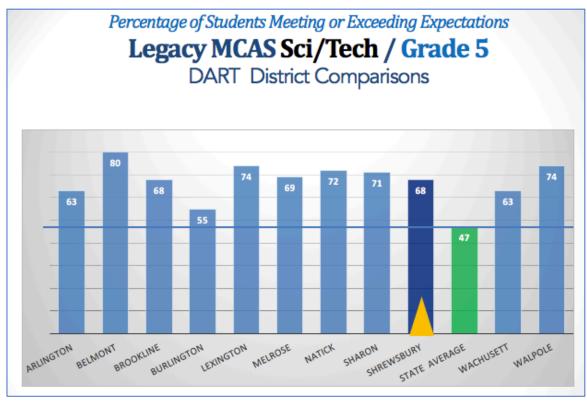
| | 2014 | 2015 | 2016 | 2017 | 2018 |
|-------------|------|------|------|------|------|
| Advanced | 31 | 31 | 34 | 32 | 33 |
| Proficient | 41 | 40 | 36 | 35 | 36 |
| Needs | 23 | 25 | 24 | 27 | 26 |
| Improvement | | | | | |
| Warning | 4 | 4 | 7 | 7 | 5 |



Results in Grade 5 were very similar to past years, with a slight increase in the percentage of students in the Advanced and Proficient levels and a related decrease in the number of students scoring a Needs Improvement.





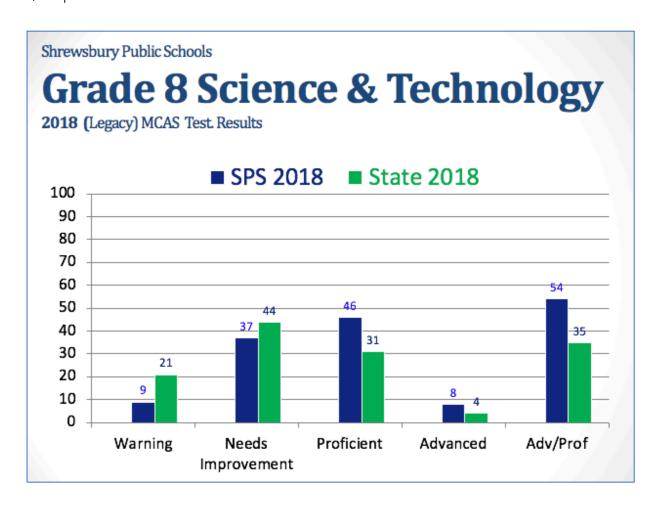


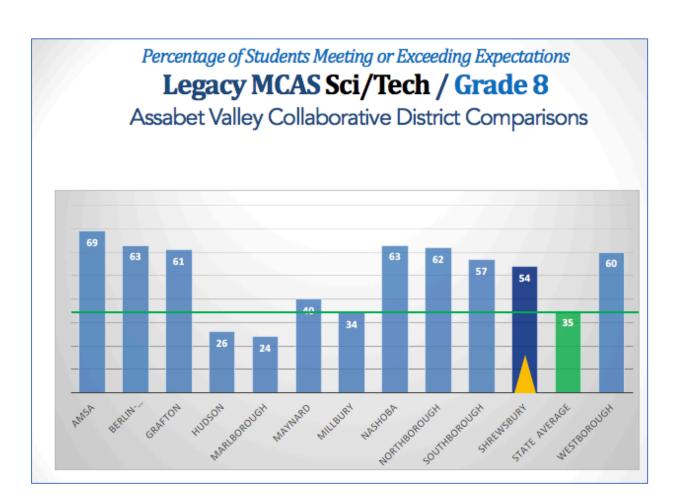
Grade 8

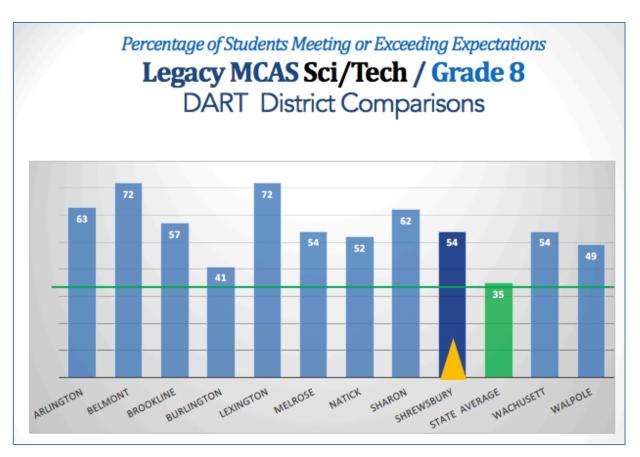
| | 2014 | 2015 | 2016 | 2017 | 2018 |
|-------------|------|------|------|------|------|
| Advanced | 14 | 9 | 12 | 5 | 8 |
| Proficient | 55 | 53 | 47 | 55 | 46 |
| Needs | 26 | 33 | 33 | 32 | 37 |
| Improvement | | | | | |
| Warning | 5 | 6 | 8 | 8 | 9 |

This year more students in Grade 8 scored in the Advanced category than last year. However, fewer students overall scored Proficient or higher.

Please note that historically the Grade 8 Science & Technology test has been the most challenging test in all of the legacy MCAS tests in terms of percentages of students scoring at high levels across the state, so while is it appropriate to compare performance of 8th graders over time, it is not valid to compare performance on this test against how students fare on the Grade 5 or High School Science & Technology tests. When we look at trends over time, our performance has remained consistent.





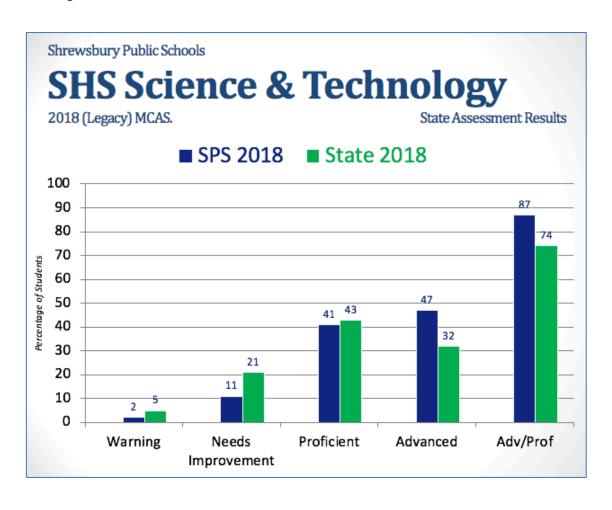


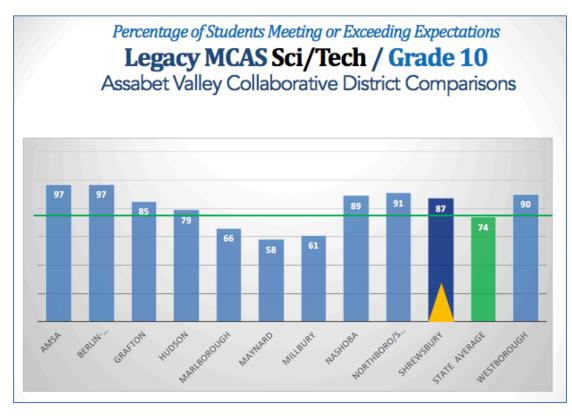
Grade 10

| | 2014 | 2015 | 2016 | 2017 | 2018 |
|-------------|------|------|------|------|------|
| Advanced | 50 | 46 | 54 | 46 | 47 |
| Proficient | 39 | 40 | 36 | 43 | 41 |
| Needs | 10 | 12 | 8 | 9 | 11 |
| Improvement | | | | | |
| Warning | 1 | 1 | 2 | 2 | 2 |

Overall, our results on the Science and Technology exam compare favorably with districts of similar size, demographics and enrollment. As before, our oldest students continue to post the highest scores.

However, as mentioned above, because the "legacy" tests were created and calibrated at different times by different groups, the progression of expectations from one grade to another is not well aligned.



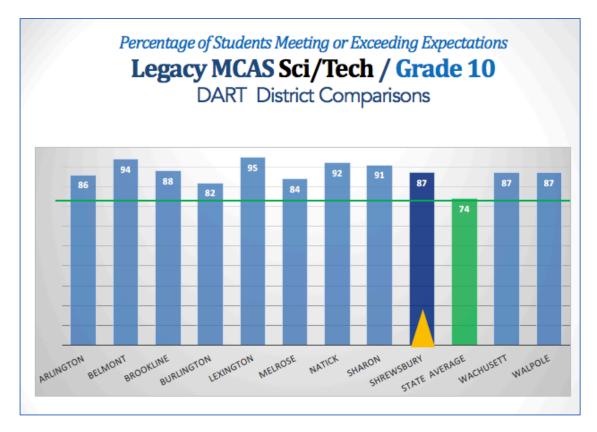


As mentioned previously, in Shrewsbury the timing of content delivery also has an impact on student performance. For example, our Grade 5 students are tested cumulatively on content that is taught

in earlier grades, especially fourth grade.

Our current work in Science should help us to align our curriculum to the new Science

standards. It's likely that the state assessment for this content area will also change in the future.



II. Student Growth Percentile Scores (SGPs)

Assessment levels indicate how each student is achieving relative to the state standards for that grade level and content area. Growth scores represent change in an individual student's MCAS performance from one exam to the next. By utilizing a growth measure, the state is attempting to answer the question, "How much academic progress did a student or group of students make in one year as measured by MCAS?"

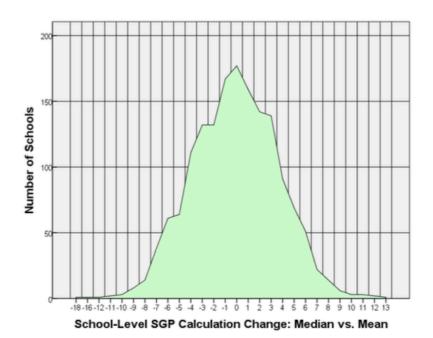
Massachusetts measures growth for individual students by comparing the change in their achievement on statewide assessments to that of their "academic peers" (all other students in the state who previously had similar historical assessment results). The rate of change is expressed as a percentile, and represents how many students had greater or lesser improvement on this year's test as compared to the performance of the cohort of students with the same achievement score history.

The state defines *moderate* (or expected) growth to be between the 40-60 percentile, with low growth as below the 40th percentile and *high growth* as above the 60th percentile. In reviewing an individual student's result, teachers and parents might wonder, "How much did Rishi improve her math score on MCAS in 6th grade, relative to students who had the same math scores on the 4th and 5th grade math tests?" SGP scores help to answer that question: if Rishi had a higher score than more than 65 percent of her academic peers with the same score history, then her Student Growth Percentile (SGP) would be 65.

The growth model method operates independently of MCAS performance levels. As a result, all students, no matter what their scores were on past MCAS tests, have an equal chance to demonstrate growth at any of the 99 percentiles on the next year's test. Growth percentiles are calculated in ELA and Mathematics for students in Grades 4 through 8 and 10, because the model requires at least two years of MCAS results to calculate growth percentiles. Therefore, no growth scores are available for Grade 3; Grade 4 growth percentiles are only in comparison to Grade 3 scores; and Grade 5 and up are in comparison to the two previous years of scores. In addition, because the Science and Technology test is only administered in grades five, eight, and nine/ten there is no growth data produced for this test.

Analyzing student test scores over time provides us with additional information; this data helps us monitor individual students and subgroups within the district. Importantly, it may also us identify "bright spots", grade level practices that yield exceptional outcomes for students.

Aggregate Growth Percentiles



While student growth percentiles enable educators to chart the growth of an individual student compared to that of academic peers, student growth percentiles may also be aggregated to understand growth at the subgroup, school, or district level.

Initially the Department of Elementary and Secondary Education (the DESE) reported growth as a median percentile (the middle score if one ranks the individual student growth

percentiles from highest to lowest). A typical school or district in the commonwealth would have a median student growth percentile of 50.

Beginning in 2018, the DESE moved to a growth model that uses the average student growth percentile (SGP), replacing the median SGP model at the



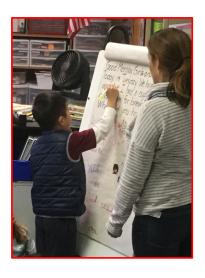
aggregate level for school and district data.

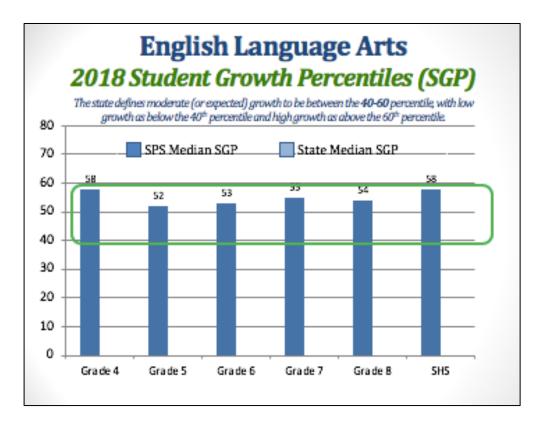
Although there are areas to target for improvement in achievement levels at several grade levels, the growth percentiles for each grade level in both subject areas were well within the moderate (or expected) growth range this year.

English Language Arts 2018

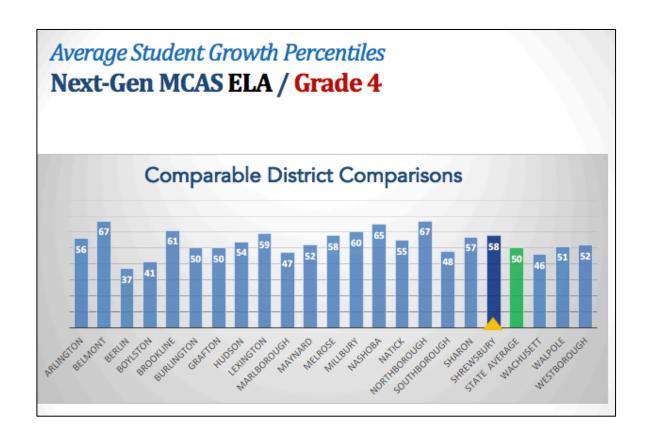
SGP Results for the English Language Arts Assessment, 2013-2018

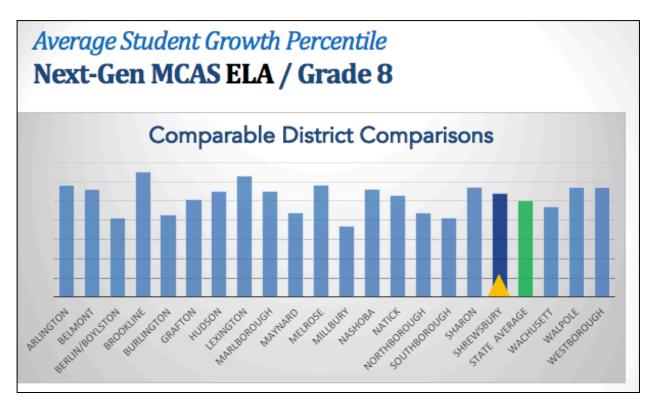
| ELA | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|-------|------|------|------|------|------|------|
| | | | | | | |
| Gr 4 | 77 | 65 | 69 | 53 | 58 | 58 |
| Gr 5 | 42 | 45 | 37 | 46 | 49 | 52 |
| Gr 6 | 56 | 50 | 46 | 46 | 51 | 53 |
| Gr 7 | 47 | 42 | 37 | 34 | 39 | 55 |
| Gr 8 | 48 | 51 | 50 | 45 | 52 | 54 |
| | | | | | | |
| Gr 10 | 60 | 54 | 53 | 46 | 48 | 58 |





Comparison SGP Data in English Language Arts, 2018 for Grades 4 & 8

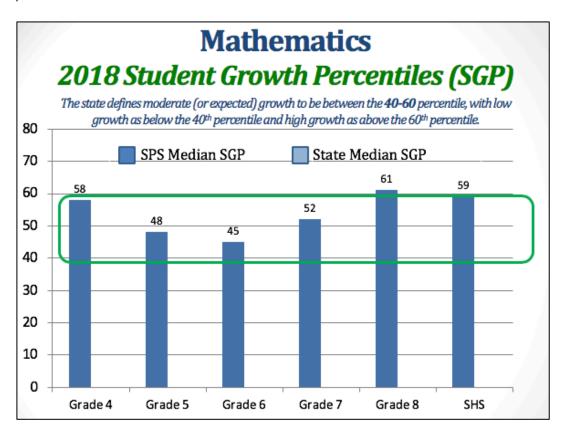




SGP Results for the Mathematics Assessment, 2013-2018

| Math | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|-------|------|------|------|------|------|------|
| | | | | | | |
| Gr 4 | 58 | 67 | 65 | 59 | 58 | 58 |
| Gr 5 | 42 | 45 | 44 | 41 | 47 | 48 |
| Gr 6 | 57 | 54 | 38 | 38 | 44 | 45 |
| Gr 7 | 42 | 36 | 30 | 38 | 40 | 52 |
| Gr 8 | 61 | 45 | 39 | 50 | 54 | 61 |
| Gr 10 | 55 | 62 | 53 | 58 | 57 | 59 |

Again, growth percentile scores are expected to fall within 40-60. Note the relative higher rate of growth in grades 4, 8 and 10.

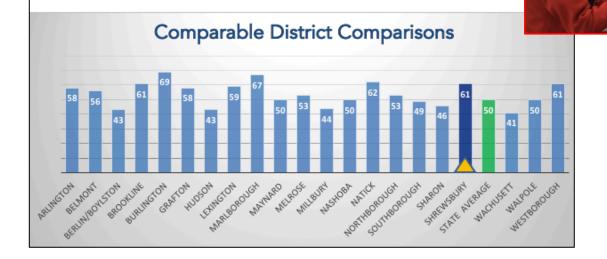


Comparison SGP Data in Mathematics 2018 for Grades 4 & 8

Average Student Growth Percentile Next-Gen MCAS Math / Grade 4



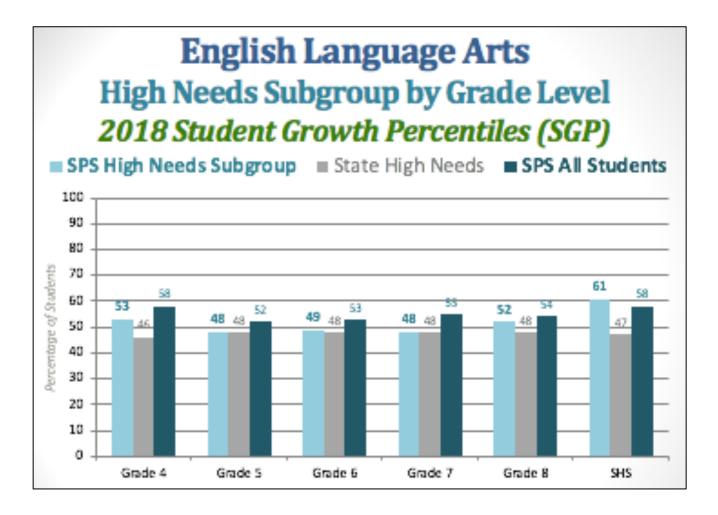
Average Student Growth Percentile Next-Gen MCAS Math / Grade 8



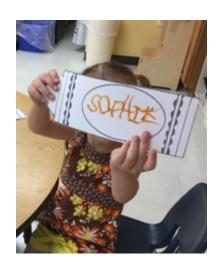
District Subgroup Performance

Another important way we demonstrate our commitment to student growth is by monitoring groups of children. These cohorts are called 'subgroups'. Comparing their results to aggregate data helps educators to identify and close achievement opportunity gaps.

ELA Student Growth Percentiles 2018



Staff look closely at the achievement gap between the high needs subgroup and the "all students" group in various ways. While this chart shows that our overall SGP scores consistently outperform the state, there is still progress to be made in closing gaps for some subgroups.

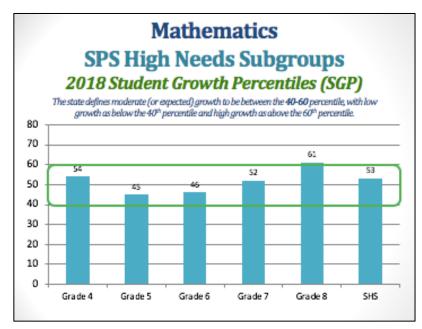


English Language Arts **High Needs Subgroup by Grade Level** 2018 Percentage of Students Meeting or Exceeding Expectations ■ SPS High Needs Subgroup ■ State High Needs ■ SPS All Students 100 90 80 Percentage of Students 70 60 53 50 40 30 20 10 0 Grade 3 Grade 4 Grade 5 Grade 6 Grade 7 Grade 8 SHS



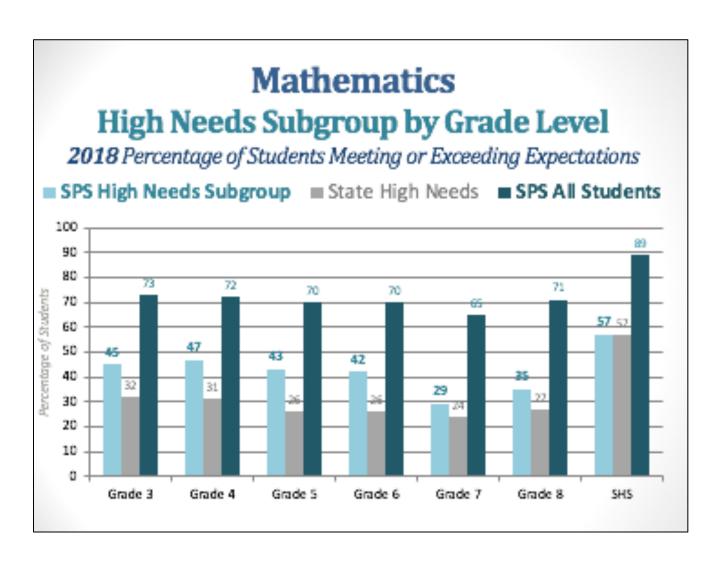
For example, in Grade 4 the growth percentiles for students with "high needs" is similar to those for most Grade 4 students. This suggests that students in both groups are growing at a similar rate. Moreover, students with disabilities (a portion of this larger group) have similar SGP to their "high needs" peers.

However, only 33 % of students with disabilities meet or exceed expectations for the Grade 4 MCAS test in ELA, as compared to 53% of students with high needs. When we consider achievement, there is a wide range of performance scores among subgroups, in Shrewsbury and across the state.



Students in the high needs subgroup faced similar achievement challenges in Mathematics. For these students, a higher growth percentile is critical to their ability to "catch up" to their peers.

While there is still improvement to make in achievement levels for the high needs subgroups, the rise in student growth percentiles is promising.



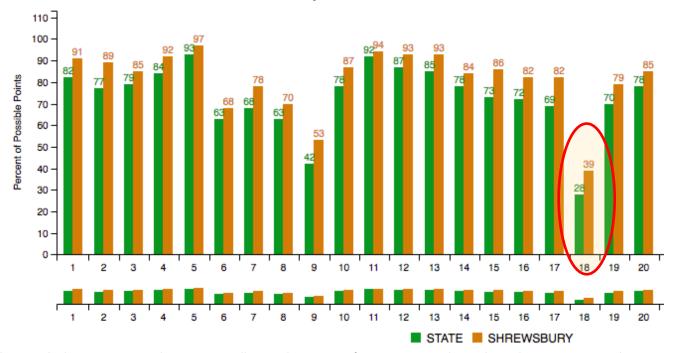
Item Analysis

Staff analyze MCAS data from the DESE portal to review student performance and to identify strengths and weaknesses in specific standards. Grade level teams also look to released questions and student responses to determine how well students apply their understanding of concepts on the test.

The DESE district profile portal allows anyone to access data about standards, question types and even to compare item scores across districts. Click here to see how it works: http://profiles.doe.mass.edu/mcas/mcascharts2.aspx?linkid=33&orgcode=02710000&fycode=2017&orgtypecode=5&

Scrutinizing student results by question helps educators to align their practice with the expectations inherent in the assessment. The chart below depicts an item analysis. Looking at the results in this way allows teacher teams to visually spot areas of instruction to target for reteaching.

Number of Students Included: 454 Mode: Paper



This graph depicting scores by question allows educators to focus on strengths and needs. Question number 18 (above) is an "open response" question, which presents a greater degree of challenge to most students than multiple choice items.

18 ES CCSS.ELA-Literacy.Not Available Write an essay that explains how the author uses text features to help the reader understand the topic. Use information from the passage as evidence.

Looking Forward

With the release of a new state Science framework, a K-12 committee was formed to review the Science curriculum and to prepare for anticipated changes in content and practice. Work is underway at both the Elementary and Middle levels to help educators adjust and plan, with the goal of implementing units and lessons aligned with the new standards in the coming year. This is a small step in the continuous improvement process, and we are at the early stages. Similar work will begin soon in Social Sciences, as we anticipate similar changes at the state level. However, some of the most important work we have committed to is ongoing.

As we aspire to make our schools more inclusive, we are also learning how to translate achievement data into meaningful, timely interventions for students. Collecting the right information at the right time requires ongoing collaboration and helpful data tools. As the district builds capacity for data analysis, we are confident that our teaching staff will be better able to assess, to intervene and to support students and their families with the areas of challenge that are identified in student performance data. To that end, we have begun to look at online assessment tools, with a specific need to find effective and efficient ways to track and support students' literacy skills.

Most anniversaries provide occasion to look back and look forward. That's certainly the case for the Education Reform initiative in Massachusetts. In Shrewsbury, we are fortunate to have so many reasons to celebrate the success of our students and their teachers. While there is work to do, there is also cause for hope. Our school communities are supportive of our efforts, and our educators are collaborative professionals. As we respond to this data, implementing learning experiences that empower students and devoting resources to monitor and support student growth will be important fuel for future progress.

