# Shrewsbury Public Schools MCAS Update 2017 



Report to School Committee December 6, 2017

## Spring 2017: A Tale of 2 Tests

## Legacy MCAS

- Science, Technology/Engineering test, Grades 5 and 8
- ALL high school tests (English Language Arts, Math, and Science, Technology/Engineering )


## "Next-Generation" MCAS

- English Language Arts and Math
- Grades 3-8


## What is the Next-Gen MCAS?

- Increased rigor: Focuses on students' critical thinking abilities, application of knowledge, and ability to make connections between reading and writing
- Designed to be given on a computer
- Gives a clearer signal of readiness for the next grade level or college and career



## NEW Achievement Levels

## Legacy

## 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.

## 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. subject.

## "Next-Generation"

## 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

## 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.

## Assessment

## Instruction

## 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.

## 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.

## Interpreting the Results

- Massachusetts educators set these standards, and they raised them in order to make sure our students will be college- and career- ready.
- The roughly equivalent proportion of students in each grade and subject area reflect:
> a clear progression of learning expectations from grade to grade;
> Panelists' consistent application of the standards
> Achievement targets were set for all these tests at the same time



## Projected Statewide 2017 Results for Grades 3-8 ELA and Math

Percent of students in each achievement level

...and Less Like Legacy MCAS Results (2015)


## Projected Next-Gen MCAS Results Look More Like Massachusetts's 2015 NAEP Results...



NAEP Level

- Advanced
- Proficient
- Basic

Below Basic

## Leading the Nation



MASSACHUSETTS


PUBLIC SCHOOLS ARE IN THE NATION


## District Overview

Achievement Levels by Content and Grade Levels
District Comparisons
Sub-Group Data
Student Growth Percentile (SGP)


## Achievement vs. Growth

Assessment scores indicate how each student is achieving relative to the state standards for that grade level.

- This is helpful in determining a student's proficiency in a given content area, like Math

Growth indicates a change in an individual student's test score over time. . .

- For instance, it tells how much a specific student improved on the Mathematics MCAS test from $4^{4^{\text {th }}}$ and $5^{\text {th }}$ grade to $6^{\text {th }}$ grade



## Student Growth Percentiles (SGP)

$\checkmark$ Massachusetts measures growth by comparing the change in a student's achievement scores on statewide assessments with all other students with similar test score histories.
$\checkmark$ The rate of change is expressed as a percentile.

- How much did Rishi improve in mathematics from $4^{\text {th }}$ and $5^{\text {th }}$ grade to $6^{\text {th }}$ grade, relative to her academic peers?
- If Rishi improved more than 65 percent of her academic peers, then her Student Growth Percentile (SGP) would be 65 .

The state defines moderate (or expected) growth to be between the 40-60 percentile

## SGP Reminders

$\checkmark$ Growth is distinct from achievement

- A student can achieve at a low level but demonstrate high growth, or achieve at a high level but demonstrate low growth
$\checkmark$ Students are compared only to their statewide academic peers, not to all students statewide
- All students can potentially grow at the $1^{\text {st }}$ or $99{ }^{\text {th }}$ percentile



## Why look at growth?

$\checkmark$ to monitor progress

- A student may achieve currently at a lower level, but still make great progress relative to academic peers
- Another could achieve well but not improve much from year to year
$\checkmark$ to set meaningful goals
- Because the growth model compares students to others with similar score histories, students at all levels of achievement can show growth.


## Science and Technology/Engineering



Shrewsbury Public Schools and State Results

## Grade 5 Science \& Technology

2016-2017 (Legacy) MCAS
■ SPS 2017 ■ State 2017


Fewer students (2\% less than last year) achieved at the Advanced level, resulting in a slight decrease in the percentage of students in the Adv/Prof levels. We saw a slight increase in the number of students scoring a Needs Improvement.

Shrewsbury Public Schools and State Results

## Grade 5 Science \& Technology

2016-2017 (Legacy) MCAS
■ SPS 2016 ■ SPS 2017


Fewer students (2\% less than last year) achieved at the Advanced level, resulting in a slight decrease in the percentage of students in the Adv/Prof levels. We saw a slight increase in the number of students scoring a Needs Improvement.

## Percentage of students Meeting or Exceeding Expectations

## Legacy MCAS Sci/Tech / Grade 5

Comparable District Comparisons


Shrewsbury Public Schools and State Results

## Grade 8 Science \& Technology

2016-2017 (Legacy) MCAS


There is a slight increase in the percentage of students in the Adv/Prof levels. Again, this is movement in the right direction, but we have progress to make in Science.

Shrewsbury Public Schools and State Results

## Grade 8 Science \& Technology

2016-2017 (Legacy) MCAS


There is a slight increase in the percentage of students in the Adv/Prof levels. Again, this is movement in the right direction, but we have progress to make in Science.

Percentage of students Meeting or Exceeding Expectations

## Legacy MCAS Sci/Tech / Grade 8

## Comparable District Comparisons



Shrewsbury Public Schools and State Results

## SHS Science \& Technology 2016-2017 (Legacy) MCAS

■ SPS 2017 - State 2017


Shrewsbury Public Schools and State Results

## SHS Science \& Technology 2016-2017 (Legacy) MCAS

■ SPS 2016 ■ SPS 2017


Percentage of students Meeting or Exceeding Expectations

## Legacy MCAS Sci/Tech / Grade 10

## Comparable District Comparisons



Percentage of students Meeting or Exceeding Expectations

## Legacy MCAS Sci/Tech / Grades 5-8-10

## Comparable District Comparisons



## English Language Arts



Shrewsbury Public Schools and State Results

## Grade 3 English Language Arts

2017 Next-Generation MCAS
■ State 2017 ■ SPS 2017


This slide (and the following slides for each grade level) indicate SPS grade-level results for the next-generation MCAS. The light gray bar indicates the 2017 state percentages, and the purple bar indicates Shrewsbury's percentages in each category.

Percentage of students Meeting or Exceeding Expectations

## Next-Gen MCAS ELA / Grade 3

## Comparable District Comparisons



Shrewsbury Public Schools and State Results

## Grade 4 English Language Arts

 2017 Next-Generation MCAS■ State 2017 ■ SPS 2017


Percentage of students Meeting or Exceeding Expectations

## Next-Gen MCAS ELA / Grade 4

## Comparable District Comparisons



Shrewsbury Public Schools and State Results

## Grade 5 English Language Arts

## 2017 Next-Generation MCAS

■ State 2017 ■ SPS 2017


Grade 5's results look very similar to those of Grades 3 and 4.

Percentage of students Meeting or Exceeding Expectations

## Next-Gen MCAS ELA / Grade 5

Comparable District Comparisons


- Grade 5

Percentage of students Meeting or Exceeding Expectations

## Next-Gen MCAS ELA / Grades 3-4-5

## Comparable District Comparisons



Shrewsbury Public Schools and State Results

## Grade 6 English Language Arts

 2017 Next-Generation MCAS■ State 2017 ■ SPS 2017


## Percentage of students Meeting or Exceeding Expectations

## Next-Gen MCAS ELA / Grade 6

## Comparable District Comparisons



Shrewsbury Public Schools and State Results

## Grade 7 English Language Arts

 2017 Next-Generation MCAS■ State 2017 ■ SPS 2017


Grade 7 English Language Arts seems to be a good area to focus on in this first year of the next-generation MCAS. Staff are analyzing data to guide next steps.

Percentage of students Meeting or Exceeding Expectations Next-Gen MCAS ELA / Grade 7

Comparable District Comparisons


Shrewsbury Public Schools and State Results

## Grade 8 English Language Arts

2017 Next-Generation MCAS
■ State 2017 ■ SPS 2017


Percentage of students Meeting or Exceeding Expectations

## Next-Gen MCAS ELA / Grade 8

## Comparable District Comparisons



## Percentage of students Meeting or Exceeding Expectations

## Next-Gen MCAS ELA / Grades 6-7-8

## Comparable District Comparisons



Shrewsbury Public Schools and State Results

## SHS English Language Arts <br> 2016-2017 (Legacy) MCAS

■ SPS 2017 ■ State 2017


Shrewsbury Public Schools and State Results

## SHS English Language Arts 2016-2017 (Legacy) MCAS

■ SPS 2017


In English, 96\% of students performed at the Proficient or Advanced levels, with 67\% in the Advanced category.

## Percentage of students Meeting or Exceeding Expectations

## LEGACY MCAS ELA / SHS Grade 10

## Comparable District Comparisons



## From DESE : ELA Growth Gr 3-8

2017 Next Generation MCAS Student Growth Report - Shrewsbury (027100 Subject: ELA - Grade:3-8
Subject:ELA $\quad$ Year: $2017 \sim$ Grade $: 3-8 \sim \square$


2017 SPS Achievement \& Growth / English Language Arts (by level)

$(4$
Elementary Gr. 4/ SMS / OMS / SHS

## English Language Arts 2017 Student Growth Percentiles (SGP)

The state defines moderate (or expected) growth to be between the 40-60 percentile, with low


The growth percentiles for most grade level were all in the moderate (or expected) growth range. Staff look at this indicator when reviewing data for this specific cohort of students.

## English Language Arts High Needs Subgroup by Grade Level

## 2017 Percentage of Students Meeting or Exceeding Expectations

SPS High Needs Subgroup $\quad$ State High Needs$\square$ SPS All Students


Staff look closely at the achievement gap between the high needs subgroup and the "all students" group. While the SPS high needs subgroup outperformed the state's subgroup in a few grade levels, there is still a lot of progress to be made in this area.

## English Language Arts SPS High Needs Subgroups 2017 Student Growth Percentiles (SGP)

The state defines moderate (or expected) growth to be between the 40-60 percentile, with low


In all but one of the grade levels, it is a good indicator that the high need subgroup did fall into the moderate range for growth. With the high needs group, however, greater growth is ideal in order to make up ground on any deficits within the curriculum and to improve overall achievement levels.

## SGP for High Needs students Next-Gen MCAS ELA / Grades 4-5-6

## Comparable District Comparisons



## SGP for High Needs students Next-Gen MCAS ELA / Grade 4

## Comparable District Comparisons



## SGP for High Needs students Next-Gen MCAS ELA / Grade 8

## Comparable District Comparisons



## Mathematics



Shrewsbury Public Schools and State Results

## Grade 3 Mathematics

2017 Next-Generation MCAS
■ State 2017 ■ SPS 2017


Percentage of students Meeting or Exceeding Expectations Next-Gen MCAS Math / Grade 3

## Comparable District Comparisons



Shrewsbury Public Schools and State Results

## Grade 4 Mathematics

2017 Next-Generation MCAS
■ State 2017 ■ SPS 2017


Percentage of students Meeting or Exceeding Expectations

## Next-Gen MCAS Math / Grade 4

## Comparable District Comparisons



Shrewsbury Public Schools and State Results

## Grade 5 Mathematics

## 2017 Next-Generation MCAS

■ State 2017 ■ SPS 2017


As with English Language Arts, Grade 5 is a focus area for improvement as staff review data.

Percentage of students Meeting or Exceeding Expectations

## Next-Gen MCAS Math / Grade 5

## Comparable District Comparisons



Percentage of students Meeting or Exceeding Expectations

## Next-Gen MCAS Math / Grades 3-4-5

## Comparable District Comparisons



Shrewsbury Public Schools and State Results

## Grade 6 Mathematics

2017 Next-Generation MCAS
■ State 2017 ■ SPS 2017


Percentage of students Meeting or Exceeding Expectations

## Next-Gen MCAS Math / Grade 6

## Comparable District Comparisons



Shrewsbury Public Schools and State Results

## Grade 7 Mathematics

2017 Next-Generation MCAS
■ State 2017 ■ SPS 2017


The relatively low number of students meeting or exceeding expectations at this grade level warrants additional study.

Percentage of students Meeting or Exceeding Expectations

## Next-Gen MCAS Math / Grade 7

Comparable District Comparisons


Shrewsbury Public Schools and State Results

## Grade 8 Mathematics

2017 Next-Generation MCAS
■ State 2017 ■ SPS 2017


Percentage of students Meeting or Exceeding Expectations

## Next-Gen MCAS Math / Grade 8

## Comparable District Comparisons



Percentage of students Meeting or Exceeding Expectations

## Next-Gen MCAS Math / Grades 6-7-8

## Comparable District Comparisons



Shrewsbury Public Schools and State Results

## SHS Mathematics

2016-2017 (Legacy) MCAS
■ SPS 2016 ■ SPS 2017


In Mathematics, 91\% of Shrewsbury's high school students scored Proficient or higher, which includes $72 \%$ who scored at the Advanced level.

Percentage of students Meeting or Exceeding Expectations

## LEGACY MCAS Math / SHS Grade 10

## Comparable District Comparisons



## Mathematics

## 2017 Student Growth Percentiles (SGP)

The state defines moderate (or expected) growth to be between the 40-60 percentile, with low growth as below the $40^{\text {th }}$ percentile and high growth as above the $60^{\text {th }}$ percentile.


While we are working to raise achievement rates, Student Growth Percentiles seem strong in Mathematics at many grade levels, especially in Grade 4.

## Mathematics

## SPS High Needs Subgroups 2017 Student Growth Percentiles (SGP)

The state defines moderate (or expected) growth to be between the 40-60 percentile, with low growth as below the $40^{\text {th }}$ percentile and high growth as above the $60^{\text {th }}$ percentile.


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

## Mathematics

## High Needs Subgroup by Grade Level

## 2017 Percentage of Students Meeting or Exceeding Expectations

 $■$ SPS High Needs Subgroup ■ State High Needs ■ SPS All Students

## SGP for High Needs students Next-Gen MCAS Math / Grades 4-5-6

## Comparable District Comparisons



## SGP for High Needs students Next-Gen MCAS Math / Grade 4

## Comparable District Comparisons



## SGP for High Needs students Next-Gen MCAS Math / Grade 8

## Comparable District Comparisons



2017 SPS Achievement \& Growth / Mathematics (by Level)


Grade 4 / SMS / OMS /SHS

## Next Generation MCAS Setting a new baseline

- Examining data to prepare next steps
- Looking at comparable communities for some context, and perhaps consultation/collaboration

Percentage of students Meeting or Exceeding Expectations

## Next-Gen MCAS Math / Grades 6-7-8

## Comparable District Comparisons



## Comparing districts can be challenging, as there are many different variables to consider ...

- Past performance of students (starting point for student growth)
- Curriculum, Instruction
- Professional Development focus areas
- Progress Monitoring of students / Intervention
- Student Data Practices
- Status of full day Kindergarten for all students
- Schedule (and staffing to support teacher planning)
- Leadership structure (Assistant Principals, Coordinators, Coaches)
- Per Pupil Spending (even a small difference can be significant)
- Salary scale


## $\checkmark$ Use the data

- Use district, school, and student level results to identify our current strengths and weaknesses
- Calibrate expectations and standards for district assessments and report cards-to ensure close alignment with state standards


## $\checkmark$ Collaborate with other districts

- Discuss best practices and share resources
$\checkmark$ Work with district leaders to calibrate expectations for instruction.
- Continue to review all the assessment information we have to align the curriculum, improve instruction, and monitor student progress at all grade levels.


## Staff Analysis of MCAS



WR25 WR10 16 WR15 13 LA15 LA25 $\underline{23}$ LA10 $18 \underline{5} \underline{11} \underline{8} \underline{24} \underline{12} \underline{22} \underline{21} 14 \underline{19} \underline{7} \underline{9} \underline{6} 17 \underline{20} \underline{3} \underline{2} 1$
Staff will utilize the MCAS data from the DESE portal to review student performance, identify strengths and weaknesses in specific standards, and also examine released questions to determine how students need to specifically apply their understanding of concepts.

Looking at Data at the School Level

## MCAS Test Item Analysis

## Grade 3 Reading

Number of Students Included: 452 Mode: Paper

An


## Why did my child score better last time?



- new standards for Meeting Expectations are more rigorous
- The score may be closer than you think. Look at where your child's scaled score falls within the category
- From DESE: Spring 2017 is a baseline year for a new test in grades 3-8, and spring 2017 scores should not be compared to previous years' scores.


## Be aware and cautious



## How Do I Learn More?

## MCAS Parents Page

http://www.doe.mass.edu/mcas/parents/

- Resources include:
- Annotated Parent/Guardian Report
- Frequently Asked Questions (FAQs)
- Item Descriptions


## MCAS Parent Guide

(available in several languages)
http://www.doe.mass.edu/commissioner/Back-to-School/

## 2017: New Baseline

- Participation and graduation rates remained high in Shrewsbury last year. For this reason, this year our current district accountability level is: No Level

2017 Official Accountability Data - Shrewsbury

| Dlstrict Information |  |
| :--- | :--- |
| District: | Shrewsbury (02710000) |
| Region: | Central |
| Title I Status: | Yes |


| Accountability Information |
| :--- |
| Accountability and Asslstance Level |
| No level Students in grades 3-8 participated in 2017 Next Generation MCAS tests |
| Thls dlstrict's determination of need for speclal education technical asslstance or Intervention |
| Meets Requirements-At Risk (MRAR) |



## Massachusetts DESE Online Information



School Accountability Information
School
Calvin Coolidge
Floral Street School
Walter J Paton
Spring Street
Sherwood Middle School
Oak Middle School
Shrewsbury Sr High
Beal School
Parker Road Preschool

There are lots of resources on the web at:
http://profiles.doe.mass.edu/acc ountability/report/district.aspx?li nkid=30\&orgcode=02710000\&or gtypecode=5\&

## Looking Beyond Scores

- Scores can identify areas where students need academic support, but scores can also reflect non-academic barriers to learning.
- ESE and districts continue to work together to:
- teach with diverse student needs in mind,
- build cultural competency, and
- address the need for continued work with data analysis


