To:	Emily Parks, Superintendent of Schools
From:	Allison Borchers, Assistant Superintendent
Date:	November 9, 2017
Re:	2017 MCAS Results

Introduction

This year, the landscape of statewide testing shifted as districts throughout the state participated in newly developed assessments, referred to as "MCAS 2.0" or "Next Generation MCAS." These new assessments were administered in Grades 3 - 8 for English Language Arts and Mathematics. The older assessment, now referred to as the "Legacy MCAS," was given in given Grade 10 for all subjects and in grades 5 & 8 for Science, Technology and Engineering. Most students in Westwood took the computer-based format of the Next Generation MCAS. The exceptions were grade 6 & 7 students, who took their math assessments on paper.

Over the summer, DESE engaged qualified educators in the process of standard setting: determining the cut scores in order to categorize student achievement levels on the new exam. One result of the new assessment and the standard-setting process, is that the achievement levels were recalibrated. The new MCAS achievement levels (*Exceeding Expectations, Meeting Expectations, Partially Meeting Expectations* and *Not Meeting Expectations*) are not just new names for the old levels (*Advanced, Proficient, Needs Improvement* and *Warning*) and some students whose scores were "Proficient" in earlier iterations of the test scored in the "Partially Meeting Expectations" category in 2017. For example, here is a comparison of the scores of students in the class of 2022 (current 8th graders):

	Westwood	State
Advanced	45%	18%
Proficient	46%	46%
Needs Improvement	6%	26%
Warning	3%	10%

2014 English Legacy MCAS Scores (Class of 2022, in 4th grade)

2017 English Next Generation MCAS Scores (Class of 2022, in 7th grade)

	Westwood	State	
Exceeding Expectations	18%	6%	
Meeting Expectations	59%	43%	
Partially Meeting Expectations	21%	42%	
Not Meeting Expectations	2%	10%	

In the Spring of 2019, the current 9th grade (WHS Class of 2021) will be the first group of high school students to take next generation high school math and English assessments. Acting Commissioner Wulfson has recommended to the Board of Education that for the Class of 2021, the standard for passing the new MCAS remain the same as it was in the old version. Mr. Wulfson has noted, however, that the passing standard could be recalibrated for future cohorts and that this change would impact high school students seeking to meet the competency determination for high school graduation starting in the 2019-2020 school year.

Accountability and Commendation

Westwood High School received a Level 1 accountability¹ rating, and was one of just seven high schools statewide to receive commendations from DESE. The WHS commendation was awarded for two categories: high achievement (as indicated by PPI--progress performance index--and graduation rates) and high progress (as indicated by median SGP--student growth percentile).

As this was the first year of the Next Generation MCAS test, Westwood did not receive a district-wide accountability designation, and the elementary and middle schools did not receive school accountability ratings.

The participation rate of subgroups is one area to monitor going forward. Whereas the student participation rate in Westwood is generally very high across grade levels, tests and subgroups (98% - 100%), the 2017 rate on the grade 8 science assessment was just 91% among students with disabilities. If participation on any test by any subgroup drops below 90%, schools and districts are in jeopardy of receiving a Level 3² accountability designation. Thurston's administrative team will be working with staff, students and parents to ensure that student participation at the school is back on track this year.

Comparable District Performance

Given the absence of accountability ratings and the newness of the scoring system on the Next Generation assessment, it makes sense to look at how Westwood students fared when compared to their counterparts in area districts (Bedford, Lexington, Medfield, Needham, Wayland, Wellesley and Winchester). Westwood's performance on the ELA and math assessment was generally in line with nearby communities. If we take a rank-order view of the percentage of students in the top two achievement categories, our elementary students were among the top three districts when compared with their counterparts. In middle school, Westwood drops to the bottom in grade 6 and then climbs in 7th and 8th. In 10th grade, Westwood appears in the middle of the pack.

¹ All Massachusetts districts and schools with sufficient data are classified into one of five accountability and assistance levels, with the highest performing in Level 1 and lowest performing in Level 5. In general, a district is classified into the level of its lowest performing school, unless the district was classified into Level 4 or 5 as a result of action by the Board of Elementary and Secondary Education. (DESE 2016 Accountability web page: http://profiles.doe.mass.edu/state_report/accountability.aspx)

² A Level 3 designation triggers the need for corrective actions within the district as well as technical assistance from the state in meeting performance and improvement targets.

For quite a few years, we have presented a rank order chart similar to the one below as part of our public review of MCAS data. While it is interesting to note Westwood's place among comp districts, rank order does not provide a nuanced view of data. This chart fails to capture the scale of performance differences between communities and can actually distort perceptions of performance. In the data below, for example, while the difference between scores in Lexington and Wayland is just 2%, the difference between Medfield and Bedford is 10%.

2017 Grade 8 MCAS English - Westwood and Comp Towns, % Meeting or Exceeding Expectations, Rank Ordered

	Lexington	Wayland	WInchester	Wellesley	Westwood	Needham	Medfield	Bedford
% Meeting or Exceeding Expectations	83	81	80	79	76	76	70	60

By way of contrast, a stacked bar chart view (below) helps illuminate differences in performance between similar towns, doesn't encourage distortion, and allows for more realistic interpretation of the data.





Grade 8 ELA MCAS - % Meeting and Exceeding Expectations

By 10th grade, the scores among comp towns are very close together: every school has well over 90% of its students scoring in the Proficient and Advanced categories.



In science, Westwood students' scores were near the top in grade 5, in the middle in grade 8, and back at the top in grade 10. It is worth noting that in Westwood, 8th grade scores improved dramatically between 2016 and 2017, while in most other comparable districts, performance declined.



District Data Analysis Results

This year, a group of faculty from throughout the district examined assessment data, focusing mainly on grades 5, 8 and 10. The team looked at performance over time, performance of reported subgroups and performance on specific standards categories and question types in math, English and science. The primary goal of the district team was to identify opportunities for continued growth.

The initial investigation helped us identify four key focus areas. The following narrative statements of findings were generated by the team.

Math, grades 3-10

Students earned a lower percentage of possible points on "constructed response" (grade 3 - 8, Next Generation) and "open response" (grade 10, Legacy) questions. Constructed response/open response questions require students to provide a written answer to a multi-part task. To be successful, students must provide answers and explanations for each part.

English Language Arts, grades 3-10

The lowest scoring category for all grade levels on ELA assessments is "Text Types and Purposes"--a strand within the Writing Standards. The percentage of points earned lags significantly behind the percentage for other areas. Since the average scores in the area are relatively low (62% in grade 5, 53% in grade 8 and 66% in grade 10), it represents a potential area for significant growth. It is worth noting that "Text Types and Purposes" is the weakest category in the statewide average scores (45% in grade 5, 44% in grade 8, 59% in grade 10), suggesting that the questions/tasks were more challenging for many students.

Students with Disabilities subgroup, grades 3-8

There is a large achievement gap between disabled and non-disabled students in elementary and middle school ELA and the gap persists from grade to grade (e.g., 20% SWD versus 90% Non-SWD meeting or exceeding expectations in grade 5). There is also a gap in math that grows as kids progress toward 8th grade. By 10th grade, both gaps are significantly closed. (87% SWD versus 100% Non-SWD meeting or exceeding expectations in math). In science, the gap is also large in elementary and middle school but closes substantially by 10th (78% SWD versus 99% non-SWD).

African-American/Black Students subgroup, grades 3-8

The performance gap between African American students and other groups in math and ELA are significant and persistent from grade 3-8.

While it is reassuring that these gaps narrow significantly at the high school level, the team concluded that finding ways to support achievement of students with disabilities and African-American students in the earlier grades should be a goal for the district. Early intervention offers students in these groups an even better chance at meeting or exceeding the performance standards on the high-stakes 10th grade exams.

Interestingly, a look at data on the science assessment revealed that Westwood's investment in science curriculum alignment, professional development, and coaching support is working. Performance overall is strong at the elementary and high school levels and showed marked improvement at the middle school.

At the elementary level, some of the strongest percentages of correct answers were in Physical Sciences--a critical focus area for last year's elementary professional development.

These key findings will be shared with educators throughout the district in the weeks ahead, and educators at all levels will engage in the process of creating action plans that help us to address areas of potential growth.

Conclusion

Statewide testing will remain in a state of flux over the next several years. The MCAS science test will be fully updated by 2019 to reflect new state standards in science. High school students will begin taking the Next Generation version of the English and Math tests in 2019. As early as 2020, the state could recalibrate scores on the high school exams--a change that will impact students' capacity to earn a diploma.

These changes present a challenge to educators, but I am confident that Westwood's commitment to reflection and growth places us in an excellent position to meet that challenge. We will continue to use MCAS data alongside other key indicators as we consider how to meet the learning needs of all of our students.