



2016 MCAS Analysis

for the Acton-Boxborough Regional School District

December 2016

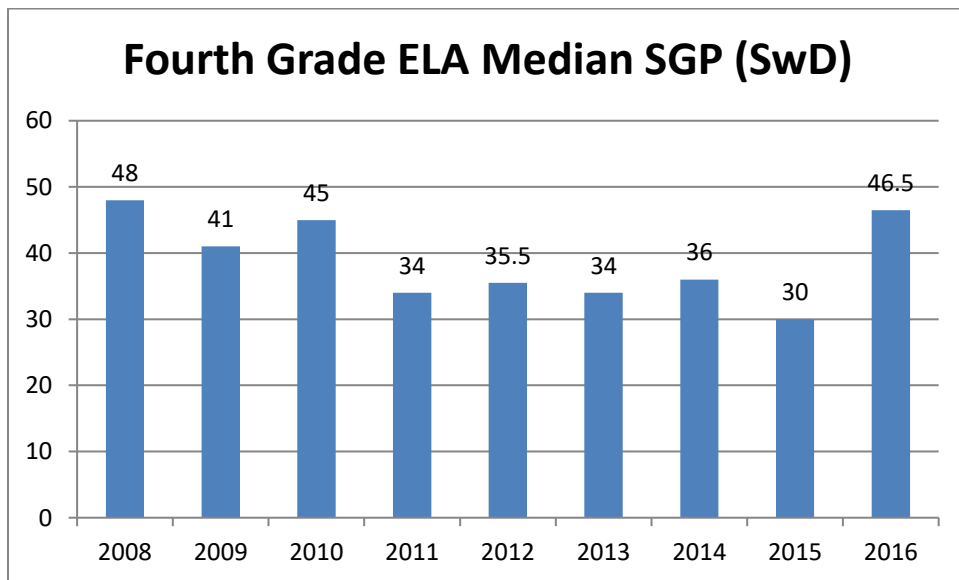
Overview

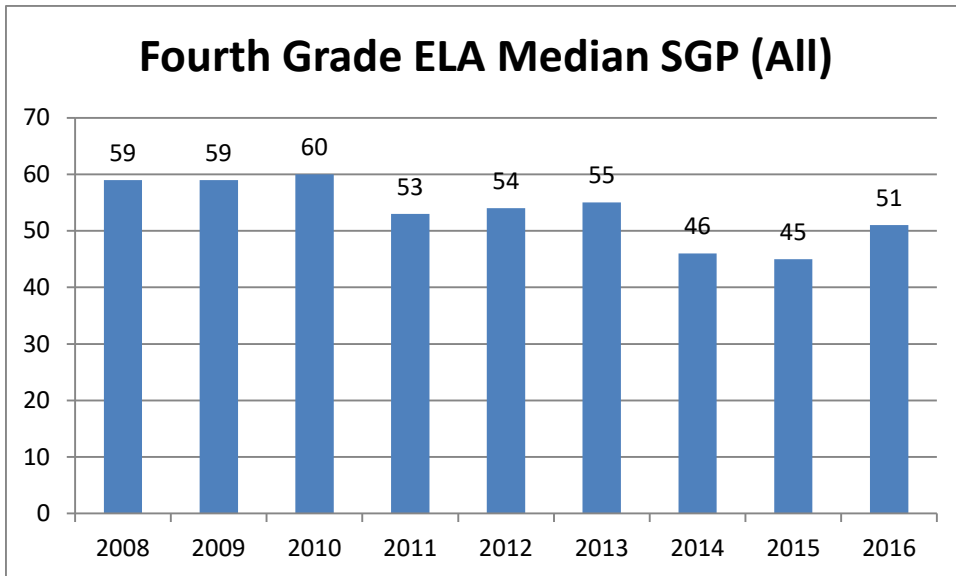
The high-performing Acton-Boxborough Regional School District consistently provides students with quality education. The Acton-Boxborough Special Education Parent Advisory Council takes a keen interest in the academic and other outcomes of Acton-Boxborough students and is especially concerned with our population of students with special education needs. The MCAS test, broadly administered to students in this and other districts every year, is our only source of academic performance as there is very little other public data available. From MCAS results achievement and progress in the English Language Arts and Mathematics can be reviewed for all students and subgroups of students by grade, by school, over time, and compared with other districts. In this way, we have tracked student performance for a number of years to outline trends for families of students with disabilities and foster discussions with the district. We thank Assistant Superintendent for Curriculum and Learning Deborah Bookis and Student Services leadership for continuing the conversation this year.

This year we highlight and celebrate improved ELA median student growth among fourth grade and junior high students and broad-based excellence in Math growth. We also express the need for continued progress in fourth grade ELA SGP and note concern about third grade ELA achievement and eighth grade Math SGP.

Fourth Grade English Language Arts – Median Student Growth Percentile

In previous years, we noted that the fourth grade ELA growth scores for the special education subgroup were substantially lower than peer school districts’ and the statewide average for the previous five years. The charts below show the nine-year history for the Students with Disabilities (SwD) subgroup and All Students. The 2016 SwD median is the second best in the nine years of SGP data. In 2016 the SwD median SGP was 46.5, up from 30.0 the prior year. The All Student median was 51, up from 45.





The 16.5-point improvement in fourth grade SwD ELA SGP and six-point improvement among All Students is a very positive result. This material parallel shift in district-wide growth scores among the SwD subgroup and All Students suggests that the underlying cause is a system-wide change affecting the regular classroom. We note this growth corresponds with the implementation of a new writing program across five of the district's six elementary schools.

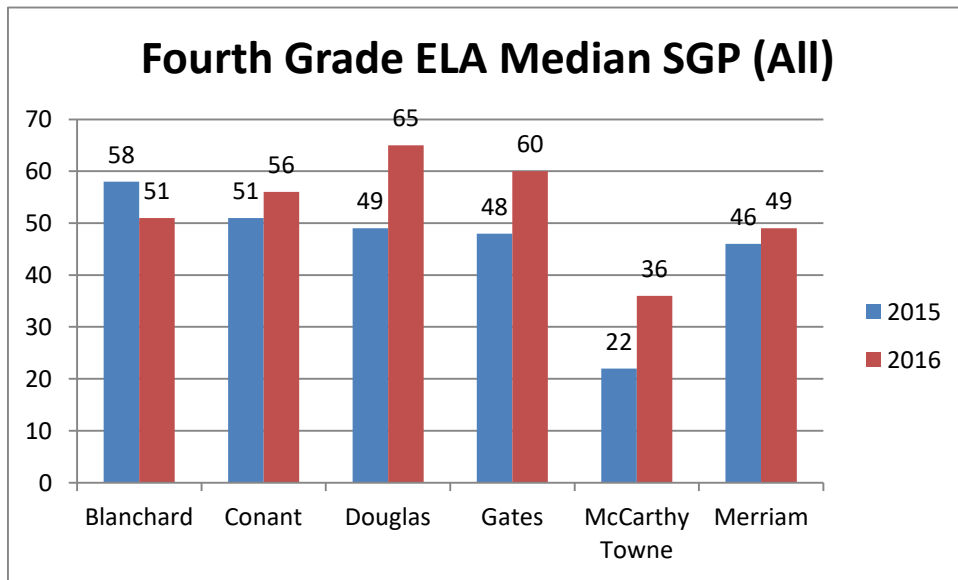
While the improvement in fourth grade SwD ELA SGP is welcome, A-B's results are on the low end when compared with peer districts'. The table below shows the 2016 SGP for five peer districts. We believe that this comparative data suggests that improving fourth grade ELA learning should be a continuing goal. Note that some of the schools used the PARCC test and, while the reporting system is similar, we do not know how comparable the PARCC data is with MCAS. In our view, however, comparing MCAS and PARCC districts' Student Growth Percentile results is reasonable as SGP fairly measures the median growth of a district's students to the total population of Massachusetts public school students taking the test. Each student's growth is measured against a cohort of students with similar achievement scores on the prior year's test. The difference in testing methodologies or base of knowledge tested does not make SGP comparisons invalid. Median SGP provides an important indicator about how well a district educates a student in the test's subject matter.

Fourth Grade ELA SGP

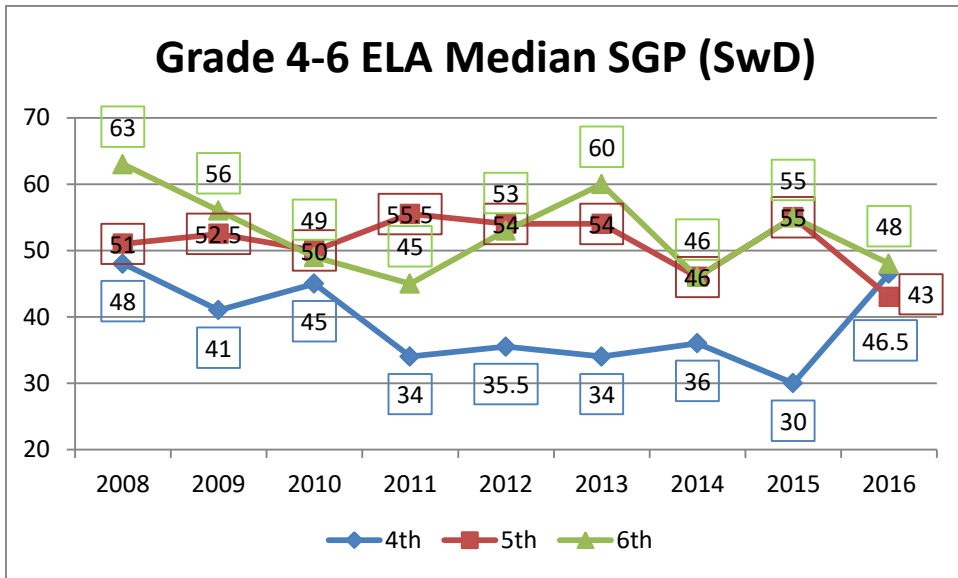
	<u>Test</u>	<u>SwD</u>	<u>All</u>
A-B	MCAS	46.5	51
Concord	PARCC	57	71
Belmont	PARCC	54	56
Lexington	MCAS	47	63
Westford	PARCC	57	59
Winchester	MCAS	58	65

Note: PARCC data as of 11/9/16.

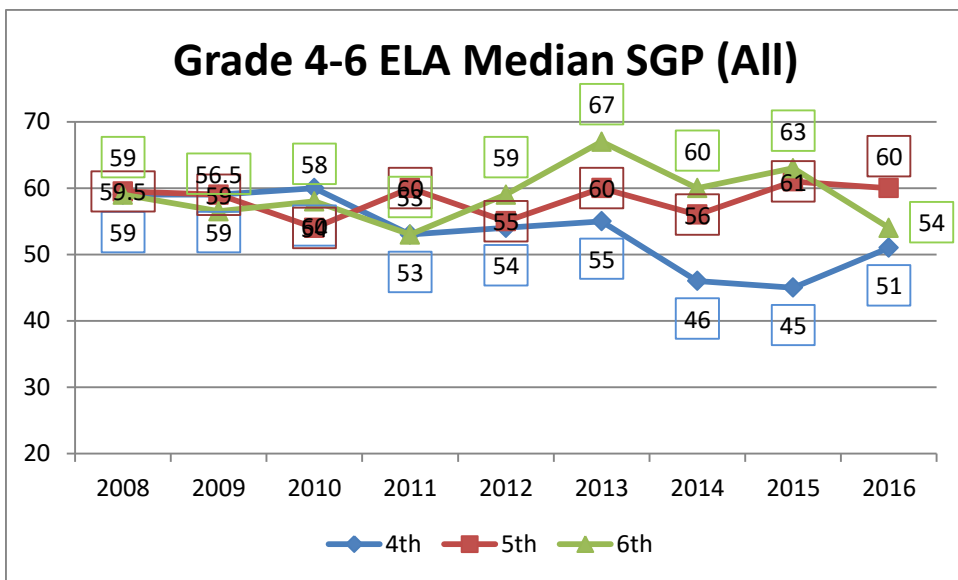
We also note the uneven nature of the increases and overall SGP scores among the fourth graders at the A-B schools. The chart below shows that the 2016 fourth grade ELA SGP for All Students ranged from 36-65 among the six elementary schools and the year over year change ranged from minus 7 to plus 16 points. The special education subgroup by school by grade cannot be tracked because data for groups less than 20 students is not made public.



The 2016 median ELA SGP for fifth and sixth grade students with special education needs declined this year. The fifth grade median of 43 is 12 points lower than last year and is the lowest in the nine years SGP has been calculated. The sixth grade median is 48, a decline of 7 points. The average ELA SGP median over the nine years for fourth grade students with special education needs is 38.9, 51.2, and 52.8. The fourth grade SGP exceeded the nine-year average and the fifth and sixth year subgroups did not. The chart below shows the nine-year history.



For All Students, there is the same divergence between fourth grade and fifth and sixth grade SGP but smaller in magnitude. Fifth grade SGP declined by one point and is very good at 60. Sixth grade SGP declined by nine points but is still good at 54.



Is there an underlying reason for the divergence in ELA SGP among students with special education needs in the elementary schools? It is not possible with the data available to reach a supportable conclusion about why fourth grade SGP moved in the opposite direction of fifth and sixth grade SGP. Randomness or coincidence is a possibility. The data trend is also consistent with the possibility of increased support for the SwD group or All Students in the fourth grade.

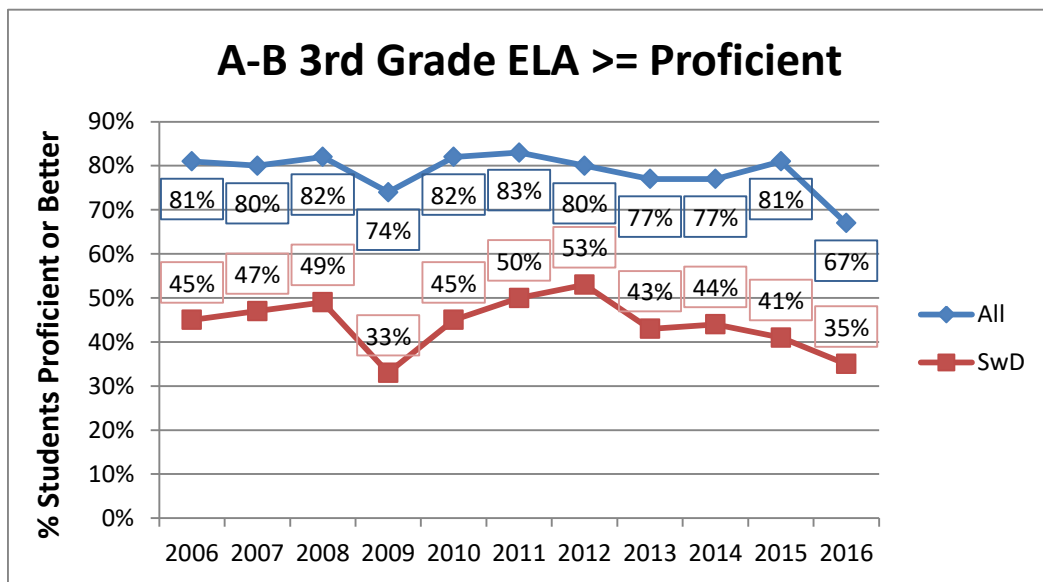
One final point should be noted about students with special education needs who are sixth graders this school year (2016-2017). This group has experienced two low years of ELA growth. As fourth graders the subgroup's SGP was 30, the lowest recorded by this fourth grade subgroup

in the nine years of data. As fifth graders their SGP was 43, again the lowest recorded by this fifth grade subgroup in nine years. We do not believe the adequate achievement levels of these students as measured by overall proficiency and Composite Performance Index scores should mitigate concern about the low growth. In our view, two years of low growth justifies more focus on the ELA progress of these students.

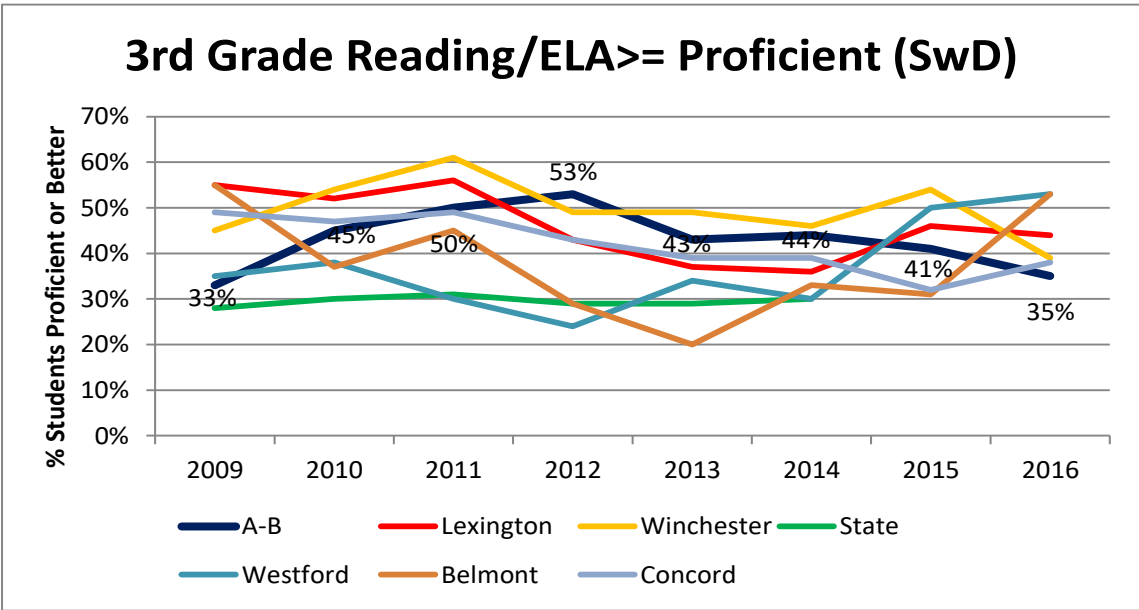
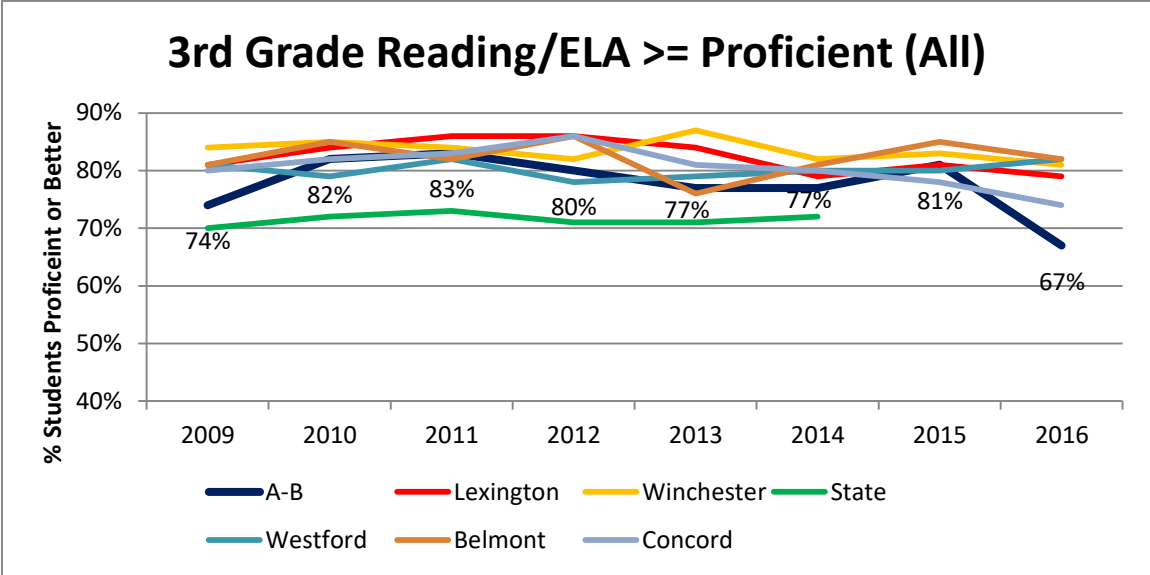
Third Grade Achievement

We note that third grade ELA achievement is lower than the historical norms for All Students and the SwD subgroup as measured by the percentage of students Proficient or better (Advanced). For All Students the proficiency percentage is 67%, the lowest recorded in the last 11 years. The 2016 result compares with 81% last year and the 11-year average of 79%.

For students with special education needs the third grade proficiency percentage is 35%, the second lowest in 11 years. The 2016 result compares with 41% last year and an 11-year average of 44%.



The following charts suggest that the decline in third grade Reading/ELA proficiency is specific to the A-B district and not a broader trend. Lexington and Winchester are MCAS districts like A-B. The 2015 and 2016 proficiency levels for Belmont, Concord, and Westford are based on the PARCC test. The first chart shows the proficiency percentage for all third grade students and the second chart shows the same for students with special education needs.



A-B's third grade achievement level is at the low end among peer districts reviewed. A-B's third graders had the lowest proficiency percentage and CPI score. A-B's SwD subgroup had the lowest CPI score and was in the middle of the pack in proficiency percentage among the peer schools. Again, some of the schools used the PARCC test and we do not know how comparable the PARCC data is with MCAS.

Third Grade English Language Arts Achievement Scores

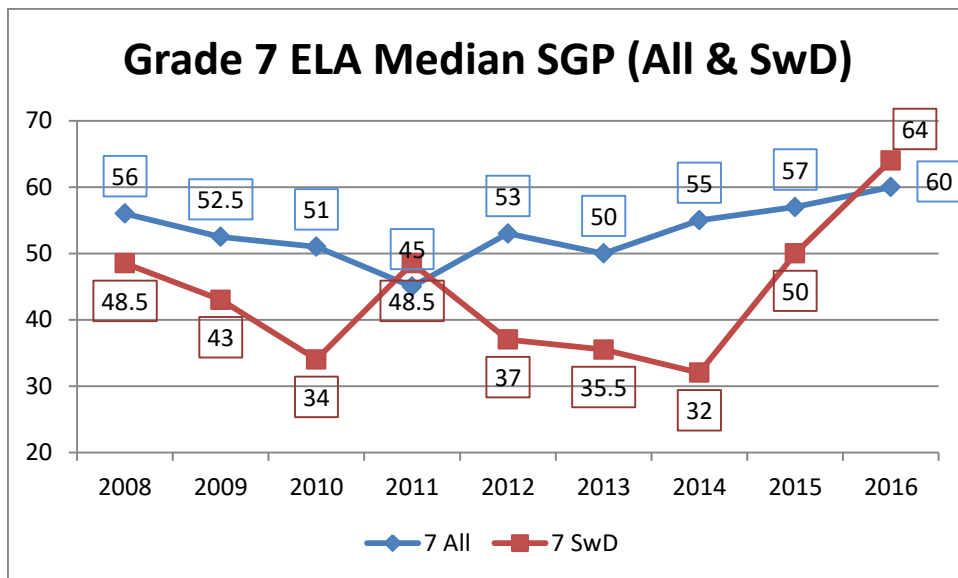
District	Proficiency %			Composite Performance Index	
	Test	SwD	All	SwD	All
A-B	MCAS	35%	67%	68.4	87.3
Concord	PARCC	38%	74%	80.3	93.9
Belmont	PARCC	53%	82%	82.6	95.4
Lexington	MCAS	44%	79%	76.0	92.8
Westford	PARCC	53%	82%	84.9	95.0
Winchester	MCAS	39%	81%	79.3	94.2

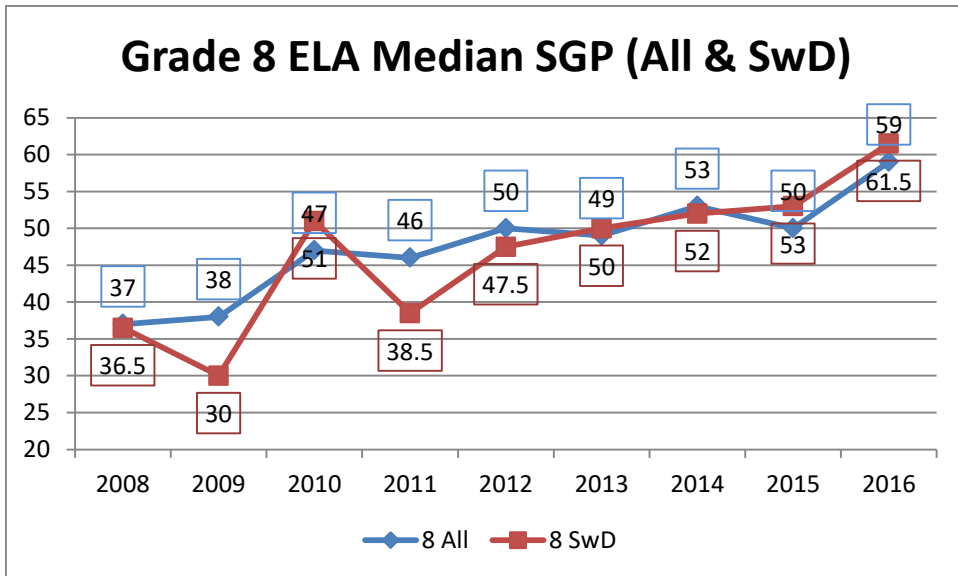
Note: PARCC data as of 11/9/16.

The third grade is the first year MCAS testing is administered to students, meaning no SGP is available. Consequently, it is not possible to guess the underlying cause of the recent downward trend in third grade ELA achievement and unfavorable results when compared with peer districts' results. We suggest that the data justifies a deeper evaluation of the underlying cause for the achievement decline and the possible need for additional resources to improve achievement in the future.

Junior High Performance

R.J. Grey students showed improved growth in English Language Arts. All Students and the SwD subgroup's ELA SGP were the highest in the nine-year history of the median SGP metric for both the seventh and eighth grades. The seventh grade ELA SGP for students with special education needs doubled over the last two years from 32 to 64. The following charts show the nine-year history of seventh and eighth grade ELA SGP results.

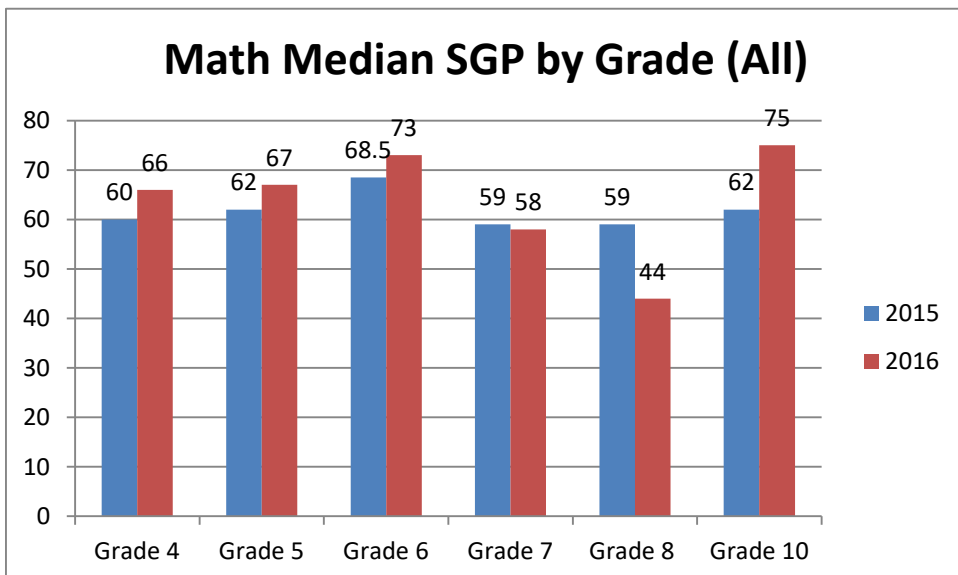


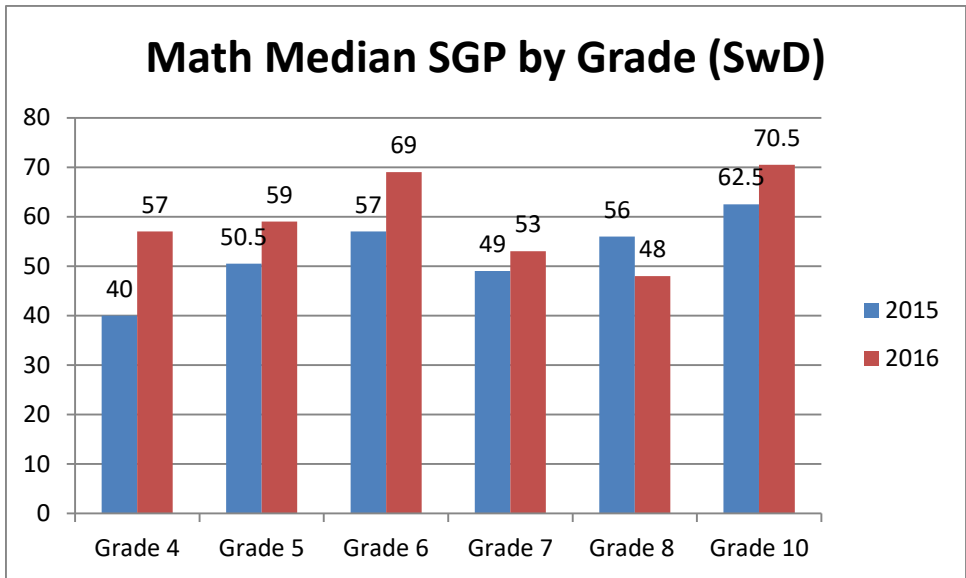


Mathematics Growth Strong for SwD and All Students

In 2016 the SwD Math median SGP was higher than the prior year for all grades except the eighth grade. Eighth grade SGP of 44 is a 15-point decrease from the prior year. For all other grades the 2016 SGP was 58 or greater with the high school (SGP 75) and sixth grade (SGP 73) reporting outstanding growth.

In 2016 the Math median SGP for All Students was higher than the prior year for all grades except the eighth grade (SGP 48). For all other grades the 2016 SGP was 53 or greater with the high school (SGP 70.5) and sixth grade (SGP 69) reporting outstanding growth.





Potential Areas of Focus

While celebrating the fourth grade ELA results and offering our congratulations, we cast an eye toward third grade ELA proficiency. Given that ELA proficiency is trending downward for all students and is at multi-year lows, with SwD scores at their second-lowest level since 2006, we wonder if there is value to understanding why. We also continue to stress the need to improve elementary ELA SGP for the SwD subgroup to above 50. The PAC continues to encourage expanding the use of measures that provide insight into students’ progress in academic and other areas and making that data available to families.