



## Addendum A – Spring 2012 Presentation to APS School Committee

**Additional Data Related to 2011 MCAS/SGP Performance of APS Special Education Students**  
 This addendum provides a deeper analysis of the points presented in the 2012 Spring PAC Presentation to the APS School Committee.

**Point 1 – The academic progress of the special education subgroup in the district is good relative to other districts’ subgroup performance. However, we are concerned about the continuing negative English Language Arts trend across multiple elementary schools.**

The subgroup’s Math progress as measured by Student Growth Percentile (SGP) is excellent – top 10% among districts in the state reporting. However, English Language Arts (ELA) progress is average with room for improvement. The special education subgroup’s ELA SGP median was 47<sup>th</sup> percentile placing it 130 among 332 reporting schools. While this SGP median was above the statewide SGP median of 42, it was essentially tied with Boxborough for last place among the five peer districts tracked for this analysis.

Table 1: Peer Group District Performance of Special Education Subgroup SGP

### District Rankings (Special Education)

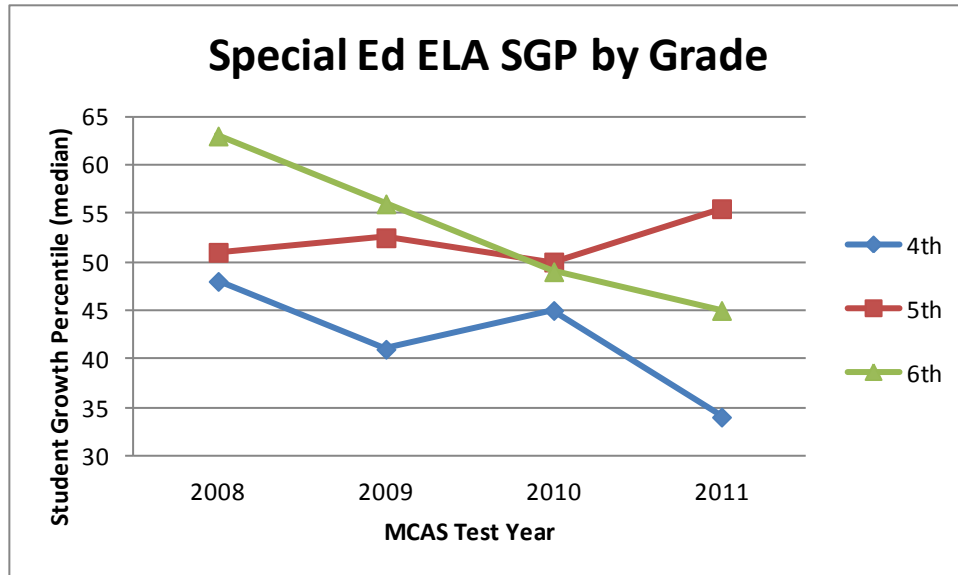
<u>District</u>	<u>English Language Arts</u>			<u>District</u>	<u>Mathematics</u>		
	<u>2011 SGP</u>	<u>Rank of 332</u>	<u>Percentile</u>		<u>2011 SGP</u>	<u>Rank of 333</u>	<u>Percentile</u>
Acton	47	130	61%	Acton	59	35	90%
Boxborough	46.5	139	58%	Boxborough	42.5	196	41%
Concord	49	106	68%	Concord	59	36	89%
Lexington	56	46	86%	Lexington	57	44	87%
Westford	52	80	76%	Westford	57.5	42	87%
State	42			State	43		

Note: 42 districts did not report Special Ed results.

Note: 41 districts did not report Special Ed results.

### Continuing Negative English Language Arts Trend

While the ELA SGP results for special education students are still in the average range, we are concerned about a negative trend over the last four years. The chart that follows shows declining SGP scores in both the fourth and sixth grade. ELA SGP has declined 14 and 18 points for the fourth and sixth grades respectively since 2008. We are most concerned about the fourth grade in 2011 whose ELA growth was only 34<sup>th</sup> percentile. This is 8 points below the state average and 13 points below the district average SGP for this population.



### ELA Trend of Aggregate Student Group

In order to gain some insight into whether the trend we are seeing is mirrored in the overall student population we compared subgroup and aggregate SGP median scores. This comparison appears in the table that follows. While the aggregate population SGP scores declined in both the fourth and sixth grades the decline was very modest in comparison to the declines experienced by special education students. As a consequence, the “gap” in growth between special education students and all students increased by 8 and 12 percentile points respectively for the fourth and sixth graders. The goal of No Child Left Behind is to close the growth and achievement gaps between regular education students and all students in monitored subgroups.

We also note that the “gap” is consistently much larger in the fourth grade, which would be consistent with the proposition that there is a special education specific factor having a negative influence on progress.

Due to limitations on data available to the public we are unable to identify school specific information by grade. However, this is an analysis we would recommend the school district complete for greater clarity.

Table 2: Aggregate Student ELA SGP Performance From 2008-2011

English Language Arts -Student Growth Percentile				
Test Year	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
<b>Fourth Grade</b>				
Special Education Students	48	41	45	34
All Students	<u>59</u>	<u>59</u>	<u>60</u>	<u>53</u>
Difference	11	18	15	19
<b>Fifth Grade</b>				
Special Education Students	51	52.5	50	55.5
All Students	<u>59.5</u>	<u>59</u>	<u>54</u>	<u>60</u>
Difference	8.5	6.5	4	4.5
<b>Sixth Grade</b>				
Special Education Students	63	56	49	45
All Students	<u>59</u>	<u>56.5</u>	<u>58</u>	<u>53</u>
Difference	-4	0.5	9	8
<b>All Grades (4-6)</b>				
Special Education Students	54	48	47.5	47
All Students	<u>59</u>	<u>58</u>	<u>57</u>	<u>56</u>
Difference	5	10	9.5	9

**Point 2 – McCarthy-Towne’s special education ELA and Math SGP scores have been erratic with some years of very low student growth.**

Both the ELA and Math SGP earned by McCarthy-Towne’s special education subgroup have been pretty consistently below 50 and below the district-wide median over the four years Student Growth Percentile data has been available (2008 – 2011). Year to year volatility of SGP scores for the subgroup has also been unusually large and low points have been very low (ELA SGP in 2009 was 27, Math SGP in 2010 was 31.5). The table that follows shows the volatility of student growth (SGP) as well as student proficiency, i.e., the number of students who received a Proficient or higher score on MCAS (shown in the “>= Profic.” column). The table also includes Composite Performance Index scores (CPI), which are calculated based on MCAS achievement scores. Student scores of Proficient or better receive 100 points, while students in lower achievement categories receive 75, 50 or 25 points depending on where in each category they fall.

In 2011 the special education subgroup SGP scores improved to the mid-40s. Notwithstanding that improvement, the PAC is concerned that if we don’t understand the underlying cause of the volatility poor growth may re-emerge in future years.

Table 3: Special Education Student MCAS Scores at McCarthy-Towne 2008-2011

McC-T English Language Arts SGP  
Special Education

<b>Results by Test Year</b>						
<u>Test Year</u>	<u>SGP</u>	<u>&gt;=Profic.</u>	<u>CPI</u>	<u>B(W) District</u>		
				<u>SGP</u>	<u>&gt;=Profic.</u>	<u>CPI</u>
2011	46	46	75.4	-1	-3	-2.6
2010	35.5	39	73.4	-12	-5	-2.3
2009	27	39	76	-21	-4	-2.7
2008	39.5	51	73.2	-14.5	0	-4.9
<b>Average</b>	37.0	43.8	74.5	-12.1	-3.0	-3.1

McC-T Mathematics  
Special Education

<b>Results by Test Year</b>						
<u>Test Year</u>	<u>SGP</u>	<u>&gt;=Profic.</u>	<u>CPI</u>	<u>B(W) District</u>		
				<u>SGP</u>	<u>&gt;=Profic.</u>	<u>CPI</u>
2011	43	31	67.4	-16	-12	-7.3
2010	31.5	39	67.6	-20.5	1	-3.6
2009	42	31	68.3	-14.5	-10	-6.1
2008	56.5	42	73.2	3	2	-0.7
<b>Average</b>	43.3	35.8	69.1	-12.0	-4.8	-4.4

Point 3 – Conant experienced a very sharp one-year decline in English Language Arts SGP.

The special education subgroup’s ELA SGP at Conant plummeted from a best-in-district of 63 in 2010 to a worst-in-district of 36 in 2011. Student growth percentiles for the fourth to sixth graders declined 27 points, proficiency declined by 10 percent, and CPI declined by 7.9 points. Conant’s Student Growth Percentile median for the special education subgroup placed it in the bottom 1/3<sup>rd</sup> of all schools in the state reporting SGP results for this student population.

We note that for the aggregate student population Conant’s ELA SGP has been slipping over the last three years from very high levels to 58.5 in 2011, which is still strong. However, the gap in growth between special education students and regular education students is a whopping 22.5 points.

Although we would not highlight most one-year trends, in this case the drop in growth for special education students was so dramatic we believe the Administration should apply a heightened level of scrutiny to factors that may have contributed to this rapid decline.

Table 4: Special Education Student MCAS Scores at Conant 2008-2011

Conant		English Language Arts SGP				
Special Education		Results by Test Year				
Test Year	SGP	≥Profic.	CPI	B(W) District		
				SGP	≥Profic.	CPI
2011	36	41	71.9	-11	-8	-6.1
2010	63	51	79.8	15.5	7	4.1
2009	48	37	72.7	0	-6	-6
2008	56	55	74.4	2	4	-3.7
<b>Average</b>	50.8	46.0	74.7	1.6	-0.8	-2.9

Conant		Mathematics				
Special Education		Results by Test Year				
Test Year	SGP	≥Profic.	CPI	B(W) District		
				SGP	≥Profic.	CPI
2011	65	43	72.4	6	0	-2.3
2010	60	38	72.9	8	0	1.7
2009	50.5	37	69.2	-6	-4	-5.2
2008	51	38	69.6	-2.5	-2	-4.3
<b>Average</b>	56.6	39.0	71.0	1.4	-1.5	-2.5

#### Point 4 – Merriam is caught in a downward trend for special education student growth in English Language Arts

The special education subgroup's ELA SGP at Merriam has declined 20 points over the last four years from an exceptional SGP of 65 in 2008 to an average SGP of 45 in 2011. The subgroup's performance in 2008 would have placed it among the top 5% of schools in the state while the school's 2011 performance ranks it in the 57<sup>th</sup> percentile, which we don't feel is up to the standards set by the district's mission statement. We note that the ELA SGP for All Students also declined ten points from 2008 to 2011 (from 60 to 50) suggesting the possibility there is a common underlying cause for the decline.

Although not so severe a drop as experienced by the Conant subgroup, the PAC hopes that research into the underlying cause of the decline in ELA SGP will result in findings which help reverse the trend at Merriam.

On the other hand Merriam's special education students' Math SGP has substantially improved from a score of 45 in 2008 to 63.5 in 2011. This subgroup's 2011 Math SGP scores placed Merriam in the 90<sup>th</sup> percentile among all schools reporting special education results. The table that follows shows special education student MCAS scores at Merriam for 2008-2011.

Table 4: Special Education Student MCAS Scores at Merriam 2008-2011

Merriam English Language Arts SGP  
 Special Education

<b>Results by Test Year</b>						
<u>Test Year</u>	<u>SGP</u>	<u>&gt;=Profic.</u>	<u>CPI</u>	<b>B(W) District</b>		
				<u>SGP</u>	<u>&gt;=Profic.</u>	<u>CPI</u>
2011	45	49	82.4	-2	0	4.4
2010	43	44	74.1	-4.5	0	-1.6
2009	58	49	82.3	10	6	3.6
2008	65	60	85.6	11	9	7.5
<b>Average</b>	52.8	50.5	81.1	3.6	3.8	3.5

Merriam Mathematics  
 Special Education

<b>Results by Test Year</b>						
<u>Test Year</u>	<u>SGP</u>	<u>&gt;=Profic.</u>	<u>CPI</u>	<b>B(W) District</b>		
				<u>SGP</u>	<u>&gt;=Profic.</u>	<u>CPI</u>
2011	63.5	58	82.1	4.5	15	7.4
2010	59	41	75.9	7	3	4.7
2009	62.5	43	80	6	2	5.6
2008	45	46	76.9	-8.5	6	3
<b>Average</b>	57.5	47.0	78.7	2.3	6.5	5.2