

Preliminary Analysis of MCAS Growth Model Data for the High School

The Massachusetts Department of Elementary & Secondary Education (DESE) released Growth Model data to the general public on October 27, 2009. The Model produces a Student Growth Percentage (SGP) for each student. DESE released Model data by test (English Language Arts (ELA) and Mathematics) by grade, by school, by subgroup, and by district provided there are at least 20 students in the group. A group's SGP score of 65 means that 65% of students with a similar test score in prior years scored below the group in the most recent test. SGP measures a student's progress in comparison with other students with similar scores. In order for a group (say a school) to excel its students must do better than similar students. DESE publications suggest that a SGP of 40-60 is average performance with SGP scores higher or lower indicating superior or inferior performance.

The only MCAS test at the high school level is given to tenth graders. The Grade 10 SGP scores are comparing two years of progress from 8th grade to 10th grade.

Special Education Student Performance at AB Regional High School

- ABRHS special education students progressed faster than the state average in English and at the state average in Math.
- ABRHS placed in the middle of four peer districts with respect to special education student progress (Acton-Boxborough, Concord-Carlisle, Lexington and Westford).
- Lexington special education students showed consistent strong progress in both English and Math.
- Traditional "achievement" measures - CPI scores and the percentage of students receiving Proficient or better – indicate ABRHS special education students are substantially superior to the state average.
- ABRHS special education students' Math achievement was highest among its peer schools and in the middle of the above peer group in English.
- ABRHS special education students' progress ranked 41 of 168 Massachusetts districts in English with an SGP score of 48. In Math, the students SGP score of 46, one percentile below the state average, earned a 106 ranking among 167 districts.
- The ranking # and SGP score [] of nearby districts with high SGP scores in ELA for special education students were: #7 Winchester [67], #9 Bedford [65], #11 Hopkinton [64.5], and #17 Concord-Carlisle [58].
- Nearby districts with high SGP scores in Math for special education students were: #2 Weston [79.5], #3 Belmont [79.0], #5 Groton-Dunstable [76] and #18

Natick [63.5].

- Charter schools are not a factor in the special education rankings. Charter schools received high rankings in the aggregate student population (see next section).

See the tables below for specific performance details.

Special Education

STUDENT GROWTH PERCENTILE

A-B Score Higher (Lower) Than:

<u>Grade</u>	<u>Subject</u>	<u>A-B Score</u>	<u>Concord -</u>			<u>State</u>
			<u>Carlisle</u>	<u>Lexington</u>	<u>Westford</u>	
10	ELA	48	-10.0	-4.0	8.5	9.0
10	MATH	46	8.0	-11.5	-8.5	-1.0

COMPOSITE PERFORMANCE INDEX

A-B Score Higher (Lower) Than:

<u>Grade</u>	<u>Subject</u>	<u>A-B Score</u>	<u>Concord -</u>			<u>State</u>
			<u>Carlisle</u>	<u>Lexington</u>	<u>Westford</u>	
10	ELA	92.8	-1.5	0.8	7.4	16.8
10	MATH	91.8	10.4	2.9	11.1	22.4

% PROFICIENT OR BETTER

A-B Score Higher (Lower) Than:

<u>Grade</u>	<u>Subject</u>	<u>A-B Score</u>	<u>Concord -</u>			<u>State</u>
			<u>Carlisle</u>	<u>Lexington</u>	<u>Westford</u>	
10	ELA	73	-6.0	-2.0	-2.0	30.0
10	MATH	73	26.0	1.0	7.0	36.0

District Rankings
Student Growth Percentage
Special Education Subgroup
167-168 reporting districts
10th Grade

ENGLISH LANGUAGE ARTS

	Score	Rank	Percentile
A-B	48.0	41	0.76
Concord	58.0	17	0.90
Lexington	52.0	32	0.81
Westford	39.5	89	0.47

MATH

A-B	46.0	106	0.37
Concord	38.0	126	0.25
Lexington	57.5	46	0.72
Westford	54.5	62	0.63

Student Growth Percentage - Score Similar to A-B

Special Education Subgroup (10th Grade)

<u>Test</u>	<u>A-B Score</u>	<u>Districts with Similar Scores (Scores in brackets)</u>
ELA	48.0	Weston [51.5], Norwood [50.5], Melrose [48.0], Newton [46.0]
Math	46.0	Worcester [47.0], Cambridge [46.5], Bridgewater-Raynham [46.0], Lincoln-Sudbury [46.0]

Aggregate Student Performance at AB Regional High School

- ABRHS students showed weak progress in English in the 9th and 10th grades. Progress was below the state average and lowest among the three peer districts.
- ABRHS students showed stronger growth in Math than the state average and roughly equivalent with Concord-Carlisle and Lexington.
- ABRHS students showed substantially stronger “achievement” in English and Math than the state average as measured by the Composite Performance Index and % of students achieving Proficient or better status.
- As measured by Student Growth Percentile performance, ABRHS ranked 190th of 279 districts in English and 107th of 279 districts in Math.
- School districts with aggregate SGP scores similar to ABRHS’ SGP scores are demographically quite different from Acton and Boxborough.

- The ranking # and SGP score [] of nearby districts with high SGP scores in English for students in aggregate was: #3 Winchester [83], #9 Brockton [78], #25 Groton-Dunstable [70.5], and #27 Hopkinton [69].
- The ranking # and SGP score [] of nearby districts with high SGP scores in Math for students in aggregate was: #4 Dedham [83], #9 Groton-Dunstable [75], #25 Westwood [72], and #27 Framingham [68].
- Five of the top ten districts ranked by SGP score in both English and Math were charter schools.

See the tables below for specific details.

Aggregate

STUDENT GROWTH PERCENTILE

A-B Score Higher (Lower) Than:

<u>Grade</u>	<u>Subject</u>	<u>A-B Score</u>	<u>Concord -</u>			
			<u>Carlisle</u>	<u>Lexington</u>	<u>Westford</u>	<u>State</u>
10	ELA	45.0	-14.0	-6.0	-17.0	-5.0
10	MATH	54.5	-0.5	-1.0	5.5	4.5

COMPOSITE PERFORMANCE INDEX

A-B Score Higher (Lower) Than:

<u>Grade</u>	<u>Subject</u>	<u>A-B Score</u>	<u>Concord -</u>			
			<u>Carlisle</u>	<u>Lexington</u>	<u>Westford</u>	<u>State</u>
10	ELA	98.8	-0.1	0.3	0.4	13.1
10	MATH	98.5	3.3	0.9	1.5	20.3

% PROFICIENT OR BETTER

A-B Score Higher (Lower) Than:

<u>Grade</u>	<u>Subject</u>	<u>A-B Score</u>	<u>Concord -</u>			
			<u>Carlisle</u>	<u>Lexington</u>	<u>Westford</u>	<u>State</u>
10	ELA	95	-1.0	0.0	-2.0	21.0
10	MATH	95	7.0	1.0	1.0	38.0

District Rankings
Student Growth Percentage
Aggregate
279 reporting districts
10th Grade

ENGLISH LANGUAGE ARTS

	Score	Rank	Percentile
A-B	45.0	190	0.32
Concord	59.0	81	0.71
Lexington	51.0	137	0.51
Westford	62.0	67	0.76

MATH

A-B	54.5	107	0.62
Concord	55.0	99	0.65
Lexington	55.5	97	0.65
Westford	49.0	158	0.43

Student Growth Percentage - Score Similar to A-B

Aggregate (10th Grade)

<u>Test</u>	<u>A-B Score</u>	<u>Districts with Similar Scores (Scores in brackets)</u>
ELA	45.0	Quincy [46.0], Wayland [46.0], Gloucester [45.0], Framingham [44.0]
Math	54.5	Melrose [55.0], Natick [55.0], Needham [54.0], Cambridge [53.0]