

# Lincoln Public Schools MCAS Report

## *October 2022*

### Introduction

Each year students in grades 3-8 participate in the state MCAS assessments. For the first time in three years, students participated in the full MCAS assessment in spring 2022, following a canceled assessment in 2020 and an abbreviated version in 2021. Last year, many aspects of school felt more “normal” than the 2020-21 year, but school was still highly impacted by COVID. Many students and staff were absent with COVID at some point in the year, and masking and other mitigating measures were still prevalent. Students’ social-emotional needs were greater last year than pre-COVID, impacting day-to-day learning for many. Even with these factors at play, there are many reasons to be proud of strong outcomes in our MCAS results. This report will also highlight aspects of our data that indicate our need to continue critical work. We always want to emphasize that MCAS is one measure among many to help us understand what our students know and can do.

### Key Yearly Measures

In this report you will find Key Yearly Measures (KYMs) highlighted in green and gray boxes. KYMs will be presented in reports throughout the school year highlighting important data points that help us understand our effectiveness as a school district and inform strategic planning and decision making. KYMs don't tell the full story in all its richness of our students and their learning experiences, but they do offer an important dipstick of our district's work that we will track year to year and consistently report out to our community.

## Overall achievement in grades 3-8 across the district

One basic indicator for student achievement on MCAS is the percent of students across the district in grades 3-8 who meet or exceed expectations. In the spring of 2021, **61% of our students in ELA, 48% of our students in math, and 53% of our students in science met or exceeded expectations on MCAS** as compared to statewide rates of 46% in ELA, 34% in math, and 41% in science. Of the students who did not meet or exceed expectations in our district the majority partially met expectations.

	2022					
	ELA		Math		Science	
	% LPS	% MA	% LPS	% MA	% LPS	% MA
Exceeding Expectations	12	6	11	6	13	6
Meeting Expectations	46	35	41	33	55	36
Partially Meeting Expectations	34	42	38	43	28	40
Not Meeting Expectations	8	17	10	17	4	18

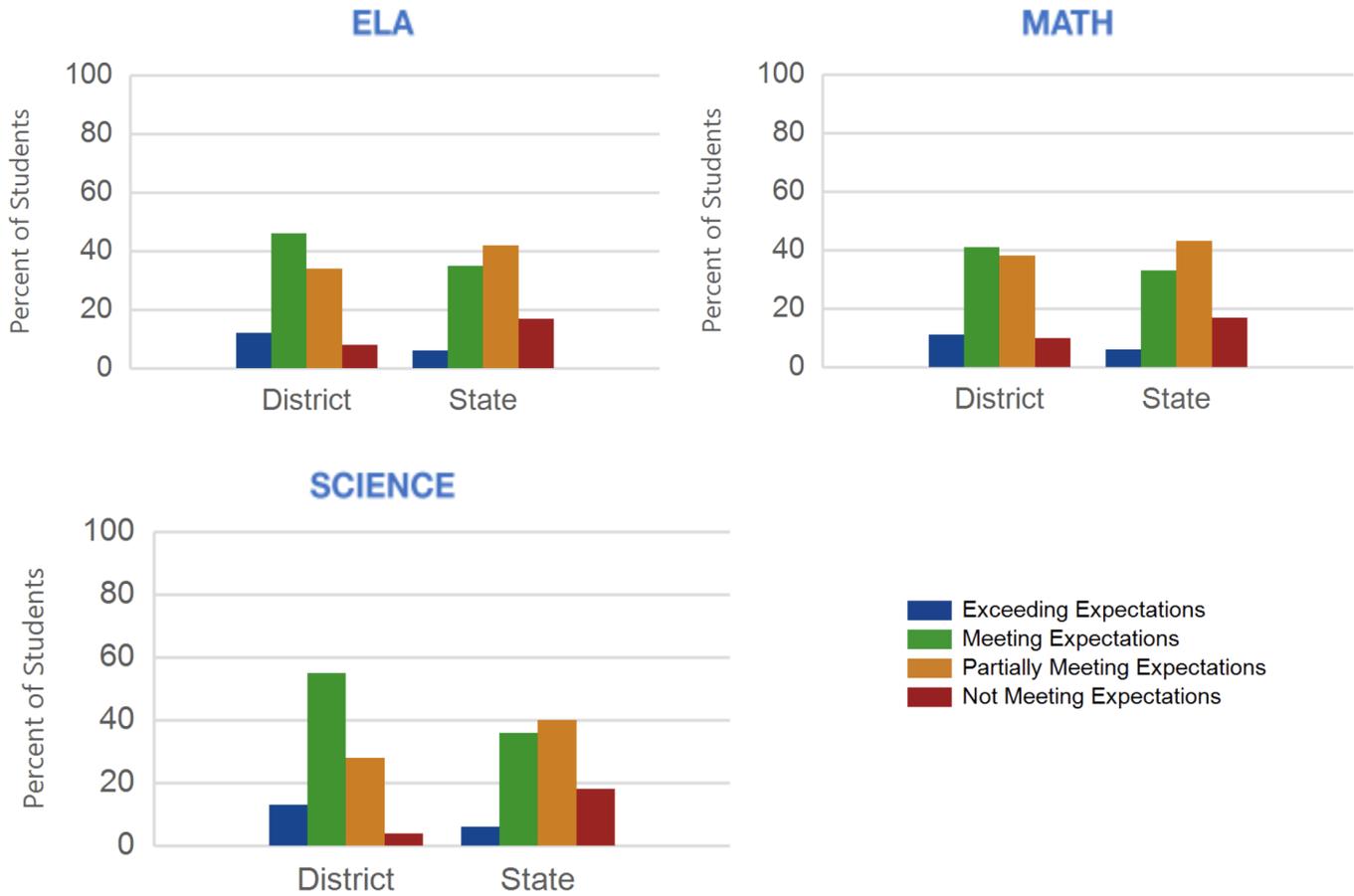
The chart below indicates the percentage point changes from 2021-22 for the district in each content area and across the state. We always hope to see positive increases in the percentage of students meeting and exceeding expectations and negative numbers in the percentage of students partially meeting or not meeting expectations. Our scores had a slight dip in ELA and a slight increase in math, both of which correlate with state trends. Of note is the significant (15 point) increase in percentage of students meeting or exceeding expectations in science in grades 5 and 8.

	2021					
	ELA		Math		Science	
	% LPS	% MA	% LPS	% MA	% LPS	% MA
Exceeding Expectations	0	-2	+2	+1	+3	-1
Meeting Expectations	-3	-3	+2	+4	+12	+2
Partially Meeting Expectations	+2	+4	-2	-2	-9	-1
Not Meeting Expectations	+1	+1	-2	-5	-6	+1

Lincoln students performed 13-26 percentage points higher than the state in all three content areas.

% of 3rd-8th graders Meeting or Exceeding Expectations	Lincoln	State	Difference
ELA	58	41	+17
Math	52	39	+13
Science	68	42	+26

The following charts illustrate the same data visually:

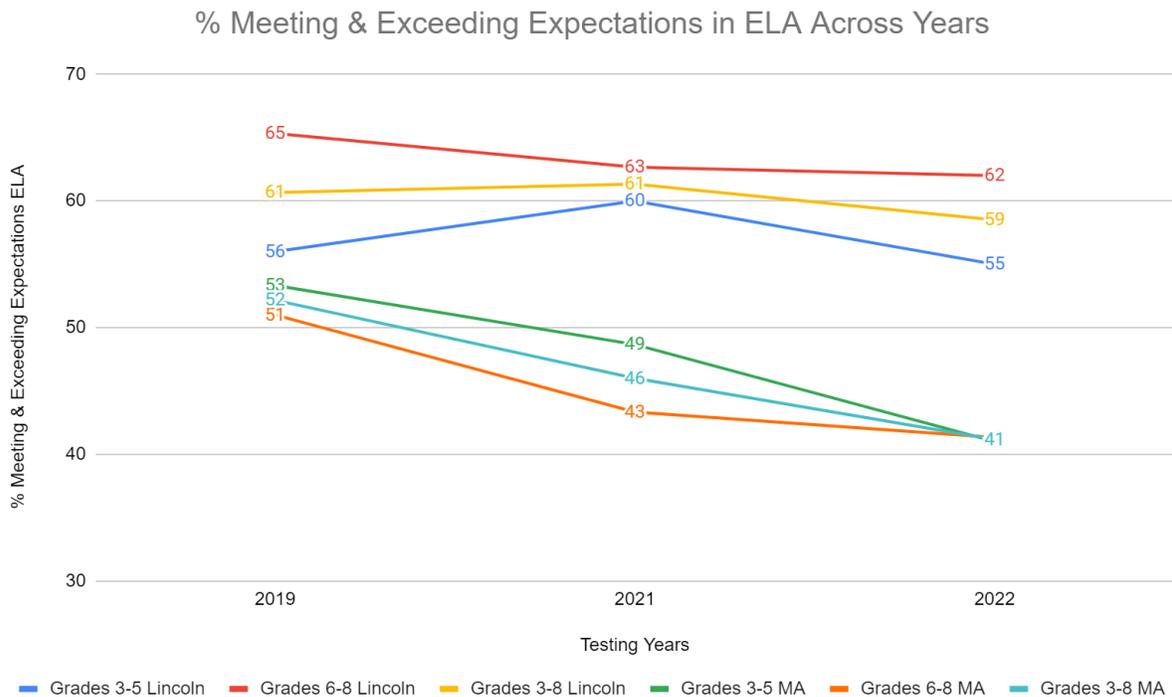


Key Yearly Measure: % Meeting or Exceeding Expectations		
<b>ELA:</b> <b>58</b>	<b>Math:</b> <b>52</b>	<b>Science:</b> <b>68</b>

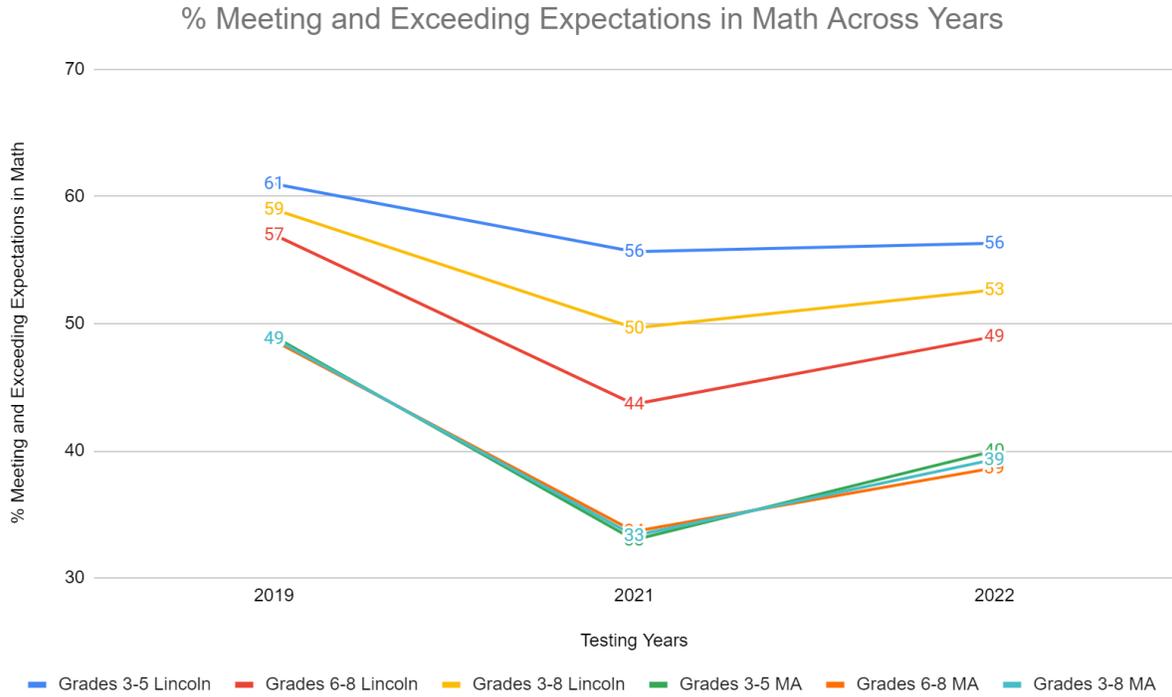
## Overall achievement across the last three testing years

The COVID pandemic has impacted schools in numerous ways. Across the state, in 2021 the average student missed 11 days of school and 15 days in 2022. In 2021, 18% of students across the state missed 18+ days of school and in 2022 that grew to 28% of students. Each district has handled each of the past 2.5 years differently. It is helpful to look across the last three testing years to understand how our district is navigating and bouncing back as compared to the state.

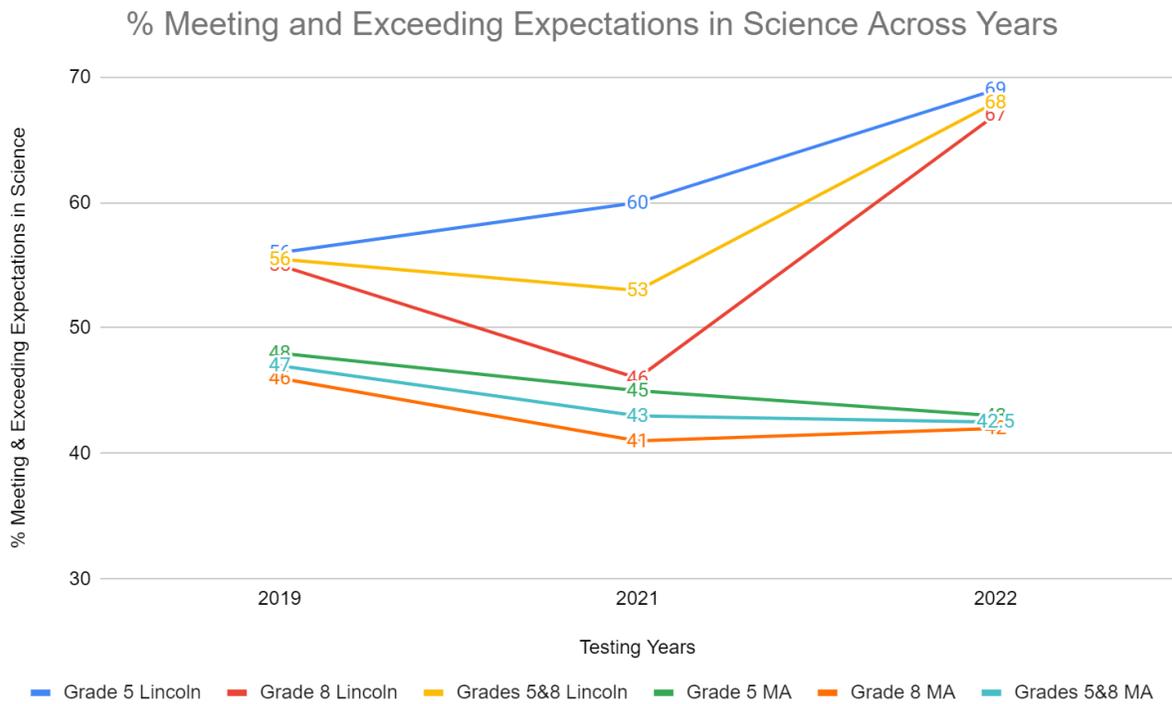
The chart below illustrates how Lincoln managed to essentially hold steady in ELA throughout the pandemic compared to schools across the state who had downward trends across the last two testing years.



Student performance across the state on the math MCAS dropped considerably in 2021 and started to bounce back up in 2022. Lincoln's own data mimics this trend, as shown on the chart below.



Impressively, Lincoln's scores on the science MCAS have dramatically increased over the last two years, while scores across the state have decreased slightly both years.



## Overall growth in grades 5-8 across the district

MCAS Student Growth Percentiles (SGP) have historically been a measure of how students perform on MCAS relative to other students state-wide who performed similarly in prior years. Typically, students are grouped by performance from prior years of MCAS. Students are then given a percentile rank within that group based on their performance on the latest MCAS assessment to determine a “cohort model SGP.” Each year, the cohort group changed (depending on the performance of the current year population), which resulted in the state average SGP of about 50. Students in grade 3 and new students to the state do not have a SGP because they have not previously taken an MCAS assessment in order to compare growth across years. In prior years the state has defined SGPs below 40 to be Low or Very Low Growth, SGPs of 40-60 to indicate Moderate Growth, and SGPs above 60 to be High or Very High Growth.

Last year, DESE made a significant change to how growth was determined for 2021 because of COVID. SGPs for 2021 were not true percentiles among a peer cohort taking the same assessment. In 2021, SGP was calculated using a historical academic peer group to determine “baseline model SGP.” Students were compared to the 2019 MCAS performance of a similar peer group, and the SGP represented what percentile the student’s 2021 score would have fallen in, had it been a 2019 score. Due to that change, there was not an even distribution of growth percentiles across the state indicating low, moderate, and high growth rates; whereas in prior years the average state-wide SGP was always approximately 50, last year it was 35.8 in ELA and 34.4 in Math.

This year, DESE has returned to its original “cohort model” SGP methodology. Given the two different approaches, it is necessary to use caution when directly comparing SGPs from 2021 to this year or prior years, as this is not an apples-to-apples comparison. However, there is still value in considering this data, as it is the best representation available of growth, and we believe it is important to consider the progress students make from year to year and not solely achievement. The chart below shows mean growth percentiles in ELA and Math for Lincoln and the state.

Year	ELA		Math		Type of SGP calculation
	Lincoln ELA SGP	State ELA SGP	Lincoln Math SGP	State Math SGP	
2022	58	49.8	55	49.9	<i>cohort model SGP</i>
2021	52.4	35.8	41	30.4	<i>baseline model SGP</i>
2019	53.7	49.9	44.5	49.9	<i>cohort model SGP</i>
2018	53.1	50	50.5	50	<i>cohort model SGP</i>
2017	54	50	60	50	<i>cohort model SGP</i>

## Achievement and growth as compared to other districts

Comparing districts is always somewhat challenging; while the districts that we included in this report are ones we consider to be our peers it is important to note that Lincoln is unique among this group. Over half of our students reside on Hanscom Air Force Base. These students frequently arrive throughout the school year, come to us with unique and diverse prior learning and life experiences, and rarely stay with us for longer than a few years. Typically, our Hanscom campus has one of the highest churn rates<sup>1</sup> amongst traditional public districts in the state. Relatedly, our student population has some of the lowest stability rate<sup>2</sup> out of traditional public districts across Massachusetts. Serving our students at Hanscom is something our district is proud, committed, and honored to do. We are developing better ways to track the growth of our students so that we can monitor their success in ways that feel appropriate and helpful.

On the following pages are two charts that show the median SGP and the percent of students who Met or Exceeded Expectations for fifteen fellow districts in ELA and then in math. Our district ELA SGP is 58, matching two other districts. An additional four districts are just one growth percentile adjacent. Of note is that **when looking at growth percentiles the Lincoln campus leads all comparison districts** being tied with Concord and Lexington. Additionally, **Lincoln campus was in the top third when compared to other neighboring districts in terms of the % of students who met or exceeded the ELA assessment.** Hanscom campus essentially matches the state growth and achievement rates.

Key Yearly Measure: 4-8 SGP (Growth)		
<i>Hanscom</i>	ELA: 48	Math: 50
<i>Lincoln</i>	ELA: 63	Math: 57

---

<sup>1</sup> Churn rate measures the number of students transferring into or out of a public school or district throughout the course of a school year.

<sup>2</sup> Stability rate measures how many students attending school on October 1 remain in the school for the entirety of the school year.

Comparison ELA -- sorted by SGP		Comparison ELA -- sorted by % M & E	
District/School	SGP	District/School	% M & E
<i>Lincoln Campus</i>	63	Concord	77
Concord	63	Lexington	75
Lexington	63	Belmont	74
Needham	61	Weston	74
Arlington	59	<i>Lincoln Campus</i>	73
Wayland	59	Wellesley	72
Lincoln District	58	Westwood	71
Weston	58	Carlisle	70
Bedford	58	Arlington	69
Belmont	57	Wayland	69
Wellesley	57	Winchester	69
Sudbury	56	Needham	68
Natick	56	Sudbury	68
Acton-Boxborough	55	Bedford	67
Westwood	54	Acton-Boxborough	65
Carlisle	54	Natick	62
Winchester	54	Lincoln District	58
State	49.8	<i>Hanscom Campus</i>	41
<i>Hanscom Campus</i>	48	State	41

In math, the Lincoln campus SGP is right in line with the “middle of the pack” when compared to our neighboring districts, with four others just one point adjacent including Winchester and Natick (+1) and Weston and Sudbury (-1). The same is true when examining the percentage of students who met or exceeded expectations; Lincoln campus is situated in the middle and in this case, six other districts are just one point adjacent.

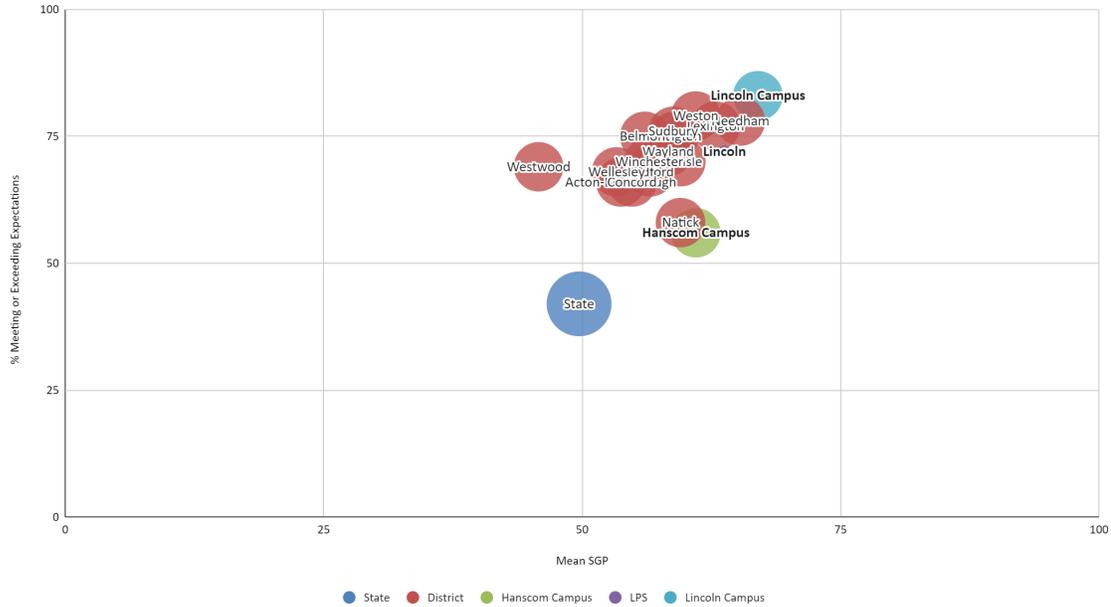
Comparison Math -- sorted by SGP		Comparison Math -- sorted by % M & E	
District/School	SGP	District/School	% M & E
Lexington	64	Lexington	78
Belmont	64	Belmont	77
Needham	64	Weston	75
Acton-Boxborough	63	Wayland	74
Arlington	62	Sudbury	73
Wayland	60	Carlisle	72
Carlisle	58	Wellesley	71
Winchester	58	Westwood	70
Natick	58	<i>Lincoln Campus</i>	69
<i>Lincoln Campus</i>	57	Acton-Boxborough	69
Weston	56	Needham	69
Sudbury	56	Arlington	68
Westwood	55	Bedford	68
Lincoln District	55	Winchester	68
Wellesley	54	Concord	65
Bedford	53	Natick	64
<i>Hanscom Campus</i>	50	Lincoln District	53
State	49.9	State	39
Concord	46	<i>Hanscom Campus</i>	34

We continue to work to understand the Hanscom math achievement results. **60% of our Hanscom students who took MCAS in 2022 have only been with us for 1-2 years, and experienced at least part of the pandemic in another school district, mostly in other states or countries,** so it is difficult for us to fully account for their learning experience during the pandemic. Due to the state's methodology for calculating growth, **the SGP cohort at Hanscom is quite small, representing only 58% of the grade 4-8 student population.** This group did show a mean growth percentile of 50, nearly identical to the mean SGP in the state.

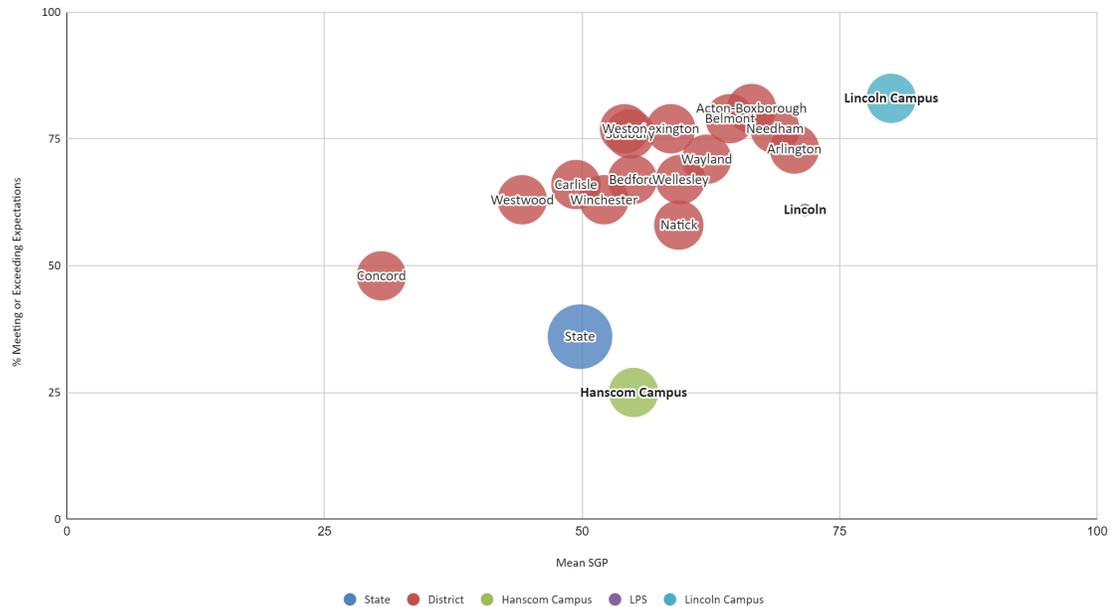
## 8th grade growth and achievement

An important data point to examine is how our students are prepared for high school. This is especially critical on the Lincoln campus, since the majority of our students have been with us for their elementary and middle school educational trajectory and will continue on to Lincoln-Sudbury High School. The charts below illustrate how 8th graders in Lincoln and on both of our campuses compare to the same group of comparison districts from prior pages.

2022 MCAS ELA Achievement and Growth by District with LPS by Campus



2022 MCAS Math Achievement and Growth by District with LPS by Campus



An exciting piece of data to celebrate is that in 2022 the Lincoln campus 8th graders led all other cohorts of 8th graders from our comparison districts in ELA and in math for both SGP and for the percentage meeting or exceeding expectations. In fact, the Lincoln School 8th grade scored in the 99th percentile for math achievement, with the second highest average scaled score in the state among all schools.

Key Yearly Measure: Grade 8 % Meeting or Exceeding Expectations			
<i>Hanscom</i>	<b>ELA: 56%</b>	<b>Math: 25%</b>	<b>Sci: 53%</b>
<i>Lincoln</i>	<b>ELA: 84%</b>	<b>Math: 83%</b>	<b>Sci: 76%</b>

## Curricular Achievement

In each content area, students answer a range of questions across multiple domains. In ELA, we see a general trend in which Lincoln students outpace students across the state in each domain more each year until they are 8th graders. The reading domain always constitutes a larger portion of the test. Last year this ranged from 54-64% of the test, depending on the grade level. Writing constructed responses and essays has historically been the most challenging component of the assessment for our students, and for students across the state.

ELA	grade 3		grade 4		grade 5		grade 6		grade 7		grade 8	
Domain	<i>% of points earned</i>	<i>district/ state difference</i>	<i>% of points earned</i>	<i>district/ state difference</i>	<i>% of points earned</i>	<i>district/ state difference</i>	<i>% of points earned</i>	<i>district/ state difference</i>	<i>% of points earned</i>	<i>district/ state difference</i>	<i>% of points earned</i>	<i>district/ state difference</i>
Language	68%	8	60%	4	69	8	67	9	67%	7	82%	16
Reading	66%	6	65%	4	77%	7	76%	12	69%	7	84%	13
Writing	19%	2	31%	2	35%	9	41%	10	37%	2	52%	14
<i>All Items</i>	<i>58%</i>	<i>6</i>	<i>57%</i>	<i>3</i>	<i>62%</i>	<i>8</i>	<i>62%</i>	<i>11</i>	<i>58%</i>	<i>5</i>	<i>74%</i>	<i>15</i>

In science, Lincoln students out-performed the state average by double digits in every domain at both 5th and 8th grade.

Science	grade 5		grade 8	
Domain	<i>% of points earned</i>	<i>district/ state difference</i>	<i>% of points earned</i>	<i>district/ state difference</i>
Earth and Space Sciences	64%	12	65%	11
Life Sciences	79%	14	68%	18
Physical Sciences	69%	13	50%	10
Technology/Engineering	57%	13	74%	19
All Items	67%	12	64%	15

Below are the domains assessed in math across the grades.

Math	grade 3		grade 4		grade 5		grade 6		grade 7		grade 8	
	% of points earned	district/state difference										
Geometry	50%	7	57%	7	68%	10	46%	8	34%	3	74%	22
Measurement and Data	64%	9	46%	2	58%	12						
Number and Operations in Base Ten	59%	5	67%	3	63%	10						
Number and Operations--Fractions	68%	4	62%	7	63%	16						
Operations and Algebraic Thinking	55%	6	59%	5	63%	11						
Expressions and Equations												
Ratios and Proportional Relationships							64%	6	58%	5	-	-
Statistics and Probability							49%	5	42%	0	60%	21
The Number System							51%	8	41%	-2	58%	8
Functions							-	-	-	-	48%	20
<i>All Items</i>	60%	6	58%	5	63%	12	54%	7	43%	2	68%	19

## Gaps Between Subgroups Across the District

Lincoln, like many other districts in the area and in the country, has gaps between subgroups of students. For many years we have paid careful attention to these differences because they often illustrate inequitable outcomes for students. By examining our systems and practices, our goal is to close these gaps in the pursuit of ensuring all of our students are successful. The following charts illustrate five subgroup comparisons in which gaps are present in our data including:

1. Students with **disabilities** and non-disabled students.
2. **Female-identifying** and **male-identifying** students (the n-sizes for other genders and gender non-conforming students are too small to include). Our male-identifying students have historically performed better than female-identifying students in math and the inverse in ELA, showing gaps for each gender by content.
3. Students with **high-needs** and those without (the category of “high-needs” is an unduplicated count of all students belonging to at least one of the following individual subgroups: students with disabilities, English Learners and former English Learners, or economically disadvantaged students).
4. **Economically disadvantaged** and non-economically disadvantaged students (in Lincoln, “economically disadvantaged” includes almost entirely students who attend the Lincoln School and nearly no students at Hanscom because the measure is based on a student's participation in one or more of the following state-administered programs: the Supplemental Nutrition Assistance Program (SNAP); the Transitional Assistance for Families with Dependent Children (TAFDC); the Department of Children and Families' (DCF) foster care program; and MassHealth (Medicaid); students on HAFB generally do not participate in these state-based programs even though some would qualify as economically disadvantaged under prior measures).
5. Students who have ever been identified as **English Learners** (Ever EL) and those who have never been classified as English Learners (Non EL).

*In 2019 DESE created a subgroup for military students; unfortunately, the state does not provide a comparative data point with a “non-military” subgroup within our district, nor did they provide any data regarding military students across the state, so we are unable to present any gap data for this group. Please see the analysis of Hanscom campus data above for the most detailed data we have access to for our Hanscom students.*

<i>ELA</i>				
<i>Gaps between subgroups</i>	<i>SGP</i>	<i>% M &amp; E</i>	<i>Growth Difference</i>	<i>Achievement Difference</i>
Students with Disabilities	47	22	-14	-47
Non-disabled Students	61	69		
Male-identifying	56	54	-3	-7
Female-identifying	59	61		
High Needs	51	33	-10	-39
Not High Needs	61	72		
Economically Disadvantaged	52	42	-7	-18
Non-economically Disadvantaged	59	60		
Ever EL*	53	34	-5	-25
Non EL	58	59		
Military students in LPS	47	39	-	-
Military students across MA	-	-		

*\*Ever EL includes any student who was ever identified as an English Learner. If we only look at **currently identified** EL students, 10% met or exceeded expectations in the spring of 2021, but they did not have an SGP.*

All subgroups have mean SGPs within the range of typical growth (between 40-60). The range of growth is considerably aligned with all subgroups within 14 percentile points of one another. It is also important to us to see that no subgroup has a mean SPG that would be considered low-growth. In comparing growth differences amongst subgroups from 2021 to 2022, we find that gaps increased, except for economic or EL status, which decreased or stayed the same, respectively.

We see larger differences between groups when examining achievement. When examining ELA MCAS data from 2021 we find that the gaps between students with disabilities and those without, and between high-needs students and those not considered high-needs remained at the same levels. In ELA, gaps by gender and economic status closed considerably; the gap in achievement between male-identifying and female-identifying students closed by half and the gap between economically disadvantaged students and those who are not economically disadvantaged narrowed from -38 in 2021 to -18 in 2022.

To understand our impact across student groups, another data point we can investigate are the achievement percentiles. Achievement percentiles are percentiles among other schools based on the average scaled score (not the performance level). When viewed in the context of a group, they are compared to that group at other schools, with a suppression size of <10. Essentially, achievement

percentiles help us understand how our subgroup of students compares to that same subgroup across other schools in the state.

**In ELA, our 3-8 graders on the Lincoln campus ranked in the 95th percentile across the state overall, meaning they outperformed 95% of other 3-8th graders.** While the gaps between subgroups described above are still critical to address, when compared with students in the same subgroup across the state, on the **Lincoln-campus, students with disabilities and our high-needs students performed in the 91st percentile. Lincoln-campus’ economically disadvantaged students and our students who have ever been designated EL, scored in the top quartile of students in their subgroups.** While it is challenging to see that only 22% of our students with disabilities met or exceeded expectations on the ELA MCAS, it is heartening to understand that our Lincoln students with disabilities out-performed 91% and our Hanscom students with disabilities out-performed 68% of students with disabilities across the state. Similar trends across subgroups and across content areas that feel discordant helps us to put some context around our data; though we remain committed to narrowing these gaps.

<i>Achievement Percentiles</i>		
<i>Demographic Groups</i>	<i>Lincoln Campus gr 3-8 percentile (n-size)</i>	<i>Hanscom Campus gr 4-8 percentile (n-size)</i>
Students with Disabilities	91 (66)	68 (50)
Non-disabled Students	96 (275)	55 (150)
Male-identifying	95 (169)	49 (98)
Female-identifying	93 (175)	58 (101)
High Needs	91 (129)	30 (64)
Not High Needs	97 (215)	32 (136)
Economically Disadvantaged	74 (73)	-
Non-economically Disadvantaged	97 (271)	30 (194)
Ever EL*	74 (41)	45 (11)
Non EL	-	-

Similar to ELA, subgroup SGPs are more aligned than achievement, with all subgroups performing in the typical growth range and the majority of subgroups receiving mean SGPs within 5 percentile points of one another. Almost all gaps, both in terms of growth as well as achievement, stayed relatively similar, with some increasing or decreasing by just a few points. Two outliers include:

- the achievement differences between economically disadvantaged students and those that are not economically disadvantaged, which narrowed by 9 points (after increasing between 2019-2021) and;
- the gap between students who were ever EL and those who were never EL, which narrowed by 5 points. This means the gap for EL-status has decreased two years in a row (from -23 in 2019 to -16 in 2021 and now -11 in 2022).

<i>Math</i>				
<i>Gaps between subgroups</i>	<i>SGP</i>	<i>% M &amp; E</i>	<i>Growth Difference</i>	<i>Achievement Difference</i>
Students with Disabilities	47	19	-10	-44
Non-disabled Students	57	63		
Male-identifying	54	55	+1	-5
Female-identifying	55	50		
High Needs	50	31	-7	-34
Not High Needs	57	65		
Economically Disadvantaged	48	37	-8	-18
Non-economically Disadvantaged	56	55		
Ever EL*	52	43	-3	-11
Non EL	55	54		
Military students in LPS	52	32	-	-
Military students across MA	-	-		

\*Ever EL includes any student who was ever identified as an English Learner. If we only look at **currently identified** EL students, 10% met or exceeded expectations in the spring of 2021, but they did not have an SGP.

In math, our 3-8 graders on the Lincoln campus ranked in the 91st percentile across the state overall, meaning they outperformed 91% of other 3-8th graders. When looking at subgroups based on disability status, gender, and overall needs, our Lincoln-campus students performed close to the top quintile.

<i>Achievement Percentiles</i>		
<i>Demographic Groups</i>	<b>Lincoln Campus gr 3-8 percentile (<i>n-size</i>)</b>	<b>Hanscom Campus gr 4-8 percentile (<i>n-size</i>)</b>
Students with Disabilities	78 (67)	67 (49)
Non-disabled Students	93 (278)	50 (150)
Male-identifying	89 (169)	50 (97)
Female-identifying	93 (176)	51 (101)
High Needs	79 (129)	42 (63)
Not High Needs	95 (216)	26 (136)
Economically Disadvantaged	71 (72)	-
Non-economically Disadvantaged	94 (273)	27 (193)
Ever EL*	69 (41)	71 (11)
Non EL	-	-

We also examine differences in growth and achievement levels when disaggregating MCAS data by race. Please note that DESE suppresses certain racial groups' data due to smaller n-sizes to protect confidentiality and so only five racial groups are listed. We also acknowledge that the way DESE defines racial groups in their data report does not capture the fullness of our students' racial identities.

<i>Racial subgroups</i>	<i>SGP</i>	<i>% M&amp;E</i>	<i>Growth difference between BIPOC and White students</i>		<i>Achievement difference between BIPOC and White students</i>	
			<i>ELA</i>	<i>Math</i>	<i>ELA</i>	<i>Math</i>
Asian - ELA (n=21; 27)	70	81	+12	+1	+17	+32
Asian - Math (n=22; 29)	59	90				
Black - ELA (n=43; 60)	55	42	-3	-6	-18	-26
Black - Math (n=42; 60)	52	32				
Latinx - ELA (n=63; 101)	49	34	-9	-12	-30	-35
Latinx - Math (n=62; 101)	46	23				
Multi-racial, non-Latinx - ELA (n=48; 67)	63	69	+5	-7	+5	+12
Multi-racial, non-Latinx - Math (n=48; 67)	51	70				
White - ELA (n=231; 361)	58	64				
White - Math (n=228; 368)	58	58				

Some differences between last year's data and this year's include:

- Asian students' achievement on the ELA assessment was 12 points higher than White students compared to last year. Differences between Asian and White students remained relatively the same in math.
- The growth difference between Black and White students narrowed in both ELA (from -7.6 to -3) and in math (from -8.3 to -6). Gaps in achievement also narrowed; in math the gap narrowed 2 points but in ELA the gap narrowed by 10 points, from -28 in 2021 to -18 in 2022.
- Growth and achievement gaps between Latinx and White students increased from 2021 to 2022 even though the SGP in ELA and math increased for Latinx students from 2021-2022. The gap between White and Latinx students in ELA growth and achievement grew by 2 points, the growth gap in math increased from -5 in 2021 to -12 in 2022 and the achievement gap increased from -22 in 2021 to -25 in 2022.
- Multiracial students had higher growth and achievement in ELA, and higher math achievement, but lower math growth compared to their White peers.

Similar to other subgroups, we can see achievement percentiles for racial groups. In 2022, our Black students in Lincoln performed in the top quartile of Black students across the state in ELA, and in

math Black students in Lincoln out-performed 83% of Black students in Massachusetts. Similarly, Latinx students in Lincoln performed in the top quartile in ELA compared to other Latinx students across the state and were in the 71st percentile for math. However, while we celebrate that data, over the last few years we have been and remain concerned with the discrepancies in achievement between our Black and Latinx students compared to our White students.

<i>Achievement Percentiles</i>				
<i>Racial Identity Groups</i>	<b>Lincoln Campus gr 3-8 percentile (<i>n-size</i>)</b>		<b>Hanscom Campus gr 4-8 percentile (<i>n-size</i>)</b>	
	<i>ELA</i>	<i>Math</i>	<i>ELA</i>	<i>Math</i>
Asian	93 (23)	92 (23)	-	-
Black	74 (41)	83 (41)	89 (18)	79 (18)
Latinx	77 (34)	71 (34)	72 (49)	69 (48)
Multi-racial, non-Latinx	87 (45)	86 (45)	54 (17)	55 (17)
White	98 (201)	97 (202)	44 (112)	41 (111)

Just like with data on other subgroups, it can be challenging to hold onto different sets of data that seem to make our understanding more complex rather than simplified; though we remain committed to narrowing the outcome gaps we see related to race.

<b>Key Yearly Measure: Achievement Gaps (Percentage points)</b>		
<i>Special Education</i>	<b>ELA: 47</b>	<b>Math: 44</b>
<i>High Needs</i>	<b>ELA: 39</b>	<b>Math: 34</b>
<i>Black</i>	<b>ELA: 18</b>	<b>Math: 26</b>
<i>Latinx</i>	<b>ELA: 30</b>	<b>Math: 35</b>

Key Yearly Measure:  
Achievement Gap Closing 2021-22\*  
(Percentage points)

<i>Special Education</i>	ELA: 3	Math: 2
<i>High Needs</i>	ELA: 1	Math: -1
<i>Black</i>	ELA: -10	Math: -2
<i>Latinx</i>	ELA: 2	Math: 13

\*Positive numbers indicate gap widening, negative numbers indicate gap narrowing

## Conclusion

We have much to celebrate in our MCAS data from 2022 amidst ongoing work to decrease the number of students partially meeting expectations and to narrow gaps between demographic groups. We also have exciting work happening now and in the near future in ELA, math, and science including:

### ELA

- strengthened phonemic awareness instruction in K-2 and phonics instruction in K-3 has been building over the past year and is continuing now
- revised K-2 reading and revised K-5 writing units on the horizon

### Math

- the creation and implementation of our K-5 Resource Guide to support prioritized instruction in critical and aligned standards
- i-Ready as a tool to understand and track our students' progress
- increased small group instruction in flexible groups, supported by our buildings which lend themselves well to this model
- increased coaching opportunities for teachers

### Science

- continued experience teaching FOSS K-5, for which adoption was significantly impacted by COVID but that we are now using fully

We are also investing heavily in Responsive Classroom, and continuing our commitment to AIDE through training all our faculty and staff through the Racial Equity Institute as well as ongoing professional learning, like our 21-day AIDE Challenge coming up in March. Experimenting with new ways of instructional coaching for new faculty and revising our approach to Learning Walks are also being developed. These collective bodies of work are aimed at bettering outcomes for all students. Ultimately, our work in these areas primarily supports our students as holistic learners and young people; secondarily we hope this work continues to positively impact student outcomes on measures like MCAS.

## Appendix 1: *Lincoln Campus*

Often educators and families want to view campus-based data that disaggregates subgroups since our campuses have different populations.

On the Lincoln campus, 73% of students in grades 3-8 met or exceeded expectations in ELA, 32 points higher than the state. 69% performed just as strongly in math, a full 30 points above the state.

The mean SGP for the campus was 63 in ELA and 57 in math, 13 and 7 points above the state respectively. SGPs of 60 or higher are considered “high growth.” Four grade levels in ELA and two grade levels in math had SGPs in this “high-growth” category. Of note is 8th grade math on the Lincoln campus which showed an incredibly impressive mean growth percentile of 80.

One can see a range of growth and achievement across grade levels once disaggregated. It is important to note that when we examine groups of students within a grade-level at a particular campus, the number of students included in the data is smaller, so it can be more variable year to year.

Grade	ELA		Math	
	SGP	% M & E	SGP	% M & E
3	-	76	-	69
4	53	58	45	61
5	65	75	58	77
6	71	75	37	65
7	61	66	60	55
8	67	83	80	83
<b>All Grades</b>	63	73	57	69
<b>State</b>	49.8	41	49.9	39

<b>Lincoln Campus ELA</b>				
<b>Gaps between subgroups</b>	<b>SGP</b>	<b>% M &amp; E</b>	<b>Growth Difference</b>	<b>Achievement Difference</b>
Students with Disabilities ( <i>n</i> =66)	53	38	-13	-43
Non-disabled Students ( <i>n</i> =278)	66	81		
Male-identifying ( <i>n</i> =169)	63	70	0	-5
Female-identifying ( <i>n</i> =175)	63	75		
High Needs ( <i>n</i> =129)	58	49	-8	-38
Not High Needs ( <i>n</i> =215)	66	87		
Economically Disadvantaged ( <i>n</i> =73)	53	44	-13	-36
Non-economically Disadvantaged ( <i>n</i> =271)	66	80		
Ever EL* ( <i>n</i> =41)	59	41	-5	-34
Non EL ( <i>n</i> =330)	64	75		

\*Ever EL includes any student who was ever identified as an English Learner. If we only look at **currently identified** EL students, 10% met or exceeded expectations in the spring of 2021, but they did not have an SGP.

<b>Lincoln Campus Math</b>				
<b>Gaps between subgroups</b>	<b>SGP</b>	<b>% M &amp; E</b>	<b>Growth Difference</b>	<b>Achievement Difference</b>
Students with Disabilities ( <i>n</i> =67)	45	30	-15	-48
Non-disabled Students ( <i>n</i> =278)	60	78		
Female-identifying ( <i>n</i> =176)	57	68	0	-1
Male-identifying ( <i>n</i> =169)	57	69		
High Needs ( <i>n</i> =129)	49	43	-12	-41
Not High Needs ( <i>n</i> =216)	61	84		
Economically Disadvantaged ( <i>n</i> =72)	49	39	-10	-38
Non-economically Disadvantaged ( <i>n</i> =273)	59	77		
Ever EL* ( <i>n</i> =41)	50	46	-7	-24
Non EL ( <i>n</i> =331)	57	70		

\*Ever EL includes any student who was ever identified as an English Learner. If we only look at **currently identified** EL students, 10% met or exceeded expectations in the spring of 2021, but they did not have an SGP.

<i>Lincoln campus</i>			<i>Growth difference between students of color and White students</i>		<i>Achievement difference between students of color and White students</i>	
<i>Racial subgroups</i>	<i>SGP</i>	<i>% M&amp;E</i>	<i>ELA</i>	<i>Math</i>	<i>ELA</i>	<i>Math</i>
Asian - ELA ( <i>n=23</i> )	72	87	7	-8	5	14
Asian - Math ( <i>n=23</i> )	53	91				
Black - ELA ( <i>n=41</i> )	54	39	-11	-1	-43	-43
Black - Math ( <i>n=41</i> )	60	34				
Latinx - ELA ( <i>n=34</i> )	54	47	-11	-18	-35	-45
Latinx - Math ( <i>n=34</i> )	43	32				
Multi-race, non-Latinx - ELA ( <i>n=4</i> )	67	73	2	-10	-9	3
Multi-race, non-Latinx - Math ( <i>n=45</i> )	51	80				
White - ELA ( <i>n=201</i> )	65	82				
White - Math ( <i>n=201</i> )	61	77				

## Appendix 2: *Hanscom Campus*

On the Hanscom campus, ELA SGPs were highly consistent between grades 4-7 (only a 4 point range), with a spike in 8th grade of 61, which constitutes “high-growth.” The percentage of students meeting or exceeding expectations was similarly consistent, with all grades within 7 points of one another, except for 8th grade which increased to 56%.

In math, there was considerably more variation across grades both for growth and achievement. Growth in grades 5 and 6, and achievement across grades 6-8 are important areas for focus this year.

Just like with the Lincoln campus, when we disaggregate by grade the numbers of students included in the data is small, so it can be more variable year to year. This is particularly true at Hanscom, since 38% of Hanscom students had only been with us for a year and thus are not included in the growth percentiles since this was their first time taking MCAS.

Grade	ELA		Math	
	SGP	% M & E	SGP	% M & E
3	-	41	-	30
4	45	33	61	53
5	43	39	42	42
6	47	39	36	28
7	44	41	51	13
8	61	56	55	25
All Grades	48	41	50	34
State	49.8	41	49.9	39

<b>HMS ELA</b>				
<i>Gaps between subgroups</i>	<i>SGP</i>	<i>% M &amp; E</i>	<i>Growth Difference</i>	<i>Achievement Difference</i>
Students with Disabilities ( <i>n=50</i> )	40	8	-10	-43
Non-disabled Students ( <i>n=150</i> )	50	51		
Female-identifying ( <i>n=101</i> )	44	49	-7	-17
Male-identifying ( <i>n=98</i> )	51	32		
High Needs ( <i>n=64</i> )	40	13	-12	-41
Not High Needs ( <i>n=136</i> )	52	54		
Ever EL* ( <i>n=11</i> )	-	18	-	-23
Non EL ( <i>n=194</i> )	49	41		

*Ever EL includes any student who was ever identified as an English Learner. If we only look at **currently identified** EL students, 10% met or exceeded expectations in the spring of 2021, but they did not have an SGP.*

<b>HMS Math</b>				
<i>Gaps between subgroups</i>	<i>SGP</i>	<i>% M &amp; E</i>	<i>Growth Difference</i>	<i>Achievement Difference</i>
Students with Disabilities ( <i>n=49</i> )	50	10	-1	-31
Non-disabled Students ( <i>n=150</i> )	51	41		
Female-identifying ( <i>n=97</i> )	51	32	+2	-4
Male-identifying ( <i>n=101</i> )	49	36		
High Needs ( <i>n=63</i> )	51	17	+1	-24
Not High Needs ( <i>n=136</i> )	50	41		

<i>HMS campus</i>			<i>Growth difference between students of color and White students</i>		<i>Achievement difference between students of color and White students</i>	
<i>Racial subgroups</i>	<i>SGP</i>	<i>% M&amp;E</i>	<i>ELA</i>	<i>Math</i>	<i>ELA</i>	<i>Math</i>
Black - ELA ( <i>n=18</i> )	-	44	-	-	+2	-8
Black - Math ( <i>n=18</i> )	-	28				
Latinx - ELA ( <i>n=49</i> )	46	29	+1	-2	-13	-15
Latinx - Math ( <i>n=48</i> )	49	21				
Multi-race, non-Latinx - ELA ( <i>n=17</i> )	-	59	-	-	+17	+11
Multi-race, non-Latinx - Math ( <i>n=17</i> )	-	47				
White - ELA ( <i>n=112</i> )	45	42				
White - Math ( <i>n=111</i> )	51	36				