

# MCAS Reporting

Sudbury Public Schools

November 8, 2022

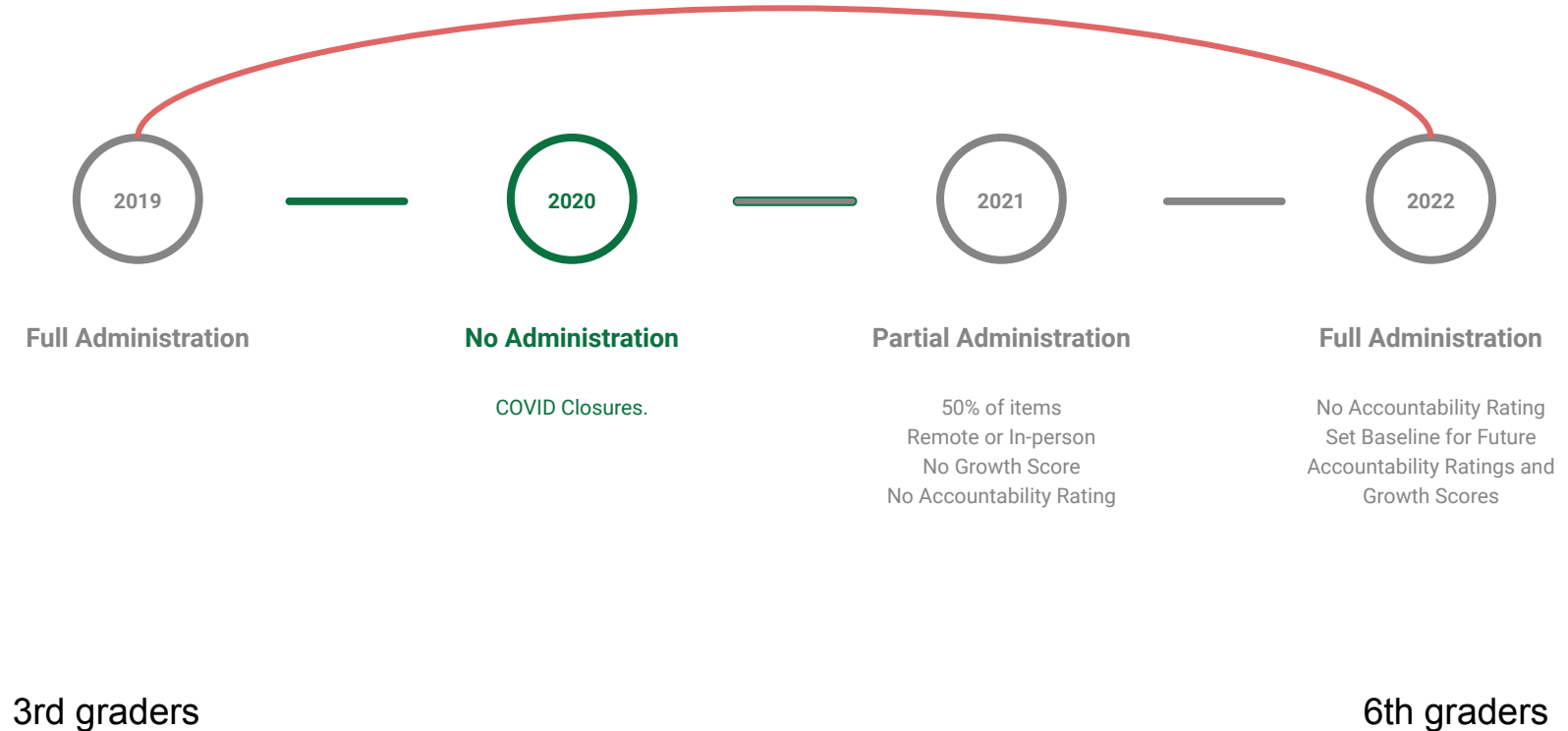


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# MCAS Timeline



Achievement



# Achievement Summary

- Impact of pandemic on early literacy instruction is being seen in results for the now upper elementary students
- Writing has been particularly impacted by the interruptions to direct instruction
- Students in older grades are rebounding in ELA more quickly from interruptions to instruction
- Mathematics outcomes demonstrate a strong rebound, especially in the upper grades
- Science outcomes demonstrate growth in grade 5 and a stronger rebound in grade 8

## MCAS Results: Non-High School (Grades 3-8)

### Next Generation MCAS Average Scaled Score

Subject	2019	2021	2022	2022 # Included
English language arts	514.4	512.5	508.5	1687
Mathematics	512.6	508.3	511.2	1687
Science	511.1	509.9	511.7	570

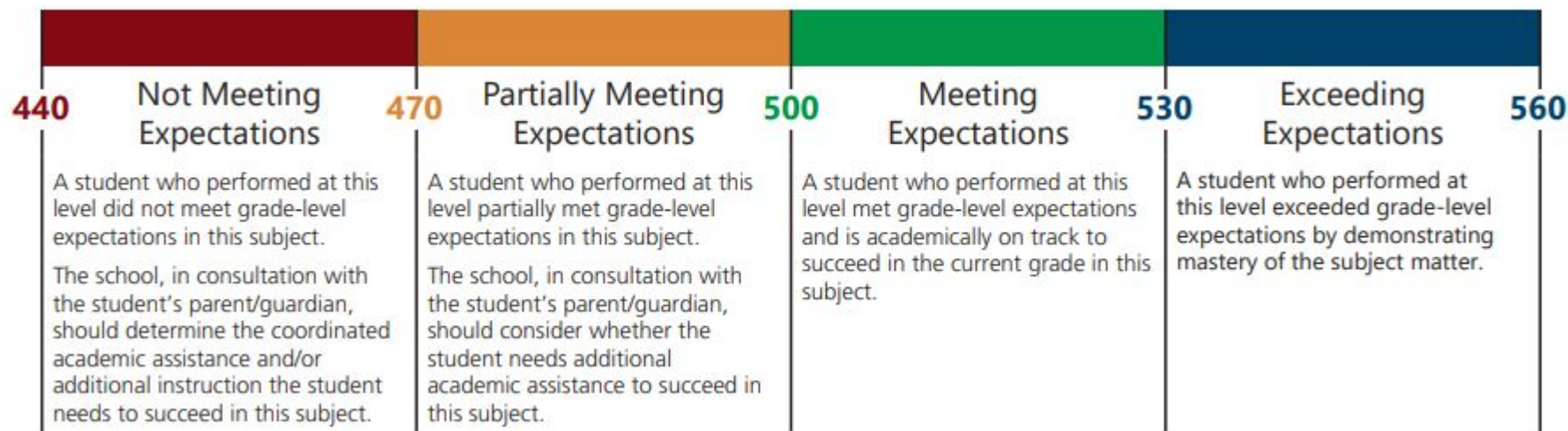
### Next Generation MCAS Percent of Students Meeting or Exceeding Expectations

Subject	2019	2021	2022	2022 # Included
English language arts	76	73	68	1687
Mathematics	73	67	73	1687
Science	71	67	77	570

### Next Generation MCAS Average Student Growth Percentile (SGP)

Subject	2019	2021	2022	2022 # Included
English language arts	56.5	47.4	55.7	1337
Mathematics	51.9	40.5	56.3	1340

# MCAS Scaled Score Levels



## ELA: State Achievement

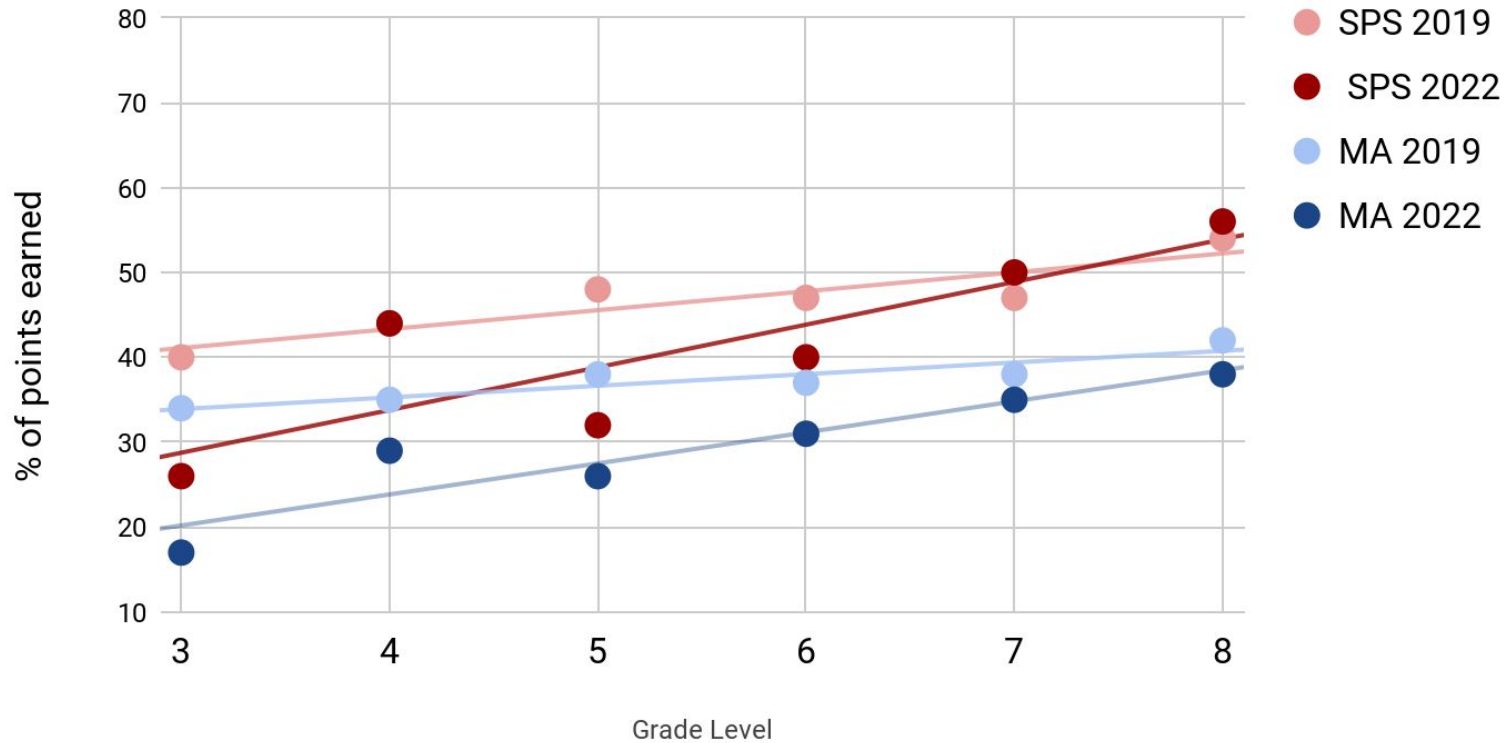
Grade	2019 % M/E	2021 % M/E	2022 % M/E	Change M/E 19-21	Change M/E 21-22	Change M/E 19-22
03	56	51	44	-5	-7	-12
04	52	49	38	-3	-11	-14
05	52	47	41	-5	-6	-11
06	53	47	41	-6	-6	-12
07	48	43	41	-5	-2	-7
08	52	41	42	-11	1	-10
3-8	52	46	41	-6	-5	-11

# ELA: SPS Achievement

Grade	2019 % M/E	2021 % M/E	2022 % M/E	Change M/E 19-21	Change M/E 21-22	Cumulative Change M/E 19-22
3	87	68	72	-19	4	-15
4	75	76	67	1	-9	-8
5	78	67	63	-11	-4	-15
6	76	74	63	-2	-11	-13
7	74	73	68	-1	-5	-6
8	76	76	76	0	0	0

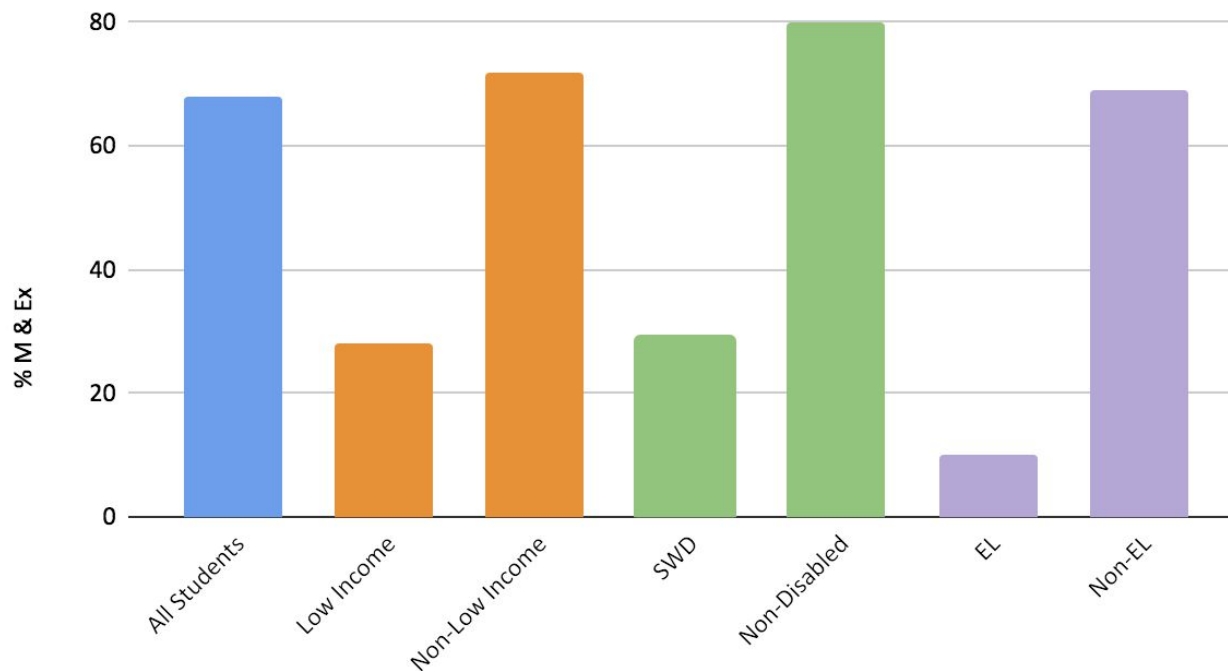


## Grades 3-8 Writing: Production & Distribution (Topic Dev.)



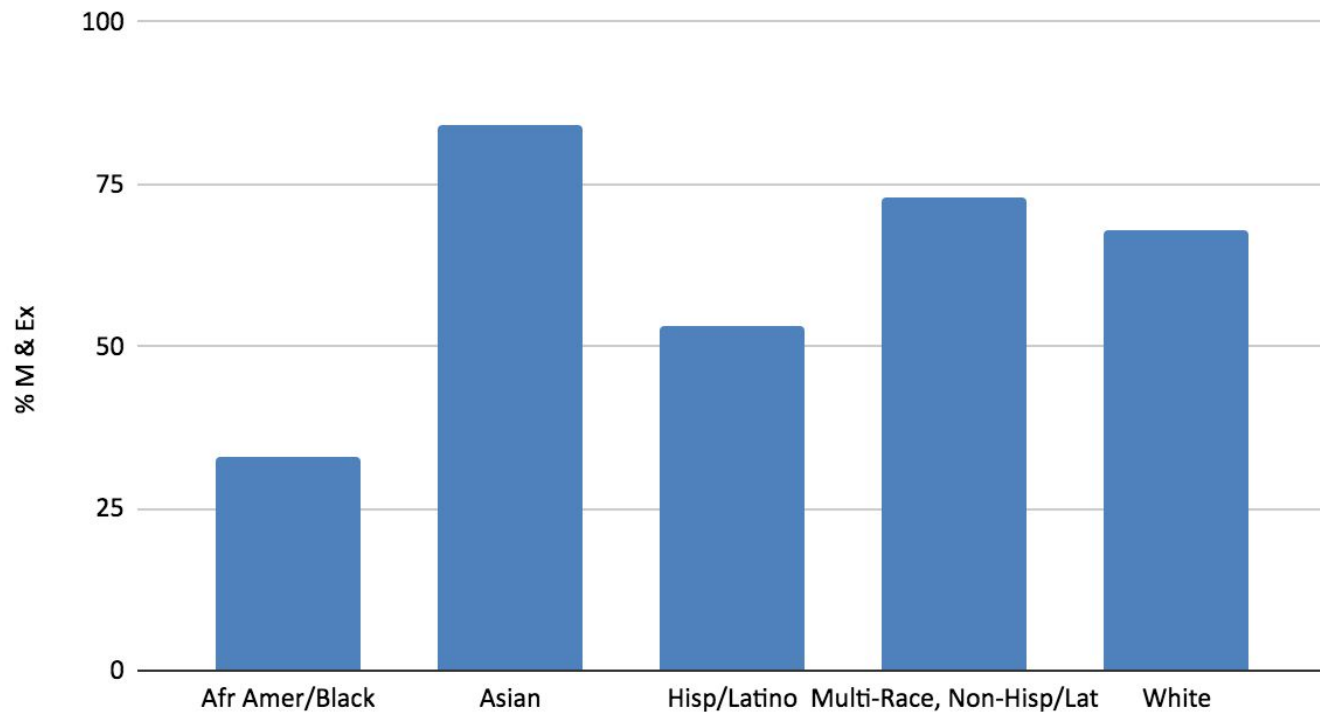
# ELA: High Needs Subcategories Grades 3-8

% Meets & Exceeds



# ELA: Race Grades 3-8

% Meets & Exceeds



# Year/Year ELA Cohort Analysis (M & E %)

ELA	3	4	5	6	7	8
2017	62	75	70	71	75	77
2018	62	75	85	70	73	77
2019	76	75	78	76	74	76
2020						
2021	68	76	67	74	73	76
2022	72	67	63	63	68	76

The chart displays the Year/Year ELA Cohort Analysis (M & E %) for cohorts 3 through 8 from 2017 to 2022. The data is presented in a grid where rows represent years and columns represent cohorts. Diagonal lines of different colors connect the data points for each cohort, showing their progression over time. The 2020 row is shaded gray.

ELA	3	4	5	6	7	8
2017	62	75	70	71	75	77
2018	62	75	85	70	73	77
2019	76	75	78	76	74	76
2020						
2021	68	76	67	74	73	76
2022	72	67	63	63	68	76

## Math: State Achievement

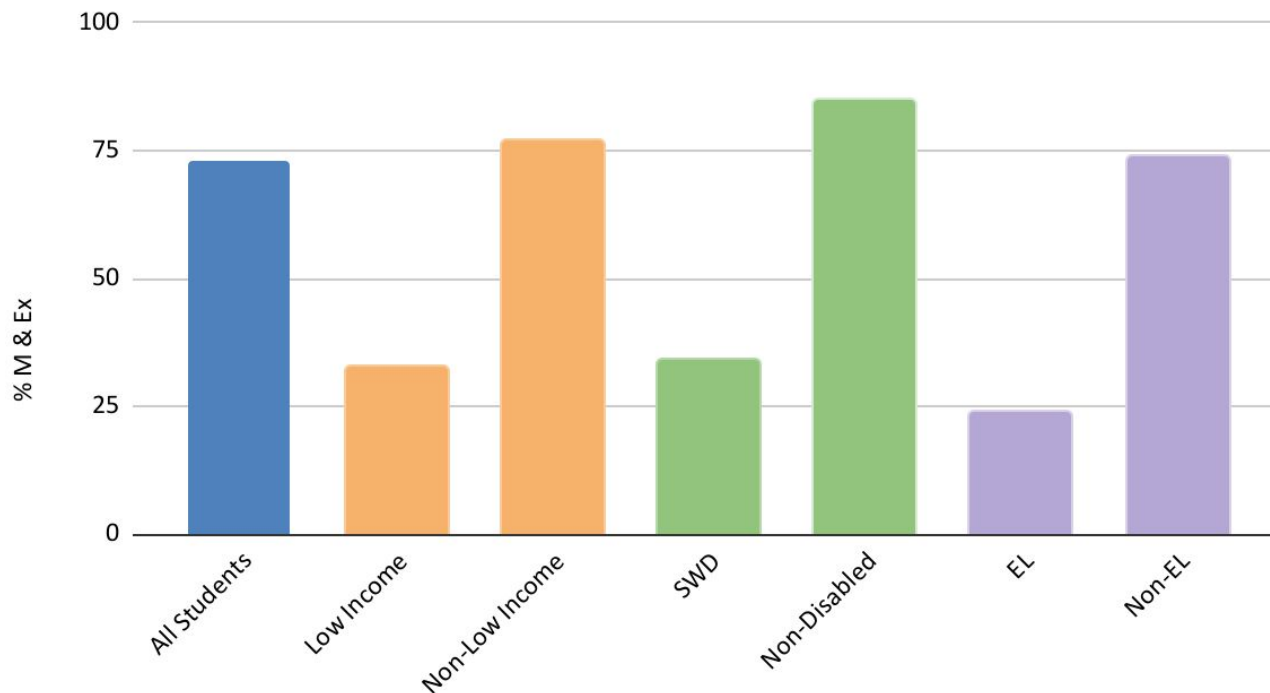
Grade	2019 % M/E	2021 % M/E	2022 % M/E	Change M/E 19-21	Change M/E 21-22	Change M/E 19-22
03	49	33	41	-16	+8	-8
04	50	33	42	-17	+9	-8
05	48	33	36	-15	+3	-12
06	52	33	42	-19	+9	-10
07	48	35	37	-13	+2	-11
08	46	32	36	-14	+4	-10
3-8	49	33	39	-16	+6	-10

# Math: SPS Achievement

Grade	2019 % M/E	2021 % M/E	2022 % M/E	Change M/E 19-21	Change M/E 21-22	Cumulative Change M/E 19-22
3	70	55	66	-15	11	-4
4	75	74	71	-1	-3	-4
5	81	64	71	-17	7	-10
6	78	68	73	-10	5	-5
7	70	76	80	6	4	10
8	64	62	76	-2	14	12

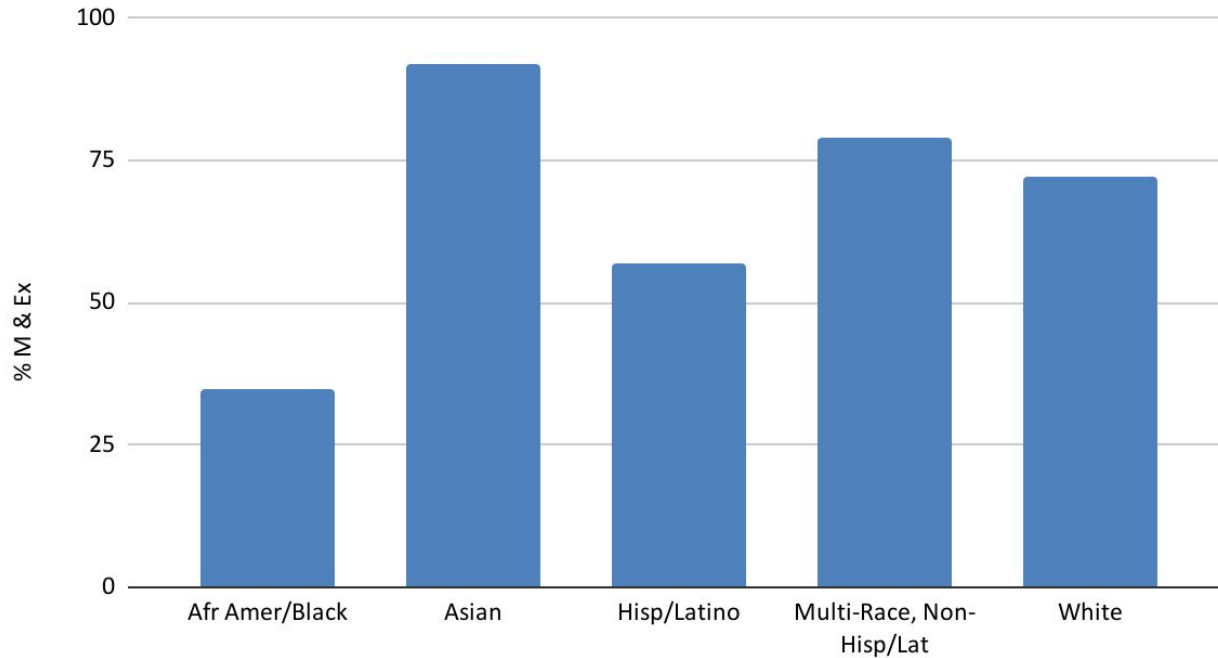
# Math: High Needs Subcategories Grades 3-8

% Meets & Exceeds



# Math: Race Grades 3-8

% Meets & Exceeds





# Year/Year Math Cohort Analysis (meets & exceeds %)

Math	3	4	5	6	7	8
2017	77	78	72	64	73	61
2018	77	83	74	71	66	69
2019	70	75	81	78	70	64
2020						
2021	55	74	64	68	76	62
2022	66	71	71	73	80	76

The chart displays the following data points (Year, Grade, %):

- 2017: (3, 77), (4, 78), (5, 72), (6, 64), (7, 73), (8, 61)
- 2018: (3, 77), (4, 83), (5, 74), (6, 71), (7, 66), (8, 69)
- 2019: (3, 70), (4, 75), (5, 81), (6, 78), (7, 70), (8, 64)
- 2020: (3, 70), (4, 75), (5, 81), (6, 78), (7, 70), (8, 64)
- 2021: (3, 55), (4, 74), (5, 64), (6, 68), (7, 76), (8, 62)
- 2022: (3, 66), (4, 71), (5, 71), (6, 73), (7, 80), (8, 76)

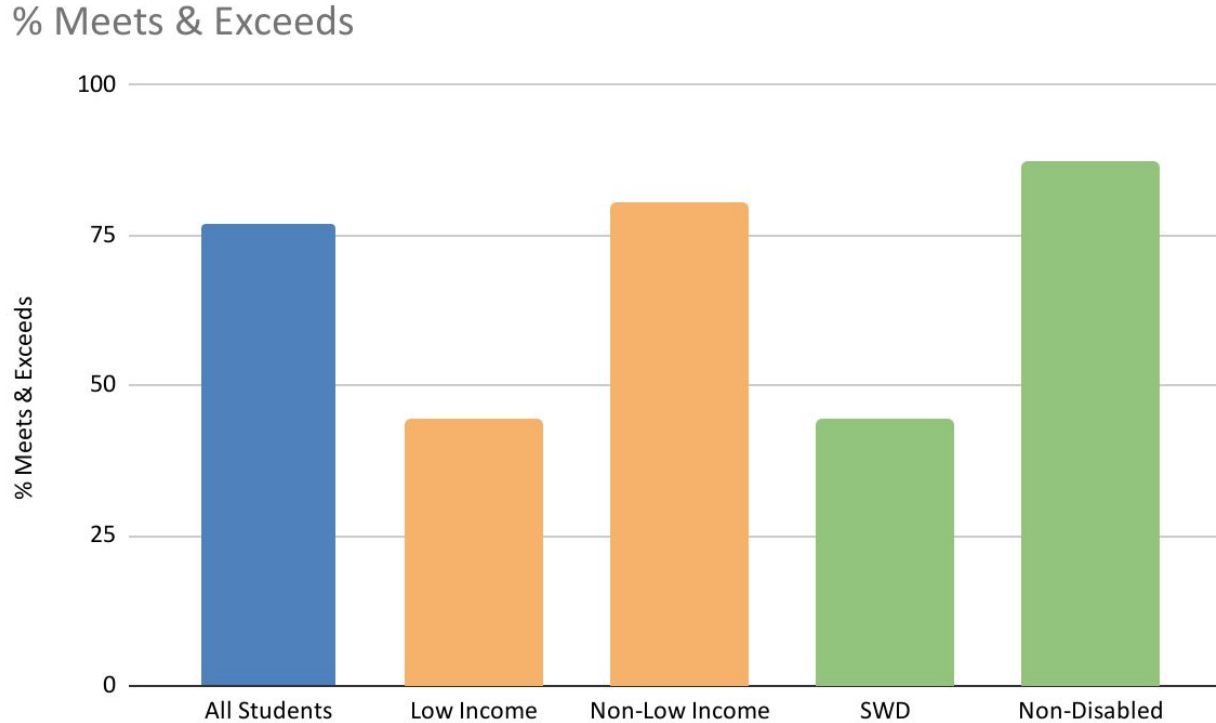
## Science: State Achievement

Grade	2019 % M/E	2021 % M/E	2022 % M/E	Change M/E 19-21	Change M/E 21-22	Change M/E 19-22
05	49	42	43	-7	+1	-6
08	46	41	42	-5	+1	-4

# Science: SPS Achievement

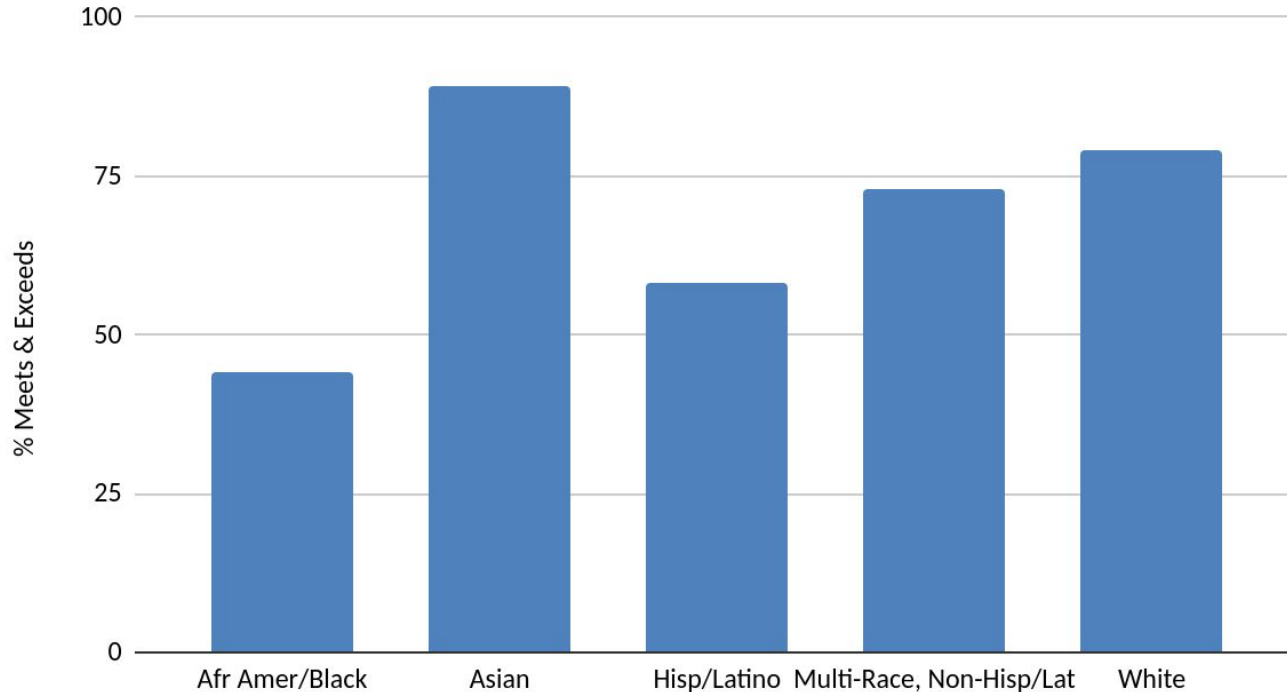
Grade	2019 % M/E	2021 % M/E	2022 % M/E	Change M/E 19-21	Change M/E 21-22	Cumulative Change M/E 19-22
5	79	69	75	-10	-4	-4
8	63	66	79	3	13	16

# Science: High Needs Subcategories Grades 3-8



# Science, Technology & Engineering : Race Grades 3-8

% Meets & Exceeds



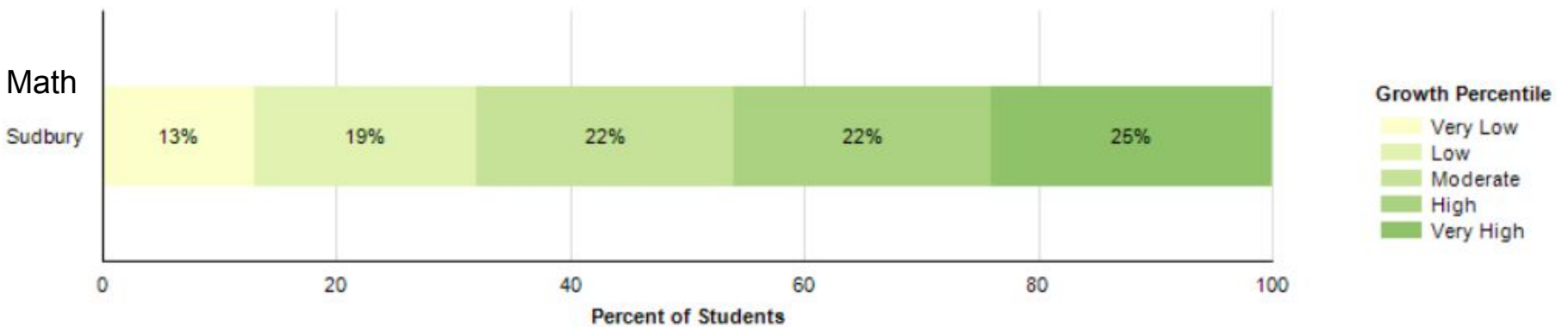
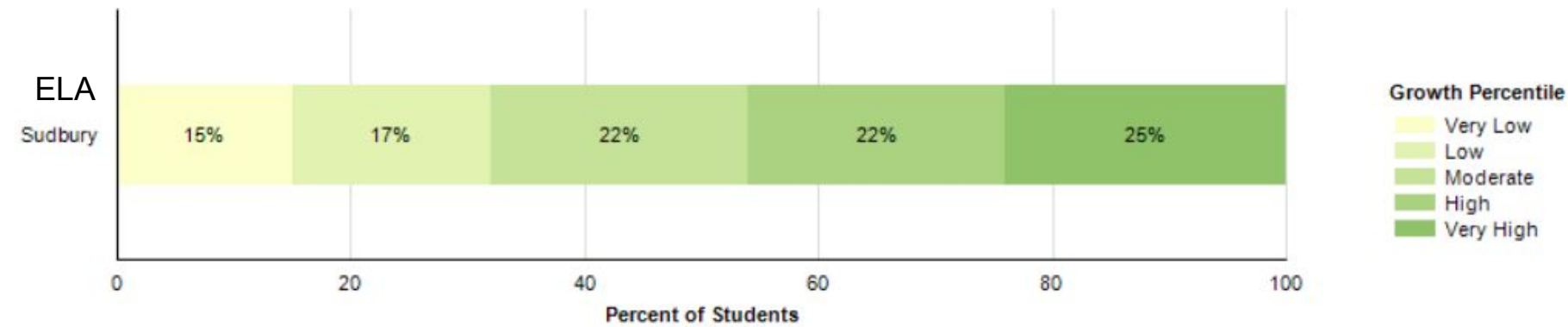
# Growth



# Growth Summary

- Mean for all students and all subgroups are in the moderate range with Asian students showing high growth in ELA and Mathematics and Multi-Race, Non Hispanic/Latino in ELA
- Student Growth Percentile calculations will use the cohort model going forward, based upon 2022 cohorts

# Student Growth Percentages: Grades 4-8





# ELA Student Growth

English language arts growth - Non-high school			<a href="#">About the Data</a>
Group	2019 Mean SGP	2022 Mean SGP	N
All Students	56.5	55.7	1,337
High needs	50.1	49.1	405
Low income	44.8	49.2	111
EL and Former EL	58.2	49.2	60
Students w/ disabilities	48.5	48.3	324
Amer. Ind. or Alaska Nat.	-	-	1
Asian	62.8	63.9	146
Afr. Amer./Black	55.1	51.4	42
Hispanic/Latino	57.9	53.6	57
Multi-race, Non-Hisp./Lat.	55.5	61.8	96
Nat. Haw. or Pacif. Isl.	-	-	3
White	55.8	54.1	992

# Math: Student Growth

Mathematics growth - Non-high school			<a href="#">About the Data</a>
Group	2019 Mean SGP	2022 Mean SGP	N
All Students	51.9	56.3	1,340
High needs	44.8	53.2	405
Low income	42.9	50.6	109
EL and Former EL	53.5	58.0	60
Students w/ disabilities	43.6	52.0	324
Amer. Ind. or Alaska Nat.	-	-	1
Asian	60.4	65.0	147
Afr. Amer./Black	43.9	47.0	42
Hispanic/Latino	51.6	52.7	58
Multi-race, Non-Hisp./Lat.	52.8	59.8	98
Nat. Haw. or Pacif. Isl.	-	-	3
White	51.2	55.3	991

# Next Steps



# Connection to District Improvement Efforts

- ELA Curriculum Review and Implementation of Dyslexia Working Group Plan to meet the needs of all learners;
- Item analysis by curriculum and instructional teams to identify areas of needs and recommendations for adjustments to scope and sequences of instruction;
- Student and cohort level analysis, including local benchmarking data, to identify strengths and areas for support;
- Professional development focused on “at risk” populations;
- Tiered supports for general education students, especially at schools with high needs populations;
- Provide additional instructional opportunities through SMILE and ESY.

# Accountability Summary

- Accountability ratings suspended for 2022
- 2022 school and district ratings will serve as baseline for 2023 accountability ratings
- School accountability percentiles ranged from 84-96%.

...the major purpose of assessment in schools should be to provide interpretive information to teachers and school leaders about their impact on students, so that these educators have the best information about what steps to take with instruction and how they need to change and adapt.

--John Hattie, *Education Week*, vol 35, #10, October 28, 2015

# Accountability



# Accountability (DART Sudbury [link](#))

School	Accountability information	School accountability percentile
<a href="#">Ephraim Curtis Middle</a>	Due to the COVID-19 pandemic, most districts and schools did not receive an accountability determination in 2022	92
<a href="#">General John Nixon Elementary</a>	Due to the COVID-19 pandemic, most districts and schools did not receive an accountability determination in 2022	96
<a href="#">Israel Loring School</a>	Due to the COVID-19 pandemic, most districts and schools did not receive an accountability determination in 2022	84
<a href="#">Josiah Haynes</a>	Due to the COVID-19 pandemic, most districts and schools did not receive an accountability determination in 2022	95
<a href="#">Peter Noyes</a>	Due to the COVID-19 pandemic, most districts and schools did not receive an accountability determination in 2022	92



# Criterion-Referenced Accountability Factors

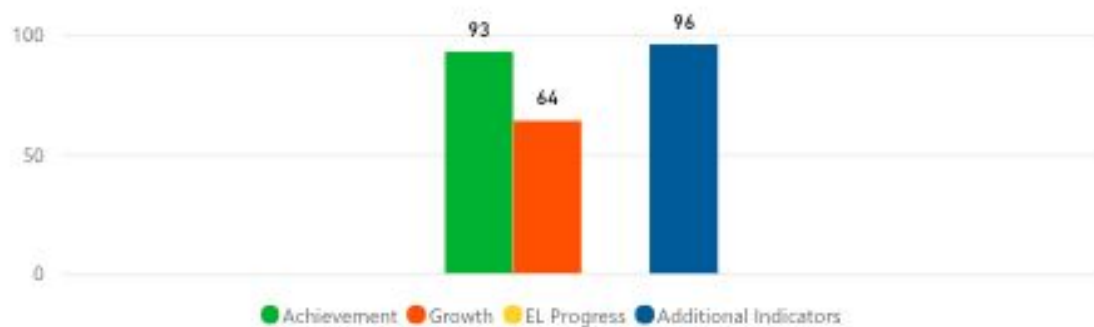
- **achievement** in English language arts (ELA), mathematics, and science based on MCAS assessments;
- **growth** in ELA and mathematics;
- **progress toward English proficiency** based on the ACCESS that English learners (ELs) take annually, and rates the school and district on the percentage of ELs meeting annual targets to achieve English proficiency in six years
- **chronic absenteeism** based on the percentage of students in grades 1-8 missing 10% or more days of school.

(DESE summary [link](#))

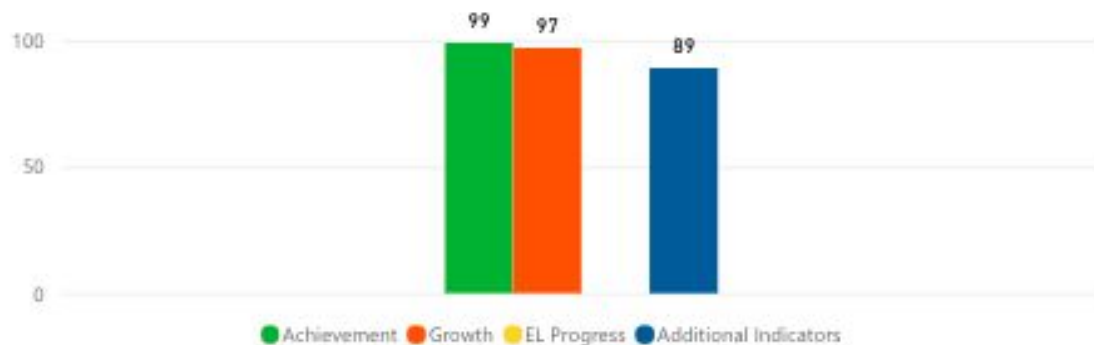
## Non-High School Data - Indicator Mean Percentiles



2022 Indicator Mean Percentiles



2019 Indicator Mean Percentiles



EL < 30

# Normative Component Accountability Factor

Compares the performance of the students in a school to all other similar schools in the state.

**Accountability percentile**, compares the individual indicators from the 2022 data, ranks them, and assigns a percentile from 1 to 99. Districts are not assigned an accountability percentile.

(DESE summary [link](#))

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