



PUBLIC SCHOOLS of  
**BROOKLINE**

**Curriculum Subcommittee - October 18, 2022**



# Agenda



- Review 2021-2022 MCAS results
- Highlight areas of celebration and areas of challenge
- Outline next steps
- Questions

# MCAS Test Administration 2019-2022

2022 school year was the first full MCAS administration for grades 3-8 since 2019.  
Grade 10 students in 2022 had not taken an MCAS test since 2019 (grade 7).

Year	Grades 3-8	Grade 10
2019	Full test administration	Full test administration
2020	No tests administered	No tests administered
2021	Half-test administered	Full test administered
2022	Full test administered	Full test administered

# 2022 MCAS Statewide Summary Notes

**The 2022 State MCAS showed mixed results compared with 2021 scores:**

- Math scores increased
- English Language Arts (ELA) scores declined
- Science scores increased slightly

**When we compare these results to pre-pandemic levels, the state has a ways to go across all subject areas to fully recover learning losses**

- Brookline's performance was more variable

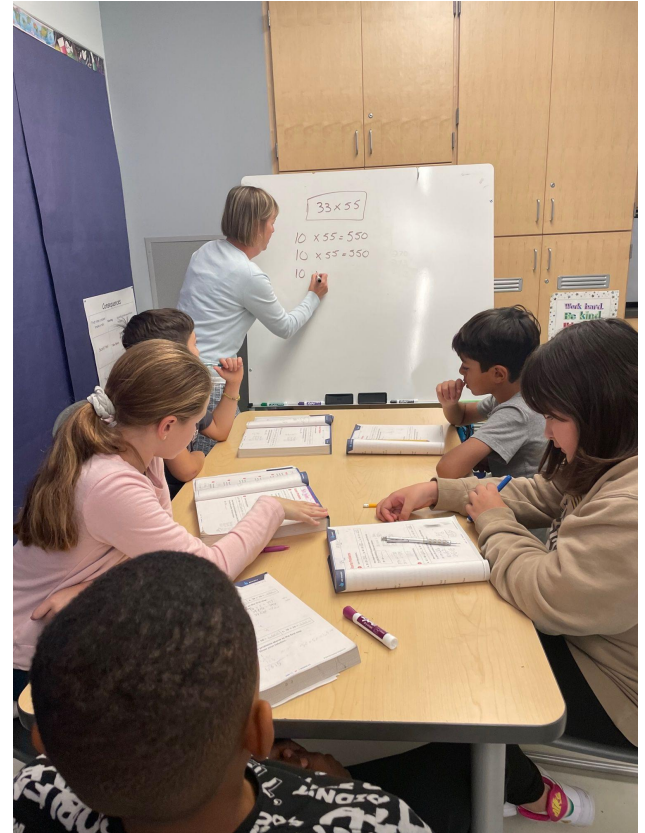
**In ELA, two focus areas for improvement**

- Impact of lower writing scores
- Early literacy challenges

**Student absenteeism remains a challenge across the board for recovery efforts**

# Brookline Celebrations

- Our students did not demonstrate the same level of “learning loss” as the state
- Brookline’s overall performance in ELA, Math and Science remained similar to pre pandemic performance
- Brookline’s aggregate group outperformed the State
- Grade 7 showed increases in performance in both math and ELA



# Challenges

## **The gaps within Brookline's subgroups remains high**

- Black and African American students in Brookline demonstrate a lower performance than their peers in the state
- The gap for Students with Disabilities has widened slightly in ELA since 2019

## **Attendance was a challenge for 2021-2022**

- This did not impact our district determination this year, however if we do not improve this will become relevant for the state determination going forward this year





# English Language Arts (ELA) Results

# 2019-2022 Statewide ELA MCAS Results by Grade

Variable losses across grades 3-7 while grade 8 showed signs of recovery in 2022. Total impact of 20% loss in grades 3-8 students meeting expectations since 2019.

Grade	2019 M/E	2022 M/E	Change M/E 19-22
03	56	44	-12
04	52	38	-14
05	52	41	-11
06	53	41	-12
07	48	41	-7
08	52	42	-10
<b>3-8</b>	<b>52</b>	<b>41</b>	<b>-11</b>
<b>10</b>	<b>61</b>	<b>58</b>	<b>-3</b>



# 2019-2022 PSB ELA MCAS Results by Grade

## Brookline

Grade	2019 M/E	2022 M/E	Change M/E 19-22
03	75	69	-6
04	71	62	-9
05	71	67	-4
06	81	71	-10
07	74	77	4
08	82	72	-10
<b>3-8</b>	<b>76</b>	<b>70</b>	<b>-6</b>
<b>10</b>	<b>83</b>	<b>81</b>	<b>-2</b>

# 2022 ELA MCAS Results by Race/Ethnicity, Grades 3-8

Achievement gaps have remained similar or decreased

Race/Ethnicity	2019 M/E	2022 M/E	Gap vs. White 19	Gap vs. White 22
<b>African-American</b>	<b>33</b>	<b>26</b>	<b>-26</b>	<b>-22</b>
Asian	72	63	+13	+15
Hispanic	33	22	-26	-26
<i>White</i>	59	48	--	--

## Brookline

<b>African-American</b>	<b>37</b>	<b>38</b>	<b>-43</b>	<b>-38</b>
Asian	82	73	+2	-3
Hispanic	61	51	-19	-25
<i>White</i>	80	76	--	--

# 2022 ELA MCAS Results by Race/Ethnicity, Grade 10

Achievement gaps have remained similar or decreased

Race/Ethnicity	2019 M/E	2022 M/E	Gap vs. White 19	Gap vs. White 22
<b>African-American</b>	<b>38</b>	<b>37</b>	<b>-32</b>	<b>-28</b>
Asian	77	78	+7	+13
Hispanic	36	38	-34	-27
<i>White</i>	70	65	--	--

## Brookline

<b>African-American</b>	<b>43</b>	<b>37</b>	<b>-48</b>	<b>-52</b>
Asian	85	89	-6	0
Hispanic	69	68	-22	-21
<i>White</i>	91	89	--	--

# Impact of lower writing scores on grades 3-8 ELA results

**Each ELA test contains a required essay and the 2022 writing results declined significantly**

- The number of test takers receiving a score of 0 points increased from 19 in 2019 to 31 in 2022
- The average points scored per essay decreased in grades 3-8 with larger decreases in grades 3-5

<b>Grade</b>	<b>2019 Average Points Earned</b>	<b>2022 Average Points Earned</b>	<b>Possible Points</b>	<b>Change 19-22</b>
<b>3-5</b>	<b>2.8</b>	<b>2.1</b>	<b>7</b>	<b>-25</b>
<b>6-8</b>	<b>3.8</b>	<b>3.3</b>	<b>8</b>	<b>-13</b>



# Math Results

# 2019-2022 Statewide Math MCAS Results by Grade

Recovery across all grades 3-8 in 2022. About 50% of “loss” from 2021 recovered in grades 3 and 4. Additional loss in grade 10 but slowing as compared to 2021.

Grade	2019 M/E	2022 M/E	Change M/E 19-22
03	49	41	-8
04	50	42	-8
05	48	36	-12
06	52	42	-10
07	48	37	-11
08	46	36	-10
<b>3-8</b>	<b>49</b>	<b>39</b>	<b>-10</b>
<b>10</b>	<b>59</b>	<b>50</b>	<b>-9</b>

# 2019-2022 PSB Math MCAS Results by Grade

## Brookline

Grade	2019 M/E	2022 M/E	Change M/E 19-22
03	68	66	-2
04	68	65	-3
05	71	61	-10
06	79	71	-8
07	76	79	+3
08	80	72	-8
<b>3-8</b>	<b>73</b>	<b>69</b>	<b>-4</b>
<b>10</b>	<b>88</b>	<b>81</b>	<b>-8</b>



# 2022 Math MCAS Results by Race/Ethnicity, Grades 3-8

Math achievement for African-American and Hispanic students remains low but achievement gaps held steady or improved due to declining achievement of White students.

Race/Ethnicity	2019 M/E	2022 M/E	Gap vs. White 19	Gap vs. White 22
<b>African-American</b>	<b>28</b>	<b>19</b>	<b>-28</b>	<b>-28</b>
Asian	76	69	+20	+22
Hispanic	29	38	-27	<b>-22</b>
<i>White</i>	56	47	--	--

## Brookline

<b>African-American</b>	<b>29</b>	<b>37</b>	<b>-48</b>	<b>-44</b>
Asian	88	83	+11	+10
Hispanic	51	41	-26	-32
<i>White</i>	77	73	--	--

# 2022 Math MCAS Results by Race/Ethnicity, Grade 10

Achievement gaps have remained similar or decreased

Race/Ethnicity	2019 M/E	2022 M/E	Gap vs. White 19	Gap vs. White 22
<b>African-American</b>	<b>35</b>	<b>26</b>	<b>-31</b>	<b>-33</b>
Asian	83	78	+17	+19
Hispanic	34	26	-32	-33
<i>White</i>	66	59	--	--

## Brookline

<b>African-American</b>	<b>28</b>	<b>50</b>	<b>-62</b>	<b>-36</b>
Asian	93	94	+3	+8
Hispanic	66	67	-23	-19
<i>White</i>	90	86	--	--



## Science Results

# 2019-2022 Science MCAS Results by Grade

**Small recovery in grades 5 and 8 in 2022.**

Grade	2019 M/E	2022 M/E	Change M/E 19-21	Change M/E 19-22
05	49	43	-7	-6
08	46	42	-5	-4
10*	--	47	--	--

## Brookline

05	66	67	+2	+1
08	72	70	-4	-2
10*	--	63	--	--

*\*First administration of the Next-Generation Science MCAS in grade 10 Physics and Biology and not comparable to prior years.*

# 2022 Science MCAS Results by Race/Ethnicity

Achievement gaps have remained similar or decreased

Race/Ethnicity	2019 M/E	2022 M/E	Gap vs. White 19	Gap vs. White 22
<b>African-American</b>				
Asian				
Hispanic				
<i>White</i>				

## Brookline

<b>African-American</b>				
Asian				
Hispanic				
<i>White</i>				



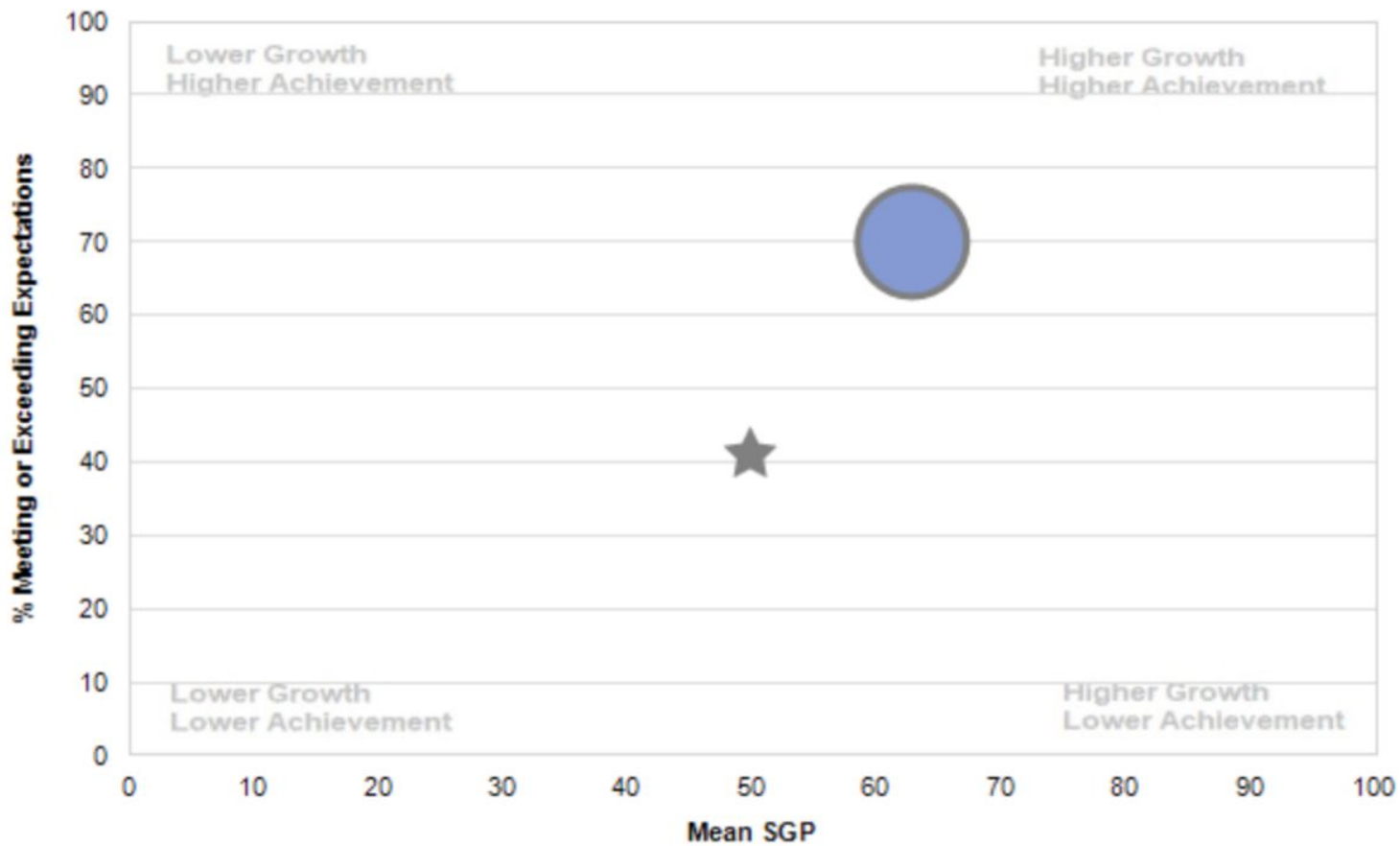
# Growth Results

# Student Growth

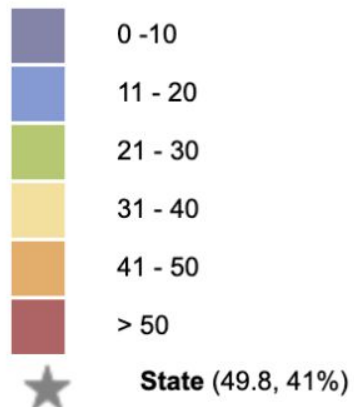


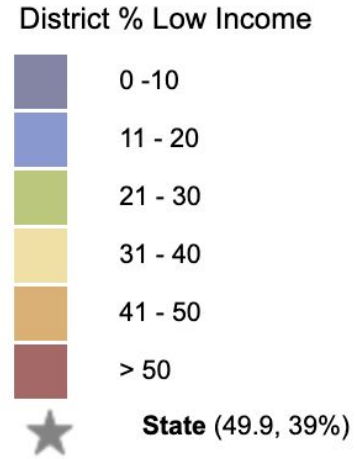
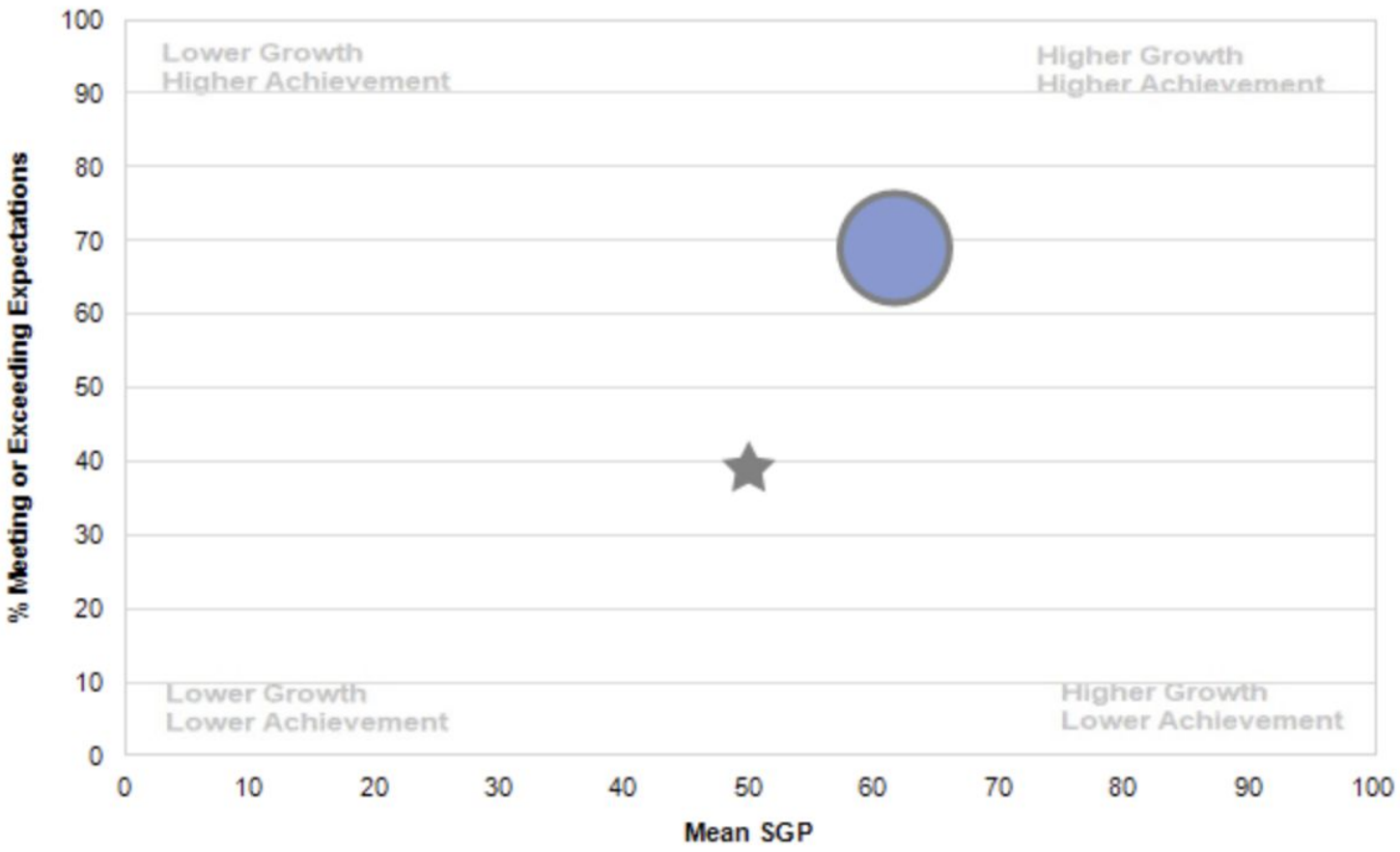
- Availability of data allows for return to cohort model for student growth percentile calculations
- **Should not be compared to 2021**
- Old standards for understanding the means are applicable
  - Mean SGP of 1-19 = Very low growth
  - Mean SGP of 20-39 = Low growth
  - Mean SGP of 40-59 = Typical growth
  - Mean SGP of 60-79 = High growth
  - Mean SGP of 80-99 = Very high growth





District % Low Income







# Attendance

# Student Absenteeism

## **Student absenteeism across the state remains a challenge for recovery efforts.**

### **Students have attended less school over past several years**

- Average student missed 11 days in 2021 and 15 days in 2022
- 18% of all students missed 18+ days in 2021 and 28 missed 18+ days in 2022

### **Chronic absenteeism for students in grades 3-8 increased in 2022 by 138 (41K vs 98K students) as compared to 2019**

### **1.7 million days of missed school because of positive COVID-19 cases in 2022**

- Does not include staff absences or days missed as close contacts
- Note: 1 million+ other school days were saved as a result of the state testing program

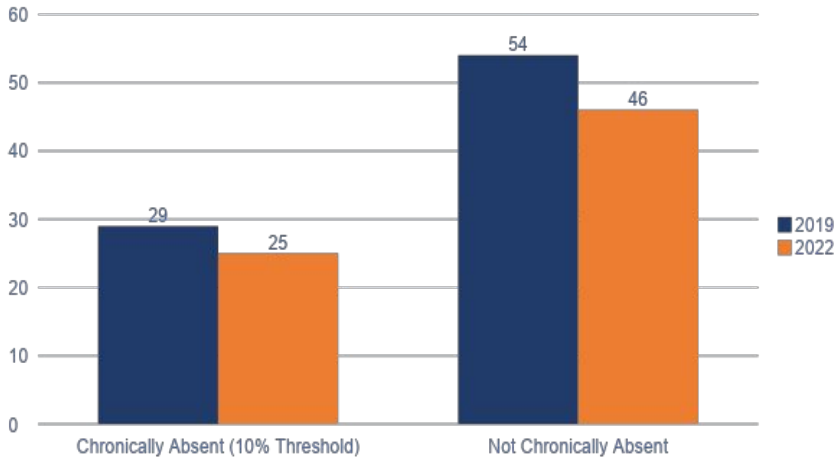
# Brookline Attendance

Group	2020-2021 School Year			2021-2022 School Year			Net Change
	Attendance Rate	Avg # Absences	Absent ≥10 Days	Attendance Rate	Avg # Absences	Absent ≥10 Days	
All Students	97.3%	4.4	11.1%	94%	10.5	40.3%	+29.2%
Students w/ Disabilities	95.8%	6.8	20.1%	91.6%	15	52.4%	+32.3%
African American / Black	95.6%	7.2	21.7%	91.7%	14.4	51.6%	+29.9%
Asian	97.8%	3.5	8.2%	95.2%	8	28.9%	+20.7%
Hispanic / Latinx	96%	6.5	18.6%	92.2%	13.5	51.8%	+33.2%
Multi-Race (Non-Hispanic)	97.5%	4.2	10.1%	94%	10.5	39%	+28.9%
White	97.5%	4.1	9.6%	94.2%	10.2	41.2%	+31.6%

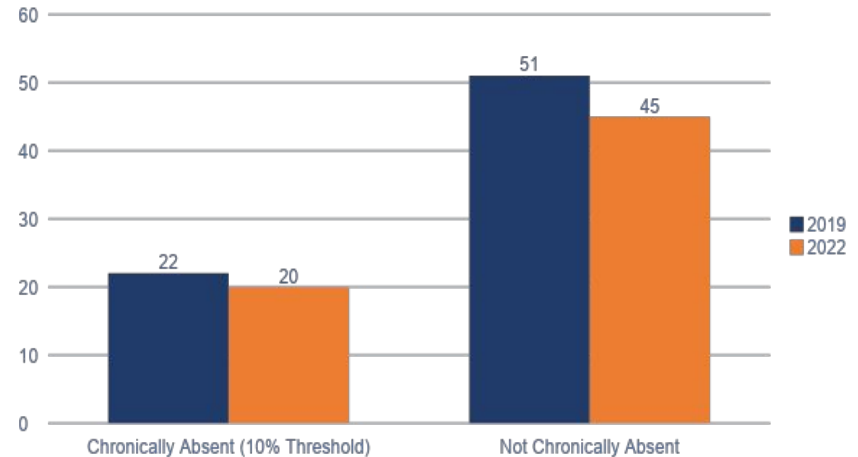
# Chronic Absenteeism and the 2022 MCAS results

**Chronic absenteeism for students in grades 3-8 increased in 2022 by 138 (41K vs 98K students) as compared to 2019 and those students were lower performing as compared to 2019.**

Percent of Students Meeting or Exceeding Expectations  
Grades 3-8 ELA

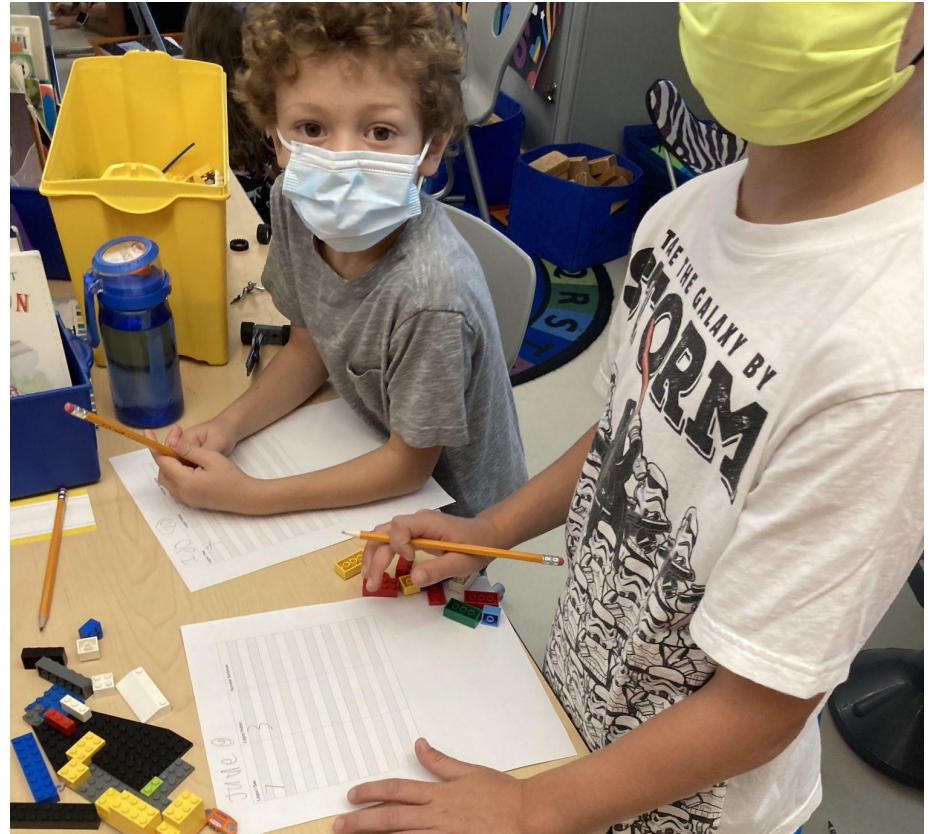


Percent of Students Meeting or Exceeding Expectations  
Grades 3-8 Math



# Considerations

- The last 2.5 school years have not been “normal”
- Increased Absenteeism – many students’ access to instruction was severely disrupted
- New baseline for moving forward





# How are we addressing the results?

- School-based analysis and targeted support
- Strengthen attendance practices
- CST evaluation
- New literacy assessment (mClass)
- Middle School Review
- Reimaging 9th Grade
- Ongoing SEL Initiatives



**Questions?**