# 98b Reporting

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Board of Education Meeting February 3, 2022



# New Legislation

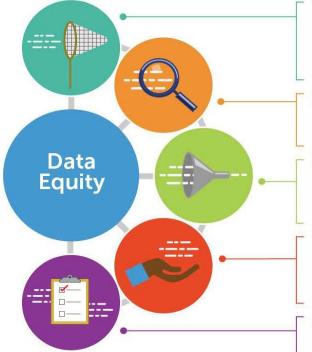
#### Public Act 48 of 2021, Section 98b

- Not later than September 15, 2021, each school building leader in conjunction with their staff, established educational goals expected to be achieved for the 2021-2022 school year
- Required reporting allowed for progress on benchmark assessments to be evaluated using achievement or growth for K-8 in reading and math in the aggregate and for all grade levels, subgroups and instructional modes (98b(1)(b))
- Goals were established for mid-year and end-of-year
- Goals were established with growth targets rather than achievement targets
- Goals must be aligned to, and measured by, benchmark assessments approved by the state
- District reporting is required twice during the 2021-2022 school year:
  - by the first board meeting of February, 2022
  - o not later than the last day of the 2021-2022 school year (98b(1)(a))
- Goals must be reported to the board (98b(1)(a)) as well as being posted to the transparency reporting link on the district webpage (98b(1)(c))



#### **Data Equity**

involves applying an equity lens and mindset throughout the data cycle to acknowledge, understand, and address educational inequities. This includes careful consideration and planning around the ways in which data is collected, analyzed, interpreted, shared, and used to make decisions.



#### **Data Collection**

- Both quantitative and qualitative data should be leveraged to develop a holistic understanding of students' and educators' experiences.
- Consideration should be given to how data is collected and whether these methods disadvantage or exclude specific groups.
- Efforts should be made to include data that centers and elevates traditionally marginalized perspectives.

#### **Data Analysis**

- Individual, community, political, and historical contexts should be considered to inform conclusions and recommendations (e.g., changes to policies or programs).
- Data should be disaggregated to understand what's happening within distinct populations.

#### Data Interpretation

- Consideration should be given to how personal experience as well as conscious and unconscious biases may influence
  participants' perceptions.
- The process should be inclusive, because viewing data from a variety of perspectives can reduce the potential for one-sided interpretation.

#### **Data Sharing**

- Inclusive and transparent data sharing can help schools and districts build trust with and spur involvement from their community.
- Careful consideration should be given to how the data is presented to and made actionable for diverse stakeholder groups.
- Framing is critical so that data is contextualized and less likely to be misconstrued.

#### **Data-Based Decision-Making**

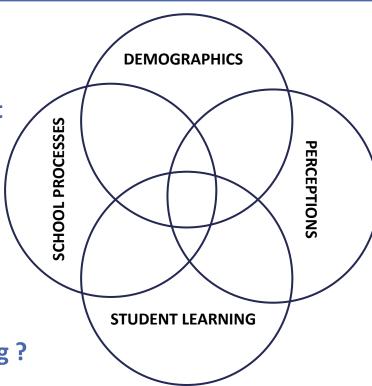
- All stakeholder groups should have a seat at the table, especially those who have traditionally been excluded.
- Decision-making methods should be made transparent to build trust.
- Participants should reflect on the impact of decisions after they're made to assess harm and course correct.

Visit the Data Ready Playbook to learn more

# Multiple Measures of Data - What can it tell us?

What processes/programs work best for different groups of students?

How are students learning and achieving?

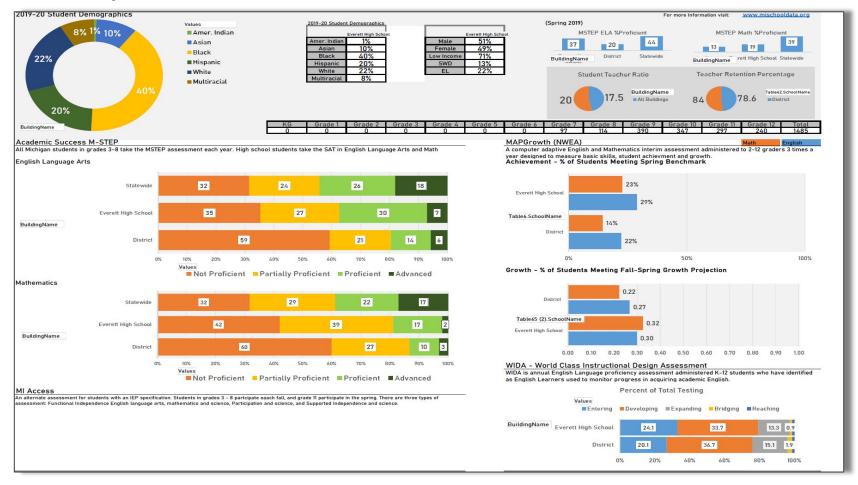


Are groups of students experiencing school differently?

What is the impact of student perceptions of the learning environment on learning?

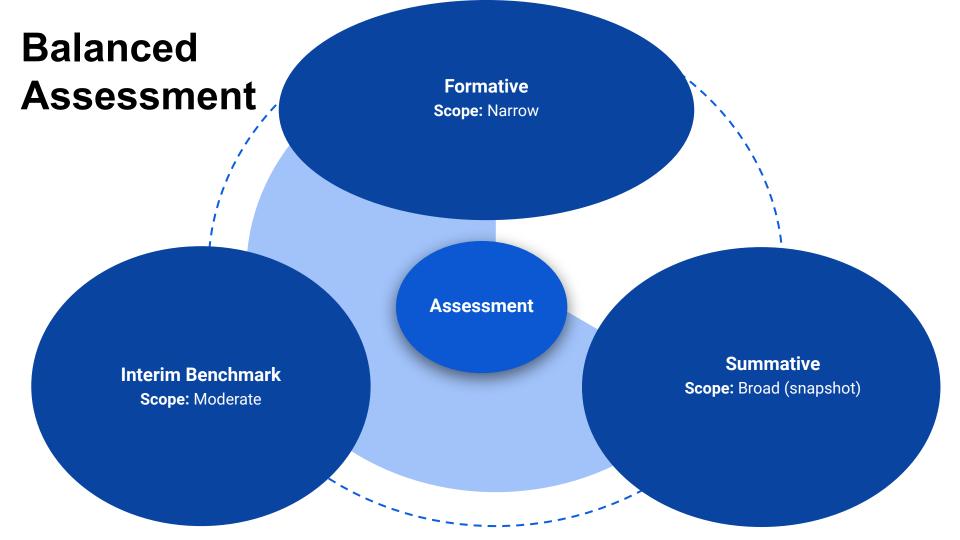


## **School/District Data Profiles - Quantitative**



## **School/District Data Profiles - Qualitative**





## **Assessment Terms**

**Benchmarking** - What is it? **Standard** - What is it? **Growth** vs. **Progress** 

- How are they measured?
- Why is it important to distinguish the difference?



# Interim Benchmark Assessments

- Assessment OF learning
- Evaluate student learning progress
- Predictive of performance on future assessments
   (i.e. standardized tests, end-of-course exams) and other
   "summative" assessment)
- Periodically administered during a course or school year
- Can have many formats



# Interim Benchmarking

- Foundational to a multi-tiered system of support (along with progress monitoring and Core instructional program evaluation)
- Administered to all students Fall, Winter, and Spring

# aimswebPlus

- Kindergarten and 1st grade
- Norm-referenced test
- Literacy and Numeracy
- Benchmark scores and growth targets
- Curriculum based measures CBMs (brief timed measures of fluency on essential foundational skills)

## NWEA MapGrowth

- 2nd grade-12th grade
- Norm-referenced test
- Computer-adaptive
- Reading, Math and Language
- Benchmark scores and growth targets
- Aligned with common core state standards





# Kindergarten & 1st grade

Literacy and Numeracy Growth

# Purpose:

 A focus on automaticity of basic foundational literacy and numeracy skills are a prerequisite for mastery of more complex and higher-order skills.

 aimswebPlus is used as a benchmark screener (administered 3x/year) and as a progress monitoring tool.

Identifies students at risk of not meeting grade level proficiency.
 Data provides guidance as to the level of support needed to reach expected outcomes.



## aimswebPlus Benchmarks

## Nationally normed to the 40th percentile

Grade	Measure	Fall Winter		Spring
K	Letter Word Sounds Fluency (LWSF)	4	29	34
1st	Nonsense Word Fluency (NWF)	29	48	54
К	Quantity Total Fluency (QTF)	11	14	15
1st	Number Comparison Fluency - Pairs (NCF-P)		26	26
1st	Math Facts Fluency - 1 Digit (MFF-1D)	10	12	12



## Methods

 aimswebPlus measures are brief (1 minute per assessment) and administered by a trained teacher proctor and recorded in a secure online platform.

 Office of Curriculum and Instruction has supported Kindergarten and 1st grade classes with over 350 hours of data collection/proctor support across all schools in the Fall and Winter benchmark windows.



## **Business Rules and Limitations**

Included students with a fall and winter score only

- In addition to benchmark data, we will be looking at both:
  - "Met growth" aligned with national norms
  - "Made growth" by digging into our data set

Note: \* We have limited data during COVID about frequency, duration, and K-1 foundational skill instruction as well as the effects of chronic absence on student access to learning.

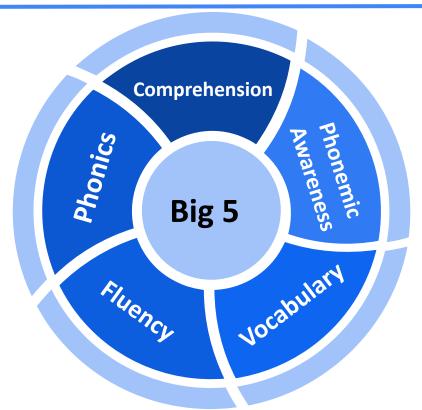




# Literacy Growth

Kindergarten and 1st grade

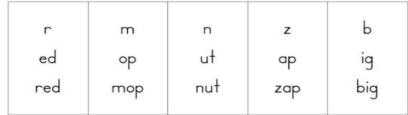
# 5 Essential Elements of Reading



Through whole and small group instruction, matching students with interesting, culturally responsive leveled text, and connecting reading and writing.

## Kindergarten Literacy: Letter Sound Word Fluency

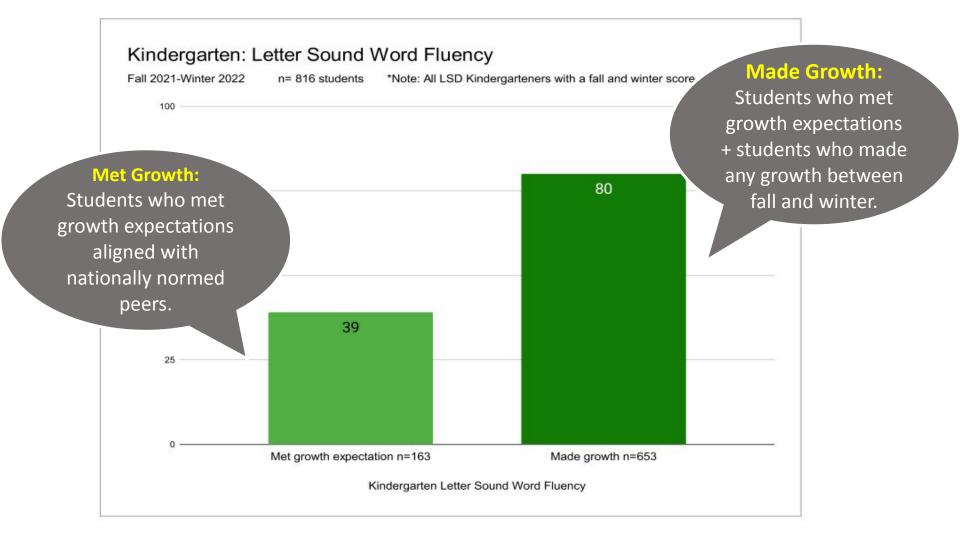




Student says the sounds of visually presented letter, syllables, and words; number of corrects are scored.

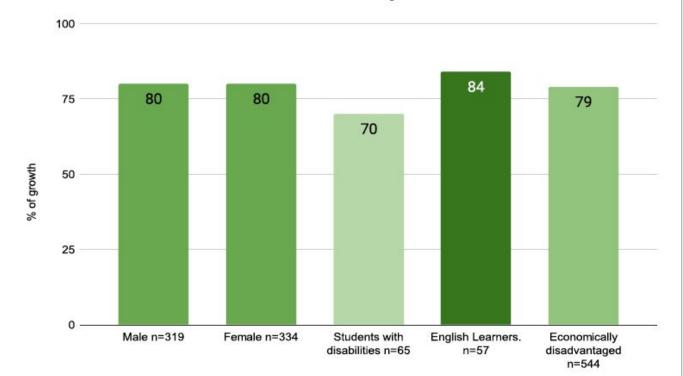
- Serves as a proxy for explicit instruction in the alphabetic principle (words are made of sounds)
- Strong predictor of end-of-year oral reading fluency ability (Clemens et al., 2015)





#### Kindergarten: Letter Sound Word Fluency

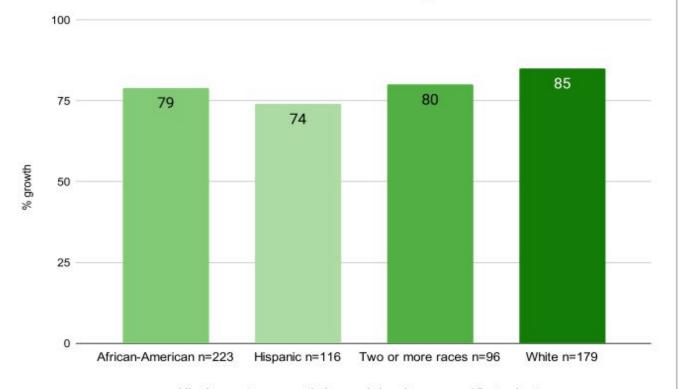
Fall 2021-Winter 2022 n= 816 students \*Note: All LSD Kindergarteners with a fall and winter score



Student subgroup growth

### Kindergarten: Letter Sound Word Fluency





Kindergarten growth by racial subgroup >10 students

# First Grade Literacy: Nonsense Word Fluency

zis	hes	hij	nuk	pez
wol	ac	wom	sid	yej
wut	siz	hip	yob	fem
zez	bub	uc	juc	res
neg	luz	muz	ik	bof
kap	nej	veg	soc	sab
tec	mol	pic	bul	meb
zan	ek	yof	lob	sem

Student says each sound (or whole words) in non-real words.

**Benchmark:** 

**Fall: 29** 

Winter: 48

sounds in one

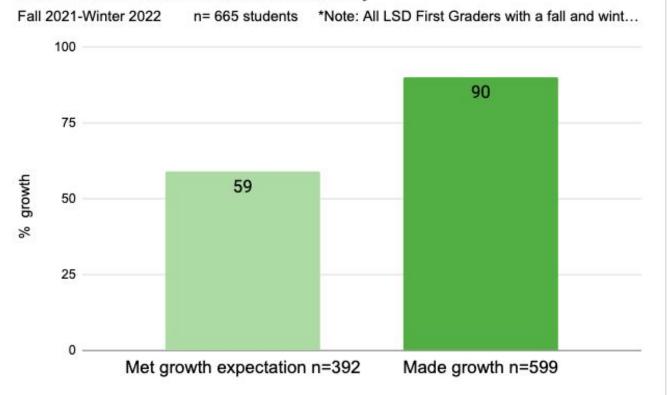
minute

- Measures a student's ability to decode individual phonemes and then blend them together to read
- Indicator of a student's progress in acquiring early alphabetic principle skills





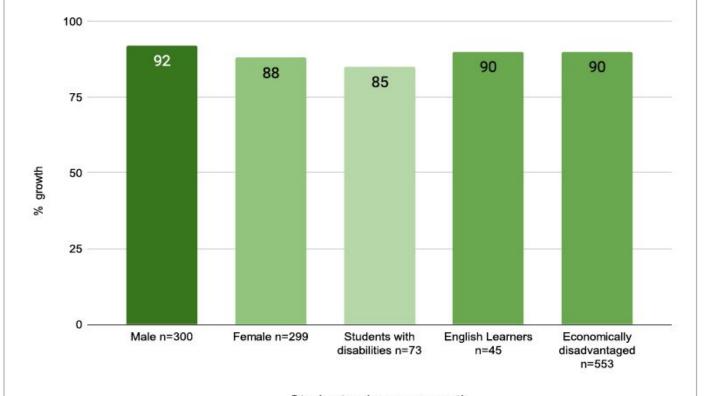
## First Grade Nonsense Word Fluency



First Grade Nonsense Word Fluency

## First Grade Nonsense Word Fluency

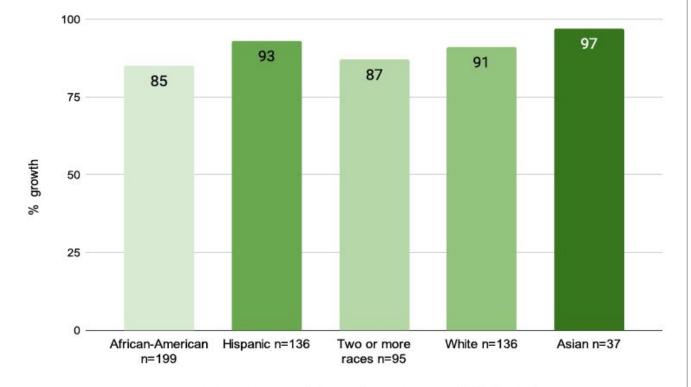
Fall 2021-Winter 2022 n= 665 students \*Note: All LSD First Graders with a fall and winter score



Student subgroup growth

#### First Grade Nonsense Word Fluency





1st grade growth by racial subgroup >10 students

## aimswebPlus Literacy Benchmark and Growth

Grade	Measure	Winter Benchmark score	2019-20 % of students at benchmark	2021-22 % of students at benchmark	2021-22 % of students made growth	
	Literacy					
K	Letter Word Sounds Fluency (LWSF)	29	31%	39%	80%	
1st	Nonsense Word Fluency (NWF)	48	43%	59%	90%	



# Key Takeaways and Considerations

 A greater percentage of students met benchmark at Winter of 2022 in LWSF and NWF. These are preconditions and predictors for grade level reading.

- For students below benchmark, we observed comparable growth across subgroups.
- As a result of the Read by Grade 3 legislation, we have increased focus on early literacy as well as identification of students within the lowest 10th percentile for Individualized Reading Improvement Plans.





# Numeracy Growth

Kindergarten and 1st grade

## Kindergarten Numeracy: Quantity Total Fluency

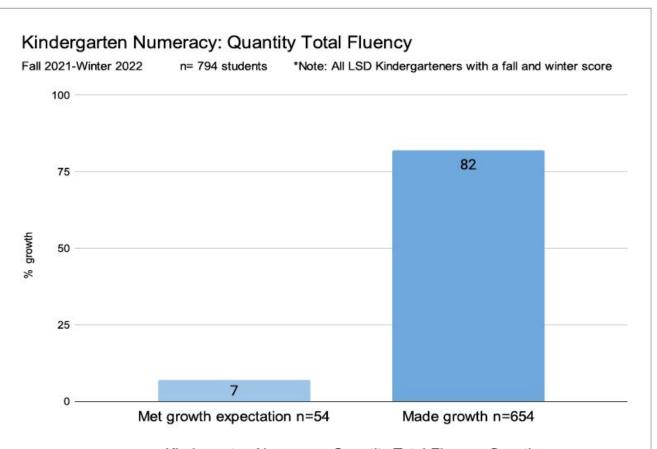
**Benchmark: Fall: 11** Winter: 14 items in one minute

The student states the total number of dots within each box or each pair of boxes for one minute.

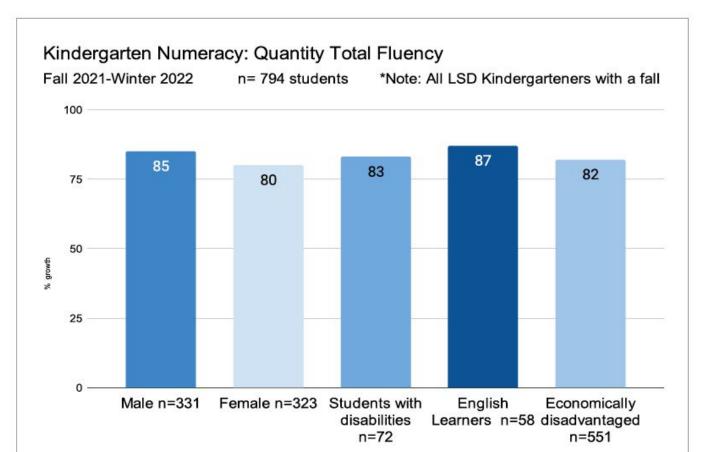
- Assesses a student's understanding of the relationship between numbers and quantities
- Assesses their ability to accurately and rapidly name the number of objects in a set of up to 10 dots
- Establishing the number of small sets is a foundational numeracy skill



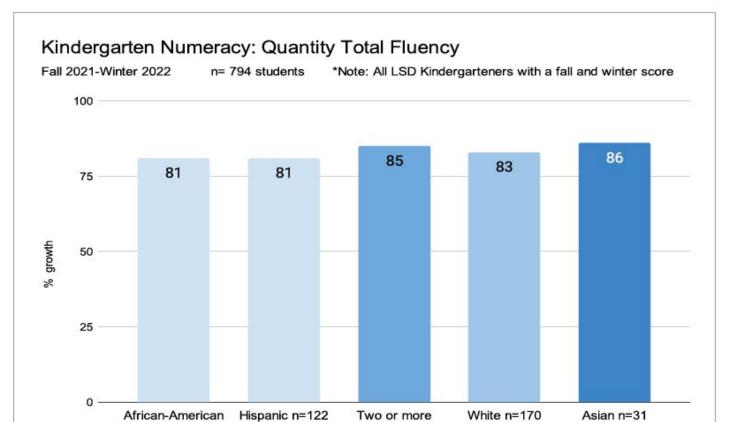




Kindergarten Numeracy: Quantity Total Fluency Growth



Student subgroup growth



Kindergarten QTF growth by racial subgroup >10 students

races n=100

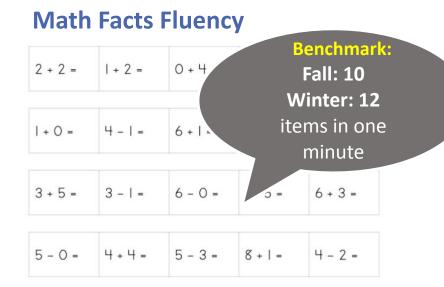
n=222

# First Grade Numeracy:

### **Number Comparison Fluency-Pairs**



- Assesses a student's ability to accurately and efficiently determine which of two numbers is greater
- Measures the level of skill automaticity



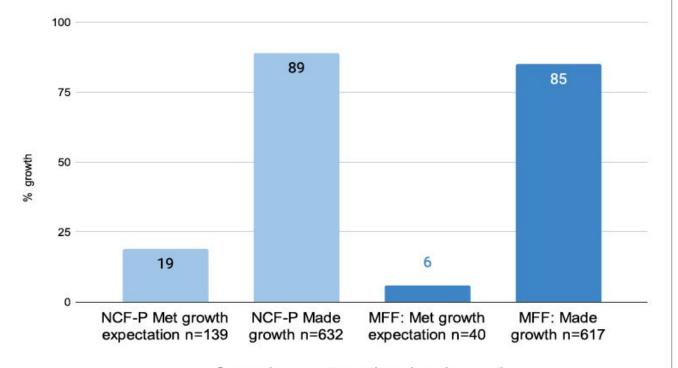
- Assesses a student's ability to accurately and efficiently add and subtract numbers from 0 through 10
- Measures the level of skill automaticity





# First Grade Numeracy: Number Comparison Fluency NCF-P and Math Facts Fluency MFF

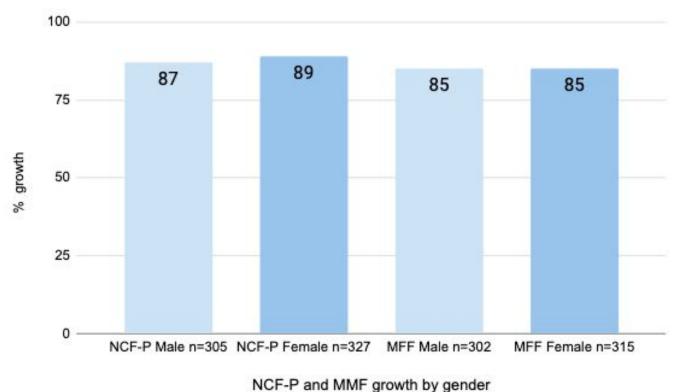
Fall 2021-Winter 2022 MFF n= 724 students NCF-P n= 713 \*Note: All LSD First Graders with a fall and winter score



Comparison: met growth and made growth

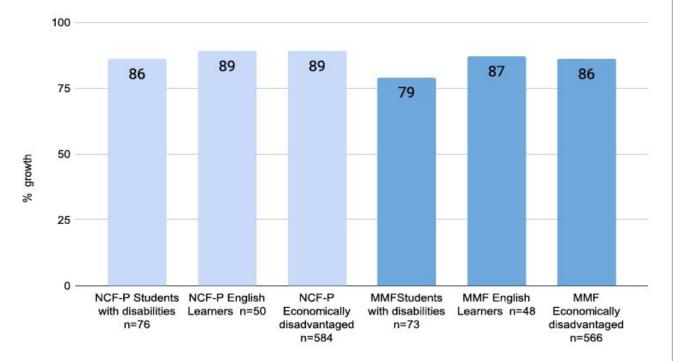
## First Grade Numeracy: Number Comparison Fluency NCF-P and Math Facts Fluency MFF

MFF n= 724 students NCF-P n= 713 \*Note: All LSD First Graders with a fall... Fall 2021-Winter 2022



# First Grade Numeracy: Number Comparison Fluency NCF-P and Math Facts Fluency MFF

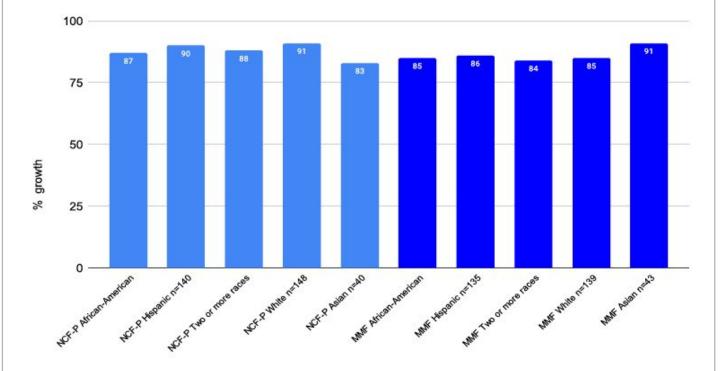
Fall 2021-Winter 2022 MFF n= 724 students NCF-P n= 713 \*Note: All LSD First Graders with a fall and winter score



NCF-P and MMF Growth by Subgroup

## First Grade Numeracy: Number Comparison Fluency NCF-P and Math Facts Fluency MFF

Fall 2021-Winter 2022 MFF n= 724 students NCF-P n= 713 \*Note: All LSD First Graders with a fall and winter score



1st grade NCF-P and MMF growth by racial subgroup >10 students

### aimswebPlus Benchmarks (Nationally normed to the 40th percentile)

Grade	Measure	Winter Benchmark score	2019-20 % of students at benchmark	2021-22 % of students at benchmark	2021-22 % of students made growth	
	Numeracy					
K	Quantity Total Fluency (QTF)	14	44%	7%	82%	
1st	Number Comparison Fluency - Pairs (NCF-P)	26	44%	19%	89%	
1st	Math Facts Fluency - 1 Digit (MFF-1D)	12	51%	6%	85%	



## Key Takeaways and Considerations

- Sharp decline in early numeracy benchmark and "met growth".
- Students are making consistent growth across subgroups.

Questions about the effects of COVID on instructional practices

- Students learn about mathematical concepts through manipulatives and hands on activities
- 18 months of screen to screen learning
- COVID protocols for small groups and interactive games





## 2nd through 8th grade

Reading and Mathematics

## Purpose:

 Measure of student growth in math, reading and language skills over time.

 NWEA MAP Test is used as a benchmark screener (administered 3x/year) and to precisely measure progress and growth for individual students.

 Informs decisions to improve learning. Data is used for flexible grouping, differentiation of instruction and growth monitoring.





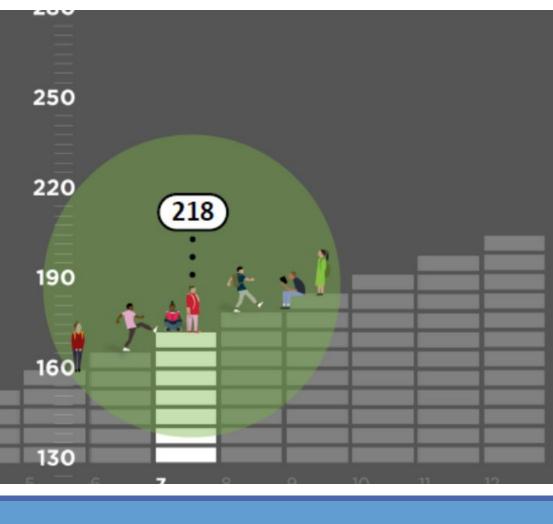
### Methods

- NWEA MAP Test is an adaptive assessment, providing more or less difficult questions based on student responses.
- Assessments can be administered virtually or in a classroom setting and are untimed.
- Results are available immediately upon completion of the assessment.
- Results are provided as RIT scores. An equal interval scale fixed unit much like an inch or foot to measure a person's physical height over time.

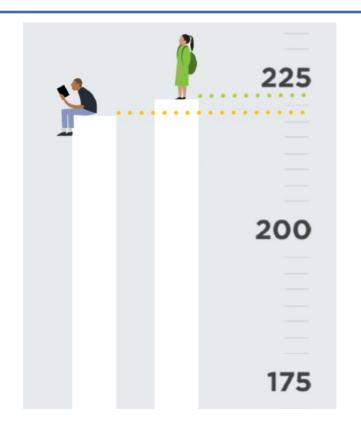


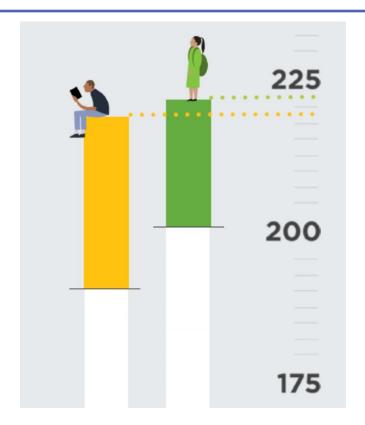
## **RIT Scale**

- Grade level independent
- Measures student achievement and item difficulty
- Tracks longitudinal growth within and across school years



## Who Had a Better Year?







### True or False?

- The MAP Growth Assessment determines mastery of skills.
- The RIT scale is an equal-interval scale and measures academic growth.
- Students will be proficient if they reach their growth projections.







# Mathematics

2nd through 8th grade

## NWEA Map Growth 2021-22 Benchmarks - Mathematics

Nationally normed to the 50th percentile

Grade	Measure Measure	Fall	Winter	Spring
Reading (2	Reading (2 - 3)			
2	MAP Growth K-2; MAP Growth 2-5	175	184	189
3	MAP Growth 2-5	188	196	201
Reading (4	Reading (4 - 6)			
4	MAP Growth 2-5	200	206	211
5	MAP Growth 2-5	209	215	219
6	MAP Growth 2-5	215	220	223
Reading (7- 8)				
7	Map Growth 6+	220	224	226
8	Map Growth 6+	224	228	230



### NWEA MAP Growth - Mathematics Performance, PreCovid

(Nationally normed to the 50th percentile)

Grade	Measure	2021-22 Winter Benchmark Score	2019-20 Winter (Mean) Benchmark Score	2021-22 Winter (Mean) Benchmark Score
Reading 2-3				
2nd	MAP Growth K-2; MAP Growth 2-5	184	N/A	169
3rd	MAP Growth 2-5	196	N/A	180
Reading 4-6				
4th	MAP Growth 2-5	206	204	187
5th	MAP Growth 2-5	215	210	194
6th	MAP Growth 6+	220	214	200
Reading 7-8				
7th	MAP Growth 6+	224	217	203
8th	MAP Growth 6+	228	219	208



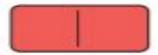
### MAPGrowth Sample Question K-2 Math



The domino shows one way to make 5.



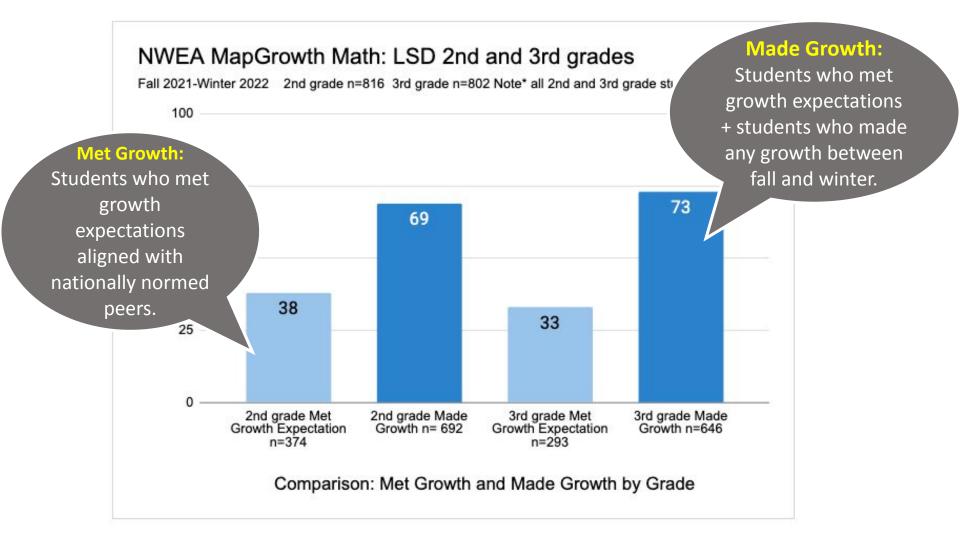
Move dots to the empty domino to show a different way to make 5.





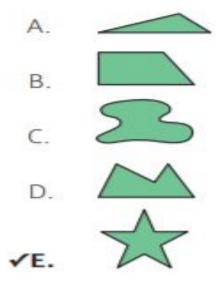






### MAPGrowth Sample Question 2-5 Math

#### Which shape has symmetry?

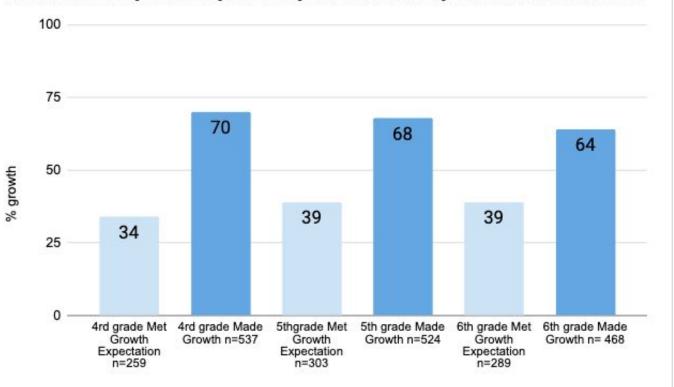






#### NWEA MapGrowth Math: LSD 4th-6th grades

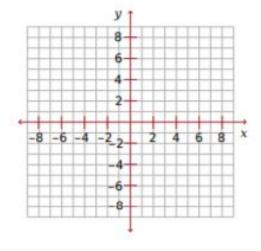
Fall 2021-Winter 2022 4th grade n=720 5th grade n=699 6th grade n= 660 Note\* all 4th-6th grade students with Fall and Winter Scores



Comparison: Met Growth and Made Growth by Grade

### MAPGrowth Sample Question 6+ Math - 9th Grade

Move the point to the coordinates (-5, 6).



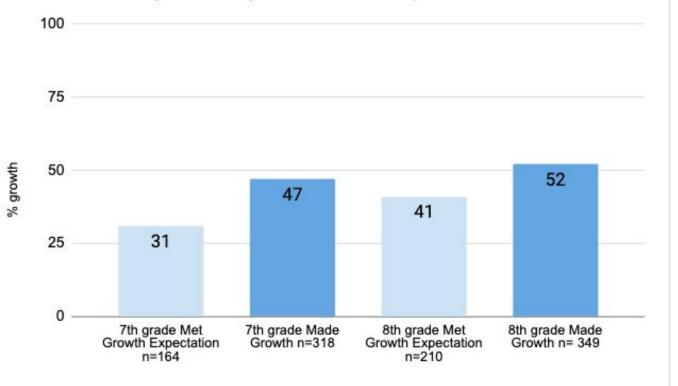






#### NWEA MapGrowth Math: LSD 7th-8th grades

Fall 2021-Winter 2022 7th grade n=554 8th grade n=549 Note\* all 7th-8th grade students with Fall and Winter Scores



Comparison: Met Growth and Made Growth by Grade

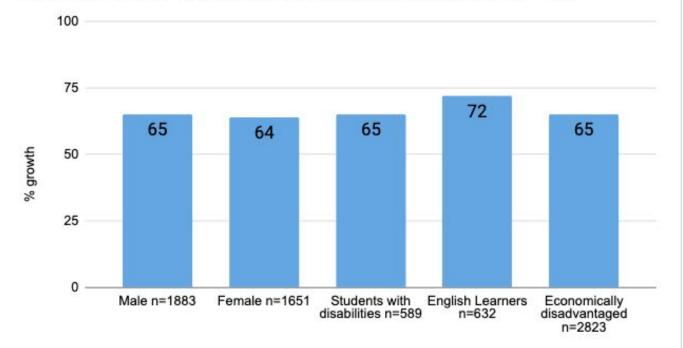


## Growth by Demographic Subgroups

Mathematics 2nd-8th

#### NWEA MapGrowth: Math LSD 2nd-8th Grades by Demographic Subgroups

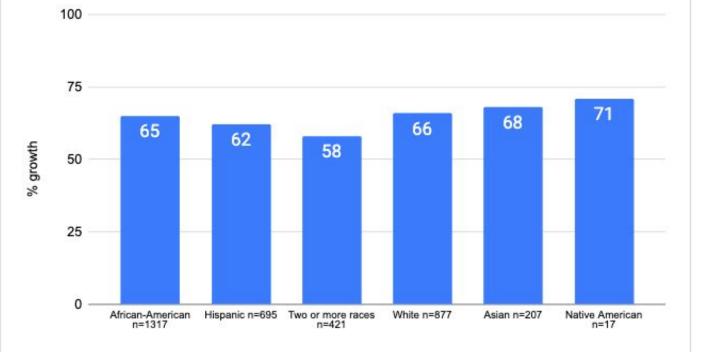
Fall 2021-Winter 2022 2nd-8th grade students with fall and winter Scores n= 4800



Made Growth by Demographic Subgroup

# NWEA MapGrowth: Math LSD 2nd-8th grades by Racial Demographics

Fall 2021-Winter 2022 2nd-8th grade students with fall and winter Scores n= 4800



Made Growth by Racial Subgroup

## Key Takeaways and Considerations

 Significant increase of students meeting growth benchmarks from K/1st levels

- Students learn about mathematical concepts through manipulatives and hands on activities
- Continue to see students making equitable growth across subgroups regardless of grade level
- Students still not growing at the expected rate





# Reading

2nd through 8th grade

### NWEA Map Growth 2021-22 Benchmarks - Reading

Nationally normed to the 50th percentile

Grade	Measure Measure	Fall	Winter	Spring
Reading (2	Reading (2 - 3)			
2	MAP Growth K-2; MAP Growth 2-5	172	181	186
3	MAP Growth 2-5	187	193	197
Reading (4	Reading (4 - 6)			
4	MAP Growth 2-5	197	203	205
5	MAP Growth 2-5	204	209	211
6	MAP Growth 2-5	210	214	215
Reading (7- 8)				
7	Map Growth 6+	214	217	218
8	Map Growth 6+	218	221	221



## NWEA MAP Growth - Reading Performance, Pre-Covid

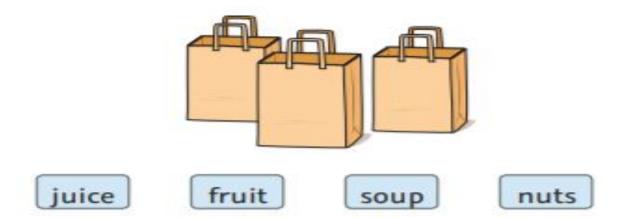
(Nationally normed to the 50th percentile)

Grade	Measure	2021-22 Winter Benchmark score	2019-20 Mean Benchmark Score	2021-22 Mean Benchmark Score
Reading 2-3				
2nd	MAP Growth K-2; MAP Growth 2-5	181	n/a	165
3rd	MAP Growth 2-5	194	n/a	178
R				
4th	MAP Growth 2-5	203	191	187
5th	MAP Growth 2-5	209	198	193
6th	MAP Growth 6+	213	194	199
R				
7th	MAP Growth 6+	217	204	201
8th	MAP Growth 6+	221	208	203



### MAPGrowth Sample Question K-2 Reading

Mr. Lee made lunch for his sons each day. Each son liked some foods best. The oldest son liked nuts and fruit. The middle son liked fruit and string cheese. The youngest son liked soup, fruit, and juice.

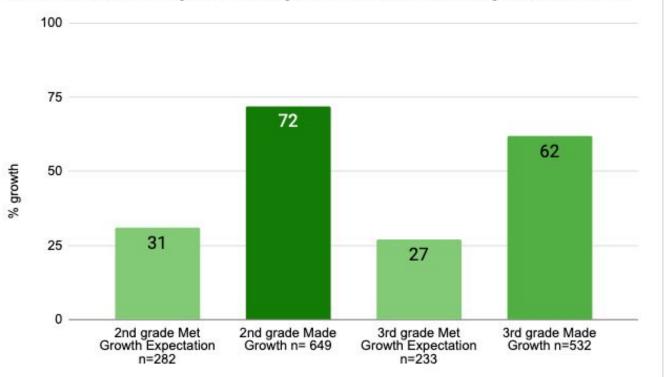






#### NWEA MapGrowth: Reading LSD 2nd and 3rd grades

Fall 2021-Winter 2022 2nd grade n=817 3rd grade n=815 Note\* all 2nd and 3rd grade students with F...



Comparison: Met Growth and Made Growth by Grade

## MAPGrowth Sample Question 2-5 Reading

#### Read the sentences.

Jackie couldn't believe how much fun she had on the field trip. She kept <u>replaying</u> the day's events in her mind on the bus ride back to school.

# In the word "replaying," what does the prefix re- mean?

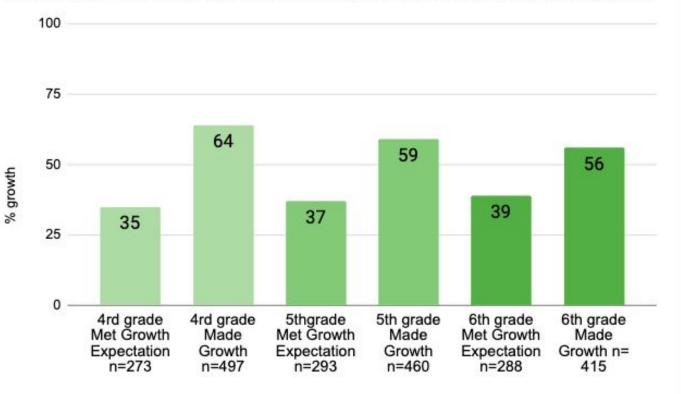
- 1. not
- 2. two
- √ 3. again
  - 4. after





#### NWEA MapGrowth: Reading LSD 4th-6th grades

Fall 2021-Winter 2022 4th grade n=726 5th grade n=698 6th grade n= 668 Note\* all 4th-6th grade students with Fall and Winter Scores



Comparison: Met Growth and Made Growth by Grade

### MAPGrowth Sample Question 6+ - Informational Text

#### Read the passage.

We observe today not a victory of party but a celebration of freedom—symbolizing an end as well as a beginning—signifying renewal as well as change. For I have sworn before you and Almighty God the same solemn oath our forbears prescribed nearly a century and three-quarters ago. (passage continues) ("Inaugural Address" by John F. Kennedy)

## Which statement best describes the main idea of this passage?

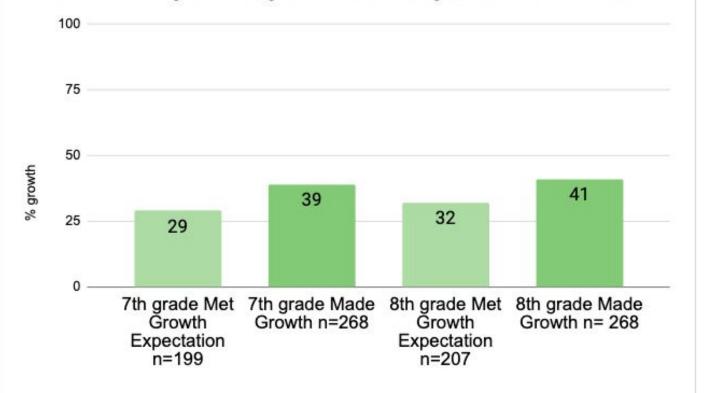
- The past generations have secured freedom for the future.
- ✓ 2. The responsibilities of freedom rest with the individual.
  - 3. Global alliances are the key to freedom for all people.
  - Well-equipped armies will fight to defend freedom.





#### NWEA MapGrowth: Reading LSD 7th and 8th grades

Fall 2021-Winter 2022 7th grade n=557 8th grade n=547 Note\* all 7th-8th grade students with Fall and Winter Scores



Comparison: Met Growth and Made Growth by Grade

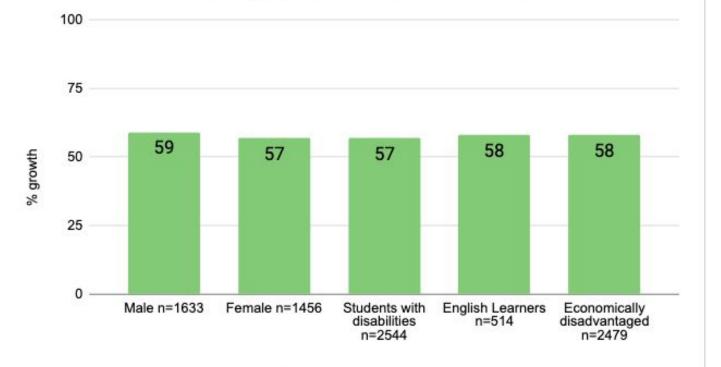


## Growth by Demographic Subgroups

Reading 2nd-8th

#### NWEA MapGrowth: Reading LSD 2nd-8th grades by Demographic Subgroups

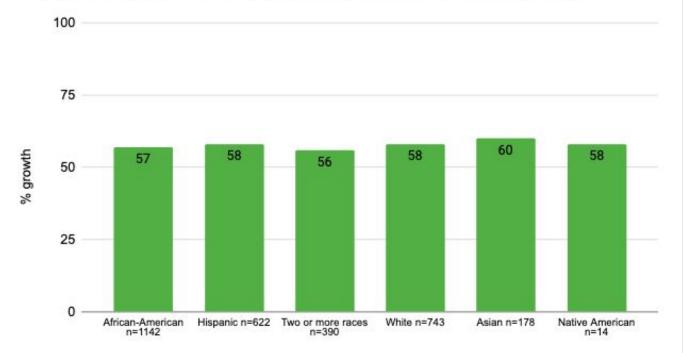
Fall 2021-Winter 2022 2nd-8th grade students with Fall and Winter Scores n= 4828



Made Growth by Demographic Subgroup

# NWEA MapGrowth: Reading LSD 2nd-8th grades by Racial Subgroup

Fall 2021-Winter 2022 2nd-8th grade students with Fall and Winter Scores n= 4828



Made Growth by Racial Subgroup

## Key Takeaways and Considerations

- 6th graders in 2021-2022 scored at a higher level than our 6th graders pre-COVID
- As you have seen across all K-8 data, in both reading and mathematics, for students below benchmark, we observed comparable growth across subgroups
- A reduction in the percentage of students growing as grade levels increase raises the question of additional influences on progress (i.e. attendance, engagement)
- Targeted interventions with ongoing progress monitoring



## Summary and Next Steps

- Our students are growing!
- Pedagogically, how can we think differently about providing hands on instructional support for our students in mathematics?
- Continue to develop COVID conscious instructional practices to drive academic growth and achievement to meet mastery goals in both literacy and mathematics.
- Provide ongoing monthly reports to the Board sharing deeper data analyses as we plan strategic support for increasing the level of mastery in student learning outcomes.



