

# State of the District Academic Proficiency & Growth

Board of Education  
May 5, 2022



**ARLINGTON HEIGHTS**  
**SCHOOL DISTRICT 25**



**ECRA** Group  
Education | Consulting | Research | Analytics

# Tonight's Focus: State of the District

- Academic Proficiency
- Academic Growth
- Student Groups
- Academic Return on Investment (ROI)

# Achievement Proficiency and Growth

## Proficiency

References attainment at one point in time. For example, status can refer to an individual student's score on a test or the percentage of students who met the state standards in Math or ELA.

## Growth

Examines how much students learn, or grow, across multiple assessments over time.

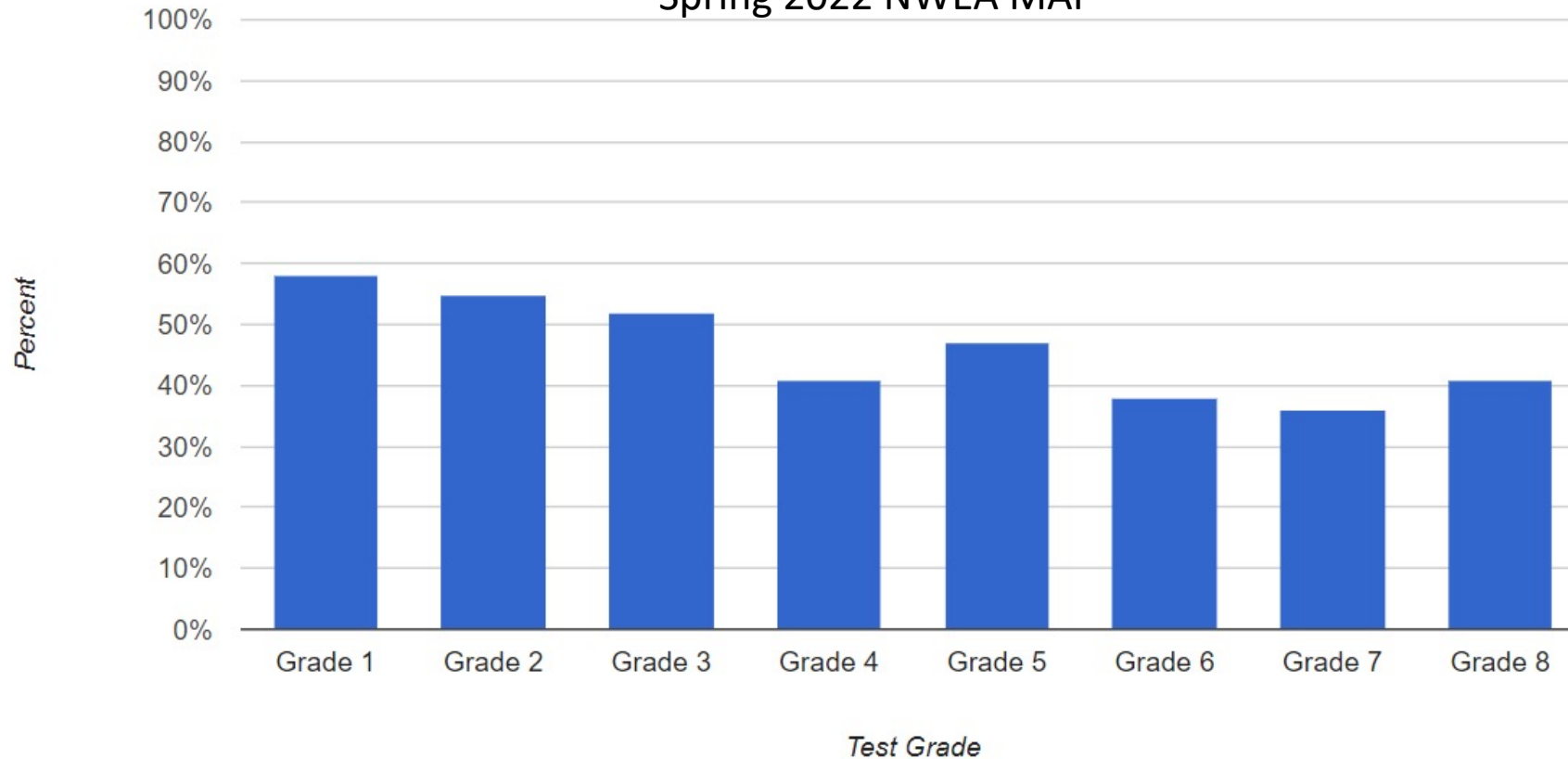


**Growth is a more equitable approach to assessing improvement efforts.**

# Academic Proficiency

# District Proficiency – Math

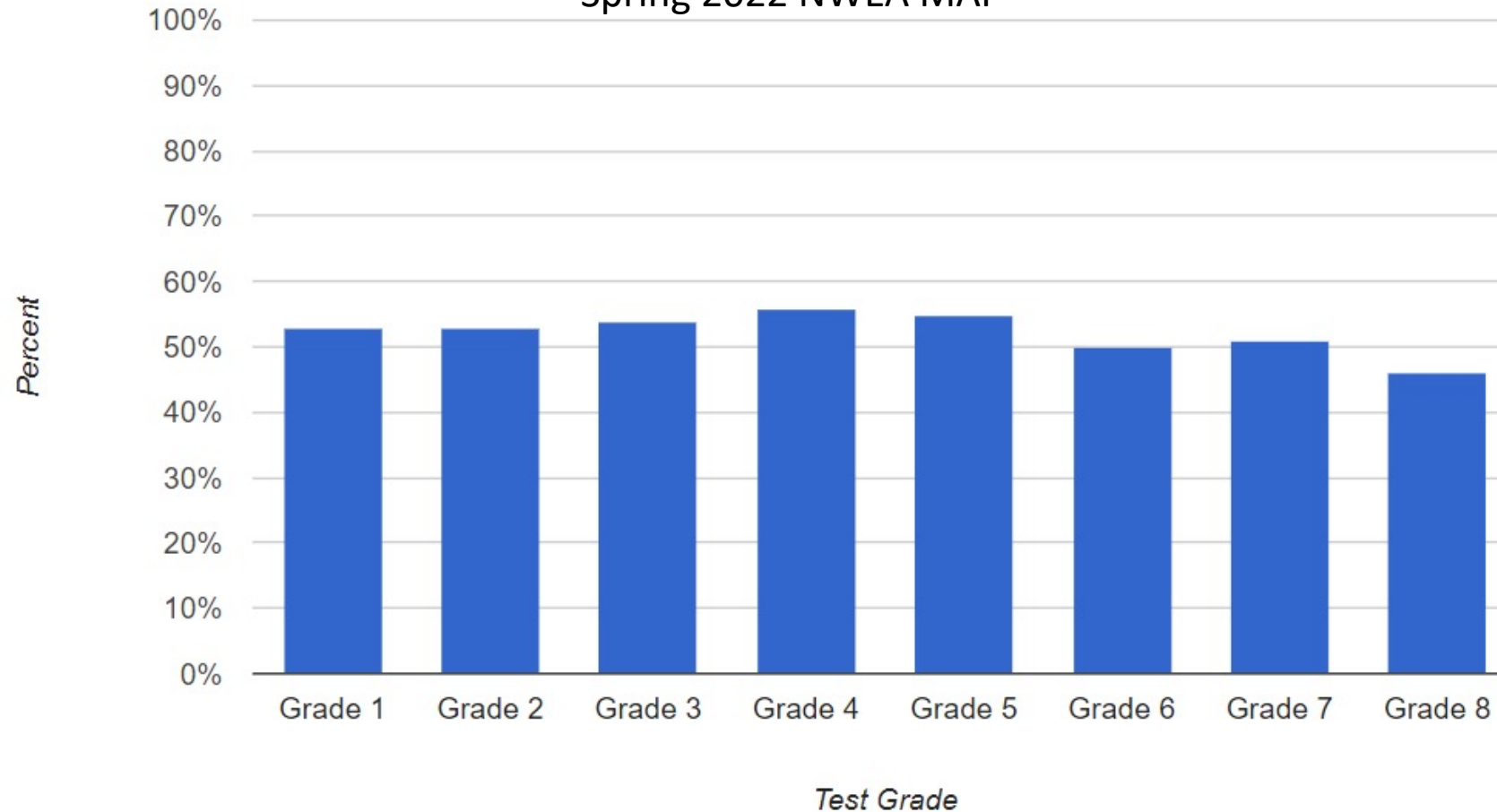
Percent Meeting/Exceeding Proficiency  
Spring 2022 NWEA MAP



School Year	Test Grade	Percentage of Students Meeting Standard	Number of Students Meeting Standards	Student Record Count
All Selected	All Selected	46%	2,128	4,643

# District Proficiency – Reading

Percent Meeting/Exceeding Proficiency  
Spring 2022 NWEA MAP

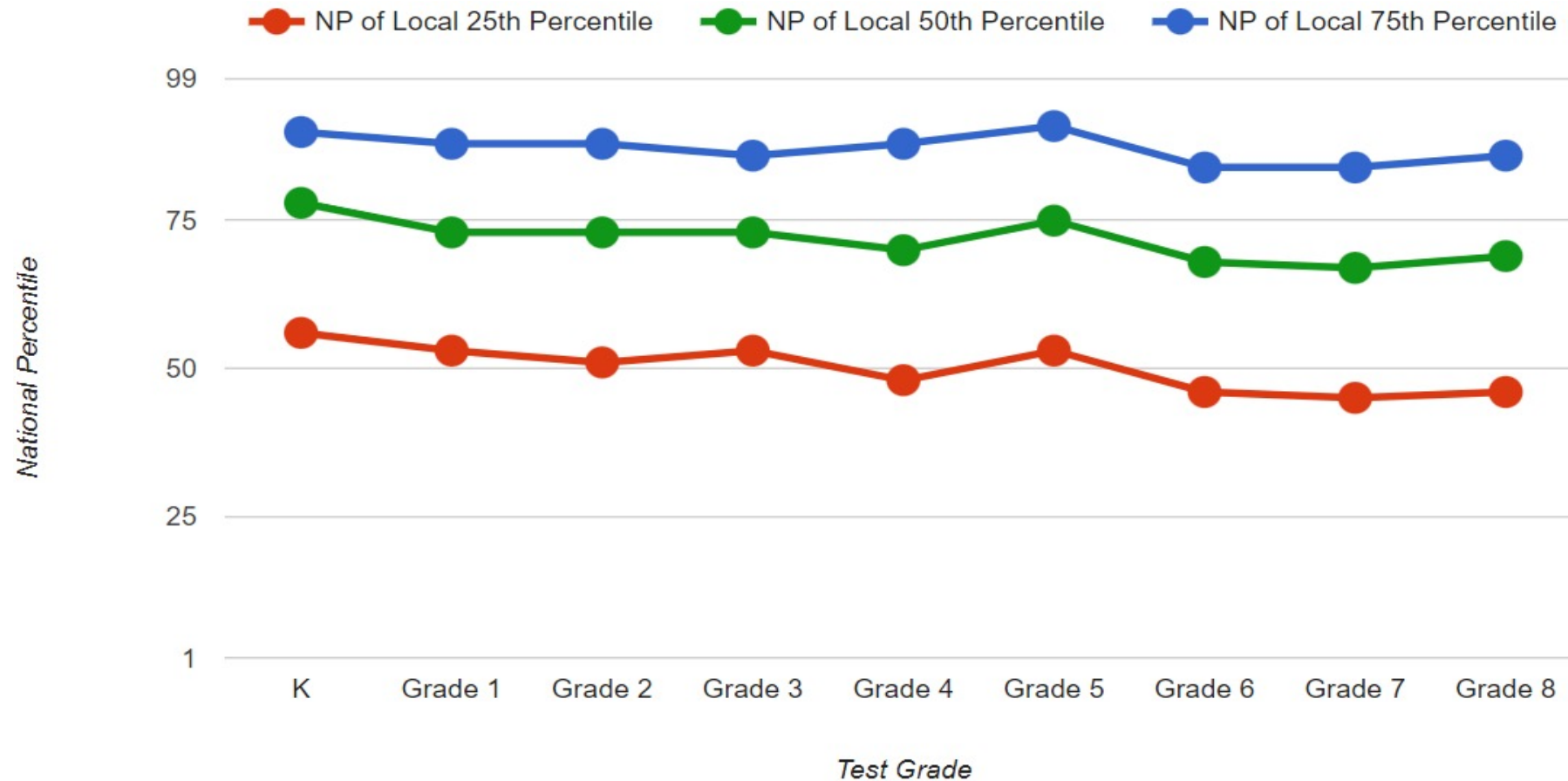


School Year	Test Grade	Percentage of Students Meeting Standard	Number of Students Meeting Standards	Student Record Count
All Selected	All Selected	52%	2,421	4,639



# National Benchmark-Math

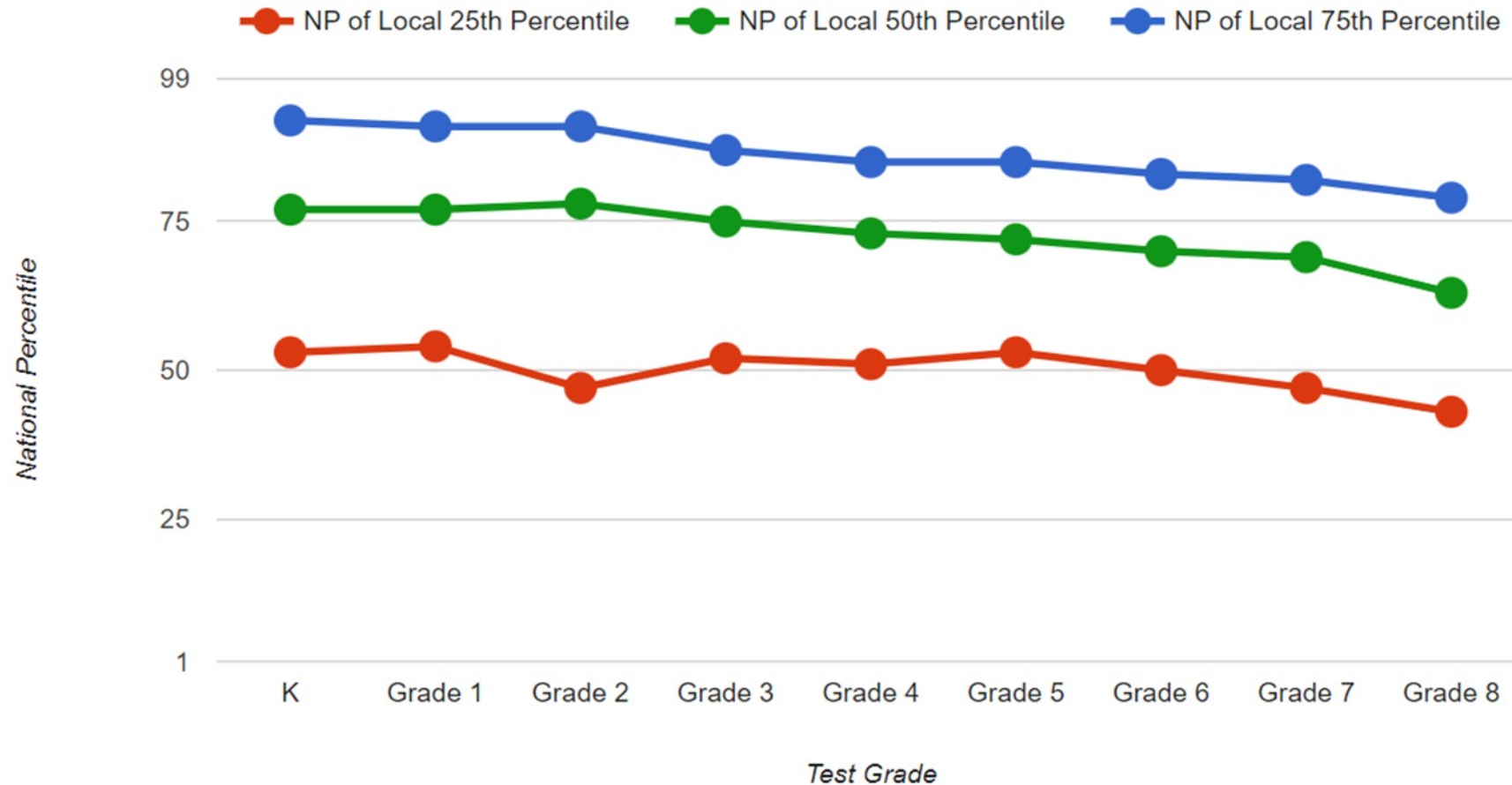
Local Percentile vs. National Percentile by Grade  
Spring 2022 NWEA MAP



Test Grade	NP of Local 25th Percentile	NP of Local 50th Percentile	NP of Local 75th Percentile	Student Count
All Selected	50	72	87	5,102

# National Benchmark-Reading

Local Percentile vs. National Percentile by Grade  
Spring 2022 NWEA MAP



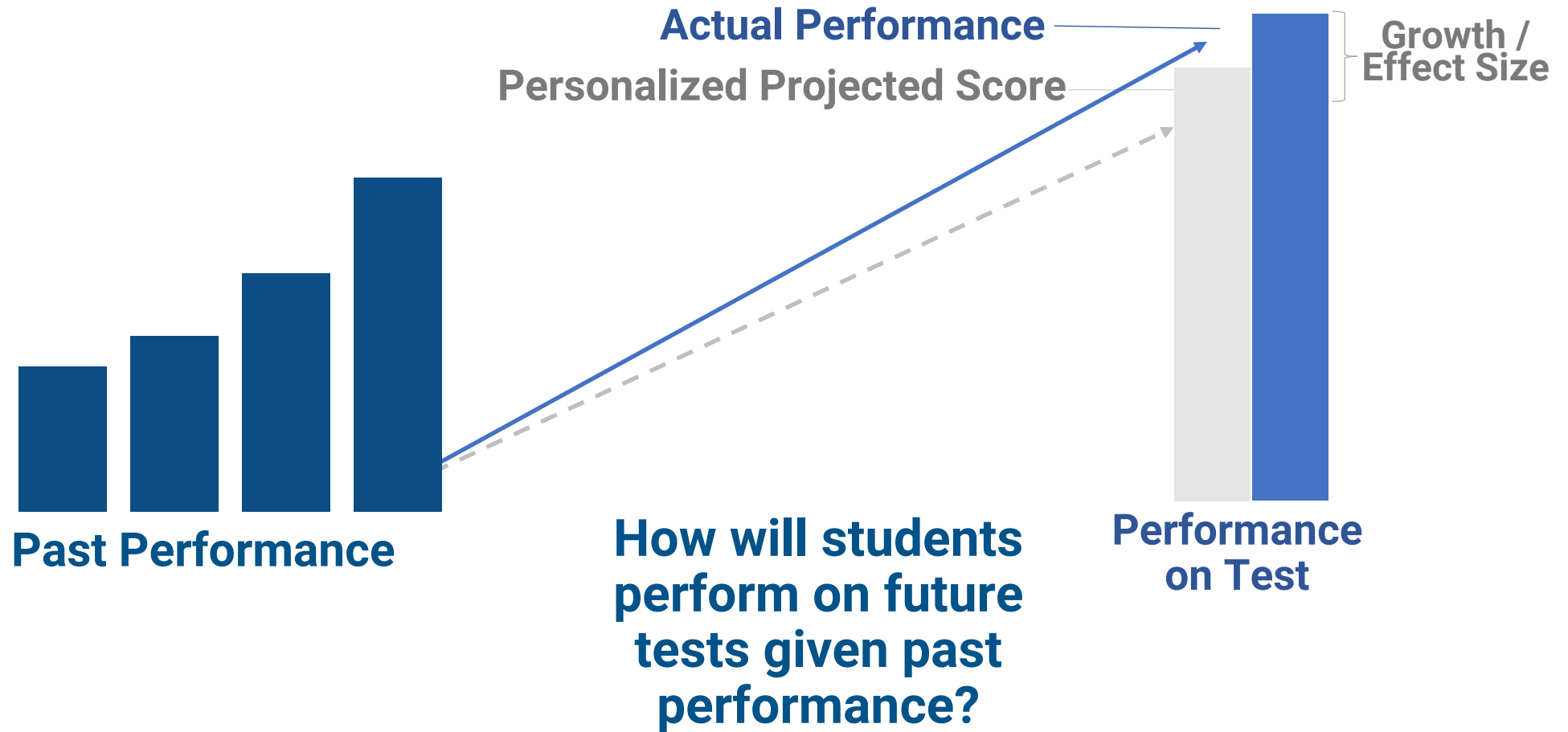
Test Grade	NP of Local 25th Percentile	NP of Local 50th Percentile	NP of Local 75th Percentile	Student Count
All Selected	49	72	86	5,100





# Academic Growth

# A Projection versus Actual Framework



# ECRA Thresholds for Effect Sizes and Growth Inference

Statistical Test	Aggregate Growth Threshold	Growth Inference	
Not Significant	Any	Expected	
Significant*	Growth is +0.30 or above	Higher than Expected	
	Growth from -0.29 to + 0.29	Expected	
	Growth from -0.30 to -0.59	Lower than Expected	
	Growth is -0.60 or below	Unsatisfactory	

\*"Significant" refers to a  $p < 0.05$  for a two-tailed test

# Academic Growth-Math

Subject:

**Mathematics**

Growth Year: 2021-2022

Growth Comparison Group: Local District

Term: Spring


Overall Growth

+ 0.23



Expected Growth

Student Growth by Grade

Grade	Student Count^	% Met Benchmark	% High Growth	% Expected Growth	% Low Growth	Growth Effect Size
03	503	53%	25%	66%	10%	+ 0.35 
04	538	41%	33%	55%	11%	+ 0.44 
05	522	47%	28%	61%	11%	+ 0.31 
06	542	38%	19%	61%	20%	- 0.03 
07	522	37%	21%	66%	14%	+ 0.18 
08	550	42%	21%	65%	14%	+ 0.14 



**Higher than Expected Growth**  
Growth is +0.30 or above



**Expected Growth**  
Growth from -0.29 to +0.29



**Lower than Expected Growth**  
Growth from -0.30 to -0.59



**Unsatisfactory Growth**  
Growth is -0.60 or below

# Academic Growth-Reading

Subject:

**Reading**

Growth Year: **2021-2022**

Growth Comparison Group: **Local District**

Term: **Spring**

**Overall Growth**

**+ 0.17**



**Expected Growth**

**Student Growth by Grade**

Grade	Student Count^	% Met Benchmark	% High Growth	% Expected Growth	% Low Growth	Growth Effect Size
03	503	55%	24%	65%	12%	+ 0.24
04	539	57%	30%	60%	10%	+ 0.38
05	521	54%	27%	62%	11%	+ 0.32
06	541	50%	21%	64%	16%	+ 0.12
07	523	50%	18%	66%	16%	+ 0.02
08	549	47%	17%	64%	19%	- 0.07



**Higher than Expected Growth**  
Growth is +0.30 or above



**Expected Growth**  
Growth from -0.29 to +0.29



**Lower than Expected Growth**  
Growth from -0.30 to -0.59
















**Unsatisfactory Growth**  
Growth is -0.60 or below

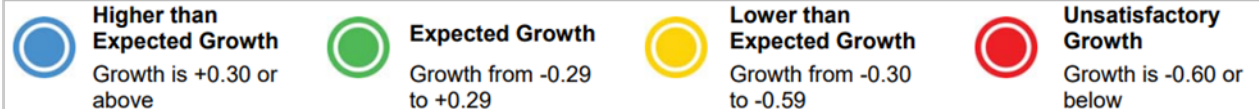
# Student Groups

# Student Groups-Math

Spring 2022 NWEA MAP

Growth by Student Group














Group	Student Group	Student Count^	% Met Benchmark	% High Growth	% Expected Growth	% Low Growth	Growth Effect Size
ELL	ELL	187	16%	24%	62%	14%	+ 0.24 
ELL	Not ELL	2,990	45%	24%	62%	13%	+ 0.23 
Ethnicity	Asian	379	63%	31%	57%	12%	+ 0.39 
Ethnicity	Black	42	14%	12%	76%	12%	+ 0.06 
Ethnicity	Hispanic	229	23%	21%	64%	15%	+ 0.13 
Ethnicity	Other	35	37%	14%	60%	26%	- 0.17 
Ethnicity	White	2,492	42%	24%	62%	13%	+ 0.22 
Gender	Female	1,569	37%	20%	65%	15%	+ 0.13 
Gender	Male	1,608	49%	28%	59%	12%	+ 0.33 
IEP	IEP	339	9%	18%	61%	21%	- 0.07 
IEP	No IEP	2,838	47%	25%	62%	13%	+ 0.26 
Income	Low Income	424	26%	21%	61%	19%	+ 0.10 
Income	Not Low Income	2,753	46%	25%	62%	13%	+ 0.25 

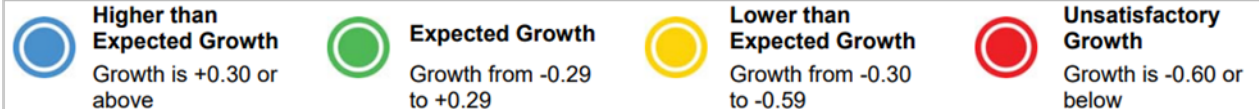


# Student Groups-Reading

Spring 2022 NWEA MAP

## Growth by Student Group

Group	Student Group	Student Count^	% Met Benchmark	% High Growth	% Expected Growth	% Low Growth	Growth Effect Size
ELL	ELL	188	16%	23%	59%	18%	+ 0.13 
ELL	Not ELL	2,988	54%	23%	64%	14%	+ 0.17 
Ethnicity	Asian	381	63%	21%	67%	12%	+ 0.15 
Ethnicity	Black	42	26%	19%	71%	10%	+ 0.24 
Ethnicity	Hispanic	230	32%	20%	66%	14%	+ 0.12 
Ethnicity	Other	35	60%	20%	66%	14%	+ 0.19 
Ethnicity	White	2,488	53%	23%	63%	14%	+ 0.17 
Gender	Female	1,572	55%	23%	65%	12%	+ 0.22 
Gender	Male	1,604	50%	22%	62%	16%	+ 0.11 
IEP	IEP	338	14%	20%	59%	21%	- 0.06 
IEP	No IEP	2,838	57%	23%	64%	13%	+ 0.19 
Income	Low Income	425	34%	21%	63%	16%	+ 0.11 
Income	Not Low Income	2,751	55%	23%	63%	13%	+ 0.18 





# Academic Return on Investment

# Academic ROI

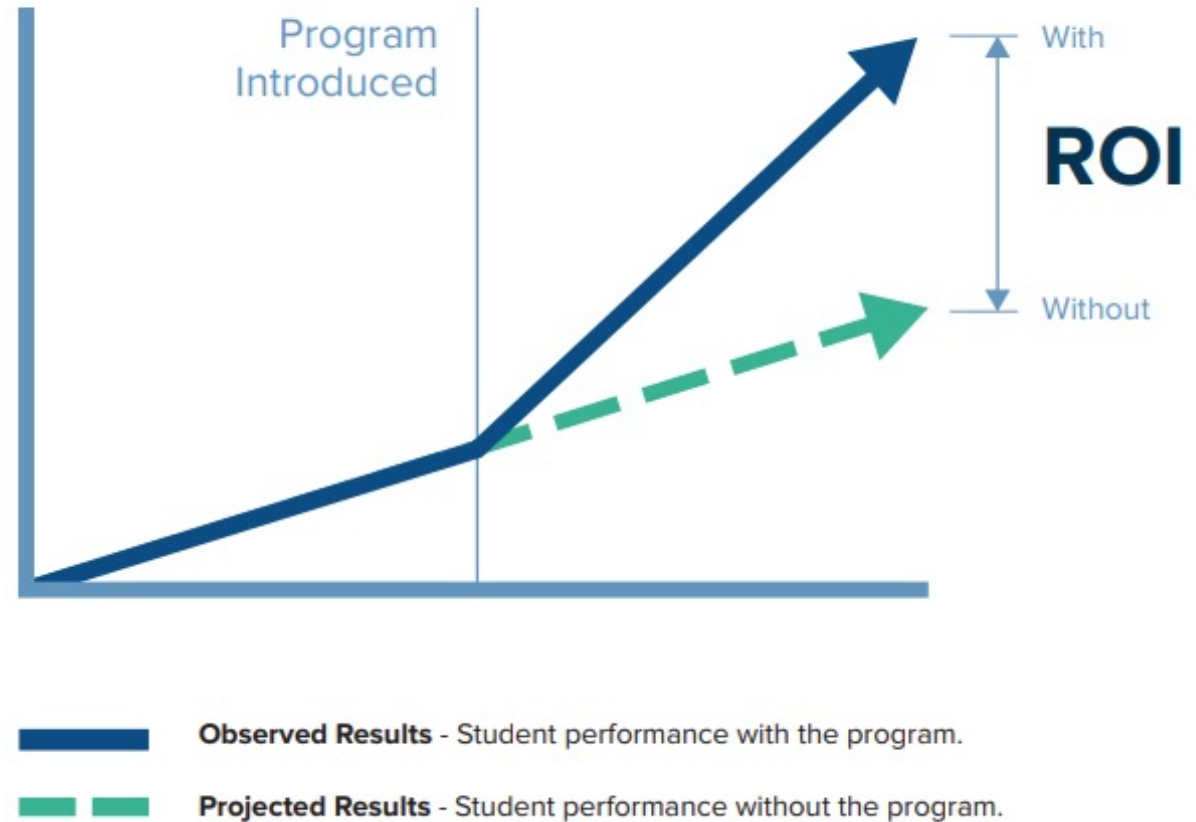
Academic ROI quantifies the impact of an investment on student growth above and beyond growth that would have happened anyway.

## Districts often ask:

“How did students in the program grow?”

## Academic ROI asks:





“How did students in the program grow compared to how they would have grown without the program?”

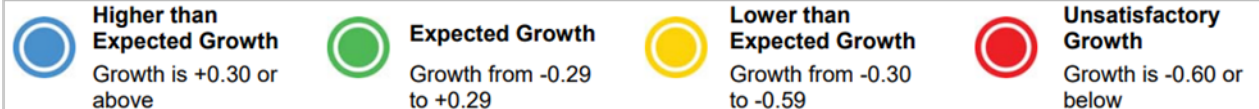


# Academic ROI-Math

Spring 2022 NWEA MAP

Student Growth by Programs and Other Groups





Group	Student Group	Student Count^	% Met Benchmark	% High Growth	% Expected Growth	% Low Growth	Growth Effect Size
Advanced Math	No - Advanced Math	2,270	31%	22%	63%	16%	+ 0.12 
Advanced Math	Yes - Advanced Math	404	99%	39%	54%	6%	+ 0.69 
Math Intervention	No - Math Intervention	3,044	45%	25%	62%	14%	+ 0.23 
Math Intervention	Yes - Math Intervention	132	2%	19%	70%	11%	+ 0.29 



# Academic ROI-Reading

Spring 2022 NWEA MAP

Student Growth by Programs and Other Groups

Group	Student Group	Student Count^	% Met Benchmark	% High Growth	% Expected Growth	% Low Growth	Growth Effect Size
Advanced Language Arts	No - Advanced Language Arts	1,443	43%	18%	65%	17%	- 0.01 
Advanced Language Arts	Yes - Advanced Language Arts	170	98%	28%	59%	12%	+ 0.28 
Reading Intervention	No - Reading Intervention	3,081	54%	23%	64%	14%	+ 0.17 
Reading Intervention	Yes - Reading Intervention	95	4%	29%	54%	17%	+ 0.23 

# Summary

- Students significantly outperform the nation in both mathematics and reading proficiency.
- Overall district level growth is consistent with pre-pandemic norms. Growth is significantly higher than expected in several grade levels.
- Proficiency gaps exist between student groups. However, student groups are growing at similar rates. To close gaps, lower performing groups have to grow at higher rates.
- Students in advanced math courses are growing at higher rates. Students in math interventions are growing at expected rates but trending higher.
- Students in advanced language arts courses are growing at expected rates but trending higher. Students in reading interventions are growing at expected rates but trending higher.

# Questions?

