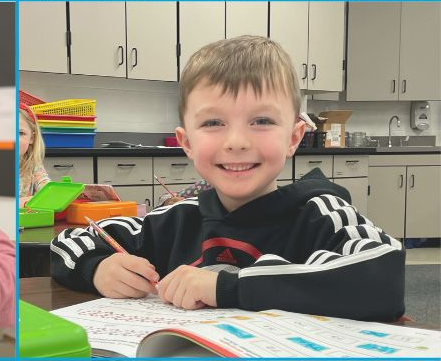# Assessment Update Spring 2023

June 13, 2023

Dr. Eleni Speron
Mrs. Amanda Czerniuk
Dr. Becky FitzPatrick

ARLINGTON HEIGHTS SCHOOL DISTRICT 25
A 25
TOGETHER TODAY TO TRANSFORM TOMORROW

Overview

1. Strategic Plan Connection
2. NWEA MAP Proficiency and Growth
3. Strategic Priorities
4. Board Goals

Strategic Plan Connection

Student Achievement Goal

Refine and extend instructional practices, programs and services to ensure all learners are academically ready for high school and beyond.

State of the District
Academic Proficiency & Growth

Board of Education
June 13, 2023

Eleni Speron, Ph.D.

Overview

- 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

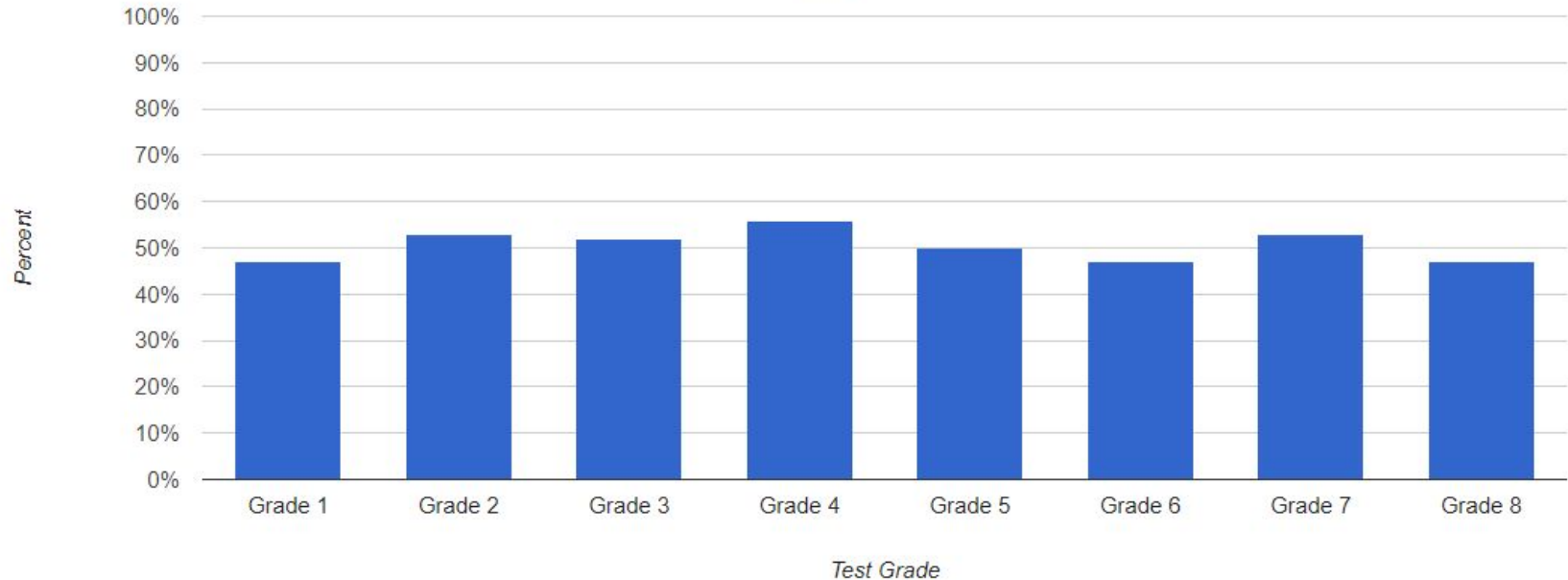Examines how much students learn, or grow, across multiple assessments over time.

Growth is a more equitable approach to assessing improvement efforts.

Academic Proficiency

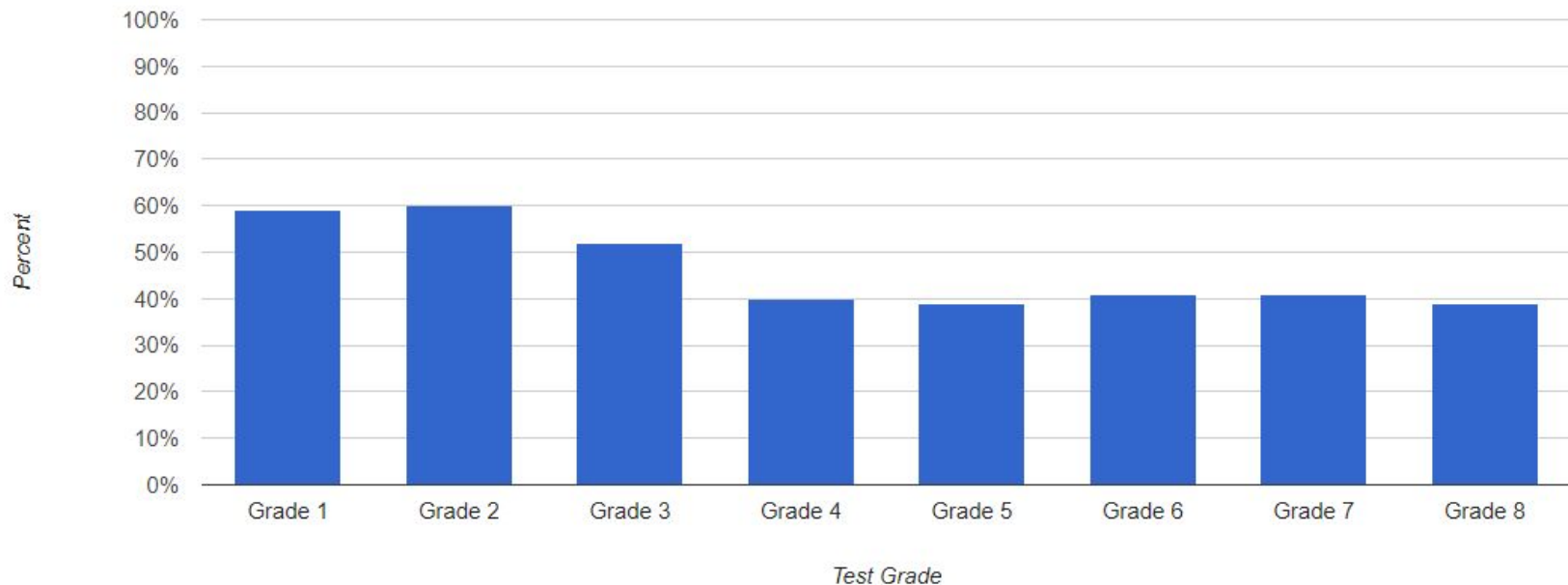# Reading Proficiency
Spring 2023 NWEA MAP

| School Year	Test Grade	Percentage of Students Meeting Standard	Number of Students Meeting Standards	Student Record Count
All Selected	All Selected	51%	2,350	4,640

Math Proficiency
Spring 2023 NWEA MAP

| School Year	Test Grade	Percentage of Students Meeting Standard	Number of Students Meeting Standards	Student Record Count
All Selected	All Selected	46%	2,153	4,646

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National Benchmark-Reading

Local vs. National Percentile by Grade
Spring 2023 NWEA MAP
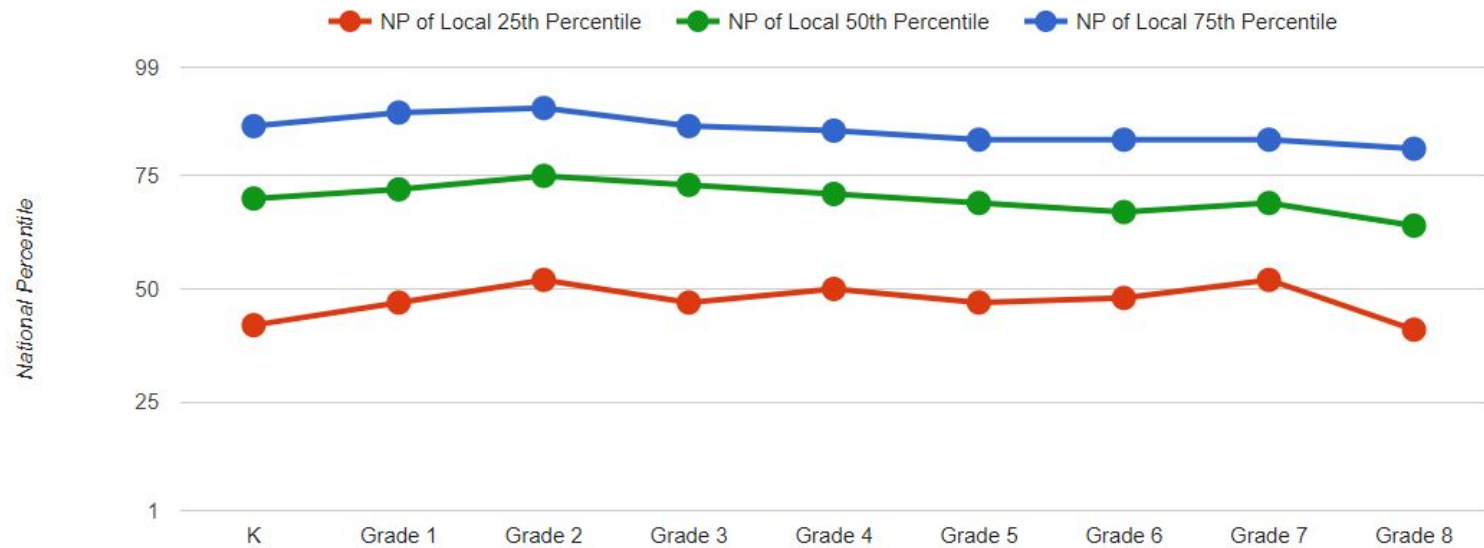
| | NP of Local 25th Percentile | NP of Local 50th Percentile | NP of Local 75th Percentile |

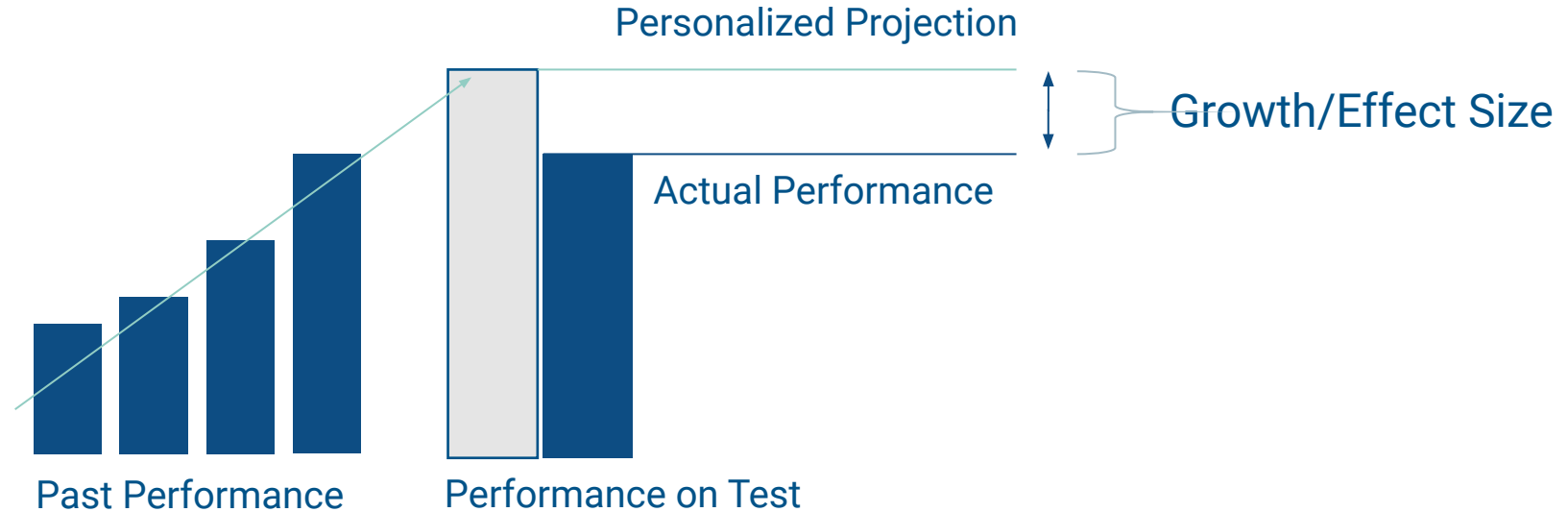| Test Grade	NP of Local 25th Percentile	NP of Local 50th Percentile	NP of Local 75th Percentile	Student Count
All Selected	48	70	85	5,057

National Benchmark-Math

Local vs. National Percentile by Grade
Spring 2023 NWEA MAP
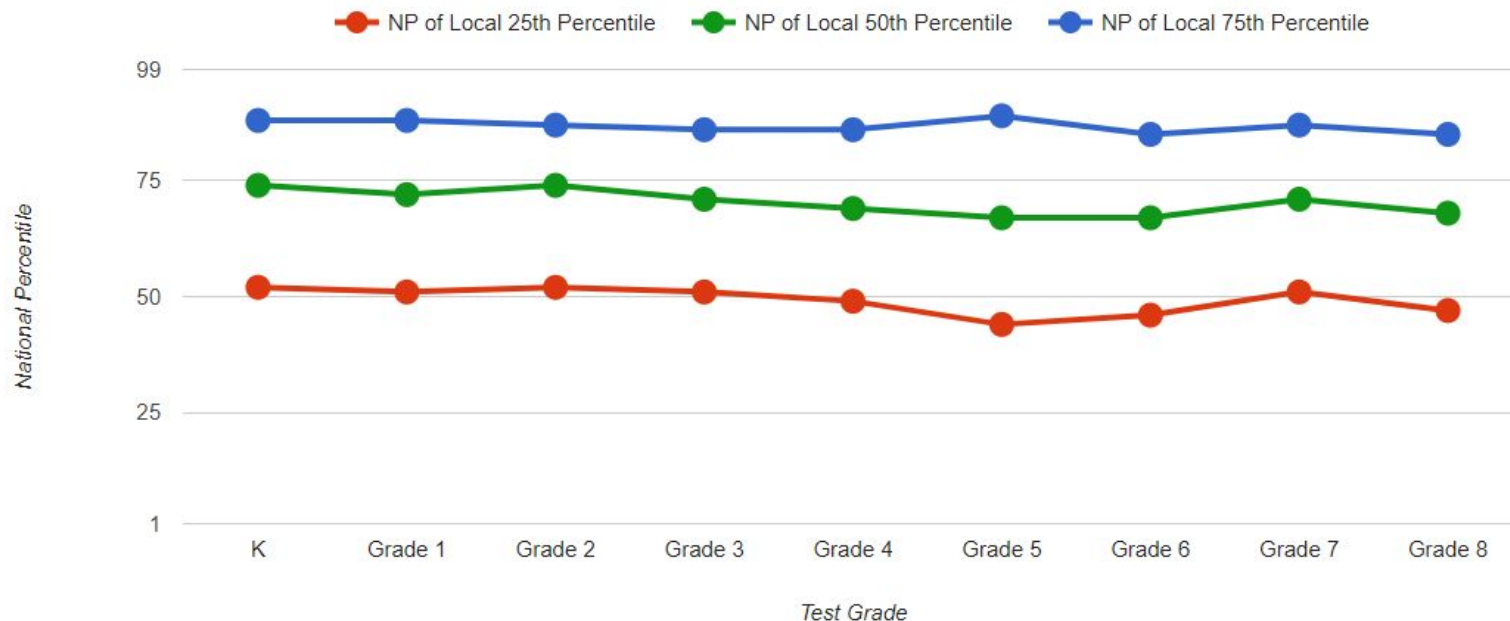
Test Grade	NP of Local 25th Percentile	NP of Local 50th Percentile	NP of Local 75th Percentile	Student Count
All Selected	49	70	87	5,065

Academic Growth

A Predictive versus Actual Framework

Personalized Projection

Growth/Effect Size

Actual Performance

Past Performance

Performance on Test

How to Interpret Results

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

Reading Growth
NWEA MAP

Subject:
Reading

Growth Year: **2022-2023**

Growth Comparison Group: **Local District**

Term: **Spring**

Overall Growth

+ 0.08 ⬤ Expected Growth

Student Growth by Grade

Grade	Student Count^	% Met Benchmark	% High Growth	% Expected Growth	% Low Growth	Growth Effect Size	
K	394	N/A	21%	62%	18%	+ 0.01	⬤
01	551	48%	17%	69%	13%	+ 0.10	⬤
02	559	53%	13%	73%	14%	- 0.01	⬤
03	504	53%	19%	68%	13%	+ 0.11	⬤
04	557	56%	17%	68%	15%	0.00	⬤
05	552	51%	22%	68%	10%	+ 0.26	⬤
06	545	48%	22%	65%	12%	+ 0.19	⬤
07	570	53%	20%	67%	13%	+ 0.10	⬤
08	558	48%	17%	63%	20%	- 0.08	⬤
ALL	4,790	51%	19%	67%	14%	+ 0.08	⬤
EXPECTED			16%	68%	16%	0.00	

* Dot color is green for all growth scores that are not statistically significant
^ Student count only includes students with at least 2 predictors

**Percentages may not add to 100 due to rounding
***Results not reported for groups with fewer than 5 students

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

Math Growth
NWEA MAP

Subject:
Mathematics

Growth Year: **2022-2023**

Growth Comparison Group: **Local District**

Term: **Spring**

Overall Growth

+ 0.04 🟢 **Expected Growth**

Student Growth by Grade

Grade	Student Count^	% Met Benchmark	% High Growth	% Expected Growth	% Low Growth	Growth Effect Size	
K	393	N/A	24%	60%	16%	+ 0.15	🟢
01	552	60%	23%	67%	11%	+ 0.26	🟢
02	560	60%	13%	66%	21%	- 0.09	🟢
03	505	53%	19%	65%	16%	+ 0.09	🟢
04	559	40%	15%	63%	22%	- 0.14	🟢
05	550	40%	11%	68%	21%	- 0.19	🟢
06	544	42%	18%	61%	20%	0.00	🟢
07	570	42%	24%	64%	11%	+ 0.32	🔵
08	553	41%	19%	61%	20%	- 0.01	🟢
ALL	4,786	47%	18%	64%	18%	+ 0.04	🟢
EXPECTED			16%	68%	16%	0.00	

* Dot color is green for all growth scores that are not statistically significant

^ Student count only includes students with at least 2 predictors

**Percentages may not add to 100 due to rounding

***Results not reported for groups with fewer than 5 students

🔵 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

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Student Groups

Reading Growth
Spring 2023 NWEA MAP

Growth by Student Group

Group	Student Group	Student Count^	% Met Benchmark	% High Growth	% Expected Growth	% Low Growth	Growth Effect Size
ELL	ELL	390	16%	15%	67%	18%	- 0.12
ELL	Not ELL	4,400	54%	19%	67%	14%	+ 0.10
Ethnicity	Asian	576	64%	18%	68%	13%	+ 0.09
Ethnicity	Black	50	30%	10%	66%	24%	- 0.15
Ethnicity	Hispanic	418	35%	14%	68%	18%	- 0.08
Ethnicity	Other	38	62%	26%	61%	13%	+ 0.10
Ethnicity	White	3,708	51%	19%	67%	14%	+ 0.10
Gender	Female	2,313	55%	21%	68%	12%	+ 0.17
Gender	Male	2,477	48%	17%	67%	16%	0.00
IEP	IEP	482	11%	12%	66%	21%	- 0.20
IEP	No IEP	4,308	56%	19%	67%	13%	+ 0.11
Income	Low Income	556	30%	18%	63%	19%	- 0.03
Income	Not Low Income	4,234	54%	19%	68%	14%	+ 0.09
EXPECTED			16%	68%	16%	0.00

* Dot color is green for all growth scores that are not statistically significant

^ Student count only includes students with at least 2 predictors

**Percentages may not add to 100 due to rounding

***Results not reported for groups with fewer than 5 students

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

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Math Growth
Spring 2023 NWEA MAP

Growth by Student Group

Group	Student Group	Student Count^	% Met Benchmark	% High Growth	% Expected Growth	% Low Growth	Growth Effect Size
ELL	ELL	392	23%	19%	64%	17%	+ 0.10 🟢
ELL	Not ELL	4,394	49%	18%	64%	18%	+ 0.03 🟢
Ethnicity	Asian	577	64%	21%	63%	16%	+ 0.14 🟢
Ethnicity	Black	50	24%	12%	64%	24%	- 0.28 🟢
Ethnicity	Hispanic	417	29%	13%	67%	20%	- 0.09 🟢
Ethnicity	Other	38	46%	26%	58%	16%	+ 0.18 🟢
Ethnicity	White	3,704	47%	19%	64%	18%	+ 0.04 🟢
Gender	Female	2,313	41%	15%	66%	20%	- 0.08 🟢
Gender	Male	2,473	53%	22%	62%	16%	+ 0.15 🟢
IEP	IEP	483	13%	17%	62%	22%	- 0.11 🟢
IEP	No IEP	4,303	51%	19%	64%	17%	+ 0.06 🟢
Income	Low Income	551	26%	18%	64%	18%	+ 0.02 🟢
Income	Not Low Income	4,235	50%	18%	64%	18%	+ 0.04 🟢
EXPECTED			16%	68%	16%	0.00

* Dot color is green for all growth scores that are not statistically significant

^ Student count only includes students with at least 2 predictors

**Percentages may not add to 100 due to rounding

***Results not reported for groups with fewer than 5 students

🔵 Higher than Expected Growth	🟢 Expected Growth	🟡 Lower than Expected Growth	🔴 Unsatisfactory Growth
Growth is +0.30 or above	Growth from -0.29 to +0.29	Growth from -0.30 to -0.59	Growth is -0.60 or below

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Academic Return on Investment

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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?"

Program Introduced

With

ROI

Without

Observed Results - Student performance with the program.

Projected Results - Student performance without the program.
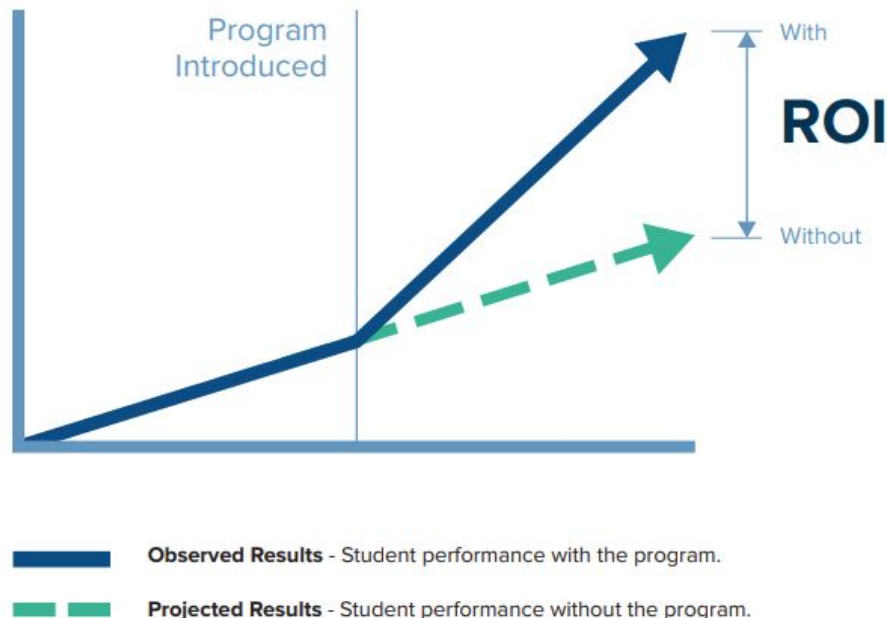
Academic ROI-Reading

Spring 2023 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	1,465	43%	20%	65%	15%	+ 0.06 🟢
Advanced Language Arts	Yes - Advanced Language Arts	208	98%	20%	66%	14%	+ 0.14 🟢
Reading Intervention	No - Reading Intervention	4,360	55%	19%	67%	14%	+ 0.09 🟢
Reading Intervention	Yes - Reading Intervention	430	8%	15%	68%	16%	- 0.06 🟢

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 ROI-Math

Spring 2023 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	2,351	30%	16%	64%	20%	- 0.06 🟢
Advanced Math	Yes - Advanced Math	425	99%	28%	59%	13%	+ 0.34 🔵
Math Intervention	No - Math Intervention	4,457	50%	19%	64%	18%	+ 0.04 🟢
Math Intervention	Yes - Math Intervention	329	2%	13%	71%	16%	- 0.04 🟢

🔵 **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

Summary

- Average district student performs as good or better than 70% of students across the nation in both reading and math.

- Overall district level growth is consistent with historical trends in reading and math.

- Proficiency gaps exist between student groups. However, all student groups are growing at similar rates. To close gaps, lower performing groups must grow at higher rates.

- Students in reading and math interventions are growing at expected rates which shows potential ROI. To provide evidence of academic ROI at the district level, long term efforts need to be maintained.

- Math growth is higher than expected for students in advanced math courses.

Strategic Priorities

Refine and Extend Instructional Practices, Programs, and Services

Refine and Extend Instructional Practices in MATH

- Elementary and middle school math teachers are incorporating research-based practices for **learner-centered, deep mathematical thinking and learning** based on the book study of *Building Thinking Classrooms* by Peter Liljedahl. The new math curriculum will be fully implemented with ongoing professional learning in the fall.

- Elementary math teachers are incorporating the *Building Fact Fluency Toolkit*, focusing on **fact fluency and algebraic reasoning.** The district allocated $107,668 in ESSER funds toward the resource.

- Elementary math interventionists are more closely **aligning intervention services with core instruction** and breaking down math concepts into smaller teachable skills. This builds a strong foundation of numeracy needed to accelerate learning and perform at grade level.

Refine and Extend Instructional Practices in LITERACY

- Elementary teachers are using the research-based *Literacy Footprints* reading system to differentiate **small group instruction and embed learning phonics and words into authentic reading and writing tasks.** The district allocated $457,945 in ESSER funds toward the resource. Next year, an elementary literacy committee will review all instructional practices and curricular resources.

- Middle school literacy teachers, in their second year of implementing a new curriculum, are further incorporating more robust **teacher feedback, student choice, collaboration, and dialogue**, which increase student engagement and achievement.

Refine and Extend Programs and Services

- Four additional ESSER-funded interventionists provide **targeted and responsive support to identified students in need**. The interventionists target both reading and math and are placed at buildings based on student data. The additional interventionists have fluid schedules and support multiple buildings throughout the district. By the end of next year, the district will have allocated $1,052,141 in ESSER funds toward the additional FTE.

- Professional development for elementary and middle school interventionists based on *Wilson Fundations* and *Just Words* has resulted in more **explicit and systematic instruction in foundational literacy skills, including decoding, phonics, phonemic awareness, spelling, and vocabulary**, which are indicators of future reading success.

Board Goals

Considerations for Discussion

Board Goals - Considerations for Discussion

- The Board has expressed an interest in setting high-level student achievement goals in English Language Arts and Mathematics utilizing the Spring MAP and Spring IAR (coming Fall 2023) data.

- D25 administration and teachers have already begun a deep dive into the building level, subgroup level, and program level data.

- D25 administration work towards reviewing the structure of leadership staffing to best impact student achievement is ongoing.

Board Goals - Considerations for Discussion

- The Board could utilize a Special Committee of the Whole or a Special Board Development meeting to focus specifically on goal setting.

- Administration welcomes a focused set of goals from the Board.

- It will be important, if comparing districts, for the Board to consider a wide range of factors in addition to IAR scores. These could include *Average Class Size, Average Spending Per Pupil,* and many other factors.

District	Average Class Size	Average Spending Per Pupil
A	18	$24,000
B	16	$26,000
C	22	$13,000
D	20	$19,000
E	19	$21,000
F	17	$28,000
G	22	$20,000
H	18	$27,000
I	20	$21,000
Arlington Heights 25	20	$16,000
J	23	$19,000
K	26	$13,000
L	22	$15,000
M	22	$16,000
N	18	$20,000
O	19	$17,000
P	19	$19,000

QUESTIONS?