

# Dual Language Program Evaluation

2018 - 2023

Presented to the Board 1/9 & 1/16/2024

# Program Evaluation Objectives

**1**

## Student Characteristics

Document student characteristics for students in the Dual Language (DL) program compared to students not in the program.

**2**

## Impact on Student Growth

Evaluate the program's impact on student growth by comparing student growth for students in the Dual Language (DL) to comparable students not in the program.

**3**

## Spanish Language Acquisition

Assess Spanish language competency for students in the Dual Language (DL) program compared to students not in the program.

# Executive Summary of Findings

1

## Student Characteristics

Students in the DL program were more likely to be low income, English Language Learners, lower achieving, and at a higher SEL risk than students not in the program.

2

## Impact on Student Growth

Overall, students in the DL program experienced equivalent rates of growth in Math, ELA, English Proficiency and SEL when compared to students not in the program. Some variation was observed in lower grade levels, most notably during the COVID years, and for EL students in SEL. The findings were consistent across native and non-native English speakers.

3

## Spanish Language Acquisition

AAPPL Spanish scores show that by 8th grade, students in the DL program are significantly more proficient in Spanish listening and reading compared to students not in the DL program.

The background image is a blue-tinted photograph of a laptop screen. The screen displays a scatter plot titled "Grade 1 Spring MAP Mathematics 2020-2021 Growth Chart". The plot shows a positive correlation between two variables, with data points clustered around a diagonal line. The x-axis is labeled "Propensity (Composite Achievement)" and the y-axis is labeled "Propensity (Composite Achievement)". The laptop is a MacBook Pro, and a hand is visible at the bottom right, typing on the keyboard.

# 1. Student Characteristics

# 2023 Program Descriptives

## *Demographics*

### Total District

**3,919 total students**  
(~400/grade)

**23% Low Income**

**16% ELL**

### DL Program

**1,059 total students**  
(~100/grade)

**54% Low Income**

**40% ELL**

### Not in DL Program

**2,860 total students**  
(~300/grade)

**11% Low Income**

**7% ELL**

# 2023 Program Descriptives

*Spring MAP National Percentiles and SEL Risk*

<b>2023 Grade</b>	<b>Dual Language</b>			<b>Not Dual Language</b>		
	<b><i>MAP Math NP</i></b>	<b><i>MAP Reading NP</i></b>	<b><i>SEL % at Risk</i></b>	<b><i>MAP Math NP</i></b>	<b><i>MAP Reading NP</i></b>	<b><i>SEL % at Risk</i></b>
<b>Grade 4</b>	<b>44</b>	<b>36</b>	<b>25%</b>	<b>74</b>	<b>69</b>	<b>15%</b>
<b>Grade 5</b>	<b>50</b>	<b>49</b>	<b>34%</b>	<b>71</b>	<b>65</b>	<b>12%</b>
<b>Grade 6</b>	<b>55</b>	<b>59</b>	<b>27%</b>	<b>70</b>	<b>67</b>	<b>15%</b>
<b>Grade 7</b>	<b>51</b>	<b>36</b>	<b>36%</b>	<b>73</b>	<b>71</b>	<b>18%</b>
<b>Grade 8</b>	<b>49</b>	<b>50</b>	<b>26%</b>	<b>70</b>	<b>61</b>	<b>19%</b>



## 2. Impact on Student Growth

# Methodology to Measure Impact on Student Growth

The analysis was comprised of three major components:

1. Growth models were trained using data from students who did not participate in the DL program. Separate models were developed by school year to account for variation over COVID years and other school-year differences. Since the growth model was developed on students that did not participate in the program, the model serves as the control group.
2. Data for students who participated in the DL program were run through the control model. The model created a projection for each student, which served as a student's own control data point and represents the growth rate that likely would have happened without the DL program.
3. Differences in observed performance for students in the program compared to projected performance from the growth model was converted to effect sizes and compared to well-established thresholds.



# Growth Thresholds

## Program Impact as Effect Size

### Effect Size

Students in the DL program  
grew at **slower** rates to  
students not in the program



Students in the DL program  
grew at **equivalent** rates to  
students not in the program



Students in the DL program  
grew at **accelerated** rates to  
students not in the program



# Dual Language Program Impact by Grade

## ELA & Reading Growth

*(Spring IAR & MAP)*

	2018-19	2020-21	2021-22	2022-23
Kindergarten	-0.17	-0.22	0.00	-0.33
Grade 1	-0.17	-0.68	-0.22	+0.06
Grade 2	-0.42	-0.73	+0.07	+0.28
Grade 3	-0.03	-0.55	-0.28	-0.33
Grade 4	+0.35	-0.28	-0.19	-0.32
Grade 5	+0.33	+0.12	+0.17	+0.10
Grade 6	+0.31	+0.07	-0.12	+0.34
Grade 7	+0.43	+0.03	+0.24	+0.15
Grade 8	+0.35	+0.27	+0.24	+0.39
Overall	+0.07	-0.22	0.00	+0.05

# Dual Language Program Impact by Grade

## Math Growth

(Spring IAR & MAP)

	2018-19	2020-21	2021-22	2022-23
Kindergarten	-0.22	-0.35	+0.05	-0.10
Grade 1	-0.11	-0.34	-0.10	+0.01
Grade 2	-0.64	-0.54	+0.04	+0.13
Grade 3	+0.11	-0.45	-0.33	-0.40
Grade 4	+0.17	-0.38	-0.37	-0.23
Grade 5	+0.75	+0.09	-0.11	+0.13
Grade 6	-0.21	-0.01	+0.06	+0.33
Grade 7	+0.46	+0.25	+0.32	-0.19
Grade 8	+0.20	-0.10	+0.01	-0.32
Overall	+0.02	-0.21	-0.05	-0.06

# Dual Language Program Impact on Student Groups

## ELA & Reading Growth

*(Spring IAR & MAP)*

	2018-19		2020-21		2021-22		2022-23	
	<i>Dual Language</i>	<i>Non-Dual Language</i>	<i>Dual Language</i>	<i>Non-Dual Language</i>	<i>Dual Language</i>	<i>Non-Dual Language</i>	<i>Dual Language</i>	<i>Non-Dual Language</i>
Native English Speaker	+0.22	0.01	-0.04	0.01	+0.08	0.01	+0.01	0.00
Non-Native English Speaker	-0.11	-0.05	-0.42	-0.06	-0.09	-0.01	+0.11	-0.08
Former EL	+0.43	0.15	+0.09	0.09	+0.13	0.09	+0.23	-0.06
Current EL	-0.13	-0.13	-0.58	-0.19	-0.16	-0.07	-0.05	-0.11
Low Income	-0.01	-0.02	-0.43	-0.20	-0.05	-0.15	-0.02	0.00
Not Low Income	0.18	0.01	-0.01	0.02	0.05	0.02	0.14	-0.01

# Dual Language Program Impact on Student Groups Math Growth

(Spring IAR & MAP)

	2018-19		2020-21		2021-22		2022-23	
	<i>Dual Language</i>	<i>Non-Dual Language</i>	<i>Dual Language</i>	<i>Non-Dual Language</i>	<i>Dual Language</i>	<i>Non-Dual Language</i>	<i>Dual Language</i>	<i>Non-Dual Language</i>
Native English Speaker	+0.11	0.00	-0.11	0.00	+0.02	0.01	-0.04	0.00
Non-Native English Speaker	-0.08	-0.09	-0.31	0.02	-0.12	-0.14	-0.08	0.01
Former EL	+0.04	-0.08	-0.14	0.23	+0.14	0.00	-0.08	0.20
Current EL	-0.11	-0.09	-0.40	-0.15	-0.18	-0.22	-0.13	-0.14
Low Income	0.00	-0.04	-0.32	-0.27	-0.11	-0.26	-0.16	-0.10
Not Low Income	0.05	0.00	-0.09	0.03	0.02	0.03	0.06	0.01

# Dual Language Program Impact on Non-Native English Speakers ELA & Reading Growth

(Spring IAR & MAP)

	2021-22 & 2022-23	
	<i>Dual Language</i>	<i>Non-Dual Language</i>
Kindergarten	-0.39	+0.03
Grade 1	-0.11	-0.37
Grade 2	-0.03	+0.10
Grade 3	-0.28	+0.04
Grade 4	-0.48	-0.25
Grade 5	+0.12	+0.03
Grade 6	+0.12	-0.06
Grade 7	+0.18	+0.07
Grade 8	+0.39	+0.06
Overall	0.00	-0.04

# Dual Language Program Impact on Non-Native English Speakers Math Growth

*(Spring IAR & MAP)*

	2021-22 & 2022-23	
	<i>Dual Language</i>	<i>Non-Dual Language</i>
Kindergarten	-0.42	-0.18
Grade 1	-0.09	-0.40
Grade 2	+0.04	+0.01
Grade 3	-0.41	+0.04
Grade 4	-0.33	-0.22
Grade 5	-0.07	0.00
Grade 6	+0.17	+0.12
Grade 7	-0.03	+0.09
Grade 8	-0.14	-0.08
Overall	-0.10	-0.06

# Dual Language Program Impact on Non-Native English Speakers English Language Growth

*(Growth on ACCESS for ELLs against state control model)*

	2018-19 & 2019-20	
	Dual Language	Non-Dual Language
Grade 1	-0.13	0.13
Grade 2	0.17	0.22
Grade 3	0.23	0.17
Grade 4	0.43	0.58
Grade 5	0.14	-0.01
Grade 6	0.12	*
Grade 7	0.46	-0.04
Grade 8	0.24	0.29
Overall	0.21	0.17

\*Effect size is not statistically significant at  $P < .05$ , but is greater than .3 in absolute value.



# Dual Language Program Impact by Grade

## SEL Risk Growth

Grade	Dual Language Student SEL Growth
Grade 4	0.31
Grade 5	-0.07
Grade 6	0.04
Grade 7	0.28
Grade 8	0.27
Overall	0.17

# Dual Language Program Impact on Student Groups

## SEL Risk Growth

Student Group	Dual Language	Non-Dual Language
Native English Speaker	0.04	-0.01
Non-Native English Speaker	0.29	0.04
Former EL	0.16	*
Current EL	0.36	*
Low Income	0.32	0.23
Not Low Income	-0.02	-0.03

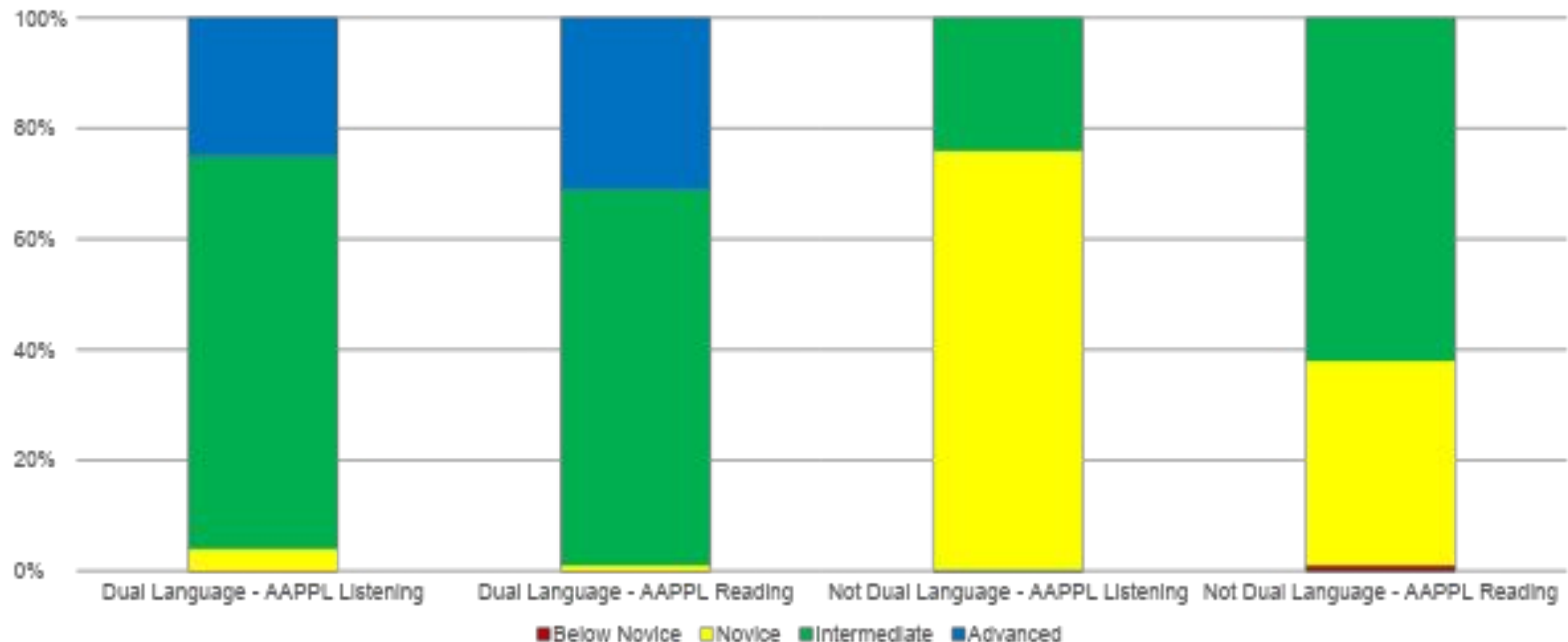
\*Effect size is not statistically significant at  $P < .05$ , but is greater than .3 in absolute value.

# 3. Spanish Language Acquisition

The background image is a blue-tinted photograph of a laptop screen. The screen displays a scatter plot titled "Grade 1 Spring MAP Mathematics 2020-2021 Growth Chart". The plot shows a positive correlation between two variables, with data points clustered around a diagonal line. The x-axis is labeled "Propensity (Composite Achievement Score)" and has tick marks at 85, 100, and 115. The y-axis has tick marks at 85, 100, and 115. The laptop is a MacBook Pro, and a hand is visible at the bottom right, typing on the keyboard.

# AAPPL Spanish Performance

8th Grade 2022-2023



# AAPPL Spanish Performance – Percent Intermediate or Advanced by Student Group

*8th Grade 2022-2023*

<b>Listening</b>	<b>Dual Language</b>	<b>Non-Dual Language</b>
<b>Native English Speaker</b>	<b>100%</b>	<b>23%</b>
<b>Non-Native English Speaker</b>	<b>93%</b>	<b>46%</b>
<b>Former EL</b>	<b>100%</b>	<b>33%</b>
<b>Current EL</b>	<b>85%</b>	<b>75%</b>
<b>Low Income</b>	<b>94%</b>	<b>38%</b>
<b>Not Low Income</b>	<b>100%</b>	<b>23%</b>

<b>Reading</b>	<b>Dual Language</b>	<b>Non-Dual Language</b>
<b>Native English Speaker</b>	<b>100%</b>	<b>61%</b>
<b>Non-Native English Speaker</b>	<b>98%</b>	<b>86%</b>
<b>Former EL</b>	<b>100%</b>	<b>78%</b>
<b>Current EL</b>	<b>97%</b>	<b>100%</b>
<b>Low Income</b>	<b>98%</b>	<b>71%</b>
<b>Not Low Income</b>	<b>100%</b>	<b>61%</b>



**Questions?**