

Summer Programs 2023: Districtwide Participation and Effects of Participation on Academic Performance

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Prepared by:

Kendra D. Price, Ph.D.

Shared Accountability





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Note: ELO SAIL = Extended Learning Opportunities—Summer Adventures in Learning; CHSSP = Central High School Summer Program

Summer Programs 2023

Student Participation and Academic Performance



Executive Summary

Evaluation Scope

The purpose of the evaluation was to: 1) determine 2023 summer programming participation rates and identify characteristics of participants for Local School Programs (LSP), Extended Learning Opportunities—Summer Adventures in Learning (ELO SAIL), and the Central High School Summer Program (CHSSP), 2) examine how LSP and ELO SAIL participants' literacy and mathematics outcomes changed from the beginning to the end of summer programs, 3) compare fall 2023 student outcomes between LSP and ELO SAIL participants and matched comparison students, and 4) examine summer credit attainment of CHSSP participants.

Methods

This study relied on: 1) descriptive statistics to provide information on summer program participation rates and participant characteristics, and credit attainment rates of CHSSP participants; 2) change in scores from pre- to post-tests in literacy and mathematics to assess the immediate effects of summer programming; and 3) quasi-experimental matching approaches to detect summer program effects on fall literacy and mathematics performance, while accounting for various factors such as baseline student performance and individual characteristics.

Results: Cost, Participation & Attendance

The total cost of the 2023 LSP and CHSSP was approximately \$10.7 million. The cost for ELO SAIL was approximately \$4.8 million. Roughly 17% of K–12 students enrolled at the end of the 2022–23 school year participated in LSP, CHSSP, or ELO SAIL in summer 2023. Participation rates were the lowest for Grade 5 and middle school students. Almost half (48%) of summer participants participated in LSP. ELO SAIL and CHSSP students constituted less than a third of participants. **Among the 9,263 students recommended for summer programming, 33% attended. Overall, the attendance rate for rising Grades 1–8 participants was 75%.**

Immediate Results

Participation in LSP yielded a significant positive effect on the summer literacy and mathematics skills of rising Grades 2–8 students. At the elementary level, all t-test results were statistically significant with effect sizes that exceeded 0.2, indicating practical significance within the educational context. Not all middle school results reached statistical or practical significance.

Participation in ELO SAIL had positive effects on students' literacy and mathematics skills at the end of the summer. Post-test scores showed measurable improvements relative to pre-test scores. Across all student groups assessed, the observed gains from statistically significant t-test results were practically significant for educational purposes.

Participation in CHSSP resulted in an increase in the number of earned high school credits by the end of the summer for the majority of participants. Approximately 84% of the rising Grades 9–12 participants and 65% of non-graduating Grade 12 participants earned summer credits. On average, rising Grades 9–12 participants earned 78% of the credits attempted, whereas non-graduating Grade 12 participants earned 52% of the credits attempted. Credit attainment rates varied by student groups.

Summer Programs 2023

Student Participation and Academic Performance



Executive Summary (Cont.)

Distal Results: LSP Literacy

For rising Grades 1 and 2 students, there were no significant differences observed in fall 2023 literacy achievement between LSP participants and matched comparison students, as measured by DIBELS composite scores. For fall 2023 MAP-R performance, however, a number of LSP student groups performed significantly lower than non-participants. Disaggregated results revealed that Asian rising Grade 3 participants had lower average MAP-R RIT scores than matched comparison students. The Grade 3 effect translates to a 12.93 percentile-point decrease in literacy performance for an average student. **For rising Grades 4–8 student groups, the fall 2023 MAP-R performances of participants were significantly lower than the performances of non-participants for Grades 4–8 Black or African American participants, Grades 4–5 Asian participants, and Grades 6–8 participants from the three service groups.** The effects, however, were not practically significant.

Distal Results: LSP Mathematics

For mathematics performance, LSP participation had a significant effect on the MAP-M RIT scores of rising Grades K–5 students receiving FARMS services. Participants in receipt of FARMS services demonstrated higher scores on fall 2023 MAP-M compared to non-participants, but the difference was not practically meaningful. **The evaluation did not find statistically significant effects on MAP-M performance for all other grade levels and student groups.**

Distal Results: ELO SAIL Literacy

For rising Grades 1 and 2 students, no significant differences in fall 2023 literacy achievement (DIBELS and Lectura composite scores) were observed between ELO SAIL participants and matched comparison students. For rising Grades 3–5 students, ELO SAIL participants receiving ELD services and Hispanic/Latino participants performed lower than the matched comparison students on fall 2023 MAP-R. The magnitudes of the effects did not reach practical significance.

Distal Results: ELO SAIL Mathematics

ELO SAIL participants outperformed matched comparison students on the fall 2023 MAP-M assessment. This positive effect was observed across the overall sample and for rising Grades 2 and 3 students. However, the differences were not practically significant. **Disaggregated results revealed that Asian, Black/African American, Hispanic/Latino, and participants receiving FARMS or ELD services also had higher adjusted mean RIT scores on MAP-M compared to matched comparison students.** The effects were not practically significant for educational purposes.

Conclusion

The evaluation found that participating in ELO SAIL and LSP had immediate positive impacts on participants' literacy and mathematics skills and that participation in CHSSP improved the academic standing of the majority of rising Grades 9–12 and non-graduating Grade 12 participants. However, when compared to non-participant peers, there were no practically significant effects of ELO SAIL and LSP participation on the fall 2023 DIBELS and Lectura performance and limited practical significance for effects on MAP performance. To enhance the effectiveness of summer programming, it is recommended for the district to increase program duration, incorporate additional instructional support to supplement summer instruction, and strengthen recruitment strategies.



Evaluation Scope

Background

Summer learning loss or “summer slide” is a phenomenon that has garnered decades of research attention (Kuhfeld, 2019). Summer programs can prevent summer learning loss (e.g., Borman, Yang, & Xie, 2021) and increase students’ reading achievement (e.g., Johnston, Riley, Ryan, & Kelly-Vance, 2015) and growth in mathematics achievement (e.g., Kerschen, Cooper, Shelton, & Scott, 2018), but some summer programs fail to have statistically significant positive effects on student achievement (e.g., Reed & Aloe, 2020). Despite this variability, summer learning programs remain a commonly used strategy in education for preventing summer learning loss (Pyne et al., 2021).

In the wake of COVID-19-related school closures, summer programming became even more critical to learning loss recovery, with an ensuing increase of federal funding to support summer learning initiatives (Barack, 2022). Beginning the summer of 2021, Montgomery County Public Schools used summer programming to assist students in their recovery from pandemic-related learning loss. The goal of MCPS summer programs is to mitigate learning disruption by offering students continual engagement in academics and electives (McKnight, 2022).

Purpose of Evaluation



The purpose of the evaluation was to 1) determine 2023 summer programming participation rates and identify participant characteristics, 2) examine immediate outcomes associated with ELO SAIL and LSP participation by assessing how academic performance changed from beginning to end of summer programs, 3) examine distal outcomes associated with ELO SAIL and LSP participation by comparing fall 2023 academic performance among program participants and matched comparison students who did not attend, and 4) examine summer credit attainment of CHSSP participants.

Research Questions

1

To what extent did students enroll in and attend the 2023 summer programs and what were the characteristics of students who participated?

2

What was the effect of the 2023 ELO SAIL and LSP for rising Grades 1–8 students' performance on the summer 2023 literacy and mathematics pre- and post-tests and their fall 2023 literacy and mathematics achievement, and to what extent do effects vary when results are disaggregated by grade, race/ethnicity, and service receipt?

3

To what extent did rising Grades 9–12 and non-graduating Grade 12 CHSSP participants increase the number of earned high school credits by the end of the summer program?



Program Description

The evaluation included ELO SAIL, LSP, and the CHSSP. The targeted population for ELO SAIL is rising K–5 students enrolled in Title I schools for the 2023–2024 school year. The program was a 17-day in-person program held at 35 Title I schools for 4.5 hours each day. The targeted population for LSP was MCPS students not enrolled in Title I elementary schools. The program is a 15-day, in-person program at the participants' local school. CHSSP targeted Grades 9–12 students and provided a blended format with synchronous and asynchronous opportunities over two summer sessions. The district provided summer programming to students at no cost, and participation was voluntary. The district also provided transportation and meals. The 2023 Extended School Year (ESY) summer program was not included in the evaluation.

Program Goals



The overarching goal of the 2023 summer programs was to mitigate learning disruption by offering continual engagement in academic instruction, specials, and electives.

Program Components



Extended Learning Opportunities—Summer Adventures in Learning (ELO SAIL): Students engaged in hands-on, exciting and enriching literacy or science, technology, engineering, or mathematics (STEM) instruction, as well as social emotional learning activities.



Local School Summer Program (LSP): The curriculum was designed to support students who needed additional or repeated instruction of previous grade-level work or who were below grade-level in reading or mathematics.



The Central High School Summer Program (CHSSP): Students could take a course for grade replacement, grade improvement, or original credit. Available courses included core courses and courses in Career Technology Education, Health Education, World Language, and Fine Arts.



To examine academic outcomes associated with participation in ELO SAIL and LSP, the evaluation employed a quasi-experimental, pre-post, and matched comparison group design. To match participants from Grades 1 through 8 to non-participating students, the evaluation used prior achievement, grade level, gender, race/ethnicity, and service receipt—i.e., FARMS, ELD, and special education—as matching variables. Descriptive analyses were used to determine summer credit attainment for CHSSP participants.

Baseline Measures and Matching Variables

Data & Measures

- Baseline measures were prior year achievement in reading and mathematics as measured by:
 - End of year (EOY) 2022-2023 DIBELS and Lectura composite scale score for Grade 1 (200–480+) and Grade 2 (200–474+)
 - Spring 2023 MAP mathematics assessment (MAP-M; Grades 1–8) and reading assessment (MAP-R; Grades 3–8) Rasch Unit (RIT) scale score (100–350)
- Matching Variables:
 - Prior year achievement in reading and mathematics (see above)
 - Grade level
 - Gender
 - Race/ethnicity
 - Special services receipt (i.e., FARMS, ELD, special education)

Outcome Measures

Data & Measures

- Immediate
 - Mathematics and reading pre- and post-assessments
 - At the start and end of ELO SAIL and LSP, program staff administered grade-level assessments on a 100-percent grading scale to students in Grades 1–8.
 - Course credit history records
 - The number of summer credits attempted and earned by CHSSP participants.
- Distal
 - Mathematics: Fall 2023 MAP-M (Grades 1–8)
 - Reading:
 - Beginning of year (BOY) 2023-2024 DIBELS and Lectura composite scale score for Grade 1 (200–354+) and Grade 2 (200–361+)
 - Fall 2023 MAP-R (Grades 3–8) RIT scale score (100-350)



Methods (Continued)



Sample

- Research Question 1: All Grades K–12 summer program participants enrolled in MCPS at the end of the 2022–23 school year.
- Research Question 2:
 - Immediate
 - Analysis of pre- and post-test performance: Grades 2–8 participants with pre- and post-test data from valid reading or mathematics assessments
 - Distal
 - Analysis of standardized testing performance: Grades 1–8 participants and matched comparison students with appropriate MAP, DIBELS, and Lectura data, and for participants, at least 75% attendance rate.
- Research Question 3: All rising Grades 9–12 and non-graduating Grade 12 CHSSP participants enrolled in MCPS at the end of the 2022–23 school year with sufficient course credit history data.



Analysis

- Research Question 1: The percentage of current students who attended summer school, characteristics of summer program participants, and attendance patterns were summarized using descriptive statistics.
- Research Question 2: Analyses were conducted separately for ELO SAIL and LSP.
 - Immediate
 - Paired samples t-tests and associated effect sizes were used to measure student growth from pre- to post-test on the summer 2023 reading and mathematics assessments.



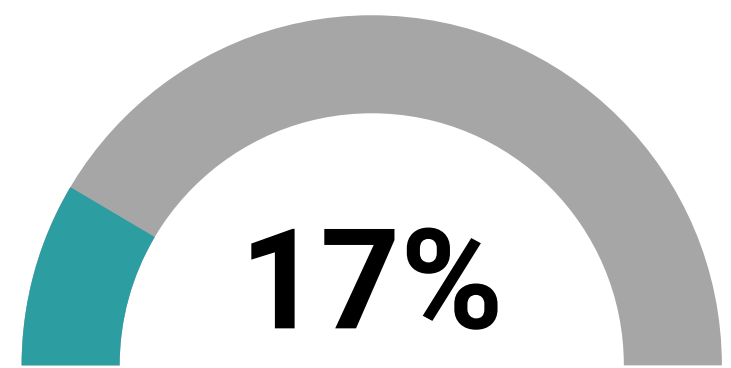
Analysis (Continued)

- Distal
 - An analysis of covariance (ANCOVA) tested the adjusted mean differences in MAP-R and MAP-M RIT scores and DIBELS and Lectura composite scores between summer participants and the matched comparison group, accounting for prior year same subject student performance.
 - For the paired samples t-test and the ANCOVA, Cohen's *d* or Hedges *g* were used as the effect size measures. The thresholds for interpreting Cohens or Hedges' *g* are: 0.2 indicates a small effect, 0.5 indicates a medium effect, and 0.8 indicates a large effect.
 - To ease interpretation of the ANCOVA results, all effects are also reported as the expected percentile-point change for an average (50th percentile) comparison student who participates in summer programming.
- Research Question 3: The percentages of rising Grades 9–12 and non-graduating Grade 12 CHSSP participants who earned summer credits were summarized using descriptive statistics.

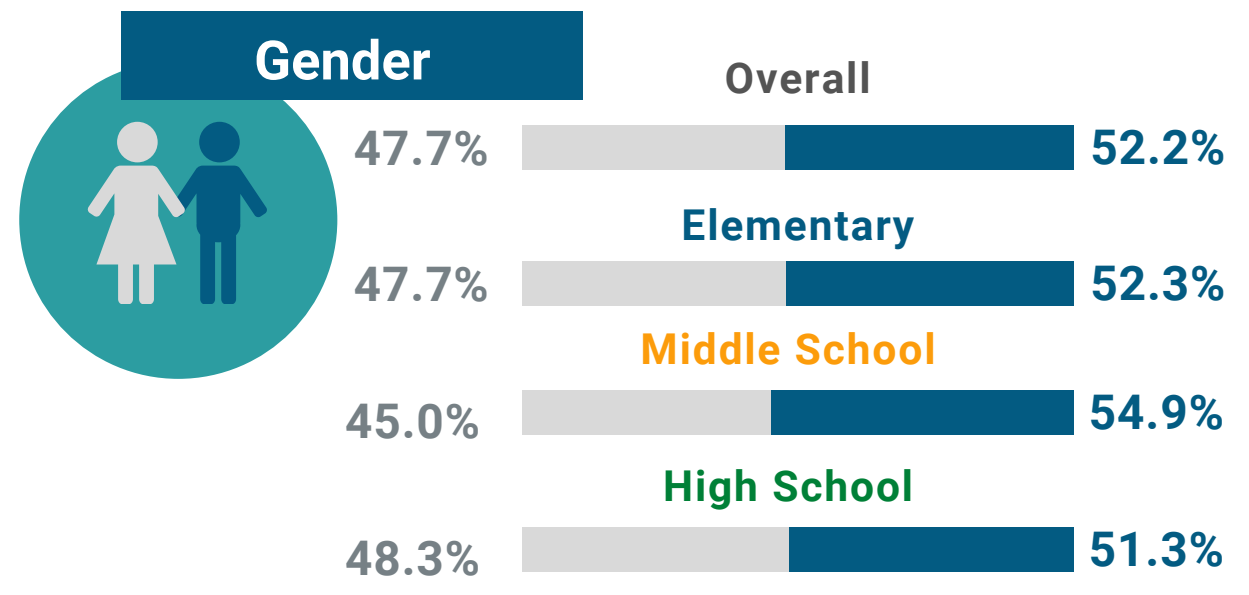
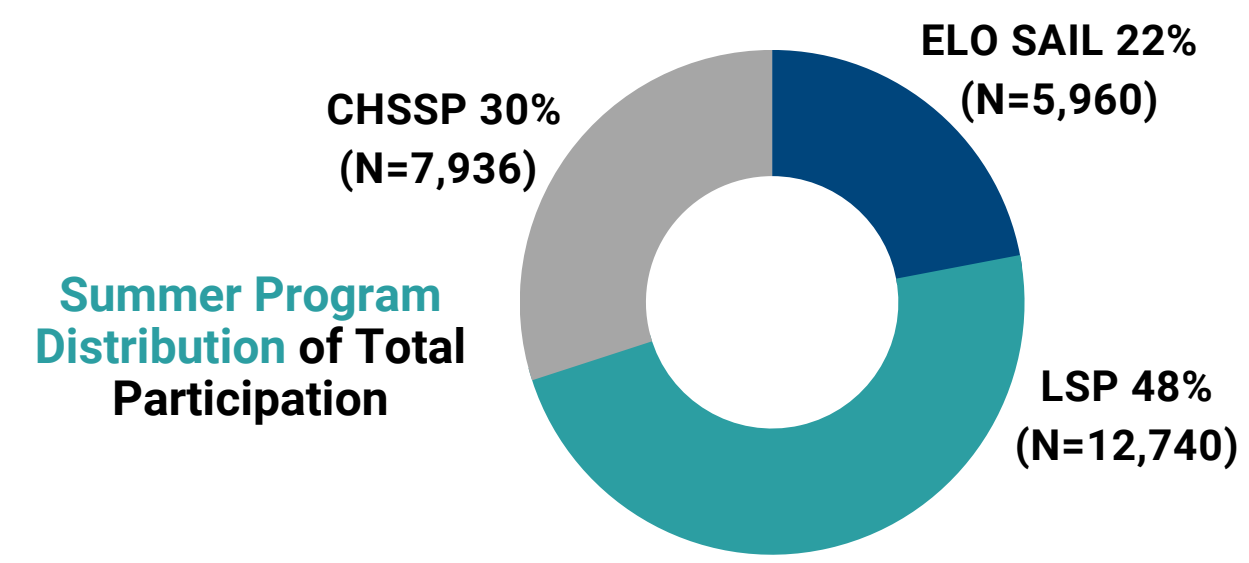
Results: Cost and Participation

Overall Cost of 2023 Summer Programming and Percent of MCPS Students who Participated (Overall and by Program and Grade Level)

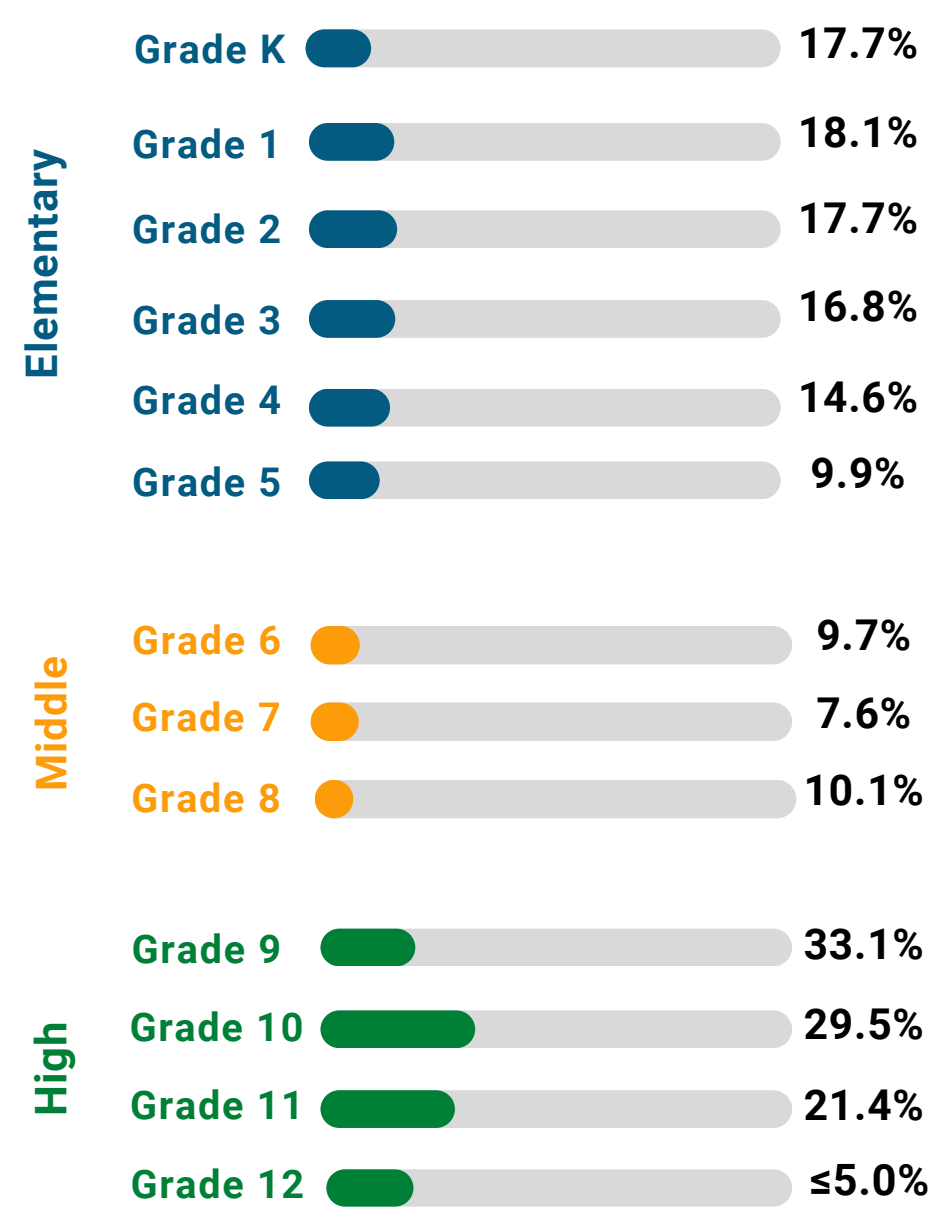
Findings



26,636 of 161,703 K-12 students participated in 2023 summer programs



2022-2023 Grade Level



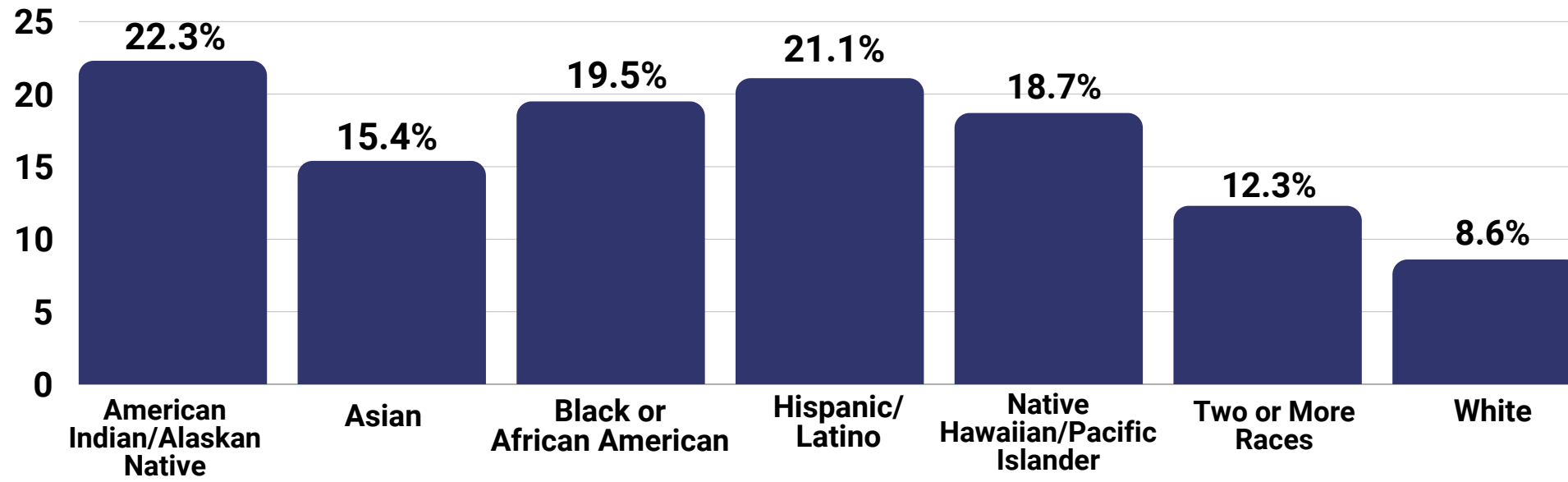
- The total cost of the 2023 LSP and CHSSP was approximately \$10.7 million. The cost for ELO SAIL was approximately \$4.8 million. Overall, 28,108 MCPS students participated in ELO SAIL, LSP, or the CHSSP in summer 2023. Of this total, 26,636 were K-12 students, representing 17% of enrolled students at the end of the 2022-23 school year. Almost half (48%) of the total number of participants participated in LSP.
- Participation rates were the lowest for Grade 5 and middle school students, with rates ranging from 8% to 10%. Higher rates were observed at the elementary and high school levels, ranging from 15% in Grade 4 to 33% in Grade 9. Across school levels, the gender breakdowns were fairly equal for males and females.
- *Note:* Total enrollment is the number of students enrolled at the end of the 2022-23 school year.
 - Program enrollment is based on the number of K-12 students who were enrolled at the end of the 2022-23 school year and attended 2023 summer programs for at least one day.
 - Totals exclude the 532 students who enrolled after the end of the 2022-23 school year. Students who participated in the ESY summer program are also excluded from participant totals.



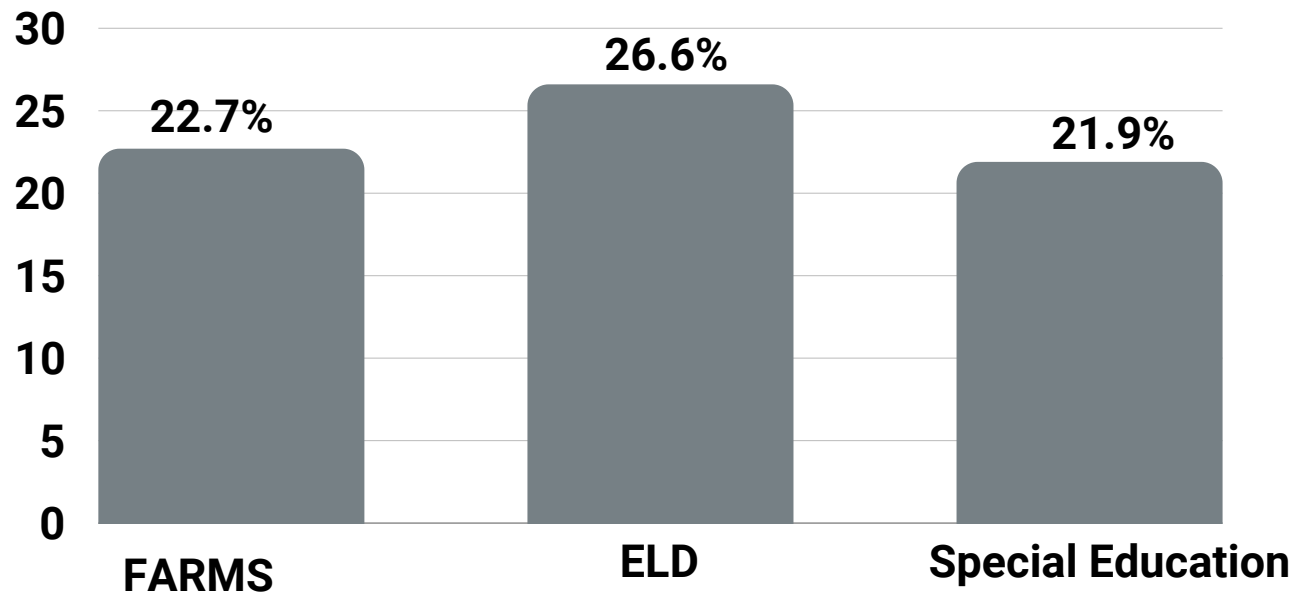
Results: Participation

Percent of MCPS Students who Participated in 2023 Summer Programs by Race/Ethnicity, Service, and Special Populations

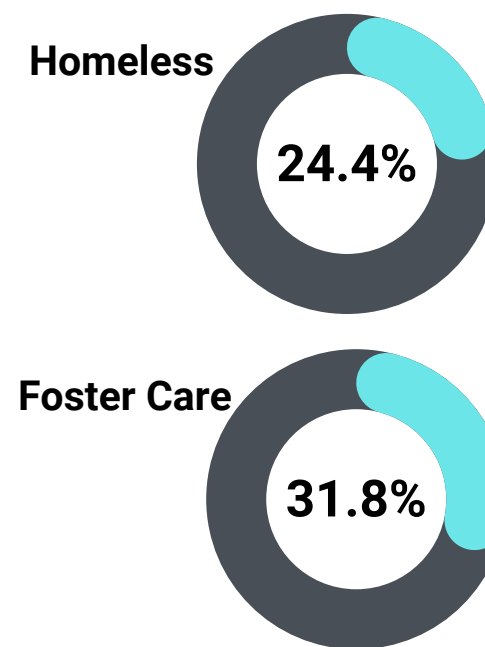
Race/Ethnicity



Services



Other Special Populations



Note: FARMS=Free and Reduced-price Meals System; ELD=English Language Development.



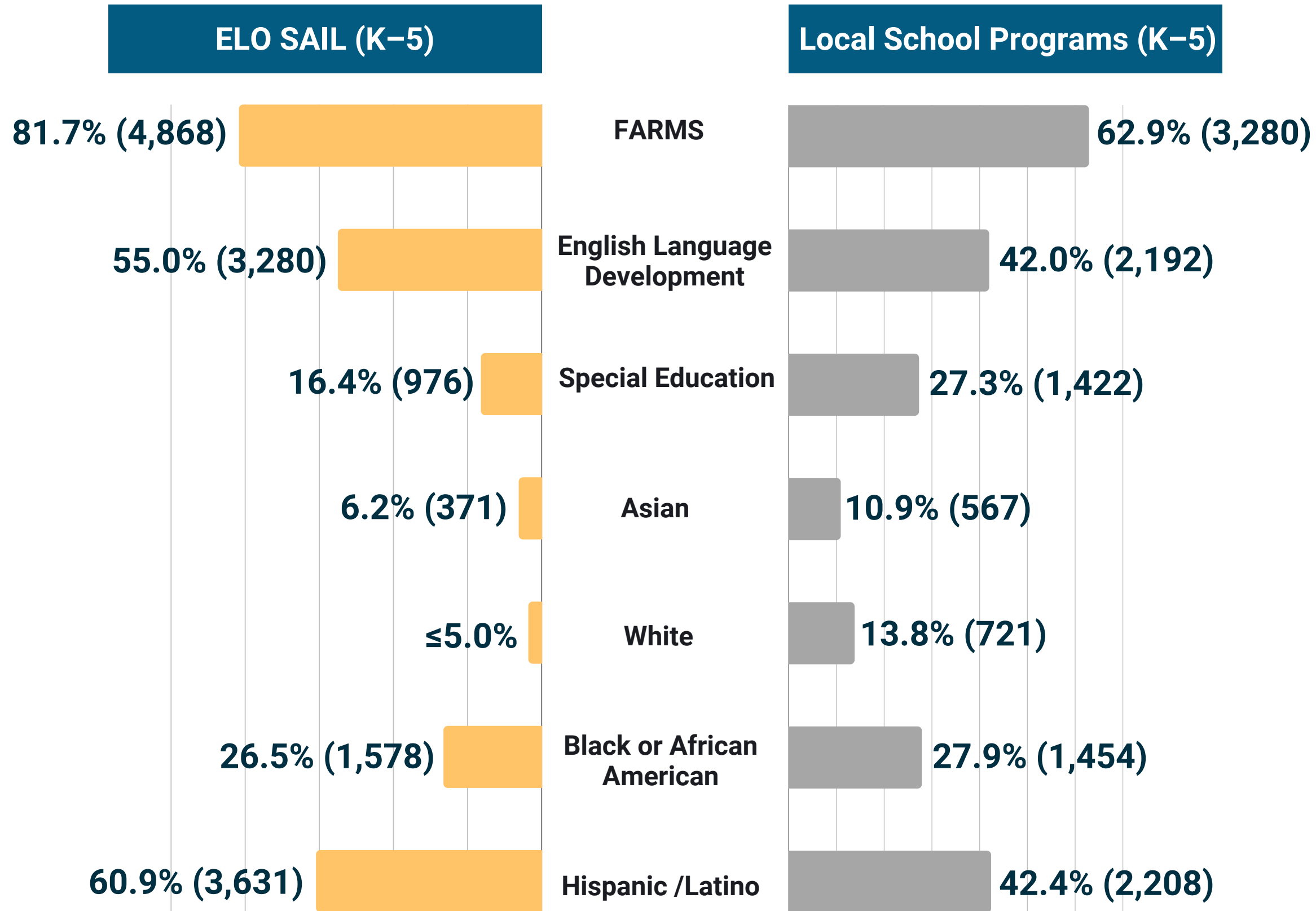
Findings

- Less than one quarter of students from each racial/ethnic group participated in 2023 summer programs, with the lowest representation being that of White students (9%) and students of two or more races (12%),
- A slightly larger percentage of MCPS students receiving ELD services participated in 2023 summer programs (27%) than did students receiving FARMS (23%) or special education (22%) services.
- Of the students identified as homeless, 32% were summer participants, whereas 24% of enrolled foster students participated. No current students were identified as migrants in MCPS official student records.



Results: Participation

Demographics of 2023 Summer Program Grades K-5 Participants by Program Type



Note: The percentages of American Indian or Alaska Native participants, Native Hawaiian or Other Pacific Islander participants, and participants with two or more races are ≤5.0 for both programs.



Findings

- Of the 5,960 ELO SAIL participants enrolled in MCPS at the end of the 2023 school year, students receiving FARMS services represented the largest percentage of participants (82%), followed by Hispanic/Latino students (61%) and then students receiving ELD services (55%).
- Of the 12,740 LSP participants, 5,213 were enrolled in Grades K-5 in 2022-23. Of these students, the largest percentages of participants were also students receiving FARMS services (63%) or ELD services (42%), and those identified as Hispanic/Latino (42%).



Results: Participation

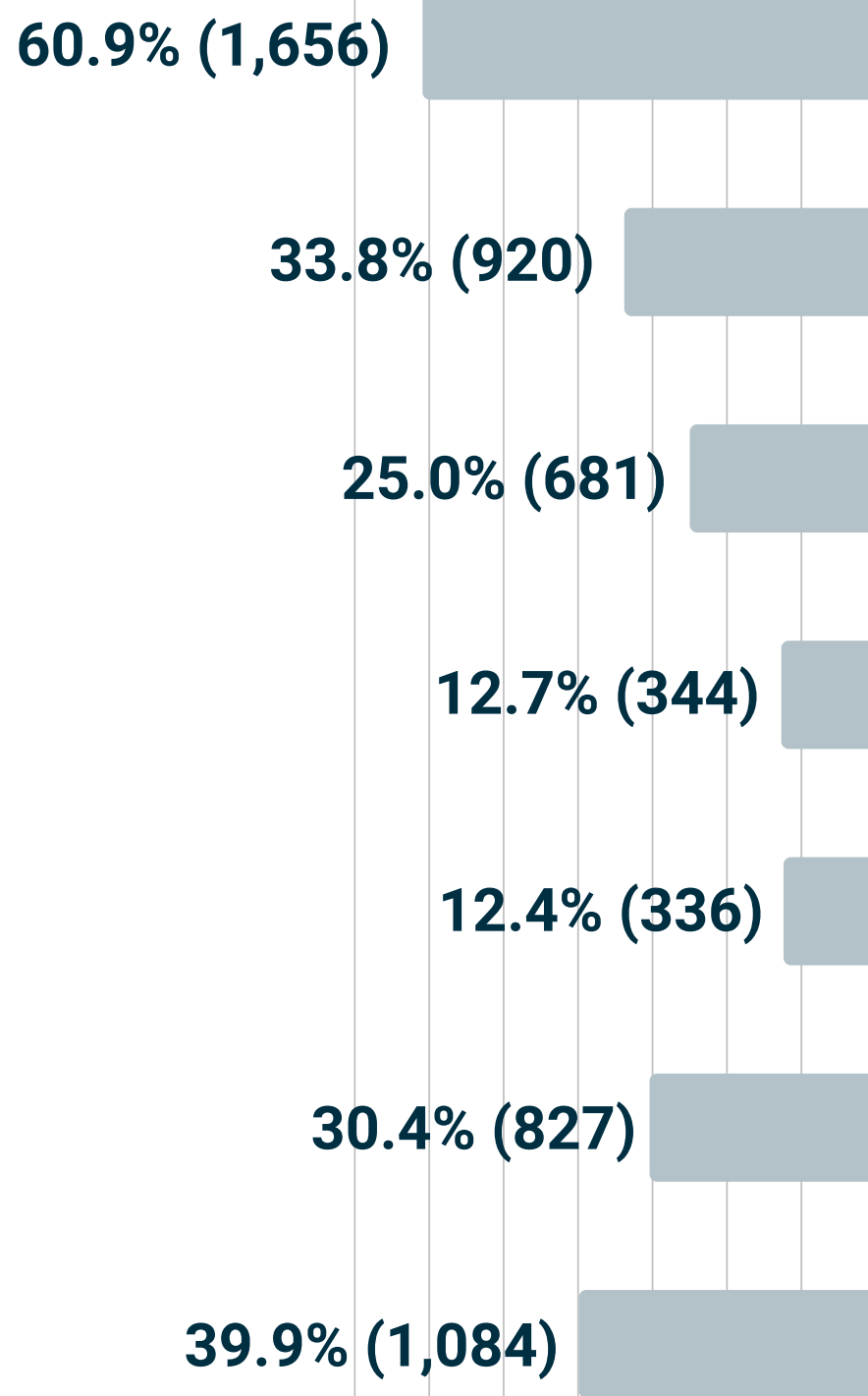
Demographics of 2023 Local School Program Participants in Grades 6-12 by School Level



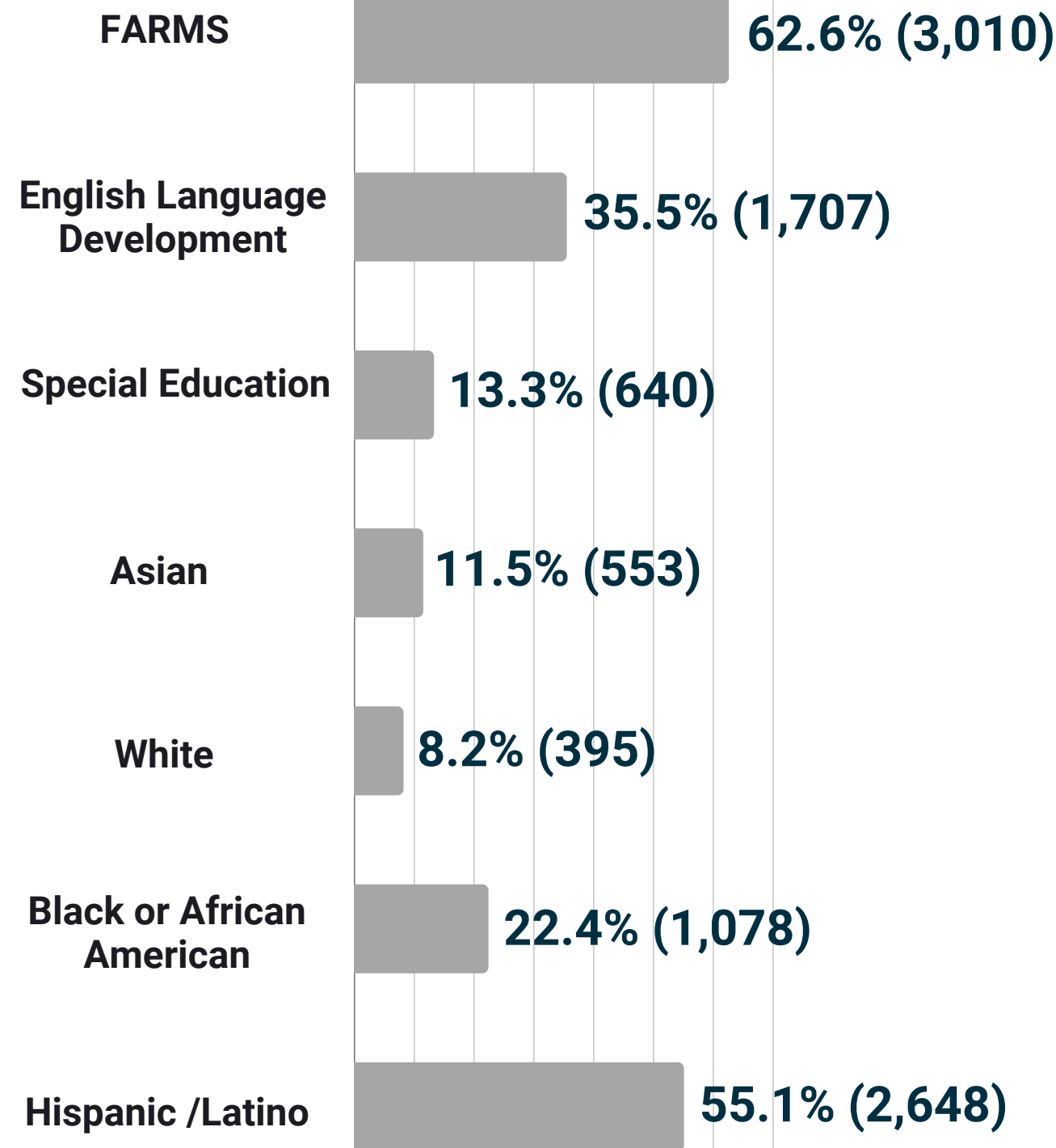
Findings

- Of the 2,719 LSP participants enrolled in Grades 6–8 in 2022–23, students receiving FARMS services represented the largest percentage of participants (61%), followed by Hispanic/Latino students (43%).
- A total of 4,808 students in Grades 9–12 for the 2023 school year participated in their LSP. Students receiving FARMS services and those identified as Hispanic/Latino were the largest represented groups (63% and 51%, respectively).

Local School Programs (6–8)



Local School Programs (9–12)

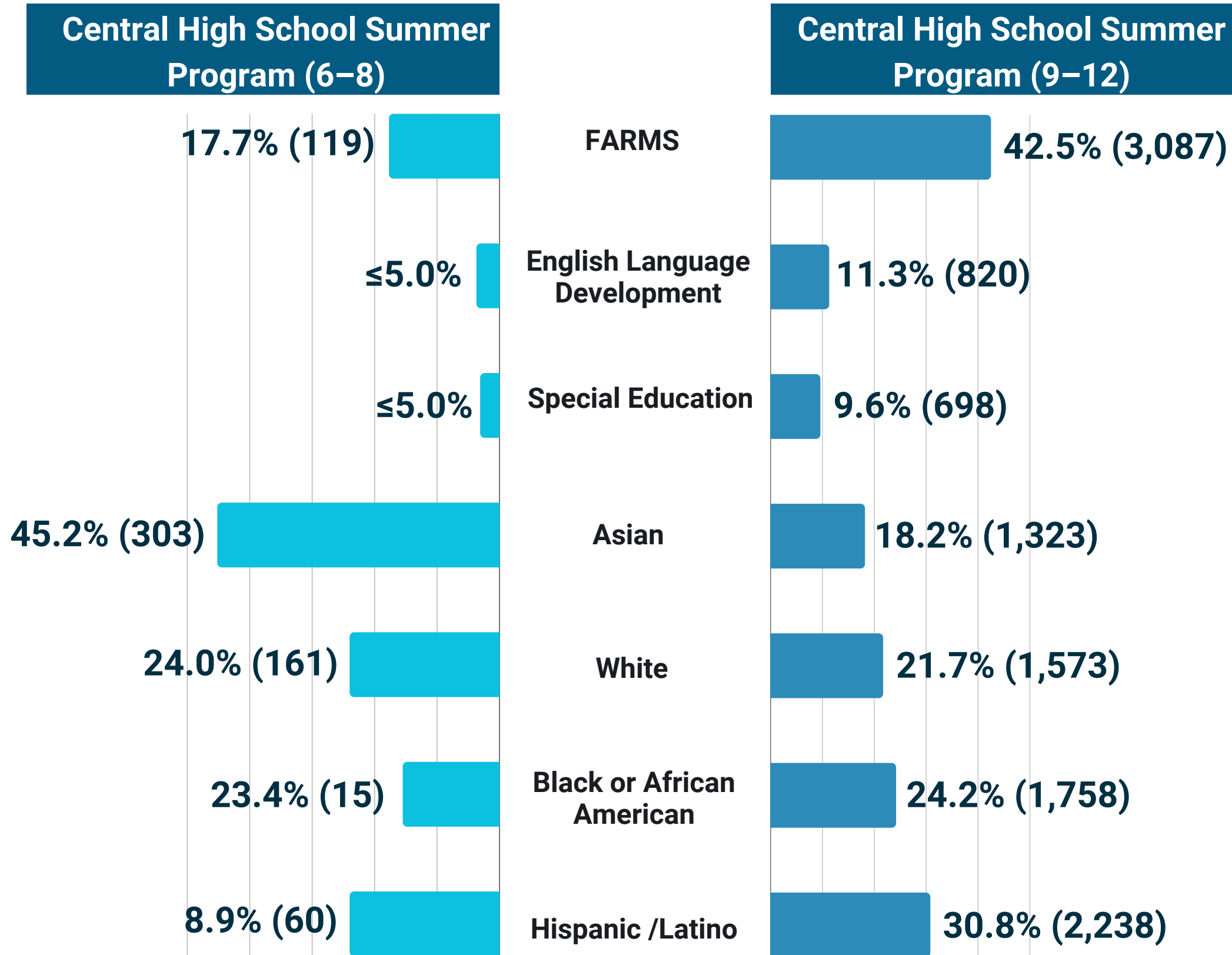


Note: The percentages of American Indian or Alaska Native participants, Native Hawaiian or Other Pacific Islander participants, and participants with two or more races are ≤5.0 for both school levels.



Results: Participation

Demographics of 2023 Central High School Summer Program
Participants in Grades 7-12 by School Level



Note: The percentages of American Indian or Alaska Native participants, Native Hawaiian or Other Pacific Islander participants, and participants with two or more races are ≤5.0 for both school levels.



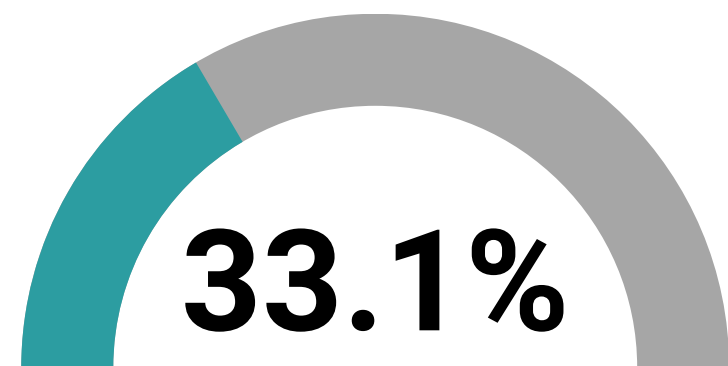
Findings

- A total of 671 students enrolled in Grades 6–8 in 2022–23 participated in the CHSSP. Asian students represented the largest student group of participants (45%).
- Of the 7,265 CHSSP participants in Grades 9–12, students receiving FARMs services represented the largest percentage of participants (43%), followed by Hispanic/Latino students (31%).

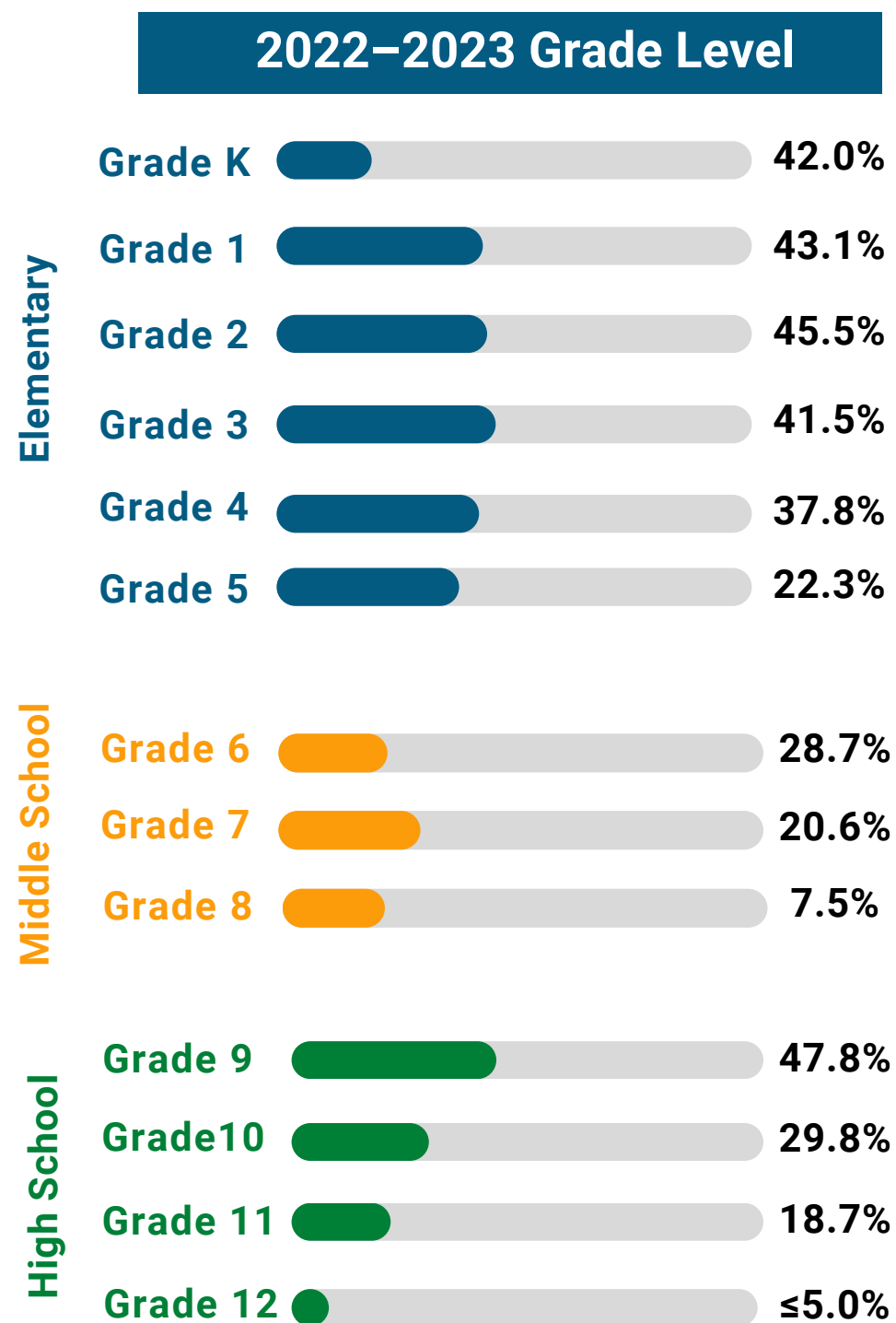


Results: Participation

Percent of Students Recommended who Participated in 2023 Summer Programs (Overall and by Program Type and Grade Level)



Of the 9,263 Grades K–12 students who were recommended for summer programs, 3,064 (33%) attended ELO SAIL, LSP, or CHSSP.



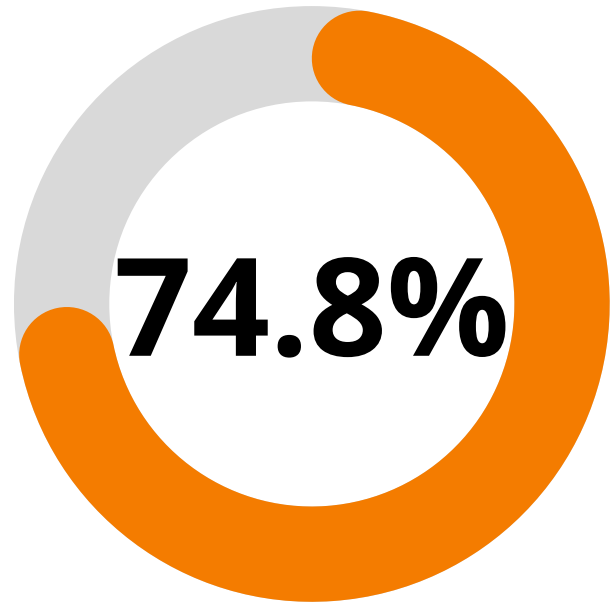
Findings

- A third of the 9,263 students (33%) who were recommended for summer programming participated.
- The percentage of recommended students who participated varied by grade level; nearly half of Grades K–3 and Grade 9 students recommended for summer programs participated.
- *Note:* Recommended students are students active as of the end of the 2022–23 school year identified for summer programming by Shared Accountability based on course performance in mathematics and literacy (e.g., reading, writing, or English courses), participation in a reading or mathematics intervention, attendance, and specifically for high school students, being on-track for graduation in mathematics and English.



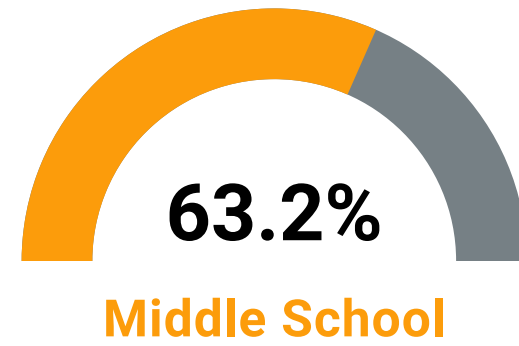
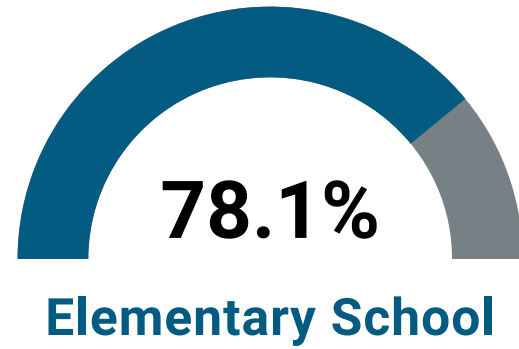
Results: Participation

Summer Program Participants' Average Attendance Rates Overall and by Program Type, School Level, and Grade Level

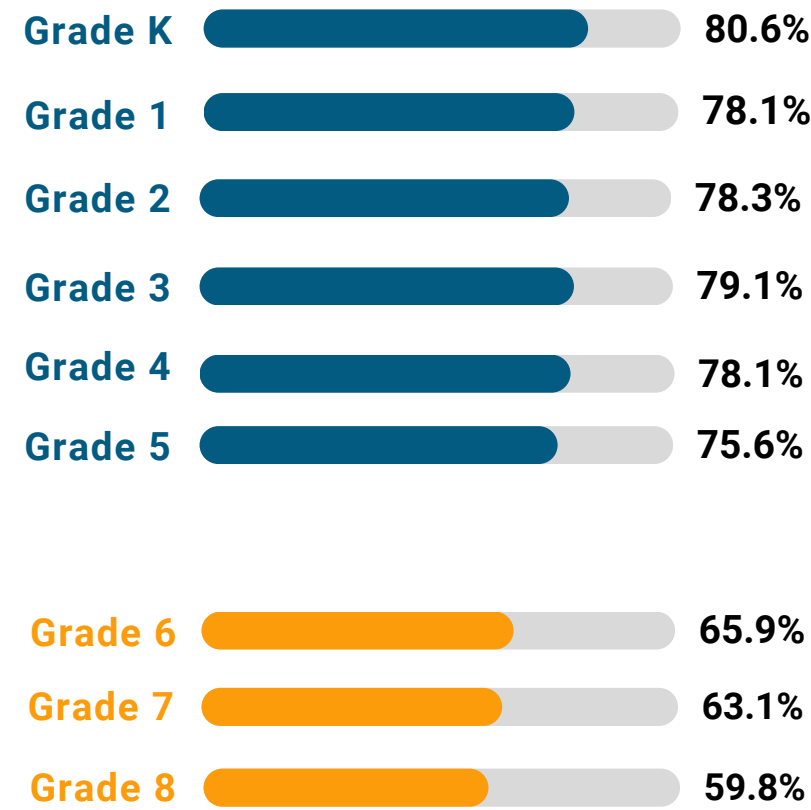


Average attendance rate for rising Grades K-8 summer program participants

School Level



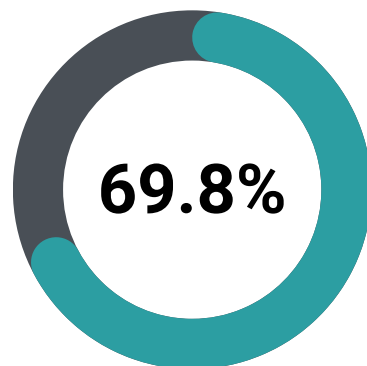
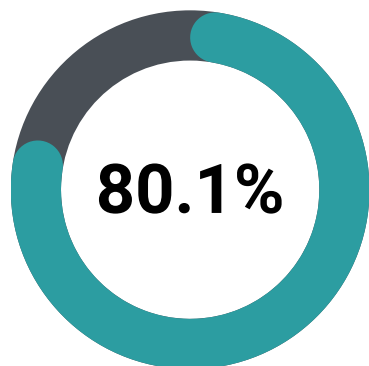
Rising Grade Level



Program Type

ELO SAIL

Local School Programs



Note: Attendance rates for high school participants are not reported due to limitations in calculating accurate percentages.



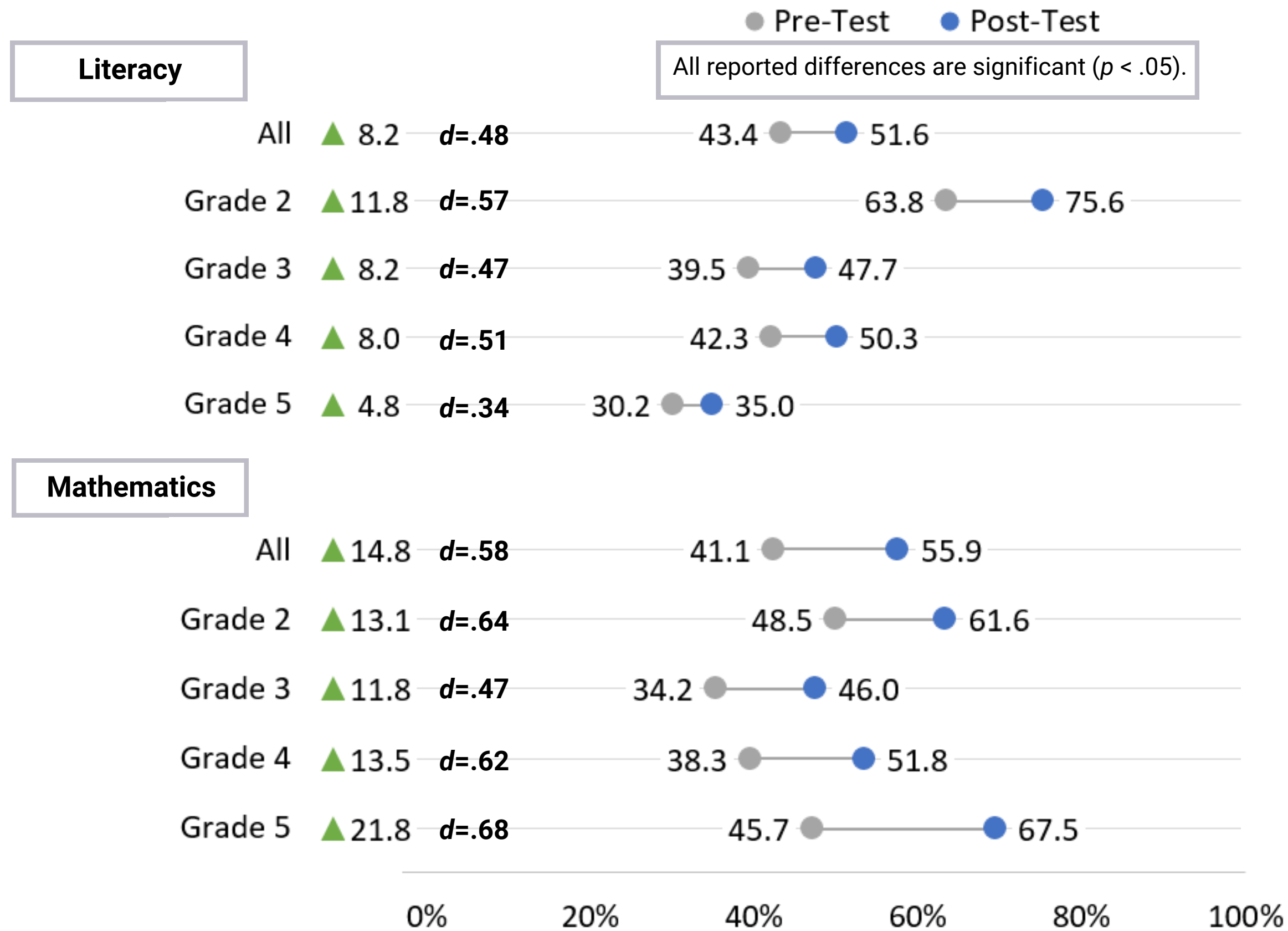
Findings

- Overall, the average reported attendance rate for 2023 summer programs was 75%. By school level, the average attendance rate was 78% for elementary and 63% for middle school.
- Reported attendance rates varied by grade level, ranging from 60% for rising Grade 8 students to 81% for kindergarteners.
- On average, the attendance rate for elementary school students attending ELO SAIL, a 17-day program, was 80%. The attendance rate for students attending the 15-day LSP was 70%.



Results: LSP

Local School Program Grades 2–5 Literacy and Mathematics: Mean Differences in Pre-Post Test Results Overall and by Grade Level



Note: d = Cohen's d (measure of effect size).



Findings

- By the end of the summer, average post-test literacy scores for rising Grades 2–5 LSP participants were significantly higher than pre-test scores. The overall difference between pre-test and post-test scores was 8 percentage points ($d=.48$). The grade-level differences ranged from 5 percentage points for rising Grade 5 students ($d=.34$) to 12 percentage points for rising Grade 2 students ($d=.57$).
- Mathematics post-test mean scores for rising Grades 2–5 LSP participants also increased significantly from pre-test administration. The overall difference between pre-test and post-test scores was 15 percentage points ($d=.58$). Growth in post-test scores ranged from 13 percentage points for rising Grade 3 students ($d=.47$) to 22 percentage points for rising Grade 5 students ($d=.68$).
- Effect sizes tell us the strength of the effect of LSP on mathematics and literacy performance. The effect sizes, which ranged from $d=.34$ to $d=.68$, indicated substantive, practically meaningful improvements in post-test literacy or mathematics scores compared to pre-test scores. Effect sizes of 0.2, 0.5, or 0.8 indicate that after attending LSP, the average score on the post-test was higher than what 58%, 66%, or 79% of students attained on the pre-test, respectively (Lipsey et al., 2012).



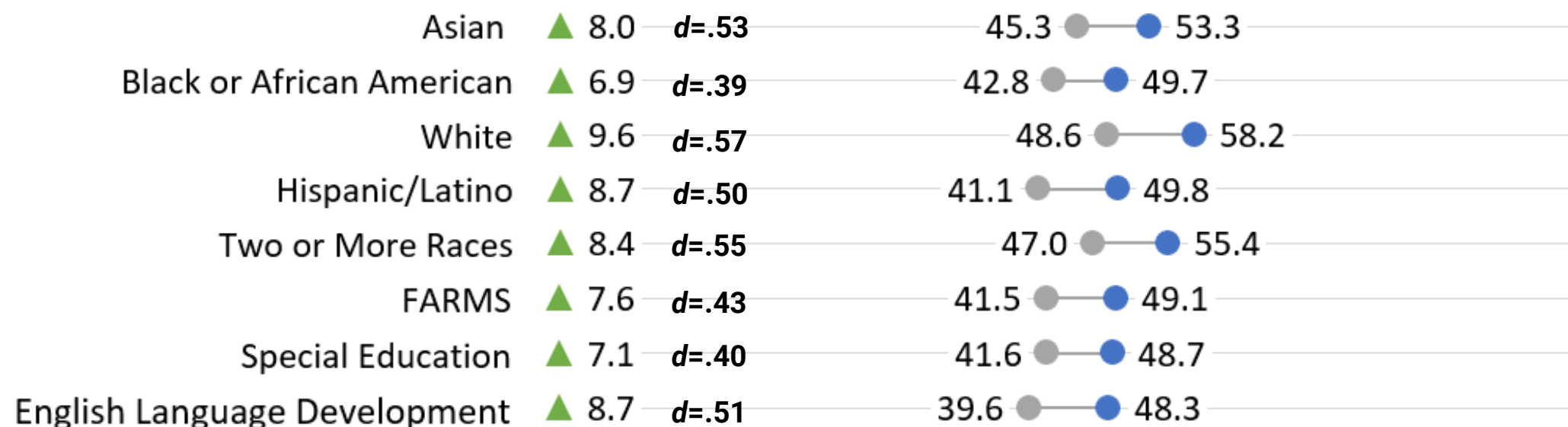
Results: LSP

Local School Program Grades 2–5 Literacy and Mathematics: Mean Differences in Pre-Post Test Results by Race/Ethnicity and Service Group

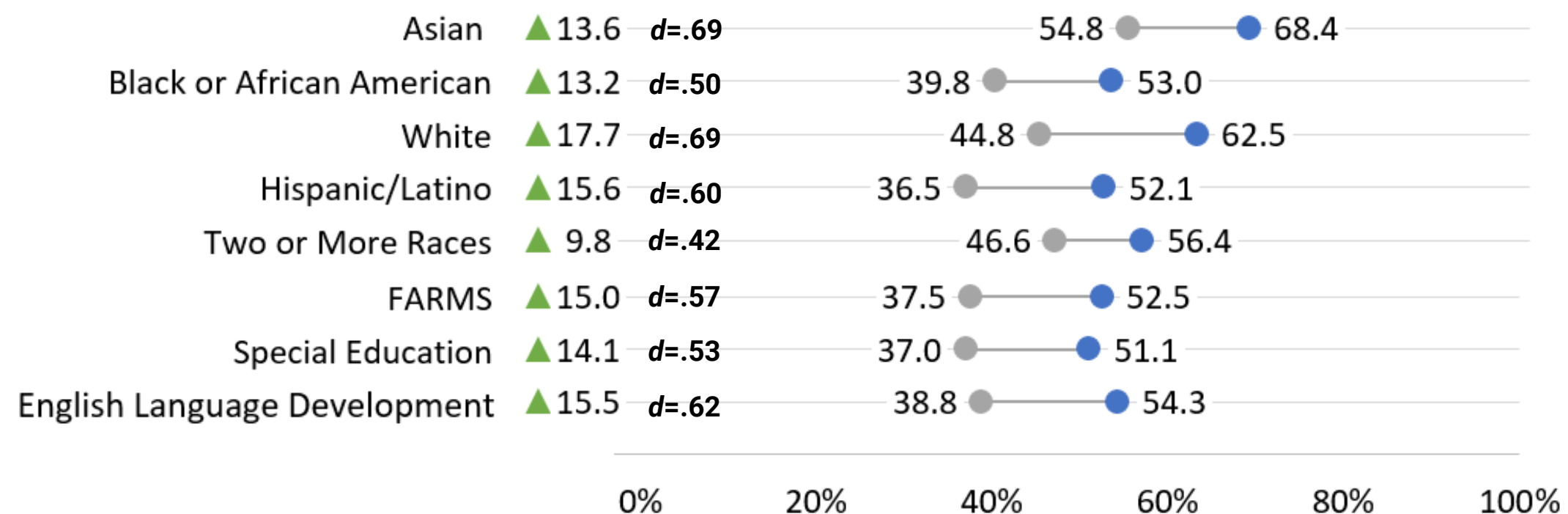
Literacy

● Pre-Test ● Post-Test

All reported differences are significant ($p < .05$).



Mathematics



Note: American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander student groups did not have sufficient numbers to detect statistical significance at the group level ($N > 30$). d = Cohen's d (measure of effect size).



Findings

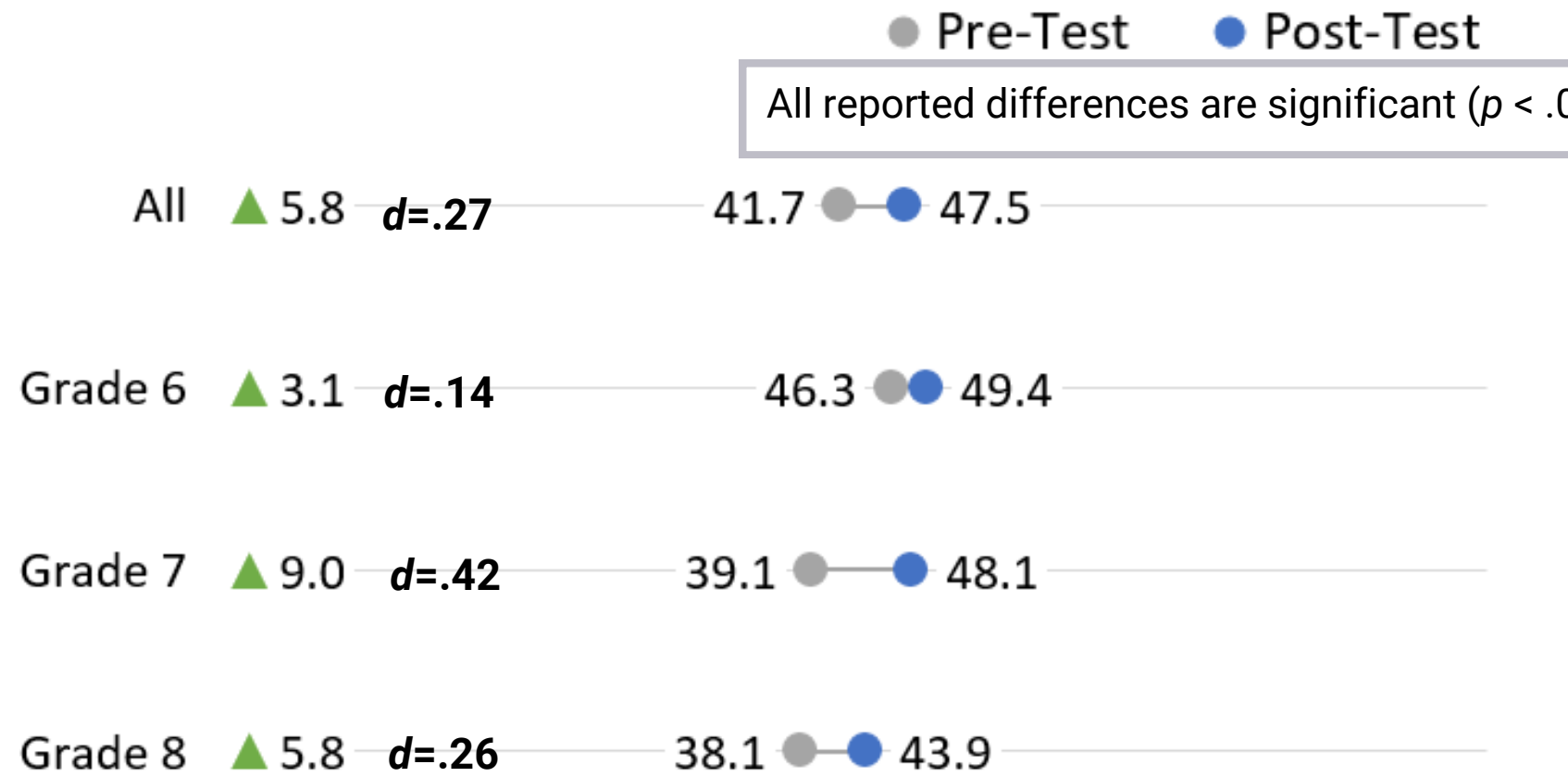
- Among the rising Grades 2–5 racial/ethnic student subgroups, White students demonstrated the largest mean score increase from pre-test to post-test in both literacy (10 percentage points; $d = .57$) and mathematics (18 percentage points; $d = .69$).
- The smallest gains in literacy were observed for Black or African American students (7 percentage points; $d = .39$). In mathematics, students with two or more races demonstrated the smallest increase (10 percentage points; $d = .42$).
- Students in receipt of ELD services had the largest pre-test to post-test increases in literacy (9 percentage points; $d = .51$) and mathematics (16 percentage points; $d = .62$) by the end of the summer program.
- The effect sizes of the significant results (ranging from $d = .39$ to $d = .69$) indicated substantive improvements in post-test literacy or mathematics skills compared to pre-test scores. Effect sizes of 0.2, 0.5, or 0.8 indicate that for 58%, 66%, or 79% of participants, respectively, average scores on the post-test were higher than the scores attained on the pre-test (University of Connecticut, 2023).



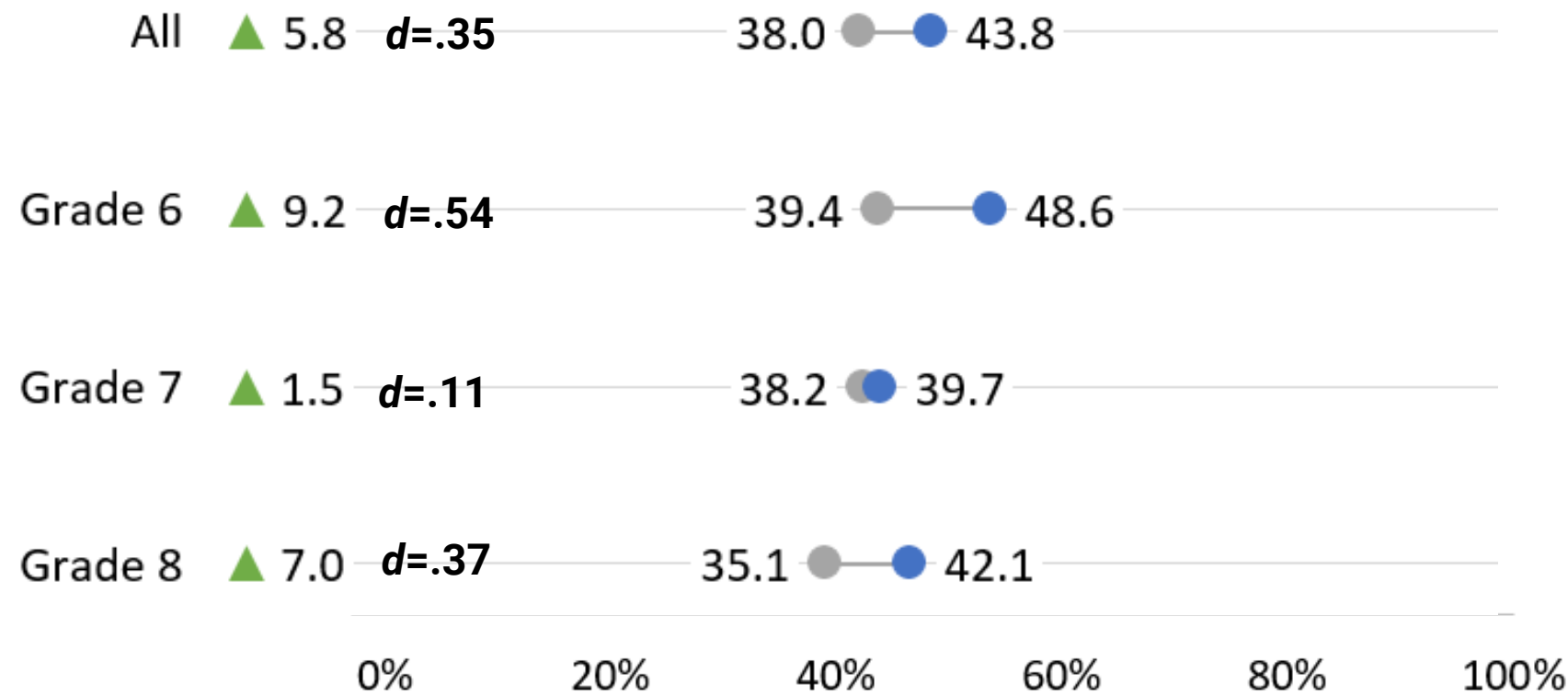
Results: LSP

Local School Program Grades 6–8 Literacy and Mathematics: Mean Differences in Pre-Post Test Results Overall and by Grade Level

Literacy



Mathematics



Note: d = Cohen's d (measure of effect size).



Findings

- Overall, the average post-test literacy and mathematics scores for rising Grades 6–8 LSP participants were significantly higher than pre-test scores, with percentage-point increases of 5.8 ($d=.27$ and $d=.35$).
- Rising Grade 7 LSP participants demonstrated the largest score increases for literacy, whereas rising Grade 6 participants had the highest increase in mathematics, with an increase of 9 percentage points ($d=.54$).
- The effect sizes, which ranged from $d=.11$ to $d=.54$, indicated substantive improvements in post-test literacy or mathematics performance compared to pre-test scores. For a given group, effect sizes of 0.2, 0.5, or 0.8 indicate that the average score on the post-test was higher than pre-test scores for 58%, 66%, and 79% of students, respectively, (University of Connecticut, 2023).



Results: LSP

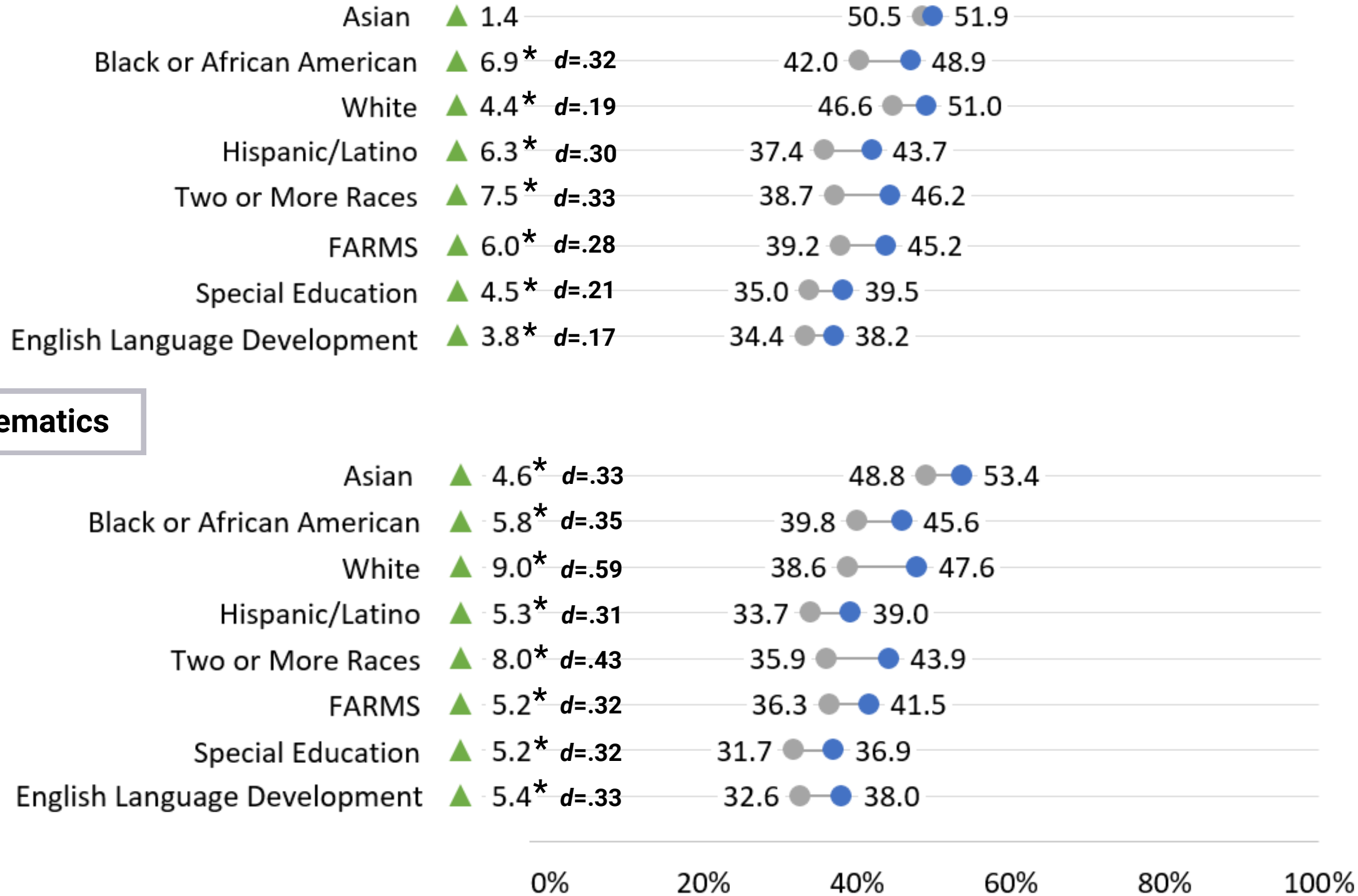
Local School Program Grades 6–8 Literacy and Mathematics: Mean Differences in Pre-Post Test Results by Race/Ethnicity and Service



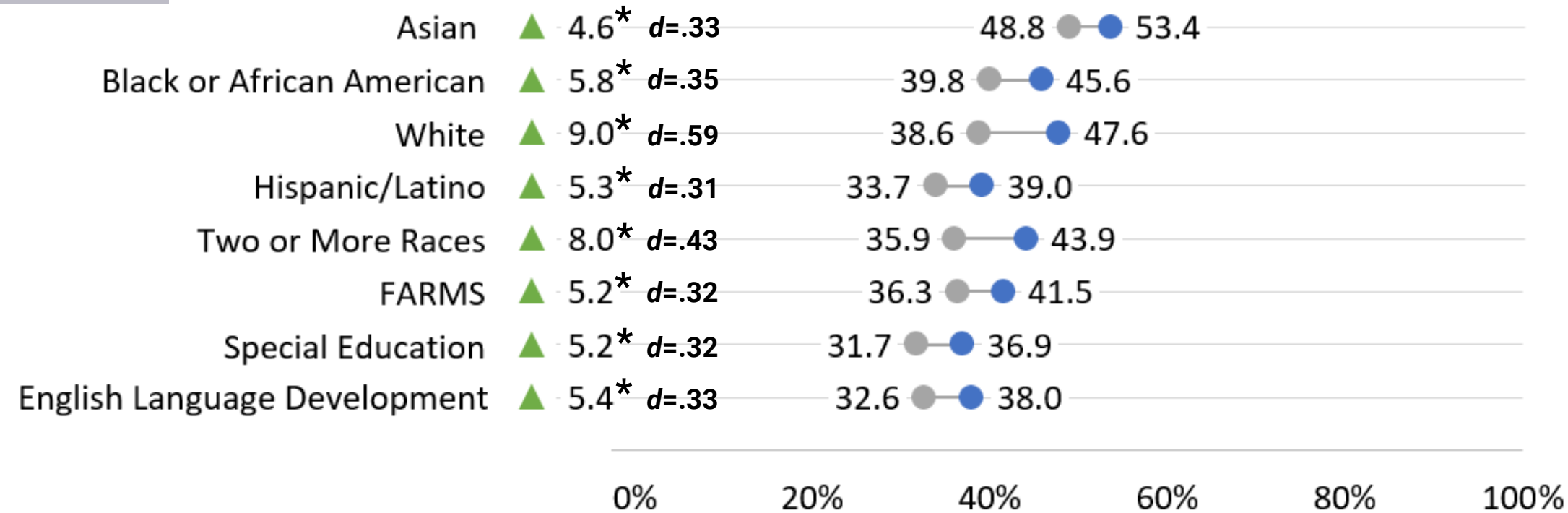
Findings

Literacy

● Pre-Test ● Post-Test



Mathematics



- Among the rising Grades 6–8 racial/ethnic groups, students with two or more races demonstrated the largest literacy mean score increase from pre-test to post-test (8 percentage points; $d=.33$), whereas White students, on average, had the smallest significant gain (4 percentage points; $d=.19$).
- In contrast to the literacy results, White students had the largest gains in mathematics from pre-test to post-test (9 percentage points; $d=.59$).
- Asian students had the smallest gains among the racial/ethnic groups both literacy (1 percentage point) and mathematics (5 percentage points; $d=.59$), with their literacy score increase not reaching statistical significance.
- Students receiving FARMS services had the largest mean increase in literacy, with a 6 percentage-point increase from pre-test to post-test ($d=.28$). The gains in mathematics for students receiving services were fairly equal.
- The effect sizes of the significant results that ranged from $d=.17$ to $d=.59$ indicated substantive improvements in post-test literacy or mathematics skills compared to pre-test scores.

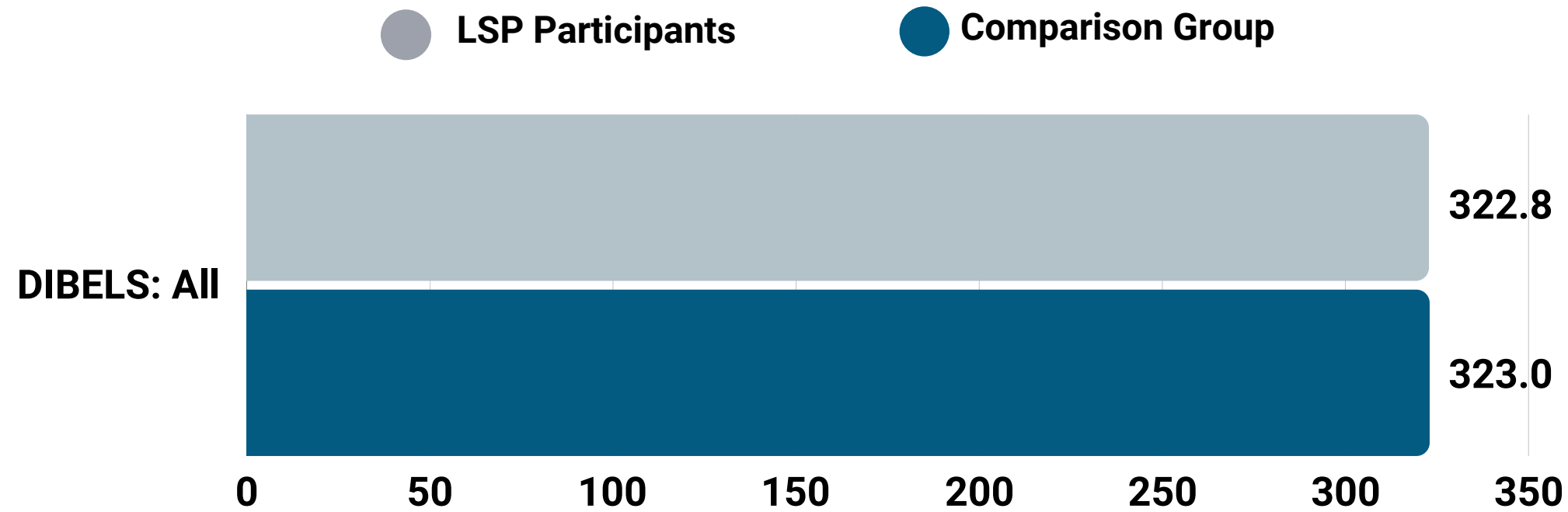
Note: American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander student groups did not have sufficient numbers to detect statistical significance at the group level ($N>30$). * = Statistically significant difference at the $p < .05$ level. d = Cohen's d (measure of effect size).



Results: LSP

LSP: Grades 1 and 2 Adjusted Mean Differences in Fall 2023 DIBELS Composite Scores Overall and by Grade Level

Literacy: Grades 1 and 2



Note: Adjusted means are composite score means corrected to account for differences in participants' and non-participants' prior achievement on the Spring 2023 DIBELS assessment. A Lectura analysis was not conducted for LSP participants. The number of participants with Lectura scores was not sufficient to detect statistical significance at the group level (N>30).



Findings

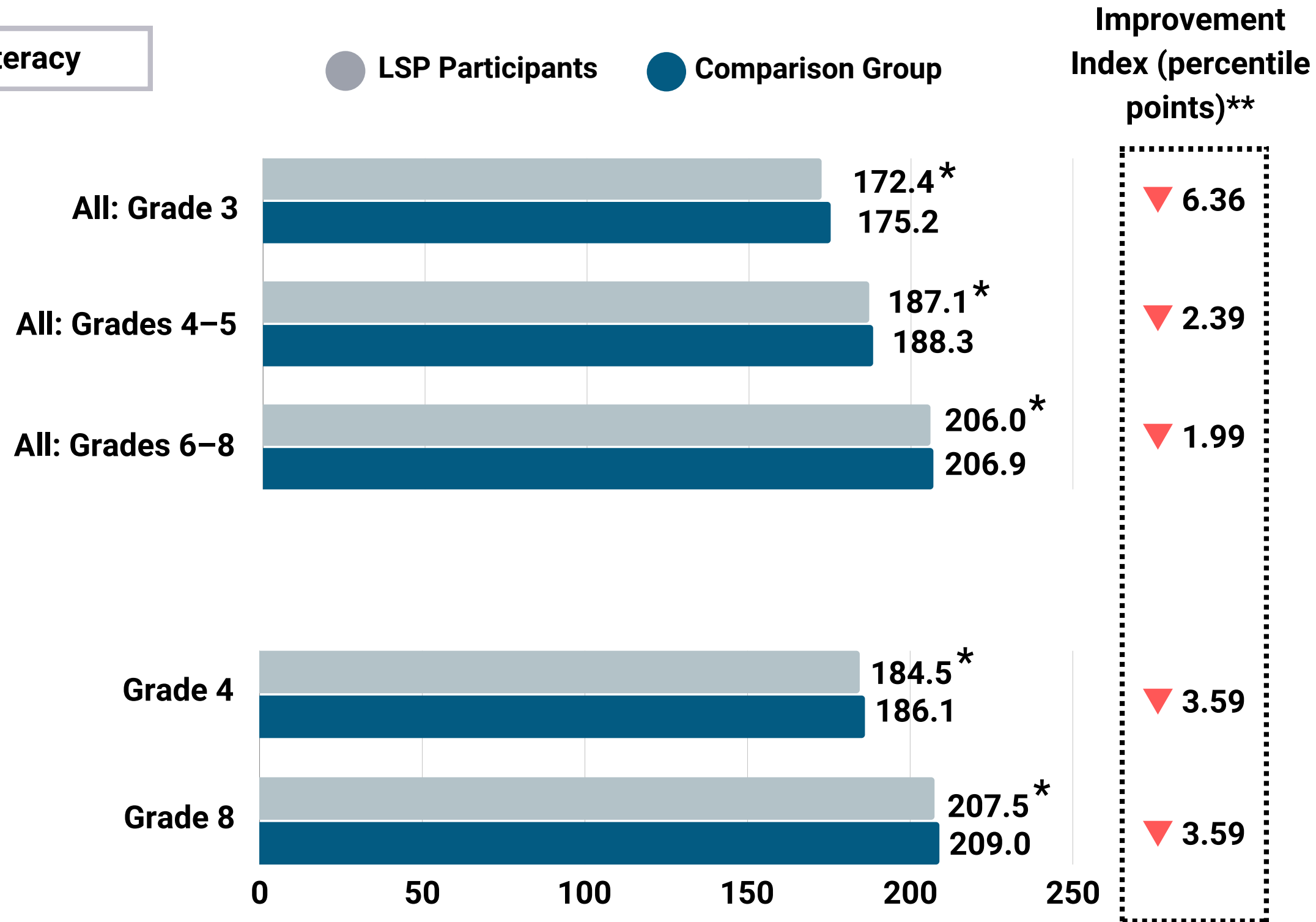
- There was no statistically significant difference in the fall 2023 DIBELS mean composite scores, overall or by grade level, among rising Grades 1 and 2 LSP participants and the matched comparison group.
- In addition to the non-significant results observed at the aggregate level, the disaggregated results did not reveal significant effects on Grades 1 and 2 literacy performance by grade level, race/ethnicity, or service group.



Results: LSP

Local School Program: Adjusted Mean Differences in Fall 2023 MAP-R RIT Scores Overall and by Grade Level

Literacy



Findings

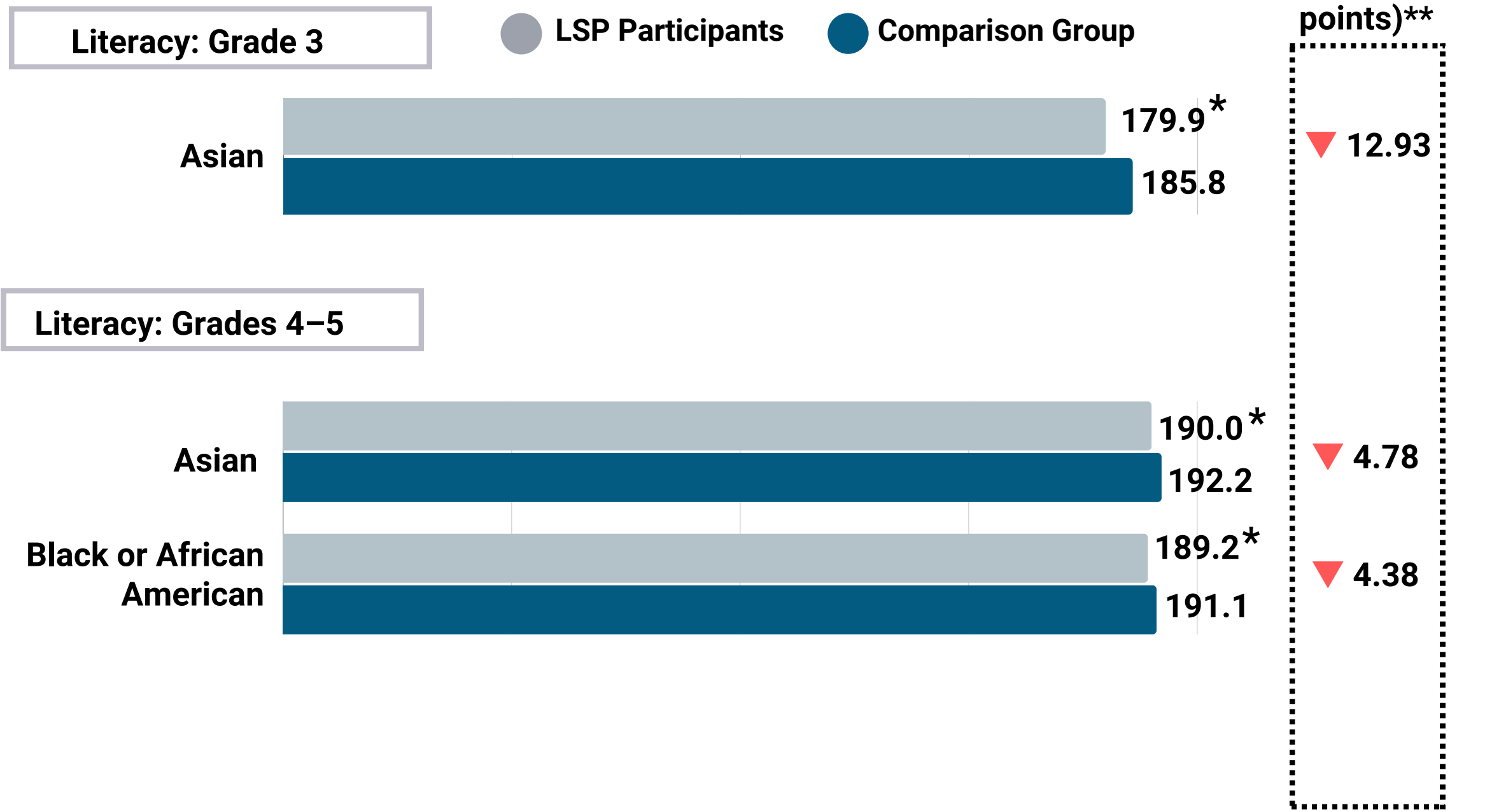
- In literacy, while accounting for Spring 2023 MAP-R performance among elementary and middle school students, there were statistically significant fall 2023 MAP-R mean RIT score differences overall and by grade level between LSP participants and the matched comparison group, in favor of the comparison students.
- The reported improvement indices are the average expected changes in the percentile rank for an average (50th percentile) student who participates in summer programming; the results indicated that the magnitudes of the significant effects translate to a 6.36 (Grade 3), 2.39 (Grades 4 and 5), and 1.99 (Grades 6-8) percentile-point decrease in literacy performance for an average student ($g=.16$, $g=.06$, and $g=.05$, respectively).
- At the grade level, significant differences were observed for Grades 4 and 8 students, with participants scoring lower than the matched comparison students. The effect size was .09 for both grades, which is equivalent to a 3.59 percentile-point decrease in literacy performance.

Note: Adjusted means are RIT score means corrected to account for differences in participants' and the matched comparison group's prior achievement on the Spring 2023 MAP-R assessment. * = Statistically significant difference at the $p < .05$ level. g = Hedges' g (measure of effect size). **The improvement indices are based on the Cohen's U index formula provided in the What Works Clearinghouse Procedures and Standards Handbook (see What Works Clearinghouse, 2022).



Results: LSP

Local School Program: Adjusted Mean Differences in Fall 2023 MAP-R and MAP-M RIT Scores by Race/Ethnicity and Service



Findings

- LSP participation had unfavorable effects on the fall 2023 MAP-R performance of rising Grade 3 Asian students. Asian participants had lower adjusted mean RIT scores on MAP-R than did matched comparison students. The program effect on Asian students' MAP-R performance translates to a 12.93 ($g=.33$) percentile-point decrease in literacy performance for an average student.
- Rising Grades 4 and 5 Asian and Black or African American students also exhibited lower adjusted mean RIT scores on MAP-R than did matched comparison students. The magnitudes of these effects translate to a 4.78 and 4.38 percentile-point decrease, respectively, in literacy performance for an average student ($g=.12$ and $g=.11$).

Note: Adjusted means are RIT score means corrected to account for differences in participants' and the matched comparison group's prior achievement on the Spring 2023 MAP-R assessment. Disaggregated results are reported for groups with statistically significant differences. American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander student groups did not have sufficient numbers to detect statistical significance at the group level ($N>30$). * = Statistically significant difference at the $p < .05$ level. g = Hedges' g (measure of effect size). **The improvement indices are based on the Cohen's U index formula provided in the What Works Clearinghouse Procedures and Standards Handbook (see What Works Clearinghouse, 2022).

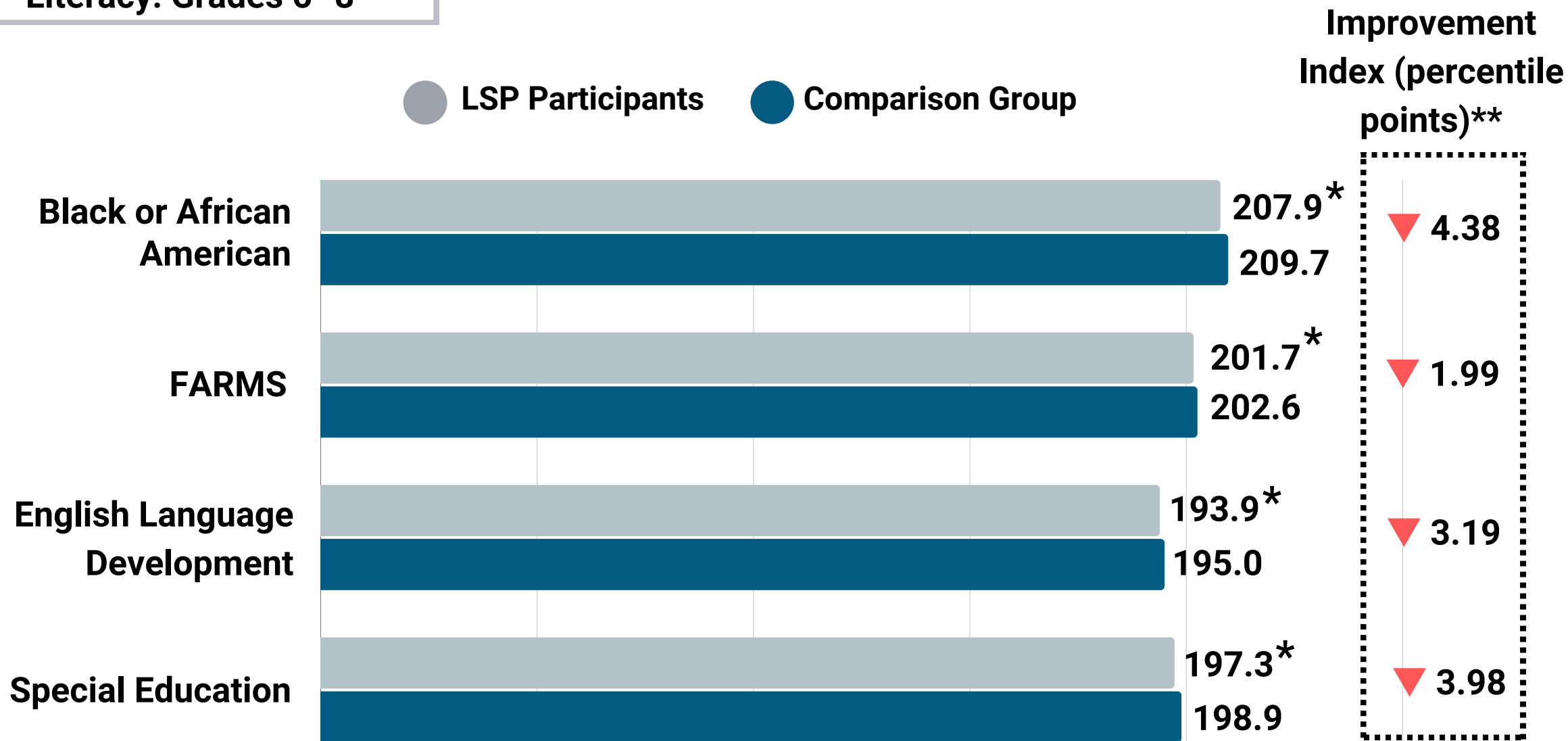


Results: LSP

Local School Program: Adjusted Mean Differences in Fall 2023 MAP-R Scores by Race/Ethnicity and Service

Literacy: Grades 6–8

● LSP Participants ● Comparison Group



Note: Adjusted means are RIT score means corrected to account for differences in participants' and the matched comparison group's prior achievement on the Spring 2023 MAP-R assessment. Disaggregated results are reported for groups with statistically significant differences. American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander student groups did not have sufficient numbers to detect statistical significance at the group level (N>30). * = Statistically significant difference at the $p < .05$ level. g = Hedges' g (measure of effect size). **The improvement indices are based on the Cohen's U index formula provided in the What Works Clearinghouse Procedures and Standards Handbook (see What Works Clearinghouse, 2022).



Findings

- For middle school, the results revealed that Black or African American participants and participants from the three service groups had lower adjusted mean MAP-R RIT scores than the matched comparison students.
- The reported improvement indices indicate that the magnitude of the program effects on these student groups are equivalent to a 1.99 to 4.38 percentile-point decrease in literacy performance for an average student, with effect sizes ranging from .05 to .11. The largest effect was observed for Black or African American students.



Results: LSP

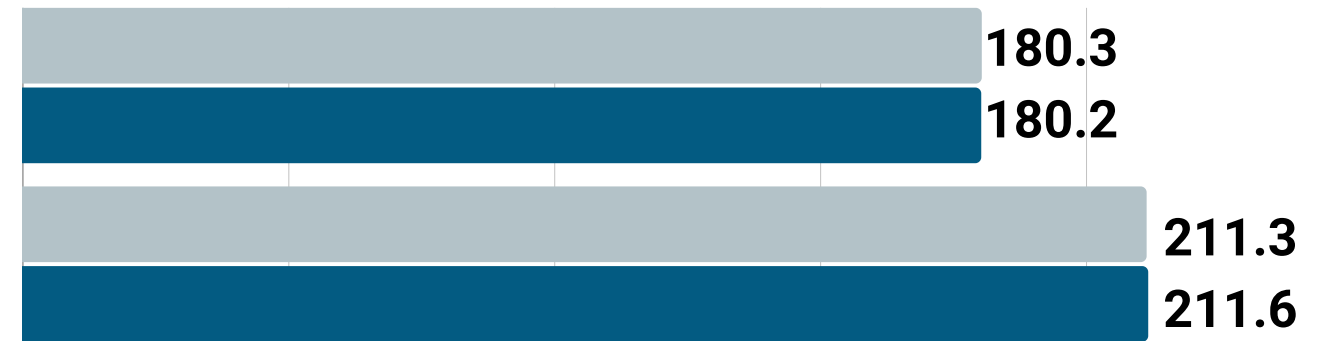
Local School Program: Adjusted Mean Differences in Fall 2023 MAP-M RIT Scores Overall and by Grade Level

● LSP Participants ● Comparison Group

Mathematics: Grades K–8

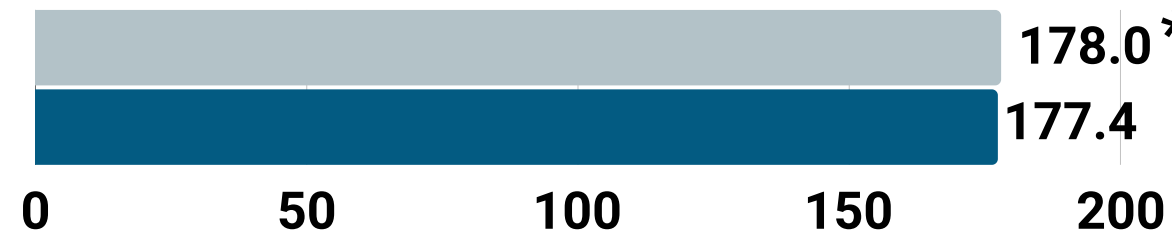
Elementary: Grades 1–5

Middle: Grades 6–8



Mathematics: Grades K–5

FARMS



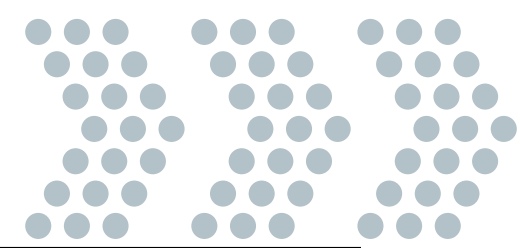
Improvement Index (percentile points)**



Findings

- Overall, the adjusted fall 2023 MAP-M RIT mean scores among rising Grades 1–5 and Grades 6–8 participants and comparison students were not significantly different. There were also no statistically significant differences observed by grade level.
- The disaggregated results revealed positive effects of LSP participation on fall 2023 MAP-M performance for participants receiving FARMS services. Participants receiving FARMS services had slightly higher adjusted mean MAP-M RIT scores than did the matched comparison students. The magnitude of this effect was not practically significant ($g=.03$). The reported improvement indices indicate that the effect translates to a 1.11 percentile-point increase in mathematics performance for an average student.

Note: Adjusted means are RIT score means corrected to account for differences in participants' and the matched comparison group's prior achievement on the Spring 2023 MAP-M assessment. Disaggregated results are reported only for groups with statistically significant differences. * = Statistically significant difference at the $p < .05$ level. g = Hedges' g (measure of effect size). **The improvement indices are based on the Cohen's U index formula provided in the What Works Clearinghouse Procedures and Standards Handbook (see What Works Clearinghouse, 2022).



Local School Program

Immediate Academic Outcomes:

- Participating in LSP yielded a significant positive immediate effect on the literacy and mathematics skills of rising Grades 2–8 students. An assessment of students' pre-test and post-test scores clearly indicated substantial improvements in their academic skills. The magnitudes of the statistically significant t-test results exceeded 0.2, indicating practical significance within the educational context. The only group to not demonstrate significant growth in literacy from pre-test to post-test was middle school Asian students.

Distal Academic Outcomes (Fall 2023):

- Literacy: For rising Grades 1 and 2 students, no significant differences in fall 2023 literacy achievement, as measured by DIBELS composite scores, were observed between LSP participants and matched comparison students.
- Literacy: Overall, however, for Grades 4 and 5, and Grades 6–8 students, LSP participants performed significantly lower than non-participants on fall 2023 MAP-R. These overall school level effects were driven by the non-favorable grade-level effects for Grades 4 and 8.
- Literacy: For rising Grade 3 students, there was a significant overall effect on literacy performance. Disaggregated results revealed that Asian participants performed significantly lower than their matched comparison students on the fall 2023 MAP-R assessment. The magnitude of this effect translates to a 12.93 percentile-point decrease in literacy performance for an average student.
- Literacy: For rising Grades 4–8 student groups, participants' fall 2023 MAP-R performance was significantly lower than the performance of their counterparts for Grades 4–8 Black or African American participants, Grades 4–5 Asian participants, and Grades 6–8 participants from all service groups. Although the differences were statistically significant, the effects, ranging from .05 and .11, did not reach practical significance.
- Mathematics: The only significant effect on the mathematics performance of rising Grades K–5 LSP participants was observed for students receiving FARMS services. These students demonstrated higher scores on Fall 2023 MAP-M compared to non-participants, but the difference was not practically significant. The effect size of .03 is equivalent to a 1.11 percentile-point increase in mathematics performance. No statistically significant effect on MAP-M performance was found for other student groups.



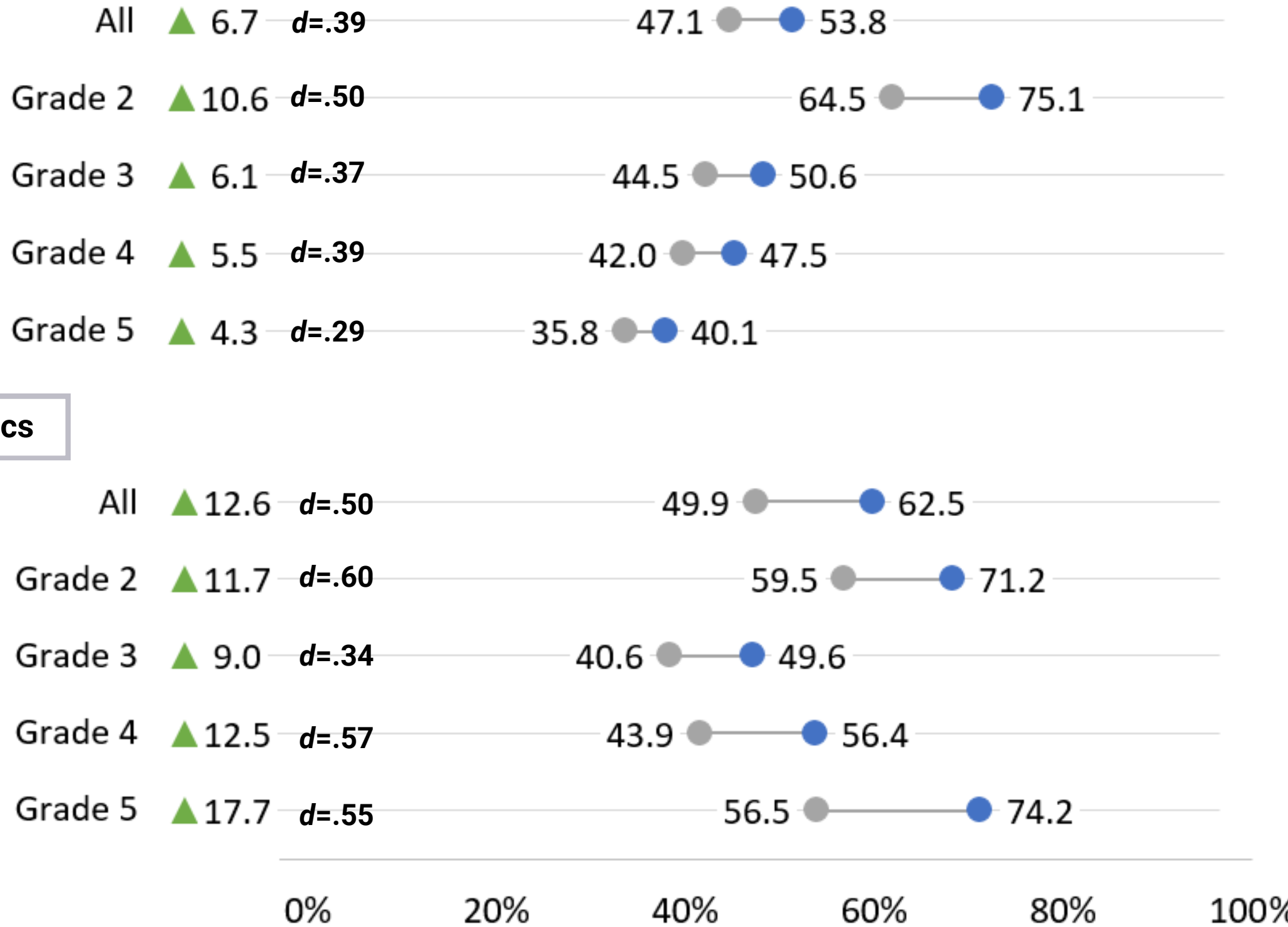
Results: ELO SAIL

ELO SAIL Literacy: Mean Differences in Pre-Post Test Results Overall and by Grade

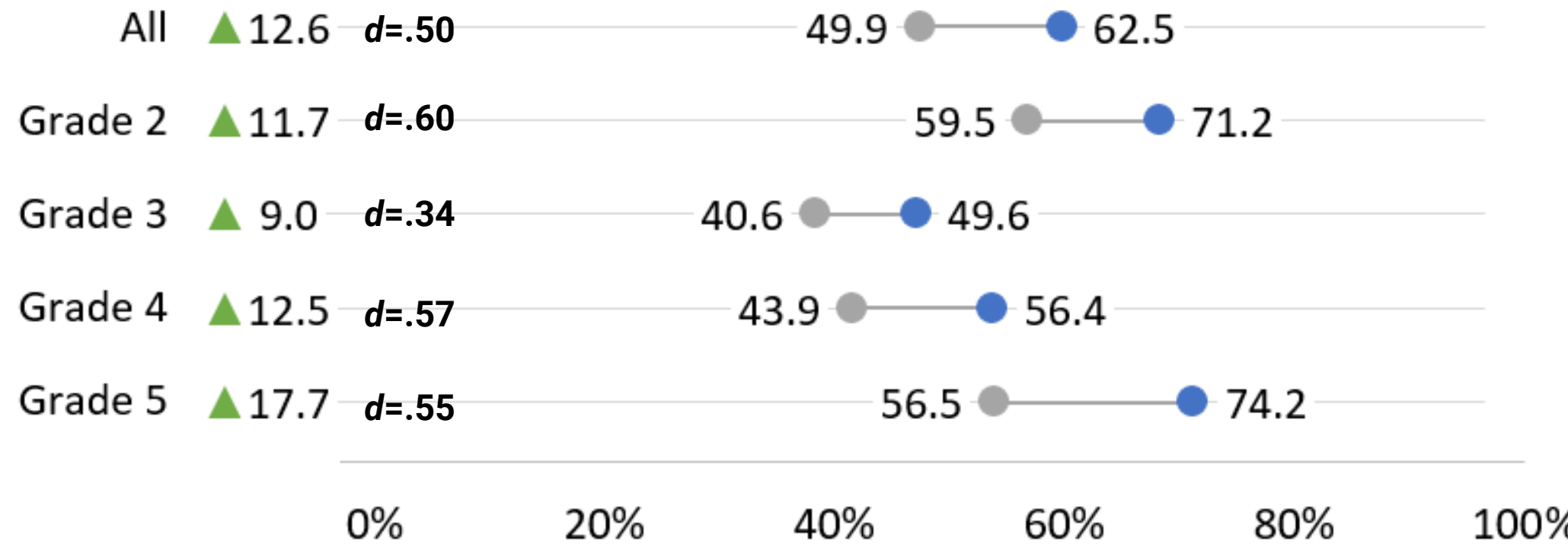
Literacy

● Pre-Test ● Post-Test

All reported differences are significant ($p < .05$).



Mathematics



Note: d = Cohen's d (measure of effect size).



Findings

- By the end of the summer, average post-test literacy scores for rising Grades 2–5 ELO SAIL participants were significantly higher than pre-test scores. The overall difference between pre-test and post-test scores was 7 percentage points ($d=0.39$). The grade-level differences ranged from 4 percentage points for rising Grade 5 students ($d=0.29$) to 11 percentage points for rising Grade 2 students ($d=0.50$).
- The mathematics post-test mean scores for rising Grades 2–5 ELO SAIL participants also increased significantly from pre-test administration. The overall difference between pre-test and post-test scores was 13 percentage points ($d=0.50$). Grade-level growth in post-test scores ranged from 9 percentage points for rising Grade 3 students ($d=0.34$) to 18 percentage points for rising Grade 5 students ($d=0.55$).
- The effect sizes of the significant results ranged from $d=0.29$ to $d=0.60$, which indicated practically significant improvements in post-test literacy or mathematics skills compared to pre-test scores.

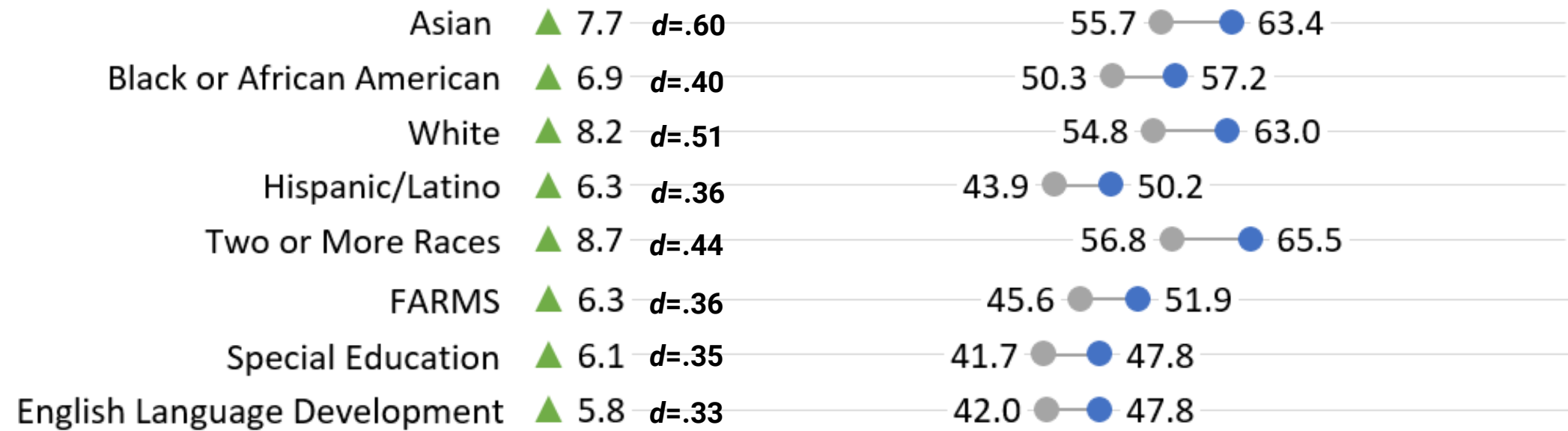


Results: ELO SAIL

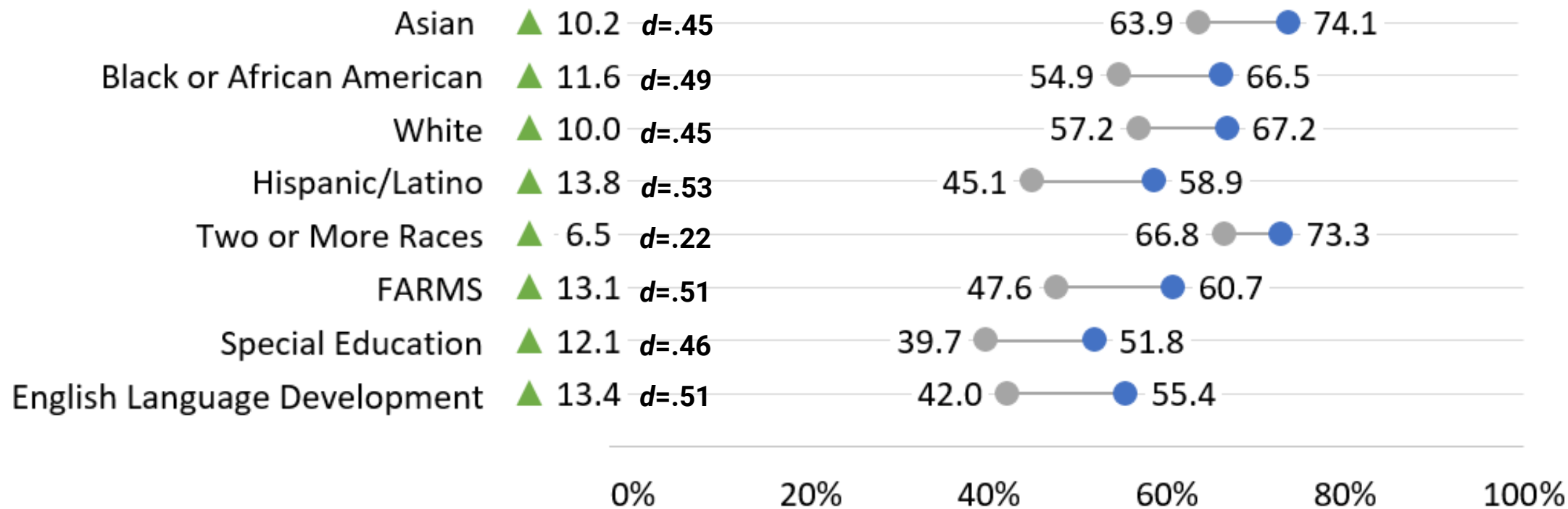
ELO SAIL Literacy: Mean Differences in Pre-Post Test Results by Race/Ethnicity and Service

Literacy

● Pre-Test ● Post-Test
All reported differences are significant ($p < .05$).



Mathematics



Note: d = Cohen's d (measure of effect size).



Findings

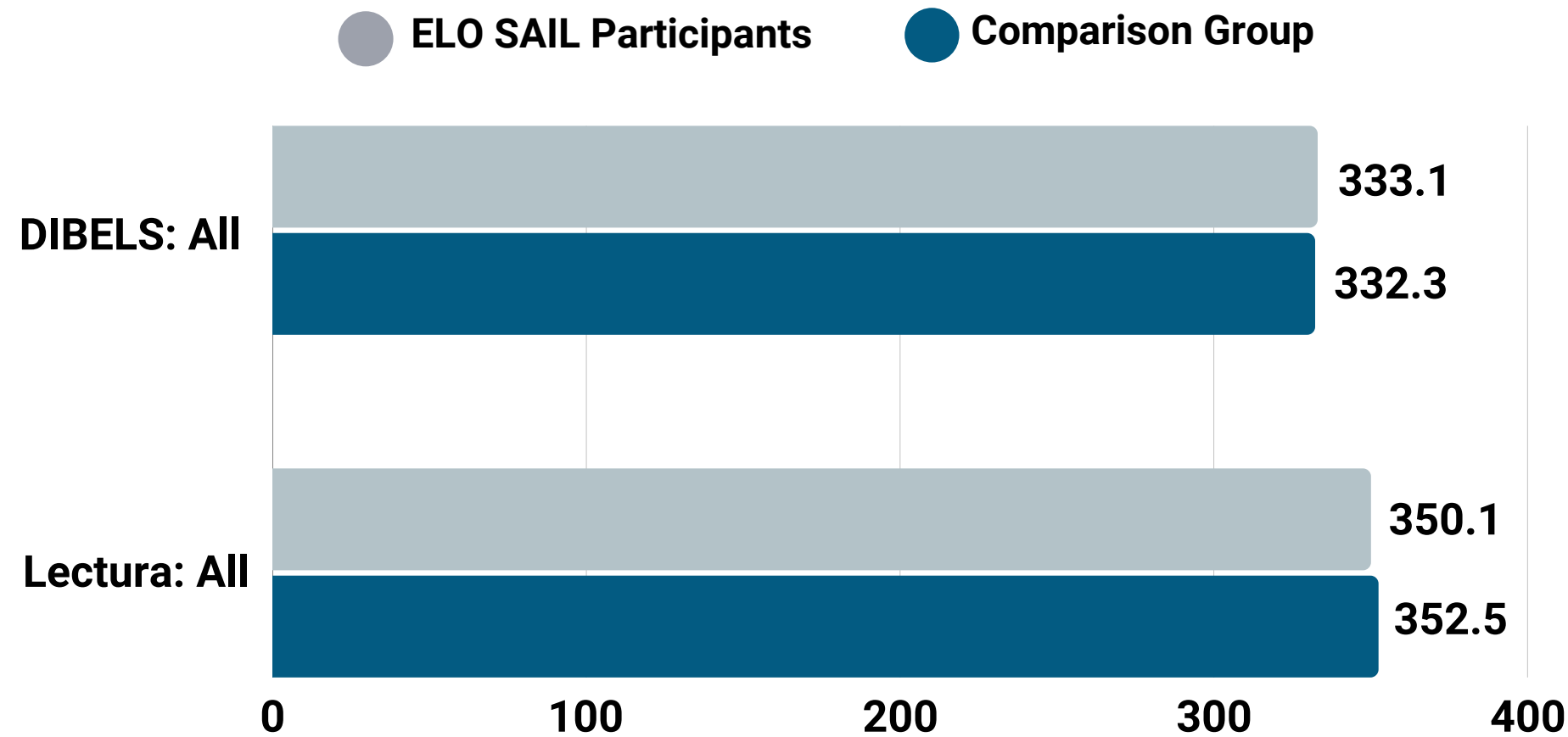
- Among the rising Grades 2–5 racial/ethnic groups, students with two or more races demonstrated the largest literacy mean score increase from pre-test to post-test (9 percentage points; $d=.44$), whereas Hispanic/Latino students had the smallest gain (6 percentage points; $d=.36$).
- In mathematics, Hispanic/Latino students had the largest mean-score gain from pre-test to post-test (14 percentage points; $d=.53$), with students with two or more races demonstrating the smallest increase (7 percentage points; $d=.22$).
- Among students receiving services, students receiving FARMS services had the largest increase in literacy mean scores at the end of the summer program (6 percentage points; $d=.36$). For mathematics, students receiving English language development services (13 percentage points; $d=.51$) experienced a greater increase than the other groups.
- The magnitudes of the effects ranged from $d=.22$ to $d=.60$, indicating meaningfully significant improvements in post-test literacy or mathematics skills compared to pre-test scores.



Results: ELO SAIL

ELO SAIL: Grades 1 and 2 Adjusted Mean Differences in Fall 2023 DIBELS and Lectura Composite Scores Overall and by Grade Level

Literacy: Grades 1 and 2



Note: Adjusted means are composite score means corrected to account for differences in participants' and non-participants' prior achievement on the Spring 2023 DIBELS and Lectura assessments.



Findings

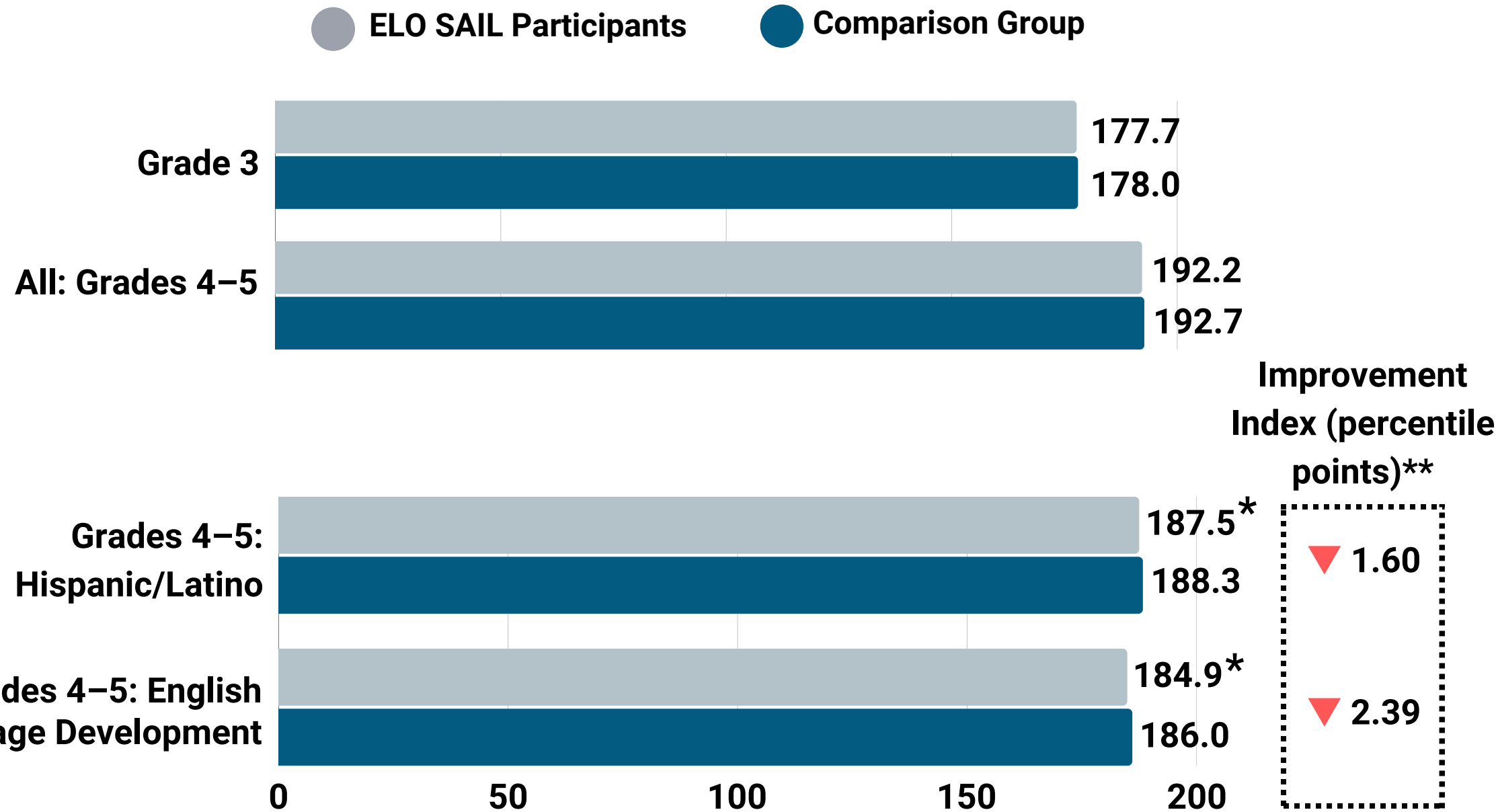
- While accounting for Spring 2023 literacy performance, there were no overall statistically significant fall 2023 DIBELS or Lectura mean composite score differences between rising Grades 1 and 2 ELO SAIL participants and the matched comparison group.
- In addition to the non-significant results observed at the aggregate level, the disaggregated results did not reveal significant effects on Grades 1 and 2 literacy performance by grade level, race/ethnicity, or service group.



Results: ELO SAIL

ELO SAIL: Adjusted Mean Differences in Fall 2023 MAP-R RIT Scores Overall and by Grade Level, Race/Ethnicity, and Services

Literacy: Grades 3–5



Note: Adjusted means are RIT score means corrected to account for differences in participants' and non-participants' prior achievement on the Spring 2023 MAP-R assessment. Disaggregated results are reported only for groups with statistically significant differences. * = Statistically significant difference at the $p < .05$ level. g = Hedges' g (measure of effect size). **The improvement indices are based on the Cohen's U index formula provided in the What Works Clearinghouse Procedures and Standards Handbook (see What Works Clearinghouse, 2022).



Findings

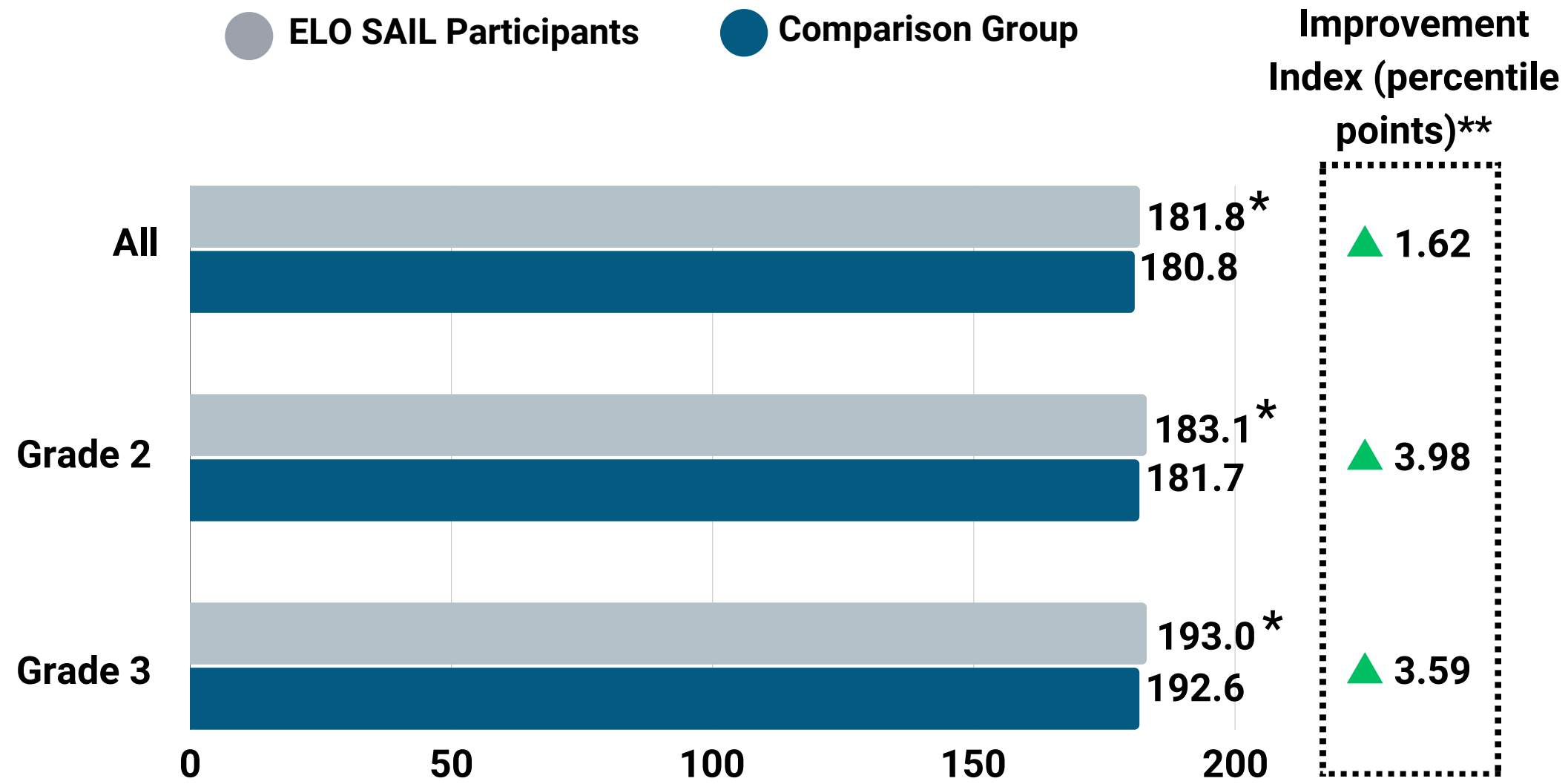
- In literacy, while accounting for spring 2023 MAP-R performance, there were no statistically significant fall 2023 MAP-R mean RIT score differences overall or by grade level between rising Grades 3, 4, and 5 ELO SAIL participants and the matched comparison group.
- ELO SAIL participation had unfavorable effects on the fall 2023 MAP-R performance of rising Grades 4 and 5 Hispanic/Latino participants and participants receiving ELD services. Students from these groups had lower adjusted mean RIT scores on MAP-R than did matched comparison students.
- The reported improvement indices indicate that the magnitudes of the program effects on MAP-R performance translate to a 1.60 and 2.39 percentile-point decrease in literacy performance for an average student ($g = .04$ to $g = .06$).



Results: ELO SAIL

ELO SAIL: Adjusted Mean Differences in Fall 2023 MAP-M RIT Scores Overall and by Grade Level

Mathematics: Grades 1–5



Note: Adjusted means are RIT score means corrected to account for differences in participants' and non-participants' prior achievement on the Spring 2023 MAP-M assessment. Disaggregated results are reported only for groups with statistically significant differences. * = Statistically significant difference at the $p < .05$ level. g = Hedges' g (measure of effect size). **The improvement indices are based on the Cohen's U index formula provided in the What Works Clearinghouse Procedures and Standards Handbook (see What Works Clearinghouse, 2022).



Findings

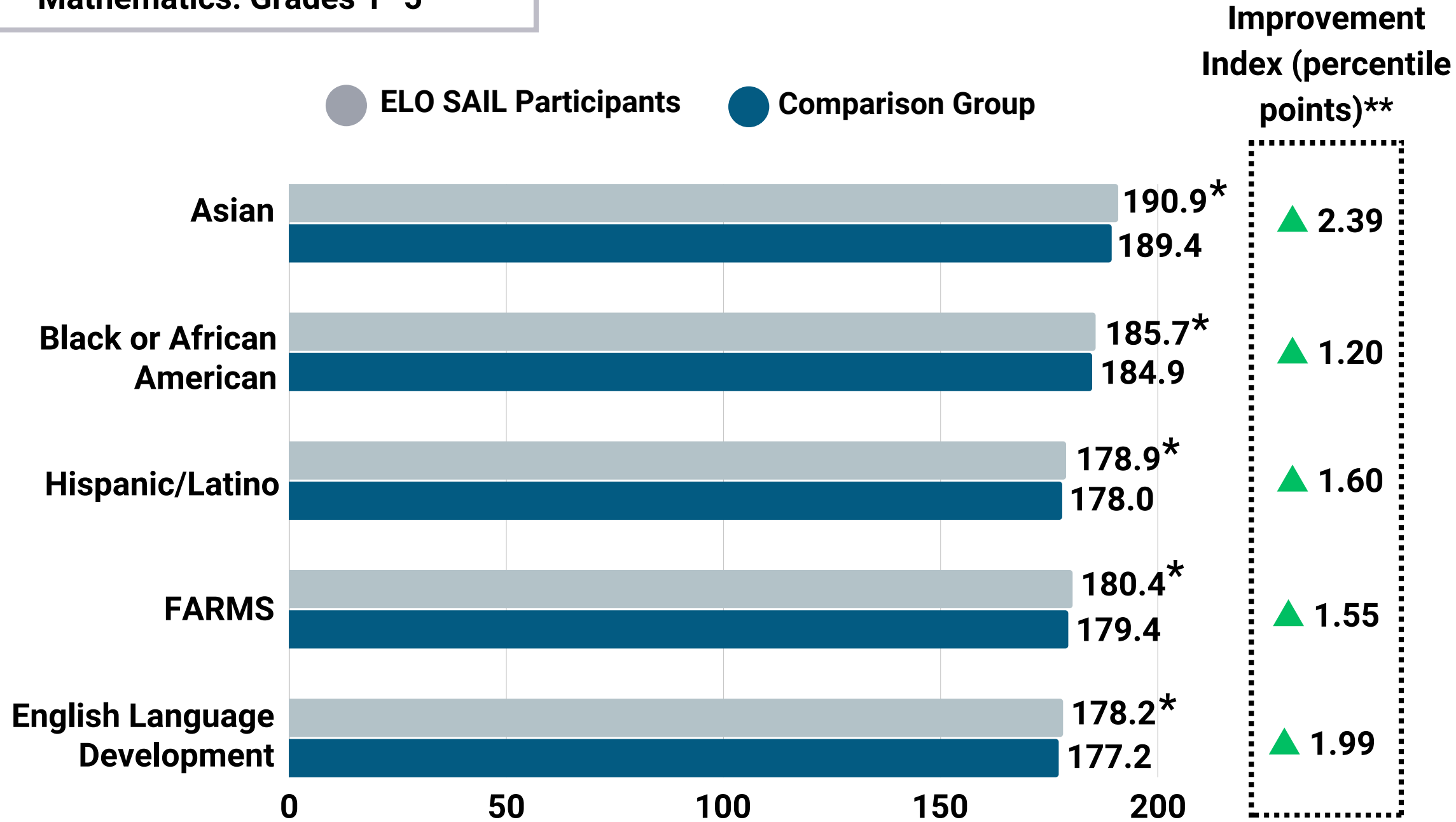
- ELO SAIL participation had a positive overall and grade-level effect on fall 2023 MAP-M performance. Rising Grades 2 and 3 participants had significantly higher mean RIT scores than the matched comparison students. There were no significant differences observed for all other grade levels.
- The reported improvement indices indicate that the magnitudes of the program effects on MAP-M performance translate to a 1.62 to 3.98 percentile-point increase in mathematics performance for an average (50th percentile) student ($g=.04$, $g=.10$, and $g=.09$).



Results: ELO SAIL

ELO SAIL: Adjusted Mean Differences in Fall 2023 MAP-M RIT Scores by Race/Ethnicity and Service

Mathematics: Grades 1–5



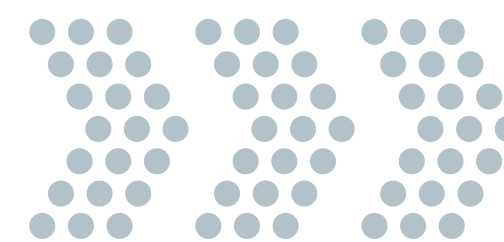
Note: Adjusted means are RIT score means corrected to account for differences in participants' and non-participants' prior achievement on the Spring 2023 MAP-M assessment. Disaggregated results are reported for groups with statistically significant differences. American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander student groups did not have sufficient numbers to detect statistical significance at the group level (N>30). * = Statistically significant difference at the $p < .05$ level. g = Hedges' g (measure of effect size).

**The improvement indices are based on the Cohen's U index formula provided in the What Works Clearinghouse Procedures and Standards Handbook (see What Works Clearinghouse, 2022).



Findings

- ELO SAIL participation had positive effects on the fall 2023 MAP-M performance of rising Grades 1–5 Asian, Black or African American, and Hispanic/Latino participants, and all participants receiving FARMS or ELD services. Students from these groups had higher adjusted mean RIT scores on MAP-M than did matched comparison students.
- The reported improvement indices indicate that the magnitudes of the program effects on MAP-M performance are comparable to a 1.20 to 2.39 percentile-point increase in mathematics performance for an average student ($g=.03$ to $g=.06$). The largest effect was on the MAP-M performance of Asian students (2.39 percentile-point increase; $g=.06$).



ELO SAIL

Immediate Academic Outcomes:

- Participation in ELO SAIL had positive effects on students' literacy and mathematics skills at the end of the summer. Post-test scores showed measurable improvements relative to pre-test scores. Across all situations assessed, the observed gains from statistically significant t-test results were practically significant for educational purposes ($d > .2$).

Distal Academic Outcomes (Fall 2023):

- Literacy: Among rising Grades 1 and 2 students, no significant differences in fall 2023 literacy achievement (DIBELS and Lectura composite scores) were observed between ELO SAIL participants and matched comparison students.
- Literacy: For rising Grades 3–5 students, ELO SAIL participants receiving ELD services and Hispanic/Latino participants performed lower than the matched comparison students on Fall 2023 MAP-R. The magnitudes of the significant effects on MAP-R performance were 0.06 and 0.04, respectively, and translate to a 2.39 and 1.60 percentile-point decrease in literacy performance for an average student.
- Mathematics: ELO SAIL participants outperformed matched comparison students on fall 2023 MAP-M. This was observed across the overall sample and for rising Grades 2 and 3 students. However, the differences were not practically significant ($g < .2$).
- Mathematics: Similar effects were observed in fall 2023 MAP-M performance for Asian, Black/African American, Hispanic/Latino, and participants receiving FARMS or ELD services; these groups had higher adjusted mean RIT scores on MAP-M compared to matched comparison students.
- Mathematics: The magnitudes of the significant effects on MAP-M performance ranged from 0.03 to 0.10 and translate to a 1.11 to 3.98 percentile-point increase in mathematics performance for an average student. Overall, the largest effect on mathematics performance was observed for rising Grades 1 and 2 students.

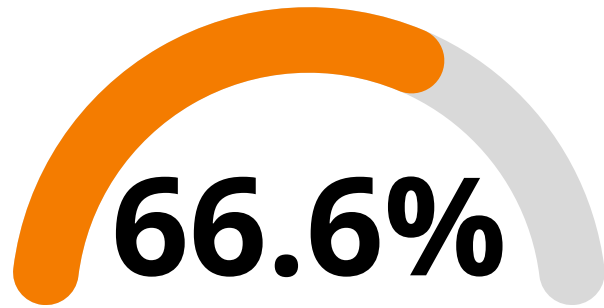


Results: CHSSP

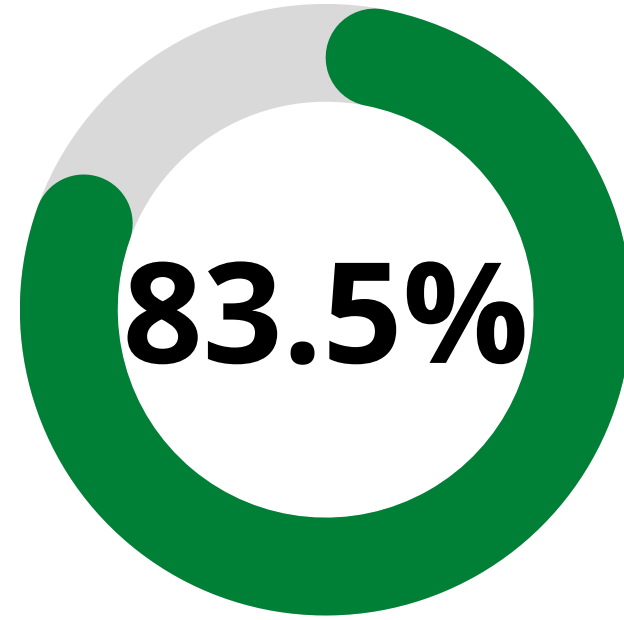
CHSSP: Summer Credits Attempted and Earned among Rising Grades 9–12 Participants

6,913

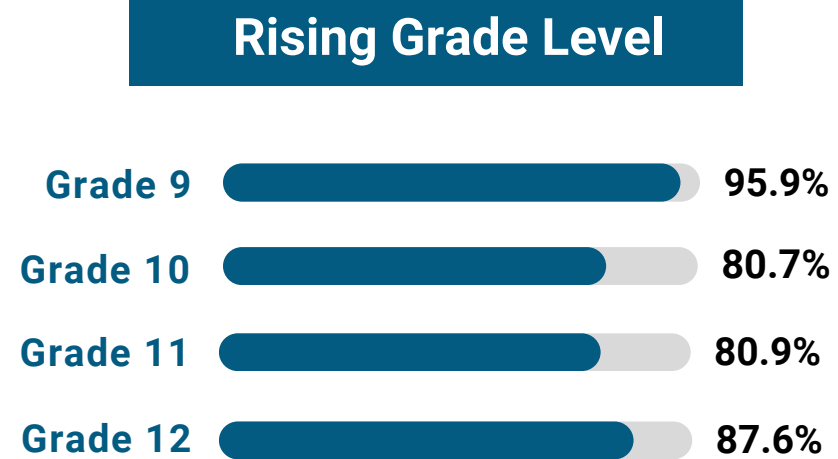
rising Grades 9–12 CHSSP participants attempted course credits in Summer 2023.



The **percentage** of rising Grades 9–12 CHSSP participants who earned 100% of credits attempted in Summer 2023.



The **percentage** of rising Grades 9–12 CHSSP participants who earned credits in Summer 2023



Note: Credit attainment rates are only reported for rising Grades 9–12 students with available credit history data for either Session 1 or Session 2 of Summer 2023. Reported totals exclude rising Grades 7 and 8 students and non-graduating Grade 12 students. Credit accumulation data for non-graduating Grade 12 students are presented later in this report.



Findings

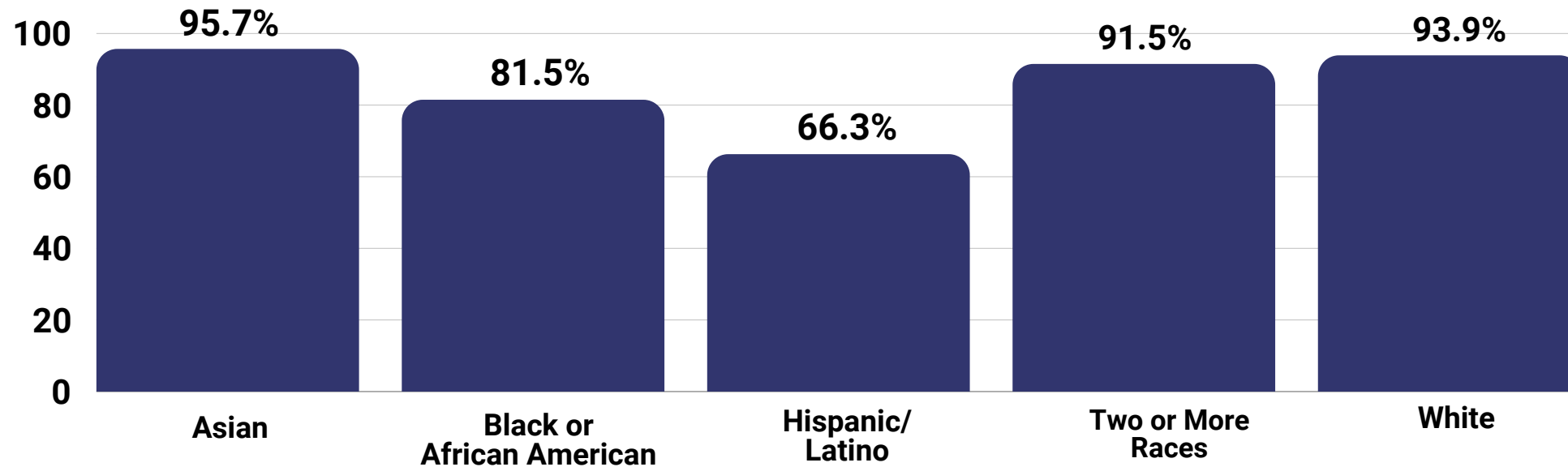
- Approximately 84% (5,775) of the 6,913 rising Grades 9–12 CHSSP participants earned credits in Summer 2023. Participants enrolled in a wide variety of courses to receive either original credit or a grade replacement. Enrolled courses included English, English Language Development, mathematics, science, history/social studies, Career Technical Education (CTE), and other elective courses.
- Results disaggregated by grade level revealed that over 80% of all grade level participants earned summer credits. Grade 9 had the largest percentage of students earning summer credits (96%).
- Of the 6,913 participants who attempted summer credits, 5,126 participants (67%) earned 100% of the credits attempted, while 1,138 students (17%) did not earn any credits. The average success rate for credits earned by credits attempted was 78%.



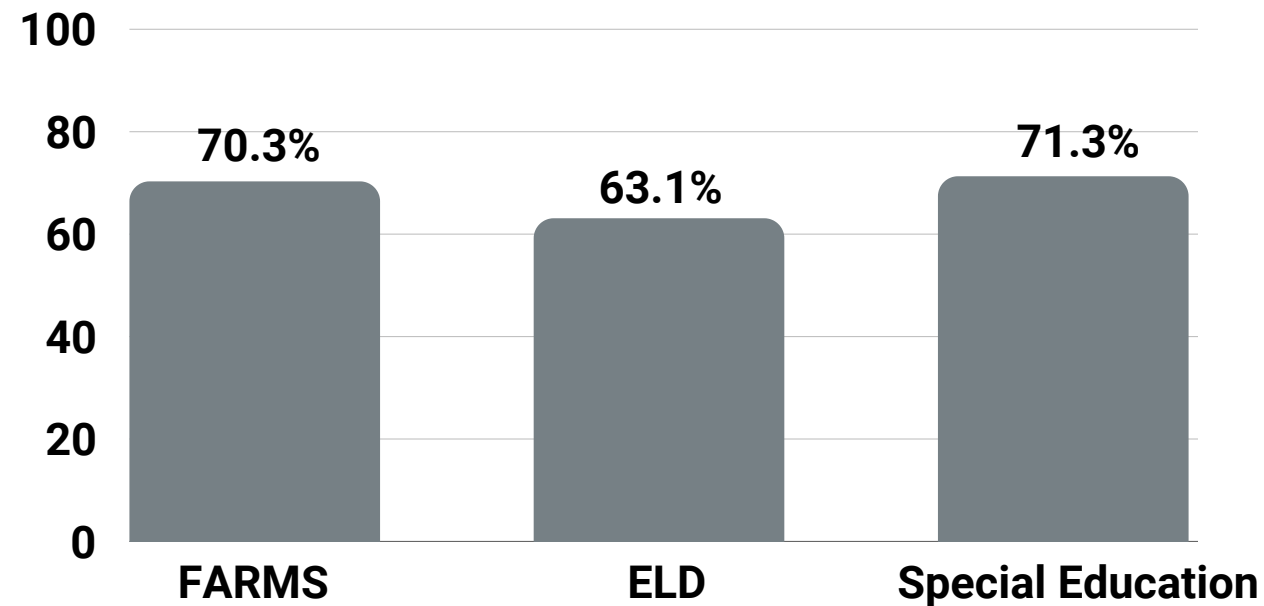
Results: CHSSP

CHSSP: Summer Credits Attempted and Earned among Rising Grades 9–12 Participants by Race and Services

Race/Ethnicity



Services



Note: The total of American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander participants is less than 10.



Findings

- Among the rising Grades 9–12 racial/ethnic groups who attempted credits in Summer 2023, a larger percentage of Asian students earned summer credits (96%). The Hispanic/Latino racial/ethnic group had the lowest percentage of students who earned credits from their attempted summer courses (66%).
- Slightly less than three quarters of rising Grades 9–12 participants receiving FARMS or special education services earned summer credits, whereas approximately 63% of participants receiving ELD services earned credits from their enrolled summer courses.



Results: CHSSP

CHSSP: Summer Credits Attempted and Earned among Non-graduating Grade 12 Participants

132

non-graduating Grade 12 CHSSP participants attempted course credits in Summer 2023.

65.1%

The **percentage** of non-graduating Grade 12 CHSSP participants who earned credits in Summer 2023

51.5%

The **percentage** of non-graduating Grade 12 CHSSP participants who earned 100% of credits attempted in Summer 2023.

Note: Credit attainment rates are only reported for non-graduating Grade 12 students with available credit history data for either Session 1 or Session 2 of Summer 2023.



Findings

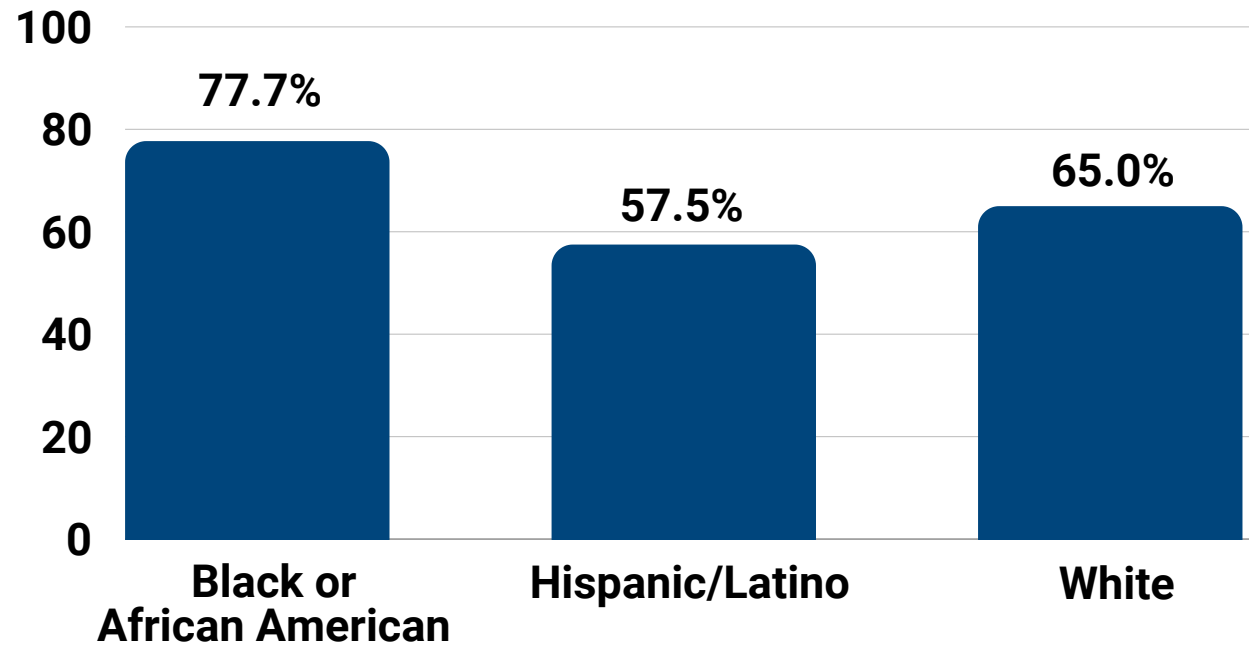
- Approximately 65% (86) of the 132 non-graduating Grade 12 CHSSP participants earned credits in Summer 2023.
- Of the 132 participants who attempted summer credits, approximately half (52%) of the students earned all of the credits attempted and 35% did not earn any credits. The average success rate for credits earned by credits attempted was 64%.
- *Note:* non-graduating Grade 12 students are students enrolled in Grade 12 at the end of the 2022–2023 school year.



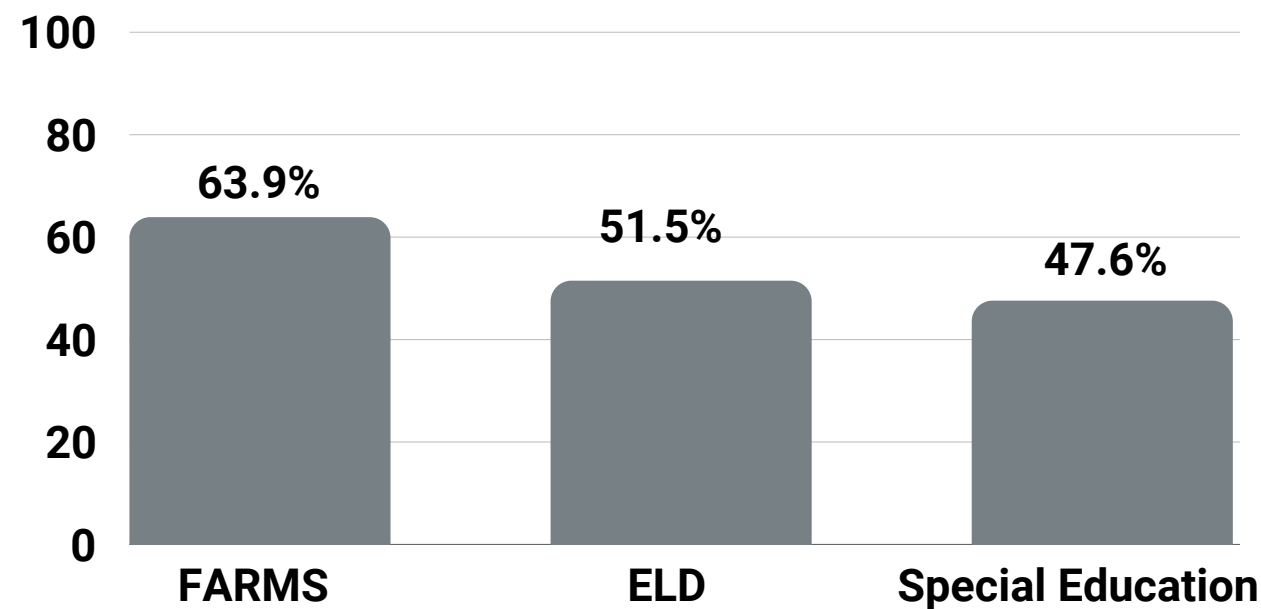
Results: CHSSP

CHSSP: Summer Credits Attempted and Earned among Non-graduating Grade 12 Participants by Race and Services

Race/Ethnicity



Services



Note: The total numbers of non-graduating Grade 12 participants from the American Indian or Alaska Native, Asian, Two or More Races, and Native Hawaiian or Other Pacific Islander racial/ethnic groups are less than 10.



Findings

- More than 50% of non-graduating Grade 12 students from each reported racial/ethnic group earned credits from their attempted summer courses, with the lowest percentage being that of Hispanic/Latino students (58%).
- Among the non-graduating Grade 12 participants receiving services, a larger percentage of students receiving FARMS services earned summer credits (64%) compared to all other service groups. Participants receiving special education services had the smallest percentage of students to earn summer credits (48%).



CHSSP

Credit Attainment:

- Approximately 84% of the rising Grades 9–12 CHSSP participants earned credits during the summer of 2023.
- On average, participants earned 78% of the credits attempted during the summer. Approximately 67% of participants earned 100% of the credits attempted, and 17% did not earn any credits.
- Results disaggregated by student group revealed that the Hispanic/Latino racial/ethnic group and participants receiving ELD services had the lowest percentages of students within each group to earn summer credits from attempted courses (66% and 63% of participants, respectively, within each group).
- Approximately 65% of the 132 non-graduating Grade 12 CHSSP participants earned summer credits.
- Of the 132 participants who attempted summer credits, 52% of participants earned all credits attempted, whereas 35% of students did not earn any of the credits attempted. The average success rate for credits earned by credits attempted was 64%.
- More than 50% of the reported non-graduating Grade 12 participants from racial/ethnic group earned credits from their attempted summer courses, with the lowest percentage being that of Hispanic/Latino students (58%).
- Among the non-graduating Grade 12 participants receiving services, a larger percentage of students receiving FARMS services earned summer credits (64%) compared to all other service groups. Participants receiving special education services had the smallest percentage of students to earn summer credits (48%).



Conclusions

Overall Limitations



Overall Analysis

Caution must be exercised when interpreting results from a quasi-experimental study. Although a matching technique was conducted to create a comparison group equivalent to participants in terms of prior performance and demographics, it is unknown if matched comparison students participated in other academic summer programs that benefited their academic achievement.

Participation and Attendance Data Accuracy

Similar to 2022 summer programming, attendance rates for 2023 could not be determined with certainty. Attendance was calculated by subtracting the number of student absences from the total days of the program. The presumption was that all students without reported absences had a participation rate of 100%. Therefore, participation rates for 2023 summer programming were not precisely determined as the record of student absences did not explicitly report daily attendance data. The ability to gather precise program enrollment data is also a limitation of this evaluation. Students registered for summer programs may not participate. Without sufficient attendance data or accurate enrollment data, it is a challenge to distinguish between registered students and program participants.

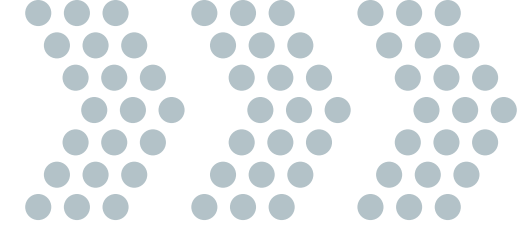
Performance Data Availability

The analysis of immediate gains in literacy and mathematics performance could not be conducted for all program participants. Participants who did not have both pre-test and post-test assessment scores were excluded from the analysis. As a result, the analytical samples for literacy and mathematics analyses were significantly reduced.

Additionally, to examine the effects of summer programming on fall MAP, DIBELS, and Lectura performance, the analysis only included students with scores from the spring 2023 and fall 2023 assessments. While necessary to ensure the fidelity of the study design, this restriction may have excluded students who benefited from summer programming but did not have sufficient assessment data.



Recommendations



1

Increase the duration of summer programming to help improve program effectiveness.

Research demonstrates that program durations of five weeks or more are associated with significant and lasting effects on student achievement, whereas programs operating for three weeks or less do not tend to yield measurable achievement benefits (McCombs & Augustine, 2021). In summer 2023, ELO SAIL and LSP operated for roughly three weeks, with ELO SAIL lasting 17 days and LSP lasting 15 days. In addition to operating for at least five weeks, effective programming often includes at least three hours of academic instruction per day. To help increase program effectiveness, the district should consider extending the duration to more than five weeks and ensure students receive sufficient instructional time each day.

2

Consider incorporating additional instructional supports in summer programming.

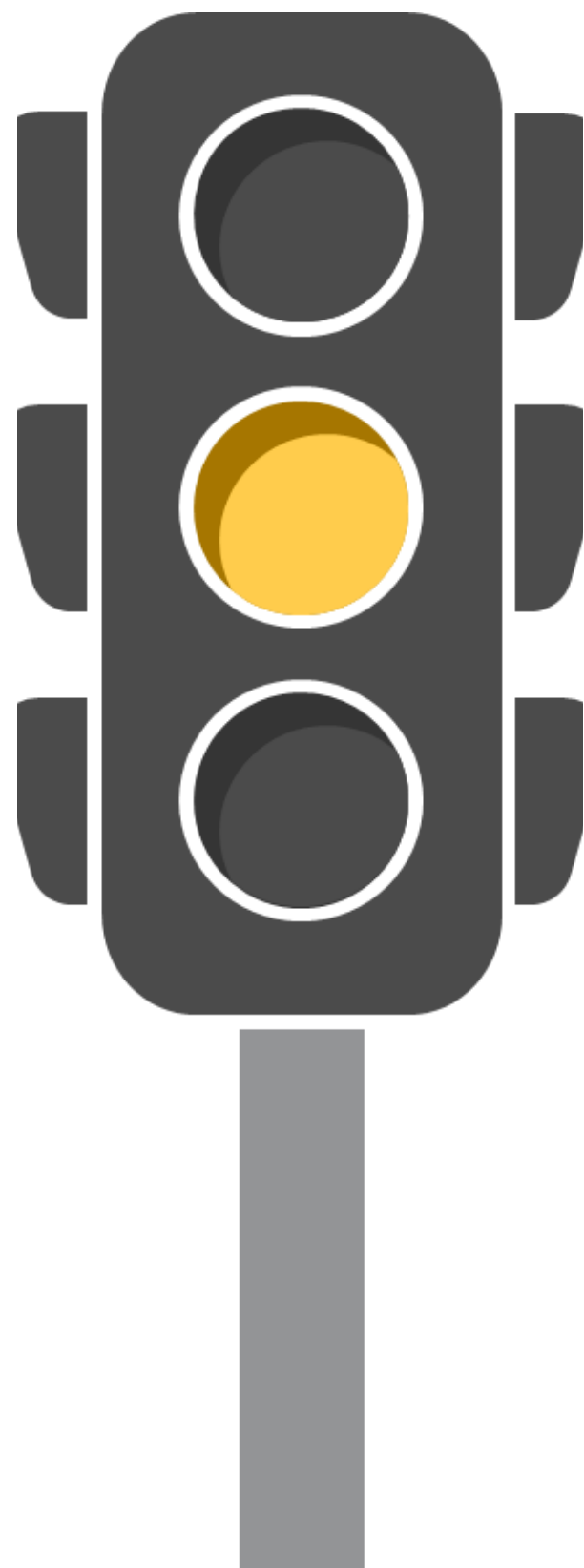
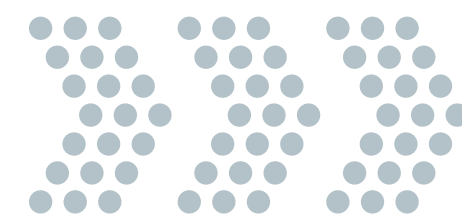
Participation in ELO SAIL and LSP resulted in very small to non-favorable longer-term effects on fall 2023 assessment performance. Participation in CHSSP left 17% of rising Grades 9–12 students and 35% of non-graduating Grade 12 students without earning any of the attempted summer credits. To provide additional instructional supports during the summer, the district should consider expanding summer programming by supplementing instructional time with small group or one-on-one high-dosage tutoring. High-dosage tutoring, as intensive academic support, is reported to be a beneficial addition to summer programming (McCombs & Augustine, 2021). The district should also ensure consistency in the availability of instructional supports and resources across summer program sites.

3

Continue to strengthen district-level recruitment strategies for summer programming.

The district should continue to improve summer recruitment. Only 33% of students recommended by the district for summer programming participated in 2023 summer programs. This percentage is a slight decline from the summer 2022 participation rate (35%) of recommended students. The district can continue targeted recruitment toward students considered to be most in need of additional support while incorporating the following previously shared strategies:

- Engage directly with students as the "customers" and get them excited to attend summer programs;
- Be consistent and assertive in recruitment efforts;
- Create engaging messaging that communicates the value of summer programming; and
- Create a written recruitment plan with specific steps for implementation (Rosenberg, 2018).

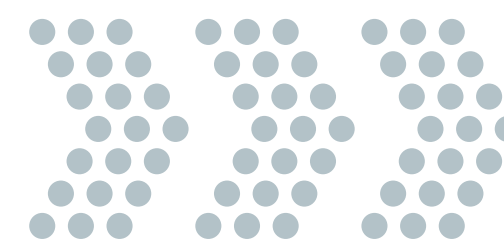


MAINTAIN CURRENT IMPLEMENTATION FOR ONE YEAR

Based on the results of this evaluation, the district should maintain implementation of ELO SAIL, LSP, and CHSSP for one additional year with substantial improvements to program structure and implementation. Participation in ELO SAIL and LSP remains to only demonstrate immediate positive effects on participants' literacy and mathematics skills, as assessed by pre- and post-summer assessments. Program participation resulted in very small to non-favorable longer-term effects on fall 2023 standardized assessment performance. A more profound positive effect on achievement outcomes in the fall following summer is a desired outcome of summer learning and was not observed in this evaluation. Student achievement improvements in literacy and mathematics are still not substantially evident as a result of program participation. As the district continues to improve summer programming, there may be a greater opportunity to observe more positive achievement outcomes.



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