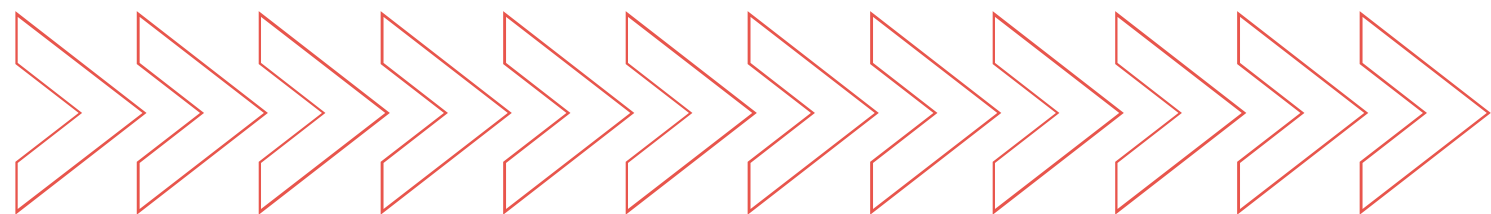# Long-Term Impact of Innovative School Calendar at Arcola Elementary School: Outcome Evaluation 2023–2024

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Shared Accountability

Innovative School Calendar
Outcome Evaluation 2023–2024

Evaluation Scope

This evaluation investigates the long-term impact of the Innovative School Calendar (ISC) since year one on academic performance outcomes, and other factors that impact student success such as chronic absenteeism, and self-reported perceptions of well-being for students enrolled in Grades 3, 4, and 5 at Arcola Elementary School.

Methods

To examine the impact of ISC enrollment on academic performance outcomes, a cohort analysis and a longitudinal analysis were conducted. Students from Arcola were matched to students from eight other comparison schools based on similar demographic characteristics such as grade, gender, race/ethnicity, and service receipt. To examine the effects of ISC enrollment on factors such as chronic absenteeism rates, and self-reported perceptions of well-being, school-level descriptive analyses were conducted to demonstrate the changes that occurred across school years since implementation began.

Results

Grade 5 Arcola ES students achieved a higher percent proficiency in comparison to the matched sample on the Spring 2022 Maryland Comprehensive Assessment Program (MCAP) ELA and this difference was statistically significant. There were no statistical differences in percent proficient on MCAP for Grades 3 and 4. Grade 3 comparison students achieved a higher percent proficiency on Spring 2024 NWEA Measures of Academic Progress Reading (MAP-R) in comparison to Grade 3 Arcola ES and this was marginally significant. The percentage of Grade 4 Arcola ES students that met or exceeded the 50th percentile benchmark on Spring 2024 MAP-R was higher than the comparison sample and this was statistically significant. The percentage of Grade 3 Arcola students meeting overall EOY EOL literacy and overall End of Year (EOY) Evidence of Learning (EOL) math for 2023-2024 was lower than the matched sample and this was statistically significant. For 2022–2023, the percentage of Grade 4 Arcola ES students meeting overall EOY EOL math was lower than the matched sample, and this was statistically significant. For Grade 4 Arcola ES students, the percentage of students meeting overall EOY EOL math was higher than the matched sample and this was statistically significant for 2023–2024. For the longitudinal analysis, comparison students achieved a higher rate of meeting overall EOY EOL math during 2022–2023, and this was statistically significant. There were no statistically significant differences on Spring MCAP and MAP assessments. Chronic absenteeism rates have increased for students enrolled in Grades 3, 4, and 5 at Arcola ES since year one of ISC implementation. Well-being survey item results demonstrate high levels of agreement across Arcola ES students, school-based staff, and parents but these differences were minimal in the case for students.

Conclusion

Overall, grade-level and longitudinal academic performance outcomes are mixed since implementation of ISC, despite additional weeks of instruction occurring every school year. Results from these outcomes vary across time for year one students and by grade-level but students in Grades 4 and 5 showed positive outcomes. Additionally, absenteeism rates are increasing despite ISC program components. Given the lack of consistent results, it is important to engage in data-driven decision making to improve these outcomes for students.

Evaluation Scope

This outcomes evaluation expands on previous reports conducted in 2021 and 2023 by examining the long-term impact of the Innovative School Calendar initiative at Arcola Elementary School. Given that there are additional days of instruction as a way to reduce summer learning loss, there is a perception that students who attend Arcola Elementary school have better outcomes compared to students who did not attend Arcola. This report expands previous findings related to ISC enrollment by examining several different academic performance outcomes, and other factors that impact student success since year one of program implementation.

Purpose of Evaluation

To examine the impact of ISC enrollment on academic performance outcomes since implementation.

To examine the impact of ISC enrollment on factors that impact student success such as chronic absenteeism, and self-reported perceptions of well-being.

Research Questions

1 Are there differences in academic performance outcomes of students who attended Arcola Elementary School in Grades 3, 4, and 5 since year one of implementation?

2 For students who began in Arcola during 2019–2020, are there differences in academic performance outcomes?

3 Are there differences in chronic absenteeism rates?

4 Are there differences in self-reported perceptions of well-being among Grades 3, 4, and 5 Arcola ES students, school-based staff and parents?

Program Description

The Innovative School Calendar (ISC) was implemented at Arcola Elementary School during the 2019–2020 school year. The purpose of this program is to extend the school year calendar by up to 30 days to reduce summer learning loss and gives students a head start as a way to foster positive student learning experiences and outcomes.

During the 2023–2024 school year, the first day of school began on July 10th. The calendar is designed to have the same last day as students following a traditional school year calendar. Students at Arcola Elementary School during the 2023–2024 school year had 25 additional days of schooling, all during the first marking period.

Program Goals

Hands-on enrichment to promote student learning.

Foster social-emotional growth.

Program Components

Extra Instructional Days
Extends the academic year to reduce summer learning loss. It is similar to a traditional calendar but has slightly longer marking periods.

Project Lead the Way (PLTW) (K–5)
Offers hands-on activities in core content areas with increased collaboration to aid in academic development.

Mindfulness
Yields positive outcomes associated with social-emotional well-being that is crucial for student success.

To answer research question 1, student-level cohort outcome analyses were conducted based on district and state assessment scores. For both the MCAP and MAP data outcomes, spring data were used. For Evidence of Learning, end-of year data were used. The reason that spring data and end of year data were chosen is because both Arcola and schools that follow a traditional school year have the same last day. Thus, in order to make a true comparison with schools that follow a traditional school year calendar, it was important to use data towards the end of the year in order to see the long term effect of ISC implementation. Based on data availability, only 2022 and 2023 Spring MCAP data were available for analysis. For Spring MAP and EOL EOY data, only data from 2021 to 2024 were available.

Data and Measures

Variables of Interest

- **Predictor Variable:**
  - Enrollment in ISC School
- **Outcome Variables:**
  - MCAP ELA and Math
  - MAP-M and MAP-R
  - Evidence of Learning (EOL) End of Year (% meeting 2 or more measures in Math and English)
- **Matching Variables**
  - Gender
  - Grade
  - Student Race/Ethnicity (Asian; Black or African American; Hispanic/Latino; White; Two or More Races; All Other student groups including American Indian or Alaskan Native and Native Hawaiian or Other Pacific Islander)
  - Receipt of Services (English Language Development services (EML/ReEML), Free and Reduced-Price Meals System (FARMS), and special education

Sample

- The ISC (Arcola ES) sample for Grades 3–5 and the Grades 3–5 matched comparison sample included **1,646** students across all years examined.
- The matched comparison sample were students from eight different elementary schools: **Gaithersburg ES, Galway ES, Harmony Hills ES, Jackson Road ES, Rolling Terrace ES, Watkins Mill ES, Weller Road ES, and Whetstone ES.**
- **Coarsened exact matching** was used to generate the comparison sample. Comparison students were selected by matching students exactly on: grade, gender, student race/ethnicity; receipt of services (EML/ReEML, FARMS, and special education).

Analysis

- A chi-square test of independence was conducted to compare the proportion of Grade 3–5 students enrolled in ISC and Grades 3–5 students not enrolled in ISC, who scored a 3 or higher on MCAP, met or exceeded the 50th percentile benchmark on MAP, and met two or more measures for EOL. Analyses were conducted by grade level.
- Descriptive analyses were conducted for MAP across grade levels to demonstrate changes in average RIT scores from 2021 and 2024.

To answer research question 2, student-level longitudinal outcome analyses were conducted based on district and state assessment scores. Long-term impact outcomes were examined for students who began as a 1st grader during 2019−2020, the first year of ISC implementation. Given that the research questions in this report focused on Grades 3, 4, and 5 Arcola ES students, students who were enrolled in Grade 1 during 2019−2020 were chosen due to data availability for MCAP, MAP, and EOY EOL as a 3rd, 4th, and 5th grader across years. In other words, the data presented for this question follows the same group of students since year one of implementation. Only 2022 and 2023 Spring MCAP data were analyzed. For Spring MAP and EOL EOY data, data from 2022 to 2024 were analyzed.

Data and Measures

Variables of Interest

- **Predictor Variable:**
  - Enrollment in ISC School
- **Outcome Variables:**
  - MCAP ELA and Math
  - MAP-M and MAP-R
  - Evidence of Learning (EOL) End of Year (% meeting 2 or more measures in Math and English)
- **Matching Variables**
  - Gender
  - Grade
  - Student Race/Ethnicity (Asian; Black or African American; Hispanic/Latino; White; Two or More Races; All Other student groups including American Indian or Alaskan Native and Native Hawaiian or Other Pacific Islander)
  - Receipt of Services (English Language Development services (EML/ReEML), Free and Reduced-Price Meals System (FARMS), and special education

Sample

- The ISC (Arcola ES) sample and matched comparison sample included **107** students across all years examined.
- The matched comparison sample were students from eight different elementary schools: **Gaithersburg ES, Galway ES, Harmony Hills ES, Jackson Road ES, Rolling Terrace ES, Watkins Mill ES, Weller Road ES, and Whetstone ES.**
- **Coarsened exact matching** was used to generate the comparison sample. Comparison students were selected by matching students exactly on: grade, gender, student race/ethnicity; receipt of services (EML/ReEML, FARMS, and special education).

Analysis

- A chi-square test of independence was conducted to compare the proportion of ISC and students not enrolled in ISC, who scored a 3 or higher on MCAP, met or exceeded the 50th percentile benchmark on MAP, and met two or more measures for EOL.
- Descriptive analyses were conducted for MAP to demonstrate changes in average RIT scores from 2022 and 2024.

Methods Continued

To answer research questions 3 and 4, school-level descriptive analyses were conducted. For chronic absenteeism, rates were examined since year one of ISC implementation across Grades 3–5. For well-being, survey items that were similar across student, staff, and parent surveys for Arcola Elementary school were analyzed based on level of agreement. Based on data availability, data from only the 2023–2024 Climate Surveys were analyzed.

Data and Measures

Variables of Interest

- **Predictor Variable:**
  - Enrollment in ISC School (Arcola ES)

- **Outcome Variables:**
  - Chronic Absenteeism (Absent 10% or more of days enrolled)
  - Similar items chosen across student, parent and school-based staff 2023–2024 Climate Surveys that reflect well-being

Sample

- Chronic Absenteeism rates were presented for Grades 3, 4, and 5 and these rates were compared with all (K–5) students enrolled at Arcola Elementary school.
- Survey items related to Well-Being were based on responses from all Grades 3–5 students enrolled at Arcola Elementary School, all school-based staff from Arcola ES, and all parents that have children enrolled at Arcola ES during FY 2023–2024.

Analysis

- Descriptive analyses were conducted for chronic absenteeism, specifically examining the rates and how these rates have changed since year one of ISC implementation.
- Descriptive analyses for survey items related to well-being were conducted to demonstrate differences in the level of agreement across Arcola ES students, staff, and parents, and this was compared to responses from students, staff, and parents from the 8 matched comparison schools.
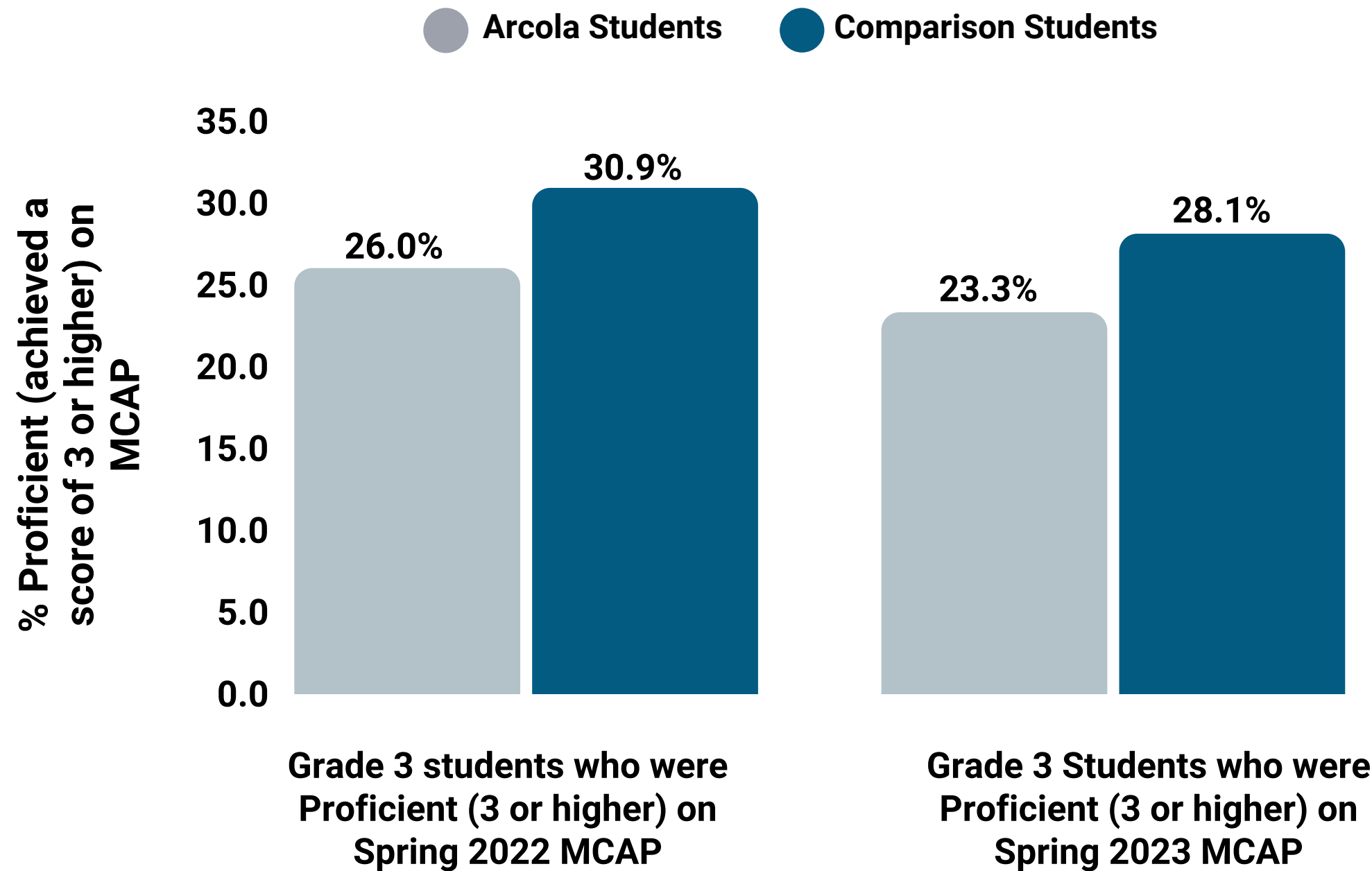
MCAP ELA Results: Grade 3

Percentages of Grade 3 Participants and Matched Comparison Students that were Proficient on Spring 2022 MCAP and Spring 2023 MCAP

● Arcola Students　　**● Comparison Students**

Percentage Difference　　▼ 4.9%　　　　　▼ 4.8%

Grade 3 MCAP ELA Findings

- Among Grade 3 Arcola ES students and Grade 3 matched comparison students, comparison students achieved a higher percent proficiency (30.9%) on the Spring 2022 MCAP ELA in comparison to Grade 3 Arcola Students (26.0%), but this 4.9% difference was not statistically significant.

- Among Grade 3 Arcola ES students and Grade 3 matched comparison students, comparison students achieved a higher percent proficiency (28.1%) on the Spring 2023 MCAP ELA in comparison to Grade 3 Arcola ES Students (23.3%), but this 4.8% difference was not statistically significant.

- The percentage of students achieving proficiency decreased for both groups across time. For Grade 3 Arcola ES students, percent proficiency on Spring MCAP ELA decreased by 2.7% from 2022 to 2023 and for matched comparison students, percent proficiency on the Spring MCAP ELA decreased by 2.8% from 2022 to 2023.

MCAP ELA Results: Grade 4

Percentages of Grade 4 Participants and Matched Comparison Students that were Proficient on Spring 2022 MCAP and Spring 2023 MCAP

Arcola Students ⬤   **Comparison Students** ⬤

% Proficient (achieved a score of 3 or higher) on MCAP

	Grade 4 students who were Proficient (3 or higher) on Spring 2022 MCAP	Grade 4 Students who were Proficient (3 or higher) on Spring 2023 MCAP
Arcola	22.1%	26.7%
Comparison	23.8%	32.7%

Percentage Difference   ▼ 1.7%   ▼ 6.0%

Grade 4 MCAP ELA Findings

- Among Grade 4 Arcola ES students and Grade 4 matched comparison students, comparison students achieved a slightly higher percent proficiency (23.8%) on the Spring 2022 MCAP ELA in comparison to Grade 3 Arcola ES Students (22.1%), but this 1.7% difference was not statistically significant.
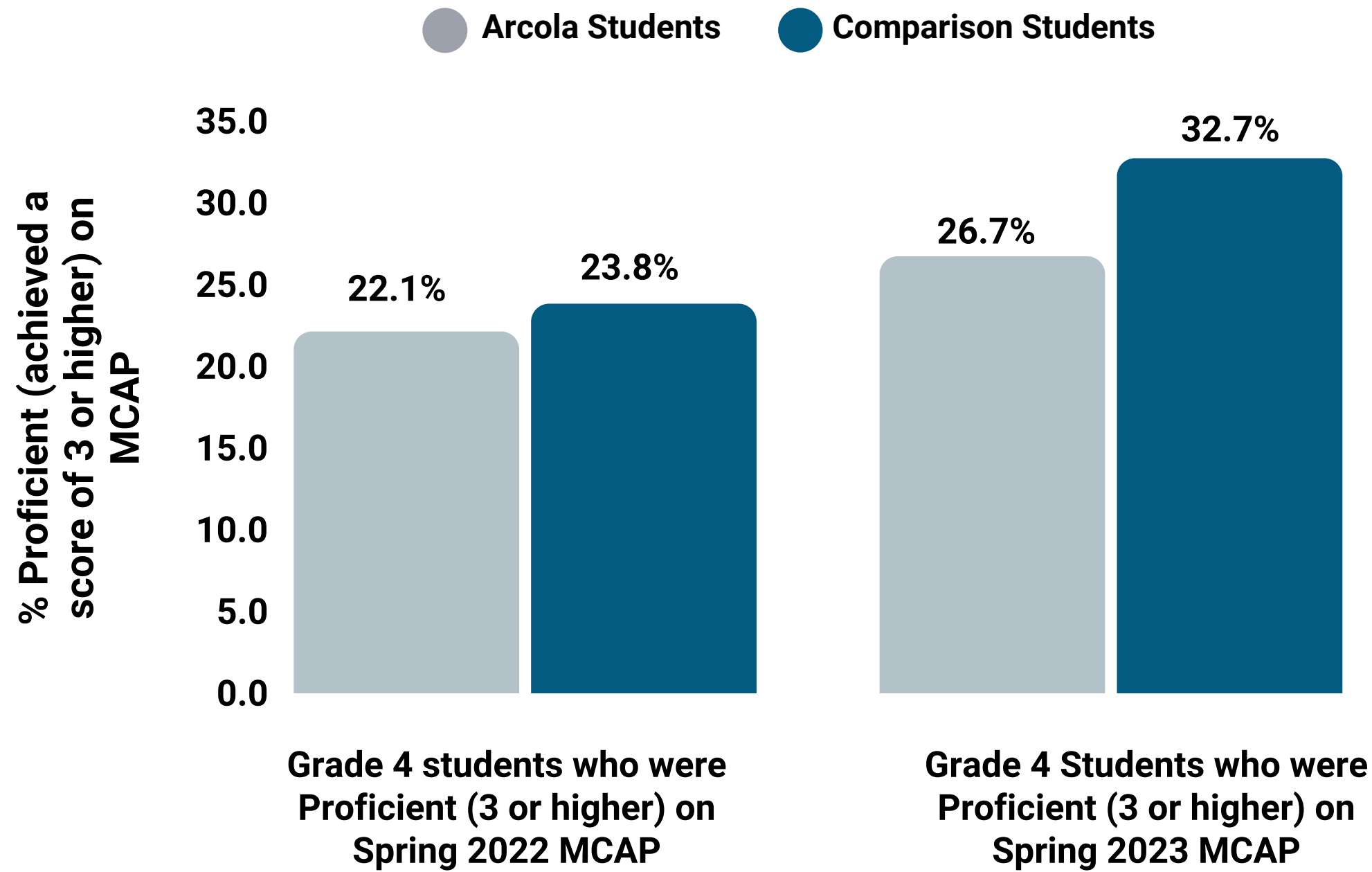
- Among Grade 4 Arcola ES students and Grade 4 matched comparison students, comparison students achieved a higher percent proficiency (32.7%) on the Spring 2023 MCAP ELA in comparison to Grade 4 Arcola ES Students (26.7%), but this 6.0% difference was not statistically significant.

- The percentage of students achieving proficiency increased for both groups across time but the increase was larger for comparison students. For Grade 4 Arcola ES students, percent proficiency on Spring MCAP ELA increased by 4.6% from 2022 to 2023 and for matched comparison students, percent proficiency on the Spring MCAP ELA increased by 8.9% from 2022 to 2023.
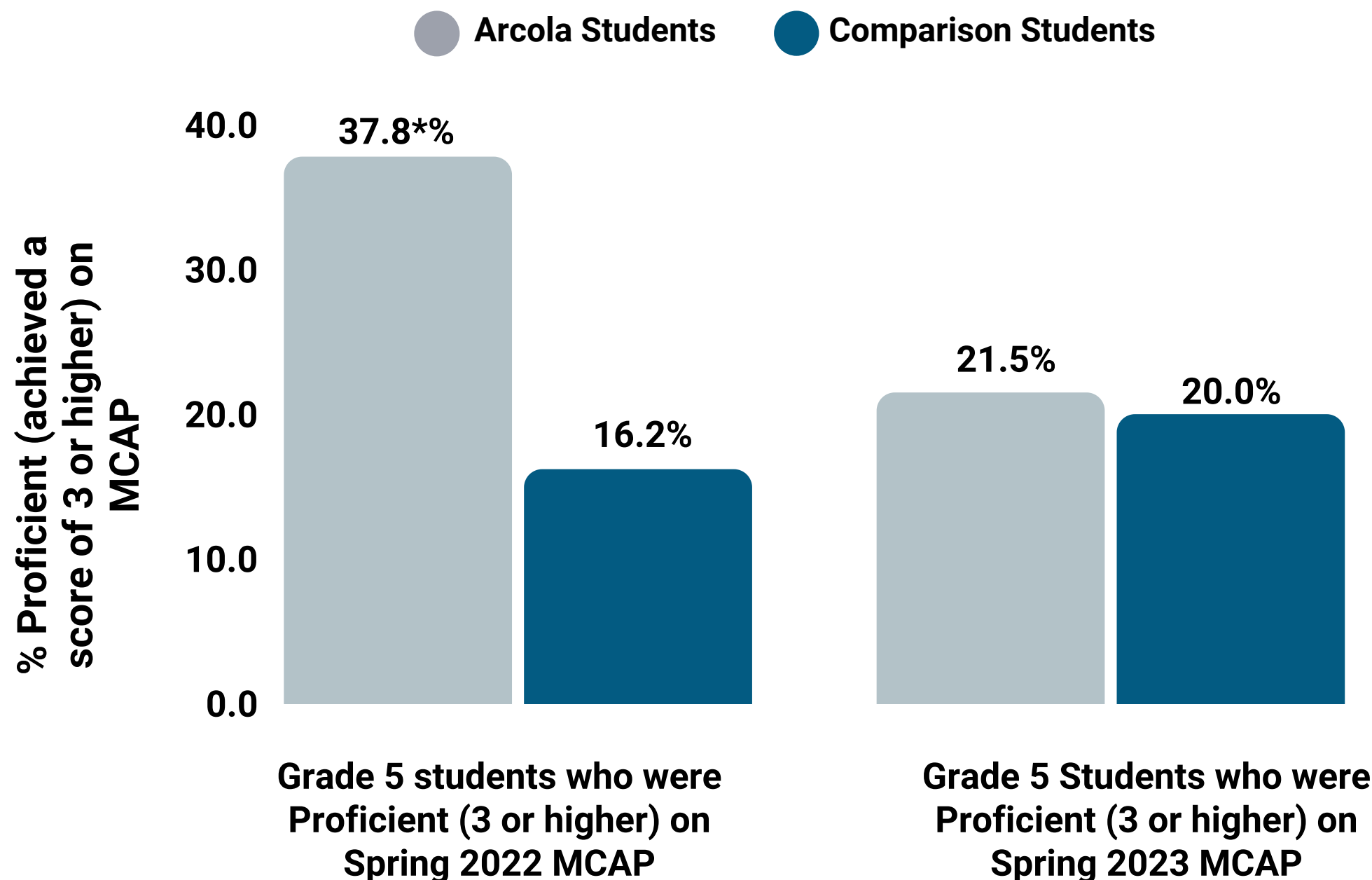
MCAP ELA Results: Grade 5

Percentages of Grade 5 Students and Matched Comparison Students that were Proficient on Spring 2022 MCAP and Spring 2023 MCAP

Arcola Students **Comparison Students**

% Proficient (achieved a score of 3 or higher) on MCAP

- 40.0
- 30.0
- 20.0
- 10.0
- 0.0

37.8*%
16.2%
21.5%
20.0%

Grade 5 students who were Proficient (3 or higher) on Spring 2022 MCAP

Grade 5 Students who were Proficient (3 or higher) on Spring 2023 MCAP

Percentage Difference ▲ 21.6%   ▲ 1.5%

Note: * = Statistically significant difference at the *p* < .05 level.

Grade 5 MCAP ELA Findings

- Among Grade 5 Arcola ES students and Grade 5 matched comparison students, Arcola ES students achieved a higher percent proficiency (37.8%) on the Spring 2022 MCAP ELA in comparison to matched comparison students (16.2%), and this 21.6% difference was statistically significant.

- Among Grade 5 Arcola ES students and Grade 5 matched comparison students, Arcola ES students achieved a slightly higher percent proficiency (21.5%) on the Spring 2023 MCAP ELA in comparison to matched comparison students (20.0%), and this 1.5% difference was not statistically significant.

- The percentage of students achieving proficiency decreased for Arcola ES students across time but increased for comparison students across time. For Grade 5 Arcola ES students, percent proficiency on Spring MCAP ELA decreased by 16.3% from 2022 to 2023 and for matched comparison students, percent proficiency on the Spring MCAP ELA increased by 3.8% from 2022 to 2023.

MCAP Math Results: Grade 3

Percentages of Grade 3 Participants and Matched Comparison Students that were Proficient on Spring 2022 MCAP and Spring 2023 MCAP

Arcola Students ● **Comparison Students** ●

Chart: % Proficient (achieved a score of 3 or higher) on MCAP

- Grade 3 students who were Proficient (3 or higher) on Spring 2022 MCAP: Arcola Students 19.8%, Comparison Students 22.7%
- Grade 3 Students who were Proficient (3 or higher) on Spring 2023 MCAP: Arcola Students 26.5%, Comparison Students 25.6%

Percentage Difference
- Spring 2022: ▼ 2.9%
- Spring 2023: ▲ 0.9%

Grade 3 MCAP Math Findings

- Among Grade 3 Arcola ES students and Grade 3 matched comparison students, Arcola ES students achieved a lower percent proficiency (19.8%) on the Spring 2022 MCAP Math in comparison to matched comparison students (22.7%), and this 2.9% difference was not statistically significant.

- Among Grade 3 Arcola ES students and Grade 3 matched comparison students, Arcola ES students achieved a slightly higher percent proficiency (26.5%) on the Spring 2023 MCAP Math in comparison to matched comparison students (25.6%), and this 0.9% difference was not statistically significant.

- The percentage of students achieving proficiency increased for both groups across time. For Grade 3 Arcola ES students, percent proficiency on Spring MCAP Math increased by 6.7% from 2022 to 2023 and for matched comparison students, percent proficiency on the Spring MCAP math increased by 2.9% from 2022 to 2023.
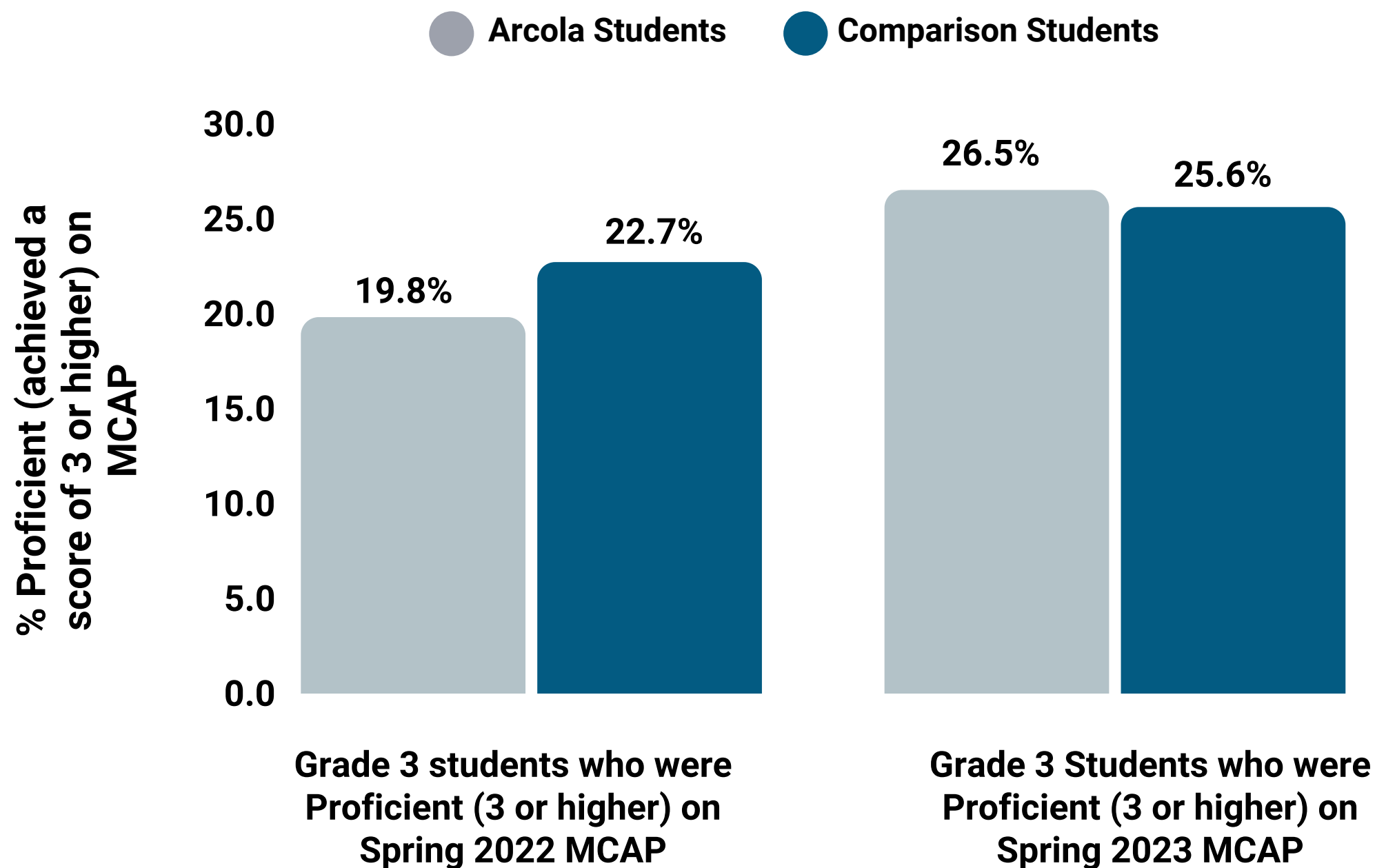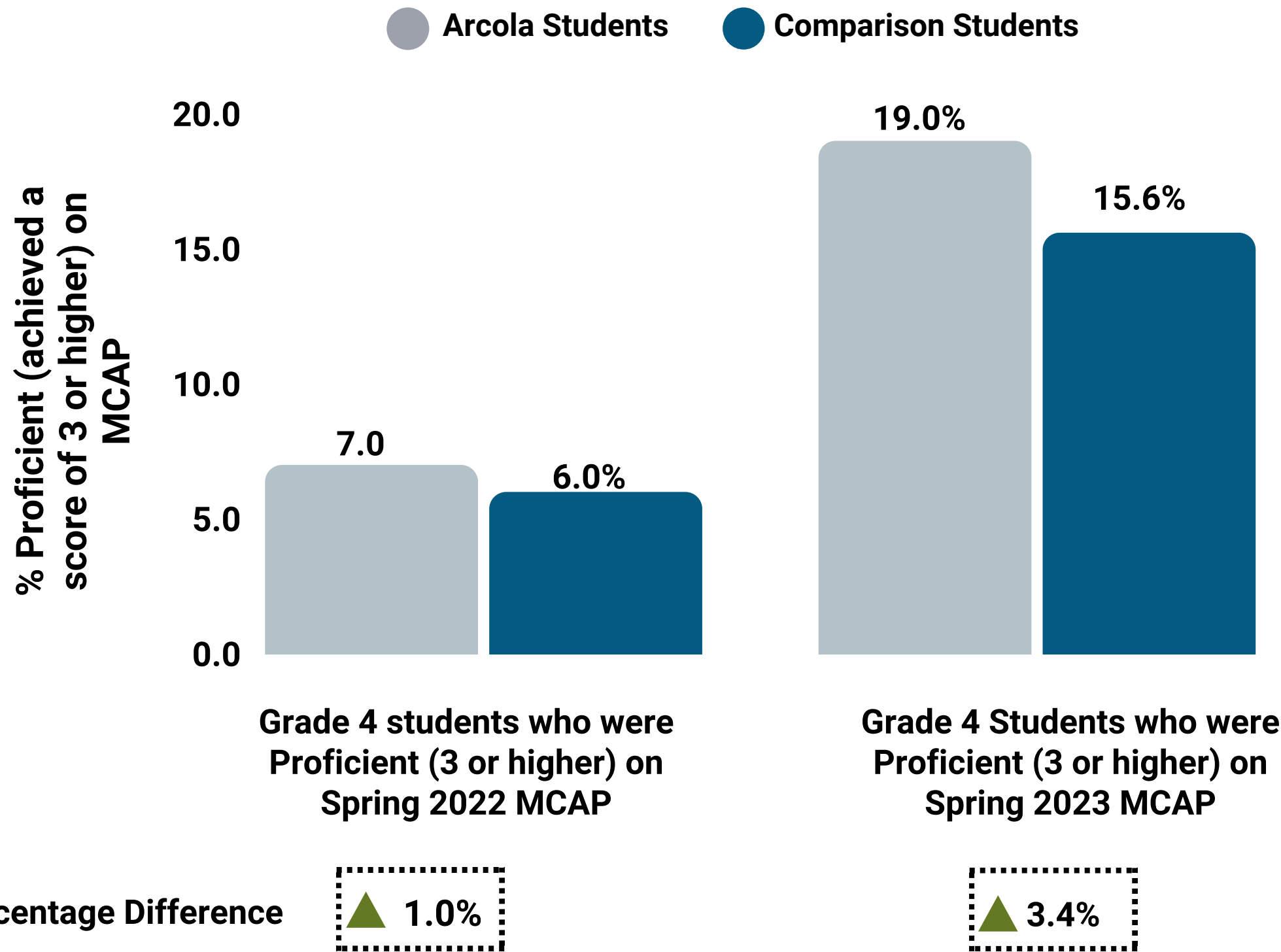
MCAP Math Results: Grade 4
Percentages of Grade 4 Participants and Matched Comparison Students that were Proficient on Spring 2022 MCAP and Spring 2023 MCAP

● Arcola Students ● Comparison Students

% Proficient (achieved a score of 3 or higher) on MCAP

20.0

19.0%

15.6%

15.0

10.0

7.0

6.0%

5.0

0.0

Grade 4 students who were Proficient (3 or higher) on Spring 2022 MCAP

Grade 4 Students who were Proficient (3 or higher) on Spring 2023 MCAP

Percentage Difference   ▲ 1.0%   ▲ 3.4%

Grade 4 MCAP Math Findings

- Among Grade 4 Arcola ES students and Grade 4 matched comparison students, Arcola ES students achieved a slightly higher percent proficiency (7.0%) on the Spring 2022 MCAP Math in comparison to matched comparison students (6.0%), and this 1.0% difference was not statistically significant. It is important to note that percent proficiency on Spring 2022 MCAP Math is very low for both groups.

- Among Grade 4 Arcola ES students and Grade 4 matched comparison students, Arcola ES students achieved a higher percent proficiency (19.0%) on the Spring 2023 MCAP Math in comparison to matched comparison students (15.6%), and this 3.4% difference was not statistically significant.

- The percentage of students achieving proficiency increased for both groups across time. For Grade 4 Arcola ES students, percent proficiency on Spring MCAP Math increased by 12.0% from 2022 to 2023 and for matched comparison students, percent proficiency on the Spring MCAP math increased by 9.6% from 2022 to 2023.

MCAP Math Results: Grade 5

Percentages of Grade 5 Participants and Matched Comparison Students that were Proficient on Spring 2022 MCAP and Spring 2023 MCAP

Arcola Students · **Comparison Students**

% Proficient (achieved a score of 3 or higher) on MCAP

- 14.0% — Grade 5 students who were Proficient (3 or higher) on Spring 2022 MCAP (Arcola)
- 8.0% — (Comparison)
- 12.4% — Grade 5 Students who were Proficient (3 or higher) on Spring 2023 MCAP (Arcola)
- 12.8% — (Comparison)

Percentage Difference ▲ 6.0%   ▼ 0.4%

Grade 5 MCAP Math Findings

- Among Grade 5 Arcola ES students and Grade 5 matched comparison students, Arcola ES students achieved a higher percent proficiency (14.0%) on the Spring 2022 MCAP Math in comparison to matched comparison students (8.0%), and this 6.0% difference was not statistically significant.

- Among Grade 5 Arcola ES students and Grade 5 matched comparison students, Arcola ES students achieved a slightly lower percent proficiency (12.4%) on the Spring 2023 MCAP Math in comparison to matched comparison students (12.8%), and this 0.4% difference was not statistically significant.

- The percentage of students achieving proficiency decreased for Grade 5 Arcola ES students and increased for comparison students across time. For Grade 5 Arcola ES students, percent proficiency on Spring MCAP Math decreased by 1.6% from 2022 to 2023 and for matched comparison students, percent proficiency on the Spring MCAP math increased by 4.8% from 2022 to 2023.
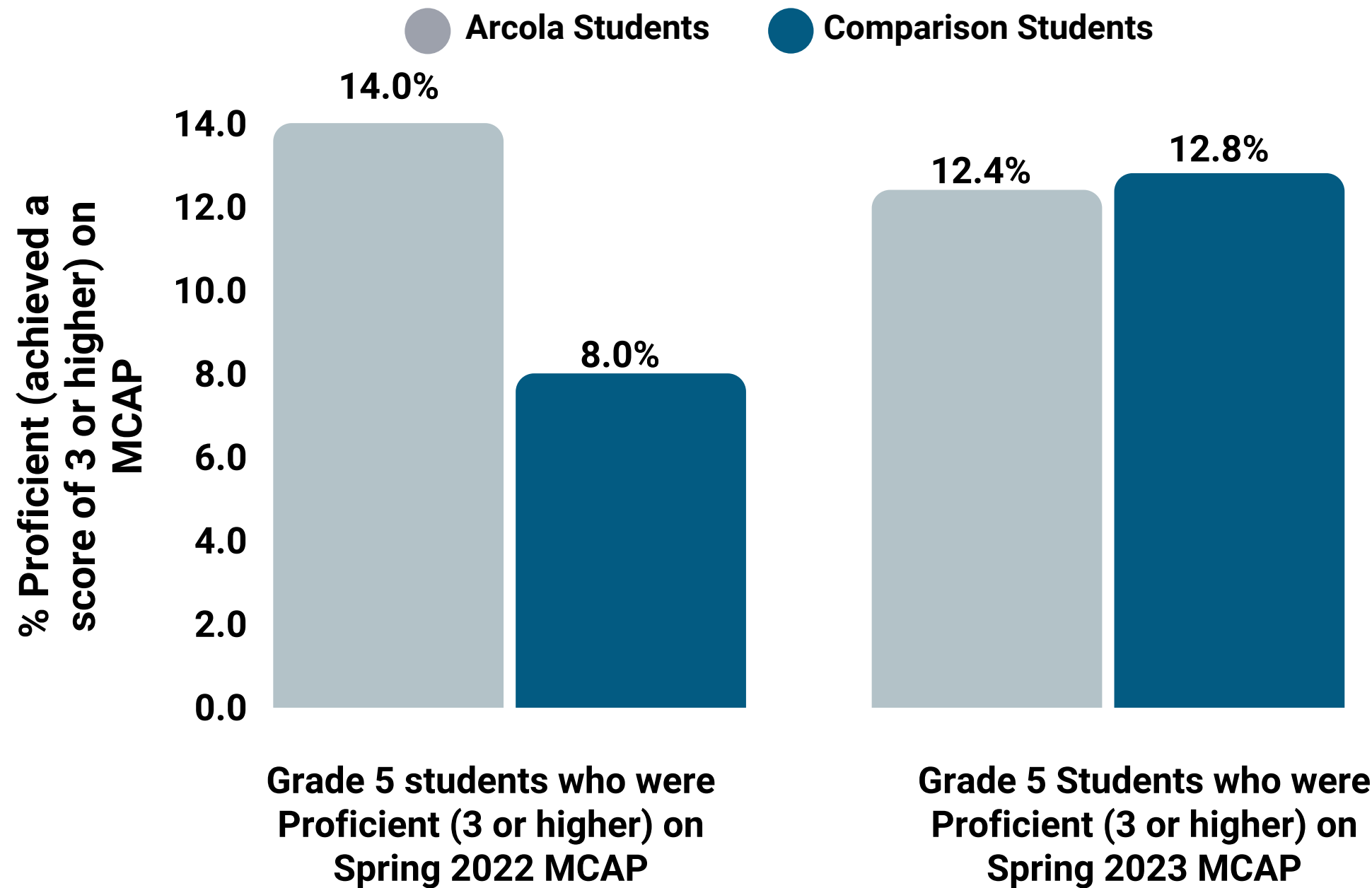
Results: Grade 3

Average MAP-R and MAP-M RIT scores and distribution by matched comparison, gender, race/ethnicity, and service receipt.

		2021 Average RIT Score Reading Spring	2024 Average RIT Score Reading Spring	2021 Average RIT Score Math Spring	2024 Average RIT Score Math Spring
Arcola (All Grade 3 Students)		182	178	186	193
Comparison (All Grade 3 Students)		182	185	186	197
Arcola					
Gender	Male	179	180	186	195
	Female	184	176	185	189
Race/Ethnicity	Asian	200	198	199	203
	Black or African American	190	183	193	197
	Hispanic/Latino	175	176	182	191
	White	204	196	194	207
	All Other Student Groups	207	180	180	189
FARMS		184	177	184	189
EML/ReML		174	173	180	188
Special Education		170	178	174	190
Comparison					
Gender	Male	184	185	185	199
	Female	181	184	187	194
Race/Ethnicity	Asian	194	198	199	217
	Black or African American	194	191	191	203
	Hispanic/Latino	175	182	182	194
	White	210	200	206	207
	All Other Student Groups	211		193	196
FARMS		175	187	185	198
EML/ReML		174	179	181	193
Special Education		169	181	174	186

Note. Only 2021 and 2024 scores are reported to reflect grade-level performance since ISC began (Spring 2020 MAP was not available) and current performance. Red font reflects a downward trend and green font reflects an upward trend in scores. Blanks reflect a lack of cases for that particular student group.

Grade 3 Findings

- Average scores for MAP-R decreased by four points for Grade 3 Arcola ES students receiving ISC implementation from 2021 to 2024 but MAP-M scores increased by seven points. For Grade 3 comparison students, average scores for both MAP-R and MAP-M increased from 2021 to 2024. The 50th percentile national benchmark is used as proxy for being on grade level.

- Overall, average RIT scores for MAP-R distributed by race/ethnicity for Grade 3 Arcola ES students receiving ISC implementation showed a downward pattern from 2021 to 2024 for four different racial ethnic groups. This same pattern also was seen for students receiving FARMS services, and for Emergent Multilingual Learners (EMLs). For special education students enrolled in ISC, scores increased by eight points from 2021 to 2024.

- Overall, average RIT scores for MAP-M distributed by race/ethnicity for Grade 3 Arcola ES students receiving ISC implementation showed an upward pattern from 2021 to 2024. This same pattern was apparent for Grade 3 comparison students

- For Grade 3 comparison students, there was an overall upward pattern in average RIT scores distributed by gender, students receiving FARMS, for EMLs, and for special education. This pattern also was apparent across most racial ethnic groups with the exception of two groups.

Results: Grade 4

Average MAP-R and MAP-M RIT scores and distribution by matched comparison, gender, race/ethnicity, and service receipt.

		2021 Average RIT Score Reading Spring	2024 Average RIT Score Reading Spring	2021 Average RIT Score Math Spring	2024 Average RIT Score Math Spring
Arcola (All Grade 4 Students)		195	197	201	207
Comparison (All Grade 4 Students)		195	190	198	203
Arcola					
Gender	Male	193	194	202	208
	Female	198	200	201	206
Race/Ethnicity	Asian	199	217	208	233
	Black or African American	198	204	201	212
	Hispanic/Latino	194	194	200	204
	White	204	219	206	221
	All Other Student Groups	204	218	213	222
FARMS		202	177	206	221
EML/ReML		189	173	198	188
Special Education		187	178	193	190
Comparison					
Gender	Male	196	186	201	202
	Female	193	194	196	203
Race/Ethnicity	Asian	200	195	208	193
	Black or African American	197	197	195	205
	Hispanic/Latino	192	187	197	202
	White	216	205	220	220
	All Other Student Groups	212	200	201	201
FARMS		192	190	197	203
EML/ReML		190	183	196	199
Special Education		183	177	184	193

Note. Only 2021 and 2024 scores are reported to reflect grade-level performance since ISC began (Spring 2020 MAP data was not available) and current performance. Red font reflects a downward trend and green font reflects an upward trend in scores.

Grade 4 Findings

- Average scores for both MAP-R and MAP-M increased for Grade 4 Arcola ES students receiving ISC implementation from 2021 to 2024 but the increase was larger for MAP-M such that scores increased by six points. For Grade 4 comparison students, average scores for MAP-R decreased by five points from 2021 to 2024 but increased by five points for MAP-M.

- Overall, average RIT scores for both MAP-R and MAP-M distributed by gender, race/ethnicity for Grade 4 Arcola ES students receiving ISC implementation showed an upward pattern with the exception of Hispanic/Latino students showing no change for MAP-R.

- There was a downward pattern in average MAP-R and MAP-M scores for students receiving FARMS services, Emergent Multilingual Learners (EMLs) and for special education students enrolled in ISC. However, there was an increase in MAP-M scores for Grade 4 Arcola ES students receiving FARMS services and this score increased by 15 points from 2021 to 2024.

- For Grade 4 comparison students, there was an overall downward pattern in average MAP-R RIT scores for male students, four different racial ethnic groups, students receiving FARMS, EMLs, and for special education students. For MAP-M, average RIT-Scores for Grade 4 comparison students increased from 2021 to 2024 with the exception of Asian students.

Results: Grade 5

Average MAP-R and MAP-M RIT scores and distribution by matched comparison, gender, race/ethnicity, and service receipt.

		2021 Average RIT Score Reading Spring	2024 Average RIT Score Reading Spring	2021 Average RIT Score Math Spring	2024 Average RIT Score Math Spring
Arcola (All Grade 5 Students)		203	201	211	210
Comparison (All Grade 5 Students)		202	198	207	209
Arcola					
Gender	Male	202	200	212	211
	Female	203	200	209	209
Race/Ethnicity	Asian	212	213	208	226
	Black or African American	211	210	201	212
	Hispanic/Latino	201	197	200	207
	White	221	229	238	236
	All Other Student Groups				
FARMS		203	197	214	207
EML/ReML		198	191	208	203
Special Education		186	192	191	201
Comparison					
Gender	Male	201	196	208	209
	Female	203	201	206	210
Race/Ethnicity	Asian	205	209	216	229
	Black or African American	207	206	209	213
	Hispanic/Latino	201	193	206	205
	White	232	231	219	235
	All Other Student Groups				
FARMS		205	197	211	204
EML/ReML		199	188	203	201
Special Education		182	183	188	190

Note. Only 2021 and 2024 scores are reported to reflect grade-level performance since ISC began (Spring 2020 MAP was not available) and current performance. Red font reflects a downward trend and green font reflects an upward trend in scores from 2021 to 2024.

Grade 5 Findings

- Average scores for both MAP-R and MAP-M decreased for Grade 5 Arcola ES students receiving ISC implementation from 2021 to 2024 but not by much. For Grade 5 comparison students, average scores for MAP-R decreased by four points from 2021 to 2024 but increased by two points for MAP-M.

- There was a downward pattern in average MAP-R scores for two different racial ethnic groups, both males and females, for students receiving FARMS services, and for Emergent Multilingual Learners (EMLs) enrolled in ISC. However, there was an increase by six points in MAP-R scores, and a nine point increase in MAP-M scores from 2021 to 2024 for grade 5 Arcola ES special education students.

- For Grade 5 comparison students, there was an overall downward pattern in average MAP-R RIT scores across gender, three different racial ethnic groups, students receiving FARMS, and for EMLs. Similar to Grade 5 Arcola ES students, average RIT scores for both MAP-R and for MAP-M increased for comparison special education students, but the increase was not as high (one point for MAP-R and two points for MAP-M) from 2021 to 2024.
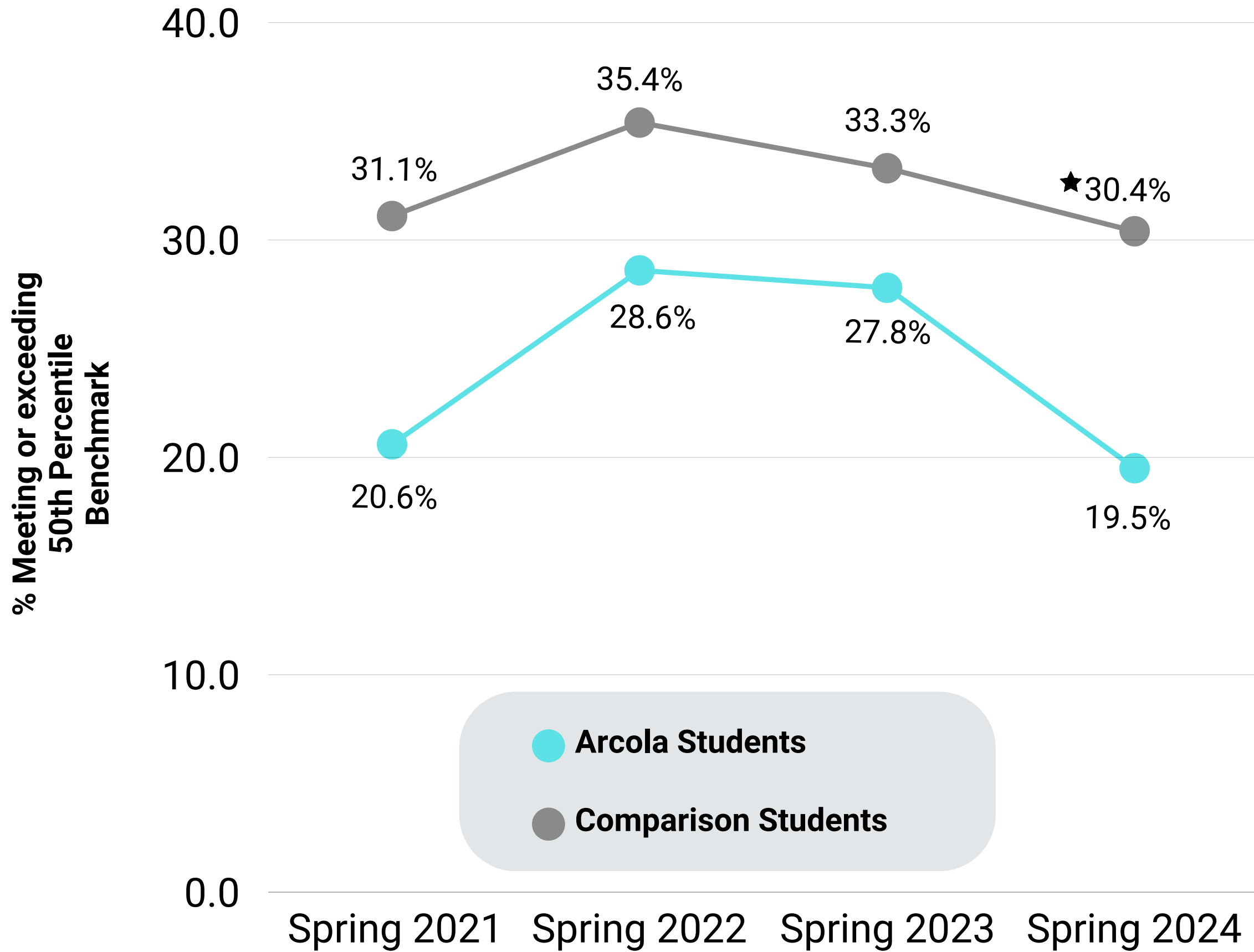
MAP-R Results: Grade 3

Percentages of Grade 3 Students and Matched Comparison Students Meeting the 50th Percentile Benchmark on Spring MAP-R
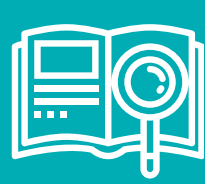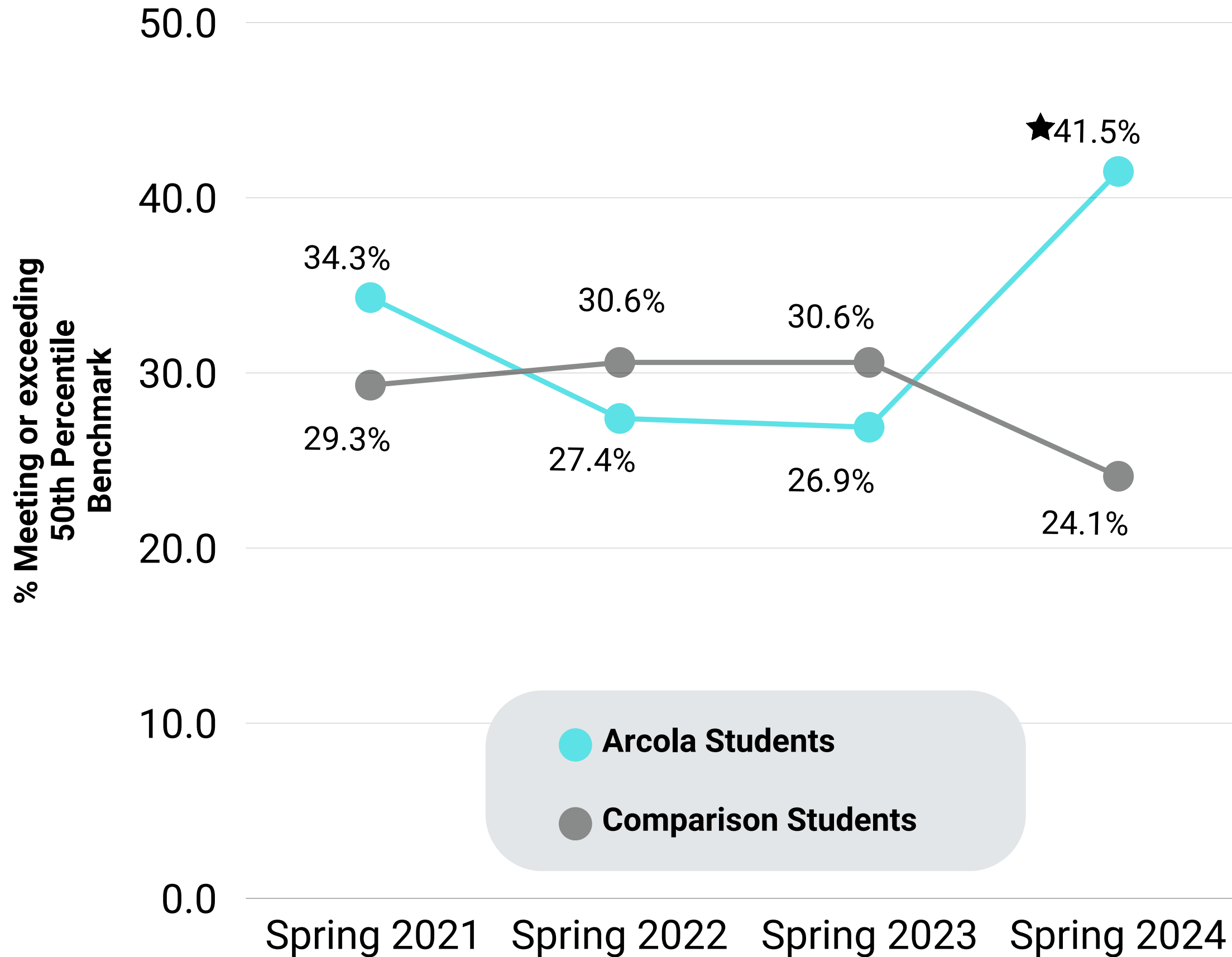

% Meeting or exceeding 50th Percentile Benchmark

Comparison Students: 31.1%, 35.4%, 33.3%, ★30.4%

Arcola Students: 20.6%, 28.6%, 27.8%, 19.5%

Spring 2021 | Spring 2022 | Spring 2023 | Spring 2024

Legend:
- ● Arcola Students
- ● Comparison Students

★Marginally Significant (*p* = 0.05)

Grade 3 MAP-R Findings

- Among Grade 3 Arcola ES students and Grade 3 matched comparison students, comparison students consistently achieved higher percentages of meeting or exceeding the 50th percentile benchmark on Spring MAP-R from 2021 to 2024 in comparison to Grade 3 Arcola ES students.

- Although the differences in meeting or exceeding the 50th percentile on MAP-R were not statistically significant between groups across the majority of years examined, there was a marginally significant difference between Grade 3 comparison students meeting or exceeding the benchmark on the Spring 2024 MAP-R (30.4%) in comparison to Grade 3 Arcola ES students (19.5%). There was a 10.9% difference in students meeting or exceeding the benchmark.

- Across all years examined, both groups showed similar trends in meeting or exceeding the benchmark. From Spring 2021 to Spring 2022, both groups showed an increase in the percentages of students meeting or exceeding the benchmark. There was a 8.0% increase for Grade 3 Arcola ES students and a 4.3% increase for Grade 3 comparison students. In subsequent years, the percentage of students meeting or exceeding the benchmark on Spring MAP-R decreased for both groups.

MAP-R Results: Grade 4

Percentages of Grade 4 Students and Matched Comparison Students Meeting the 50th Percentile Benchmark on Spring MAP-R
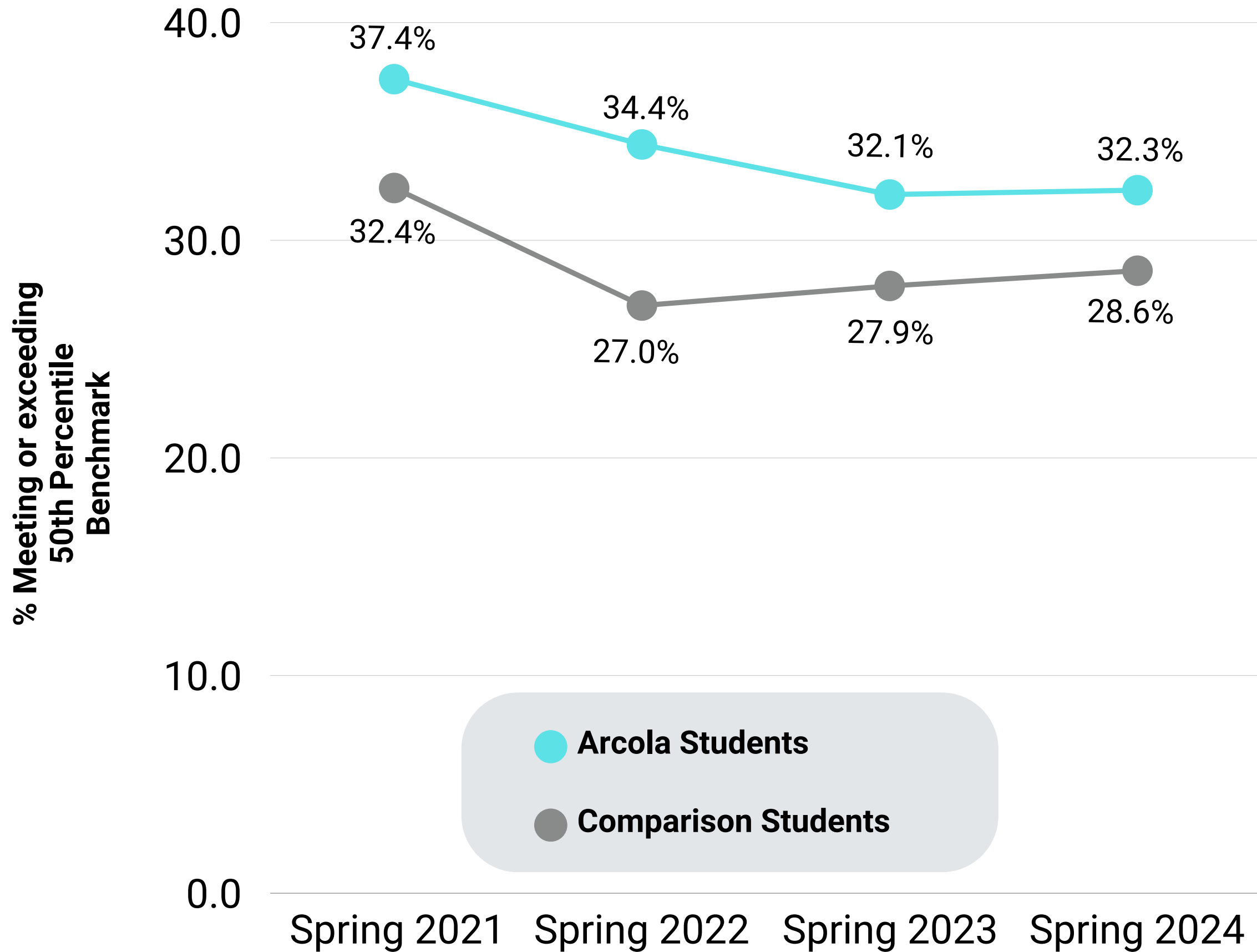
Grade 4 MAP-R Findings

- Among Grade 4 Arcola ES students and Grade 4 matched comparison students, Grade 4 Arcola ES students achieved a higher percentage of meeting or exceeding the 50th percentile benchmark on Spring 2024 MAP-R (41.5%) in comparison to Grade 4 comparison students (24.1%). This 17.4% difference in students meeting or exceeding the 50th percentile benchmark was statistically significant.

- For Grade 4 Arcola ES students, from Spring 2021 to Spring 2023, there was a 7.4% decrease in the percentage of students meeting or exceeding the benchmark for Spring MAP-R. For Grade 4 comparison students, there was an 1.3% increase from Spring 2021 to Spring 2022. However, the percentage of students meeting or exceeding the the benchmark remain unchanged for Grade 4 comparison students from Spring 2022 to Spring 2023 (30.6%) respectively.

- From Spring 2023 to Spring 2024, there was a 14.6% increase in the percentage of Grade 4 Arcola ES students meeting or exceeding the benchmark for MAP-R. In contrast, from Spring 2023 to Spring 2024, there was a 6.5% decrease in the percentage of Grade 4 comparison students meeting or exceeding the benchmark on MAP-R.

% Meeting or exceeding 50th Percentile Benchmark

	Spring 2021	Spring 2022	Spring 2023	Spring 2024
Arcola Students	34.3%	27.4%	26.9%	★41.5%
Comparison Students	29.3%	30.6%	30.6%	24.1%

★ Statistically Significant (*p* <0.05)

MAP-R Results: Grade 5
Percentages of Grade 5 Students and Matched Comparison
Students Meeting the 50th Percentile Benchmark on Spring MAP-R
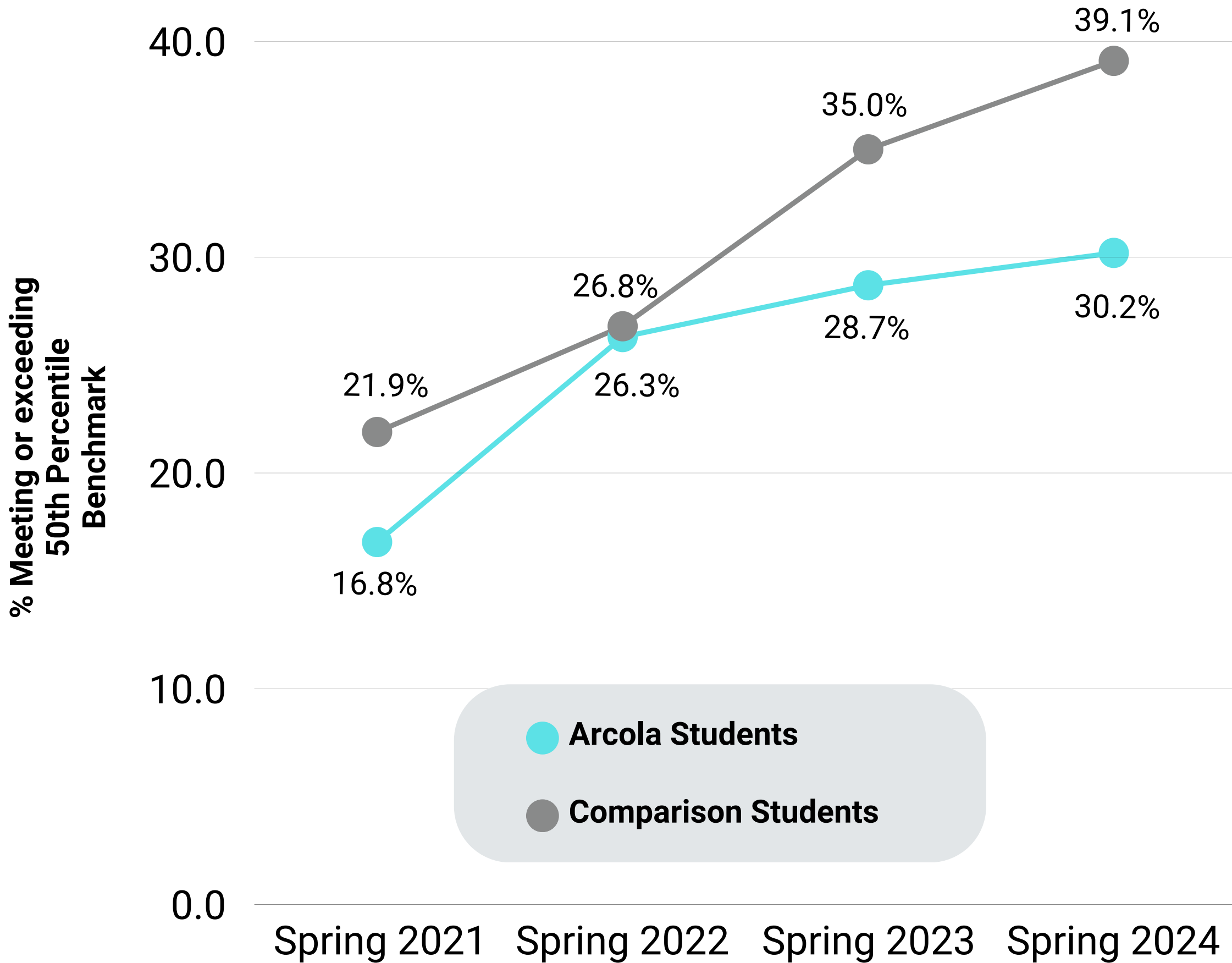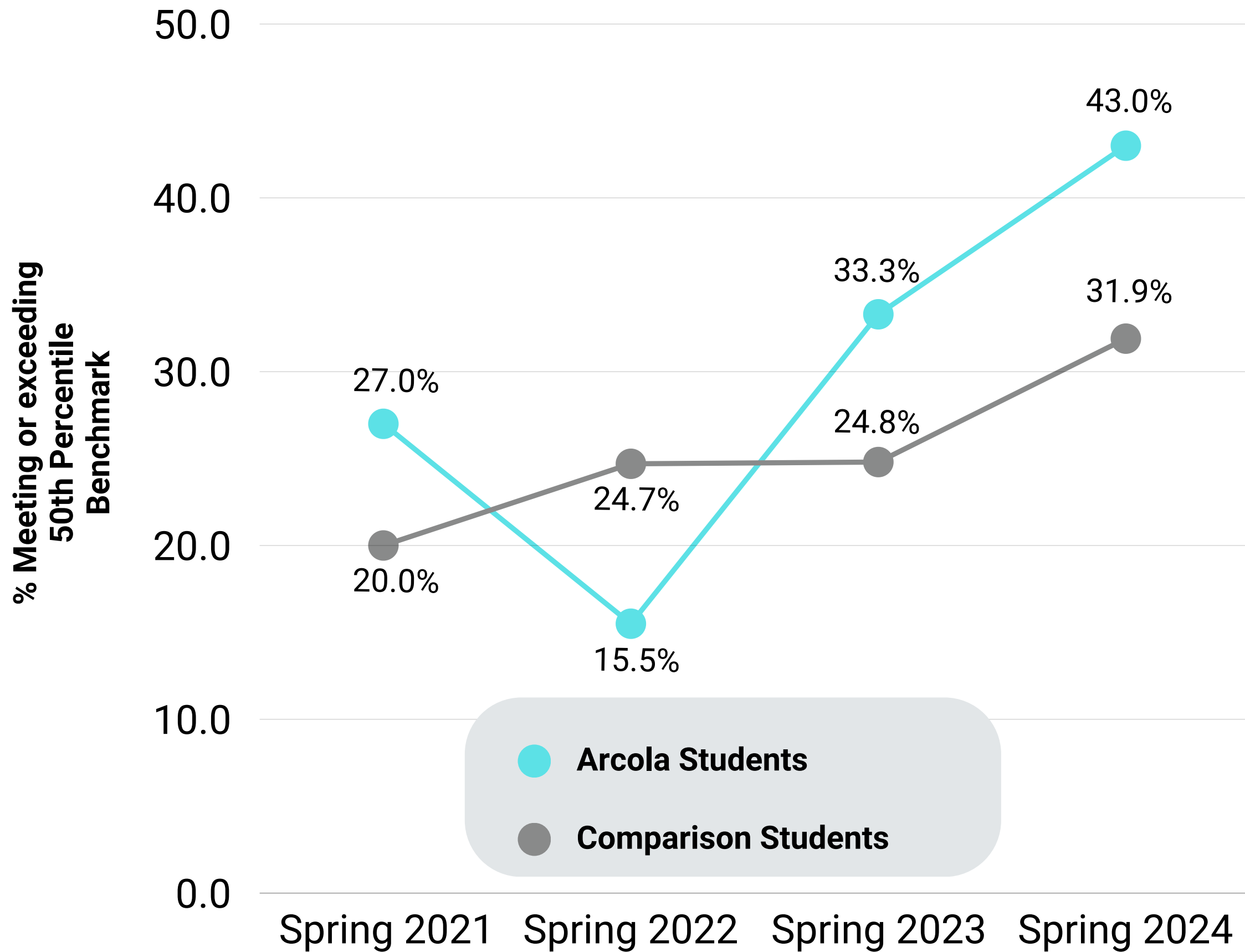

Grade 5 MAP-R Findings

- Among Grade 5 Arcola ES students and Grade 5 matched comparison students, Grade 5 Arcola ES students consistently achieved higher percentages of meeting or exceeding the 50th percentile benchmark on Spring MAP-R from Spring 2021 to Spring 2024 in comparison to Grade 5 comparison students. However, none of the differences in percentages of students meeting or exceeding the benchmark between groups over time were statistically significant.

- The largest percentage of students meeting or exceeding the 50th percentile benchmark for both groups occurred in Spring 2021. 37.4% of Grade 5 Arcola ES students met or exceeded the benchmark, and 32.4% of Grade 5 comparison students met or exceeded the benchmark on MAP-R.

- Overall, both groups demonstrated a decrease in the percentage of students meeting or exceeding the benchmark on MAP-R from Spring 2021 to Spring 2024. There was a 5.1% decrease in the percentage of students meeting or exceeding the benchmark for Grade 5 Arcola ES students from Spring 2021 to Spring 2024. For Grade 5 comparison students, there was a 3.8% decrease in the percentage of students meeting or exceeding the benchmark for MAP-R.

Shared Accountability - July 2024

MAP-M Results: Grade 3
Percentages of Grade 3 Students and Matched Comparison Students Meeting the 50th Percentile Benchmark on Spring MAP-M

% Meeting or exceeding 50th Percentile Benchmark

- Arcola Students
- Comparison Students

Spring 2021 — Arcola 16.8%, Comparison 21.9%
Spring 2022 — 26.3% / 26.8%
Spring 2023 — Arcola 28.7%, Comparison 35.0%
Spring 2024 — Arcola 30.2%, Comparison 39.1%

Shared Accountability - July 2024

Grade 3 MAP-M Findings

- Among Grade 3 Arcola ES students and Grade 3 matched comparison students, Grade 3 comparison students consistently achieved higher percentages of meeting or exceeding the 50th percentile benchmark on Spring MAP-M from Spring 2021 to Spring 2024 in comparison to Grade 3 Arcola ES students. However, none of the differences in percentages of students meeting or exceeding the 50th percentile benchmark between groups over time were statistically significant.

- The largest percentage of students meeting or exceeding the 50th percentile benchmark for both groups occurred in Spring 2024. 39.1% of Grade 3 comparison students met or exceeded the benchmark, and 30.2% of Grade 3 comparison students met or exceeded the benchmark on MAP-M.

- Overall, both groups demonstrated an increase in the percentage of students meeting or exceeding the benchmark on MAP-M from Spring 2021 to Spring 2024. There was a 13.4% increase in the percentage of students meeting or exceeding the benchmark for Grade 3 Arcola ES students from Spring 2021 to Spring 2024. For Grade 3 comparison students, there was a 17.2% increase in the percentage of students meeting or exceeding the benchmark for MAP-M.

20

MAP-M Results: Grade 4

Percentages of Grade 4 Students and Matched Comparison Students Meeting the 50th Percentile Benchmark on Spring MAP-M
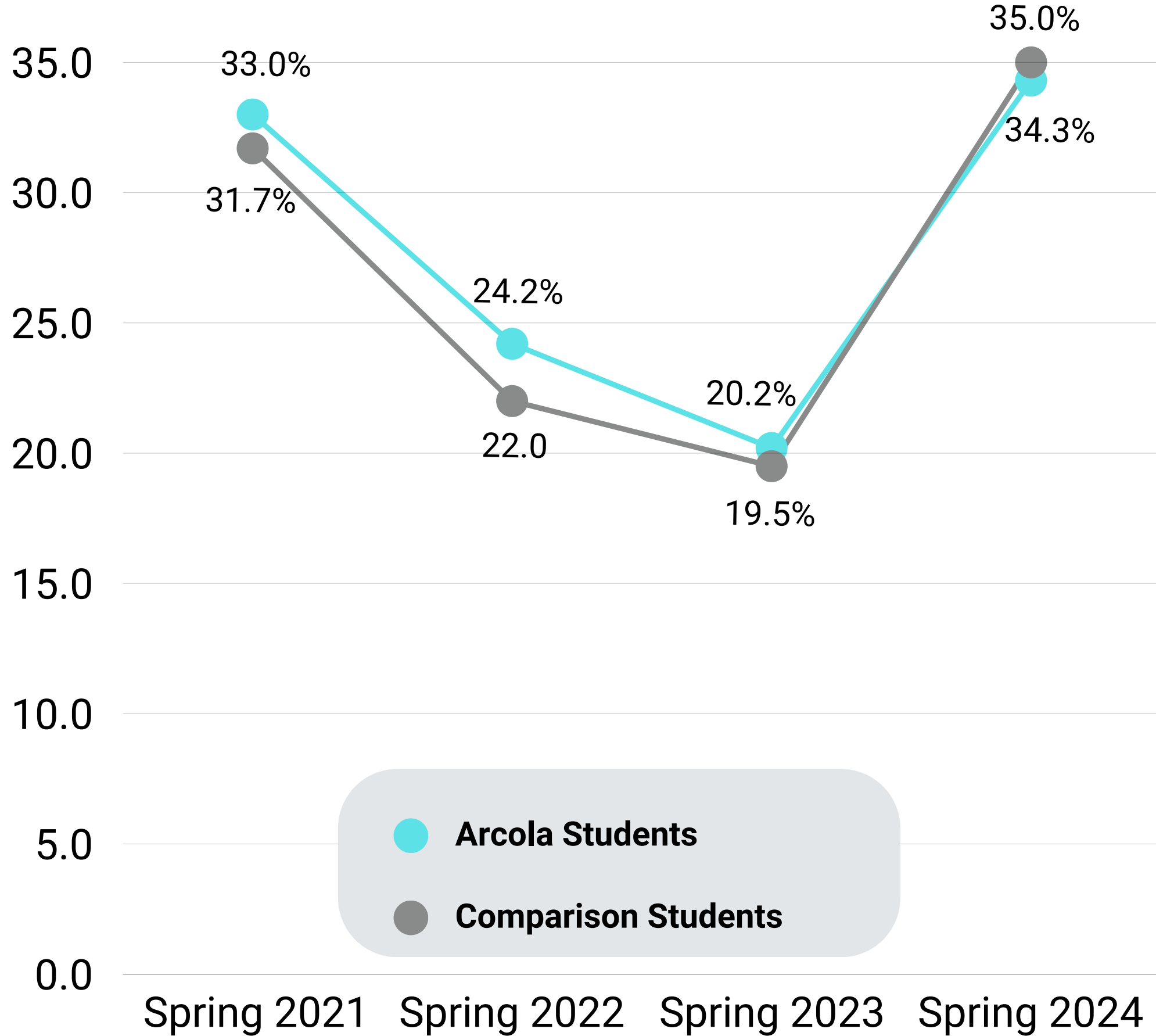

Grade 4 MAP-M Findings

- Among Grade 4 Arcola ES students and Grade 4 matched comparison students, there was a large increase (27.5%) in the percentage of students meeting or exceeding the 50th percentile benchmark on MAP-M for Grade 4 Arcola ES students from Spring 2022 to Spring 2024. However, none of the differences in percentages of students meeting or exceeding the 50th percentile benchmark between groups over time were statistically significant.

- Unlike Grade 4 Arcola ES students, Grade 4 comparison students showed steady increases in the percentage of students meeting or exceeding the 50th percentile benchmark, and it was an 11.9% increase in students meeting or exceeding the benchmark from Spring 2021 to Spring 2024.

- Overall, both groups demonstrated increases in the percentage of students meeting or exceeding the benchmark on MAP-M from Spring 2022 to Spring 2024. For Grade 4 Arcola ES students, there was a 27.5% increase in the percentage of students meeting or exceeding the benchmark for MAP-M. There was a 7.2% increase in the percentage of students meeting or exceeding the benchmark for Grade 4 comparison students rom Spring 2022 to Spring 2024.

MAP-M Results: Grade 5

Percentages of Grade 5 Students and Matched Comparison Students Meeting the 50th Percentile Benchmark on Spring MAP-M
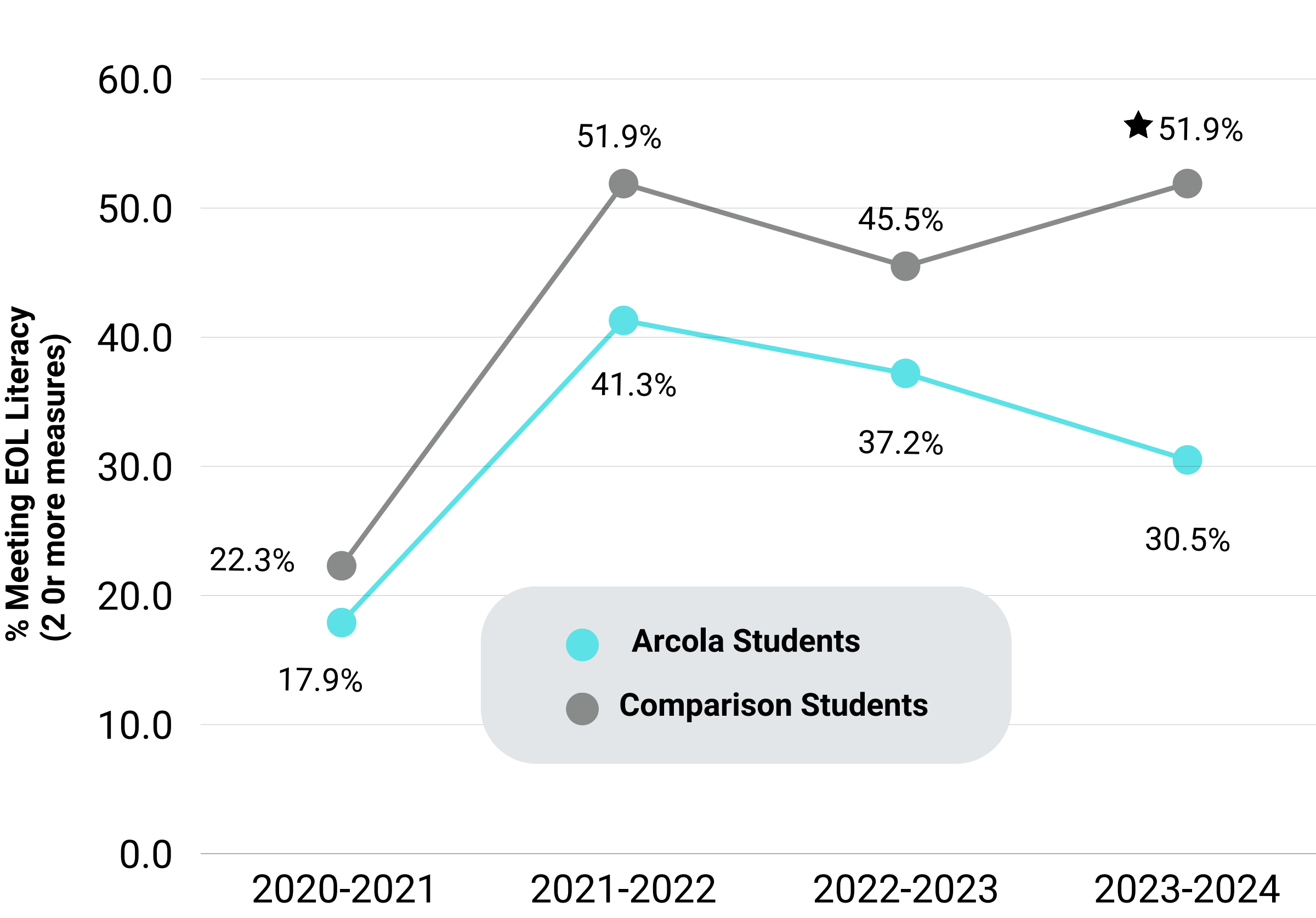
Grade 5 MAP-M Findings

- Among Grade 5 Arcola ES students and Grade 5 matched comparison students, the percentage of students meeting or exceeding the 50th percentile benchmark on Spring MAP-M across years examined were not very different from each other. Yet, Grade 5 Arcola ES students achieved slightly higher percentages of students meeting or exceeding the benchmark on MAP-M from Spring 2021 to Spring 2023 with the exception of Spring 2024. None of the differences in percentages of students meeting or exceeding the 50th percentile benchmark between groups over time were statistically significant.

- From Spring 2021 to Spring 2023, both groups demonstrated a decrease in the percentage of students meeting or exceeding the benchmark. There was a 12.8% decrease in students meeting or exceeding the benchmark for Grade 5 Arcola ES students, and a 12.2% decrease for Grade 5 comparison students.

- Overall, both groups demonstrated increases in the percentage of students meeting or exceeding the benchmark on MAP-M from Spring 2023 to Spring 2024. For Grade 5 Arcola ES students, there was a 14.1% increase. There was a 15.5% increase in the percentage of students meeting or exceeding the benchmark for Grade 5 comparison students rom Spring 2023 to Spring 2024.

Evidence of Learning: Grade 3

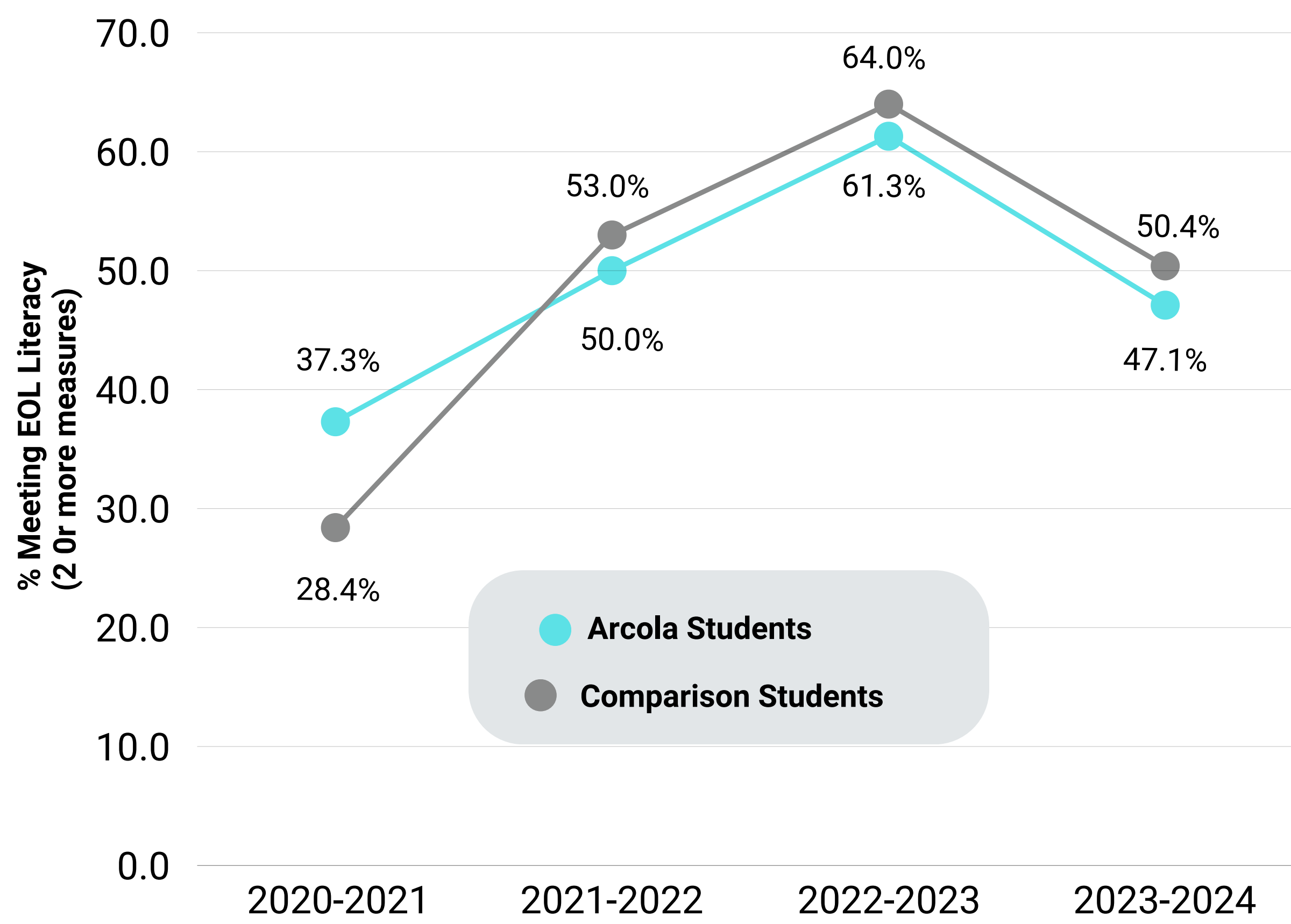Percentages of Grade 3 Students Meeting Overall EOL End of Year (EOY) Literacy

% Meeting EOL Literacy (2 0r more measures)

- 22.3%
- 17.9%
- 51.9%
- 41.3%
- 45.5%
- 37.2%
- ★ 51.9%
- 30.5%

Legend:
- ● Arcola Students
- ● Comparison Students

X-axis: 2020-2021, 2021-2022, 2022-2023, 2023-2024

Note. For 2023-2024, EOL End of Year Data is preliminary.   ★ **Statistically Significant (** *p* **<0.05)**

Grade 3 EOY EOL Literacy Findings

- Among Grade 3 Arcola ES students and Grade 3 matched comparison students, Grade 3 comparison students consistently achieved higher percentages on meeting overall end of year (EOY) Evidence of Learning (EOL) Literacy from FY 2021 to FY 2024 in comparison to Grade 3 Arcola ES students. For FY 2024, 51.9% of Grade 3 comparison students met overall end of year EOL Literacy in comparison to 30.5% of Grade 3 Arcola ES students. This percentage difference was statistically significant.

- Overall, both groups demonstrated an increase in the percentage of students meeting overall EOY EOL literacy from FY 2021 to FY 2022 and a decrease from FY 2022 to FY 2023. There was a 23.4% increase in the percentage of students meeting overall EOY EOL literacy for Grade 3 Arcola ES students from FY 2021 to FY 2022, and a 4.1% decrease from FY 2022 to FY 2023. For Grade 3 comparison students, there was a 29.6% increase in the percentage of students meeting EOY Overall EOL literacy from FY 2021 to FY 2022. There was a 6.4% decrease from FY 2022 to FY 2023.

- For Grade 3 Arcola ES students, percentage of students meeting overall EOY EOL literacy decreased by 6.7% from FY 2023 to FY 2024.

Evidence of Learning: Grade 4

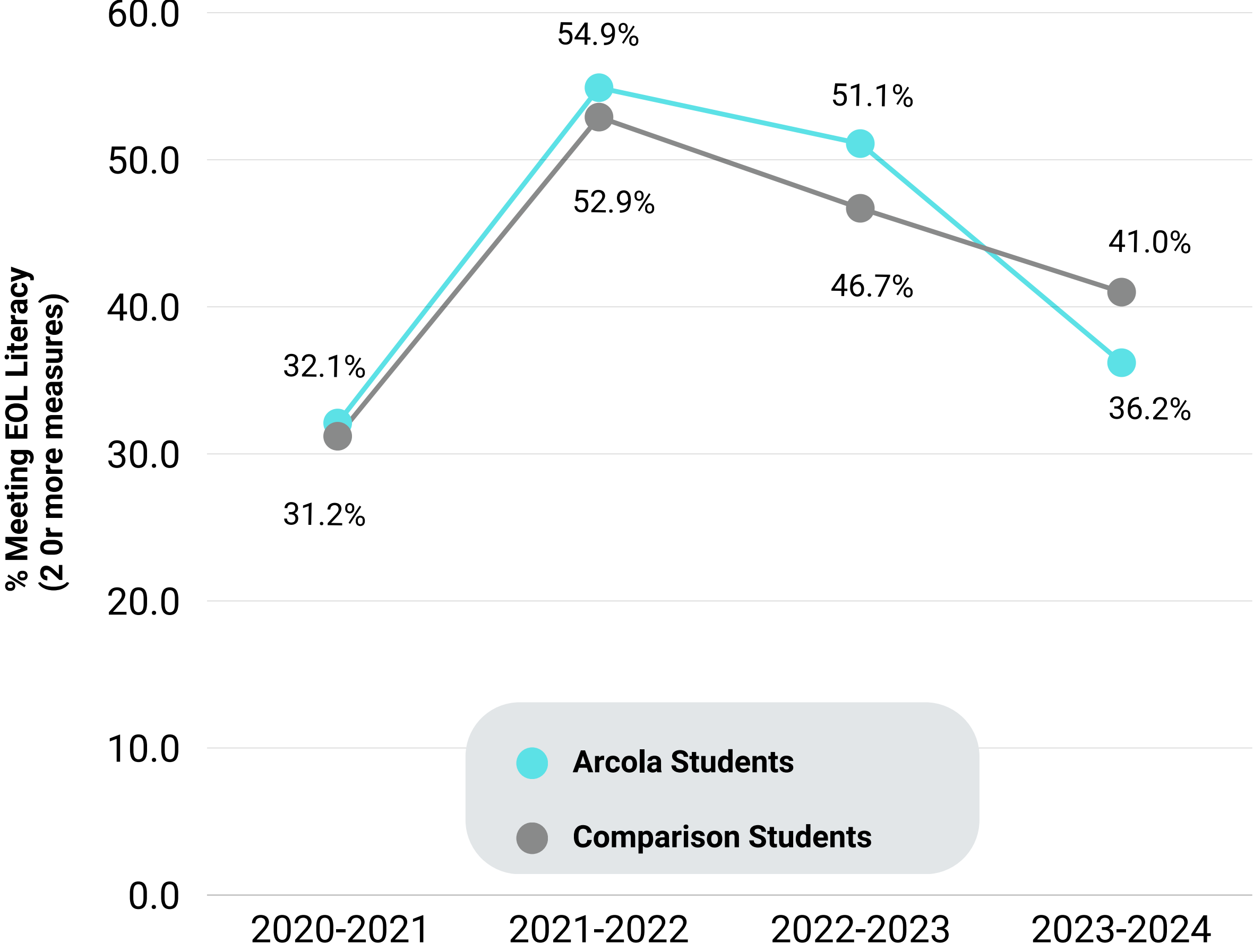Percentages of Grade 4 Students Meeting Overall EOL End of Year (EOY) Literacy

Grade 4 EOY EOL Literacy Findings

% Meeting EOL Literacy (2 Or more measures)

Chart data points:
- 2020-2021: Arcola Students 37.3%, Comparison Students 28.4%
- 2021-2022: Comparison Students 53.0%, Arcola Students 50.0%
- 2022-2023: Comparison Students 64.0%, Arcola Students 61.3%
- 2023-2024: Comparison Students 50.4%, Arcola Students 47.1%

Legend:
- Arcola Students
- Comparison Students

Note. For 2023-2024, EOL End of Year Data is preliminary.

- Among Grade 4 Arcola ES students and Grade 4 matched comparison students, there were increases in the percentage of students meeting overall EOY EOL literacy from FY 2021 to FY 2023, and decreases in the percentage of students meeting overall EOY EOL literacy from FY 2023 to FY 2024. For Grade 4 Arcola ES students, there was a 24% increase from FY 2021 to FY 2023, and a 14.2% decrease from FY 2023 to FY 2024. For Grade 4 comparison students, there was a 35.6% increase from FY 2021 to FY 2023, and a 13.6% decrease from FY 2023 to FY 2024. None of these differences across all years were statistically significant between groups.

- For Grade 4 Arcola ES students, during FY 2021, these students achieved a slightly higher percentage of meeting overall EOY EOL literacy (37.3%) in comparison to Grade 4 comparison students (28.4%). In subsequent years, Grade 4 comparison students achieved higher percentages of students meeting overall EOY EOL Literacy.

Evidence of Learning: Grade 5

Percentages of Grade 4 Students Meeting Overall EOL End of Year (EOY) Literacy

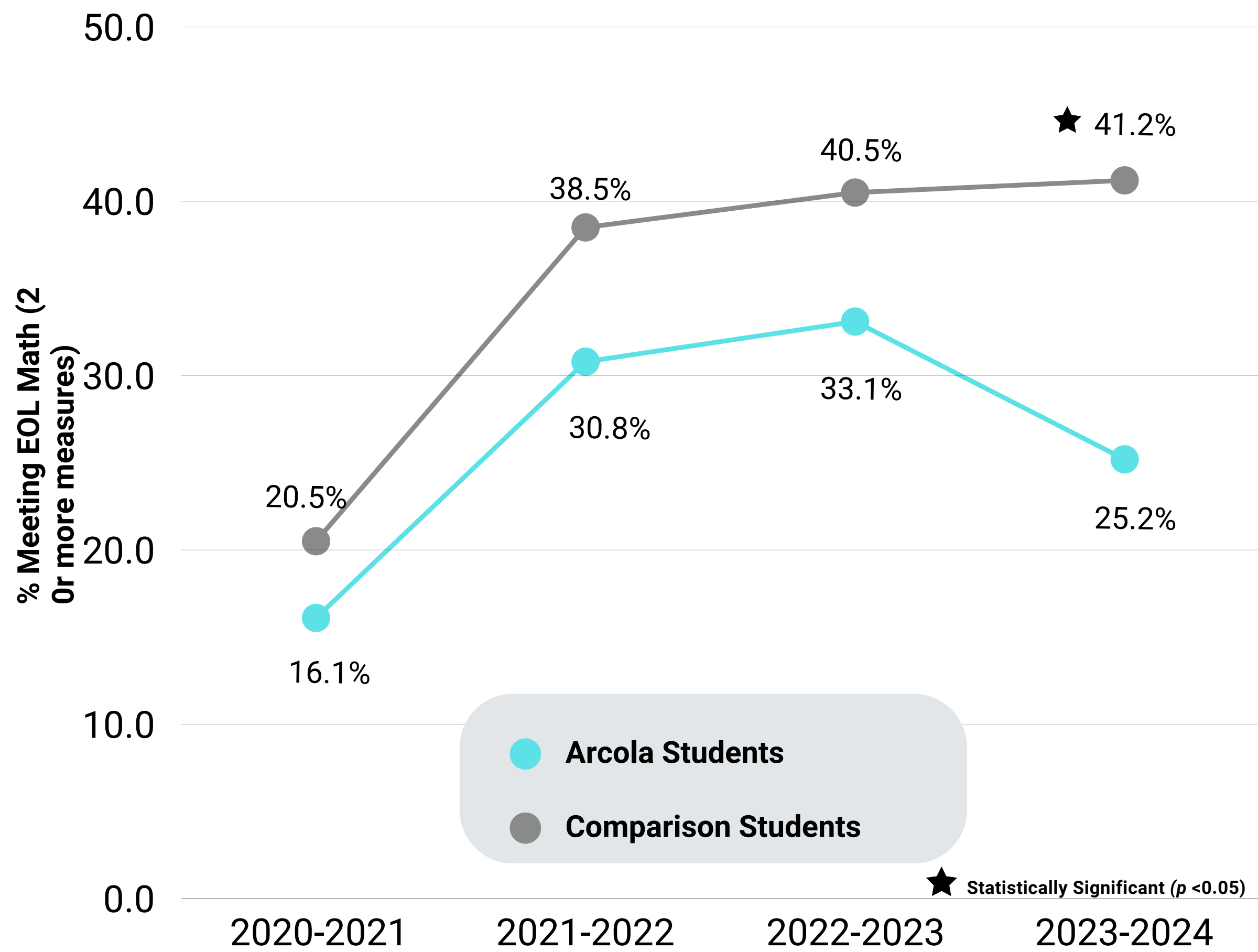*Note.* For 2023-2024, EOL End of Year Data is preliminary.

Grade 5 EOY EOL Literacy Findings

- Among Grade 5 Arcola ES students and Grade 5 matched comparison students, there were increases in the percentage of students meeting overall EOY EOL literacy from FY 2021 to FY 2022, and decreases in the percentage of students meeting overall EOY EOL literacy from FY 2022 to FY 2024. For Grade 5 Arcola ES students, there was a 22.8% increase from FY 2021 to FY 2022, and a 18.7% decrease from FY 2022 to FY 2024. For Grade 5 comparison students, there was a 21.7% increase from FY 2021 to FY 2022, and a 11.9% decrease from FY 2022 to FY 2024. None of these differences across all years were statistically significant between groups.

- Grade 5 Arcola ES students consistently achieved slightly higher rates than comparison students on meeting overall EOY EOL literacy from FY 2021 to FY 2023. In FY 2024, the percentage of students meeting overall EOY EOL literacy dropped by 14.9% from FY 2023.

Evidence of Learning: Grade 3
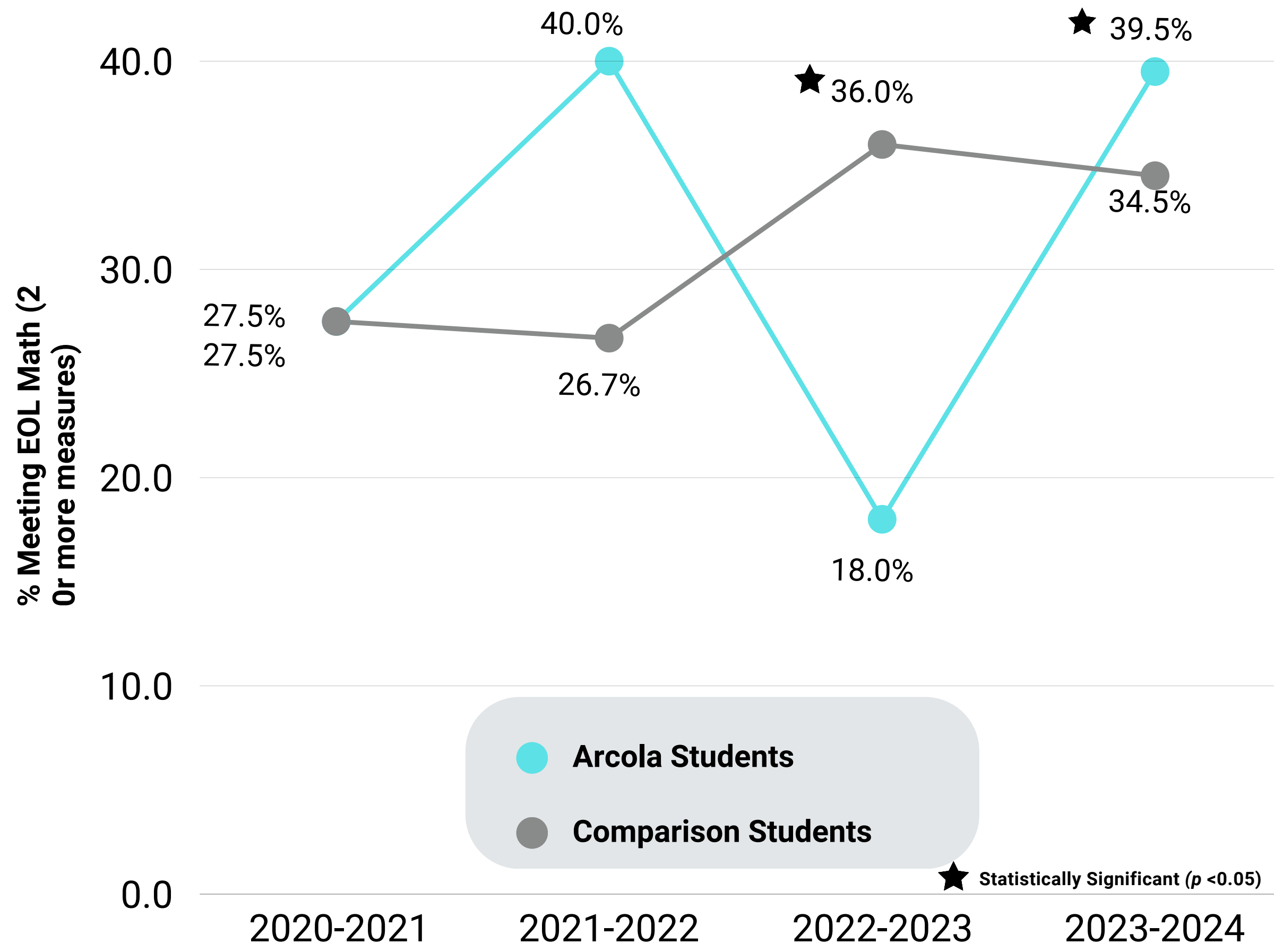Percentages of Grade 3 Students Meeting Overall EOL End of Year (EOY) Math

% Meeting EOL Math (2 Or more measures)

- 20.5% (Comparison, 2020-2021)
- 16.1% (Arcola, 2020-2021)
- 38.5% (Comparison, 2021-2022)
- 30.8% (Arcola, 2021-2022)
- 40.5% (Comparison, 2022-2023)
- 33.1% (Arcola, 2022-2023)
- ★ 41.2% (Comparison, 2023-2024)
- 25.2% (Arcola, 2023-2024)

Legend:
- ● Arcola Students
- ● Comparison Students
- ★ Statistically Significant ($p < 0.05$)

X-axis: 2020-2021, 2021-2022, 2022-2023, 2023-2024

Shared Accountability - July 2024
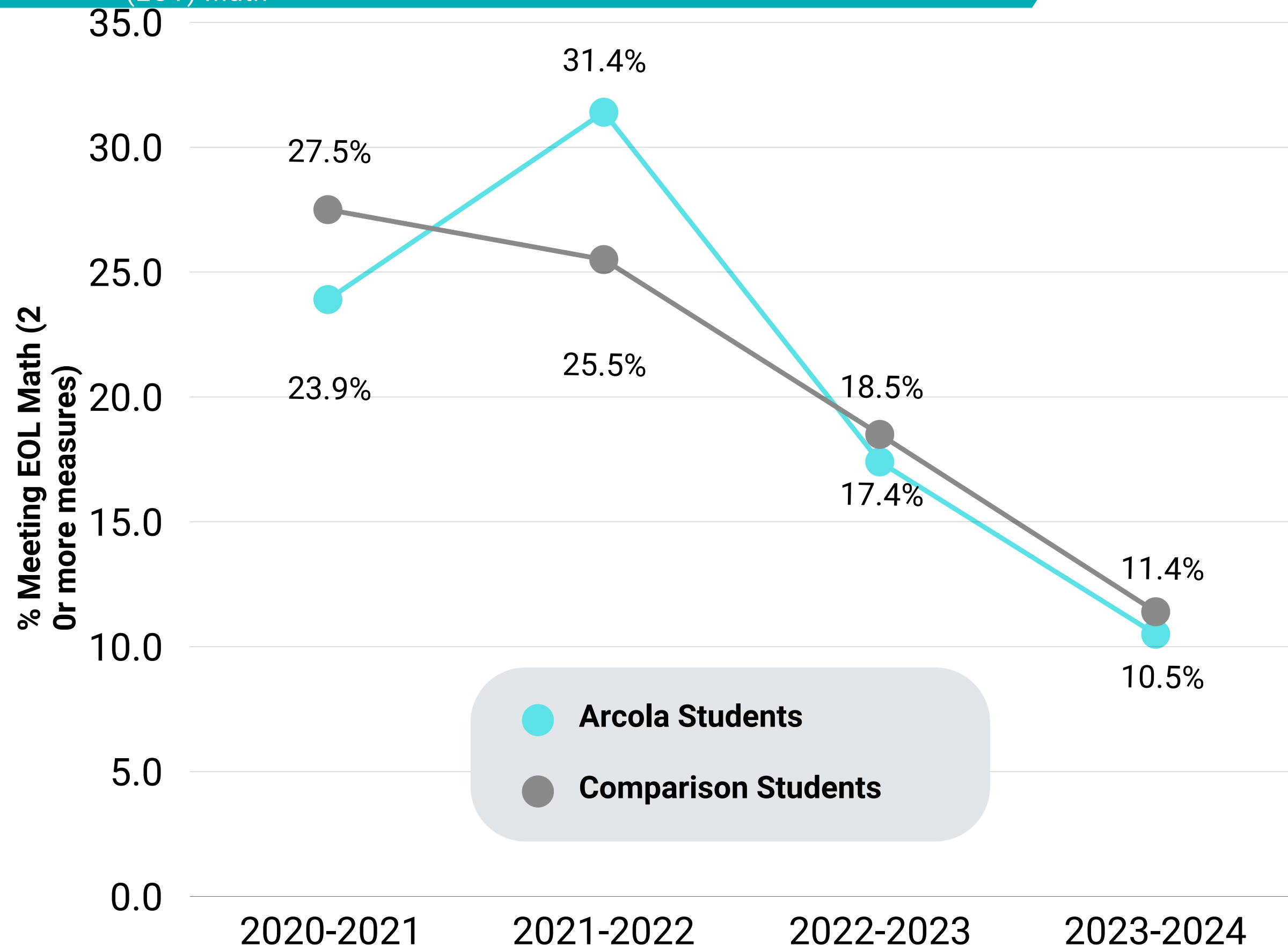
Note. For 2023-2024, EOL End of Year Data is preliminary.

Grade 3 EOY EOL Math Findings

- Among Grade 3 Arcola ES students and Grade 3 comparison students, Grade 3 comparison students consistently achieved higher percentages in meeting overall EOY EOL math than Grade 3 Arcola ES students. 41.2% of Grade 3 comparison students met overall EOY EOL math in comparison to 25.2% Grade 3 Arcola ES students, and this difference was statistically significant.

- For Grade 3 Arcola ES students, there was a 17% increase in the percentage of students meeting overall EOY EOL math from FY 2021 to FY 2023. For Grade 3 comparison students, there was a 20% increase from FY 2021 to FY 2023.

- Unlike Grade 3 comparison students, Grade 3 Arcola ES students experienced a 7.9% decrease in students meeting overall EOY EOL math from FY 2023 to FY 2024.

Evidence of Learning: Grade 4

Percentages of Grade 4 Students Meeting Overall EOL End of Year (EOY) Math

% Meeting EOL Math (2 Or more measures)

- 40.0%
- 27.5% 27.5%
- 26.7%
- 36.0%
- 18.0%
- 39.5%
- 34.5%

Legend:
- ● Arcola Students
- ● Comparison Students
- ★ Statistically Significant (*p* <0.05)

2020-2021   2021-2022   2022-2023   2023-2024

Note. For 2023-2024, EOL End of Year Data is preliminary.

Grade 4 EOY EOL Math Findings

- Among Grade 4 Arcola ES students and Grade 4 comparison students, 36.0% of Grade 4 comparison students met overall EOY EOL math in comparison to 18.0% of Grade 4 Arcola ES students during FY 2023. This difference was statistically significant.

- 39.5% of Grade 4 Arcola ES students met overall EOY EOL math in comparison to 34.5% of Grade 4 comparison students during FY 2024 and this difference was statistically significant.

- Grade 4 Arcola ES students experienced a large decline (22%) in the percentage of students meeting overall EOY EOL math from FY 2022 to FY 2023.

- Grade 4 Arcola ES students experienced a large increase (21.5%) in the percentage of students meeting overall EOY EOL math from FY 2023 to FY 2024.
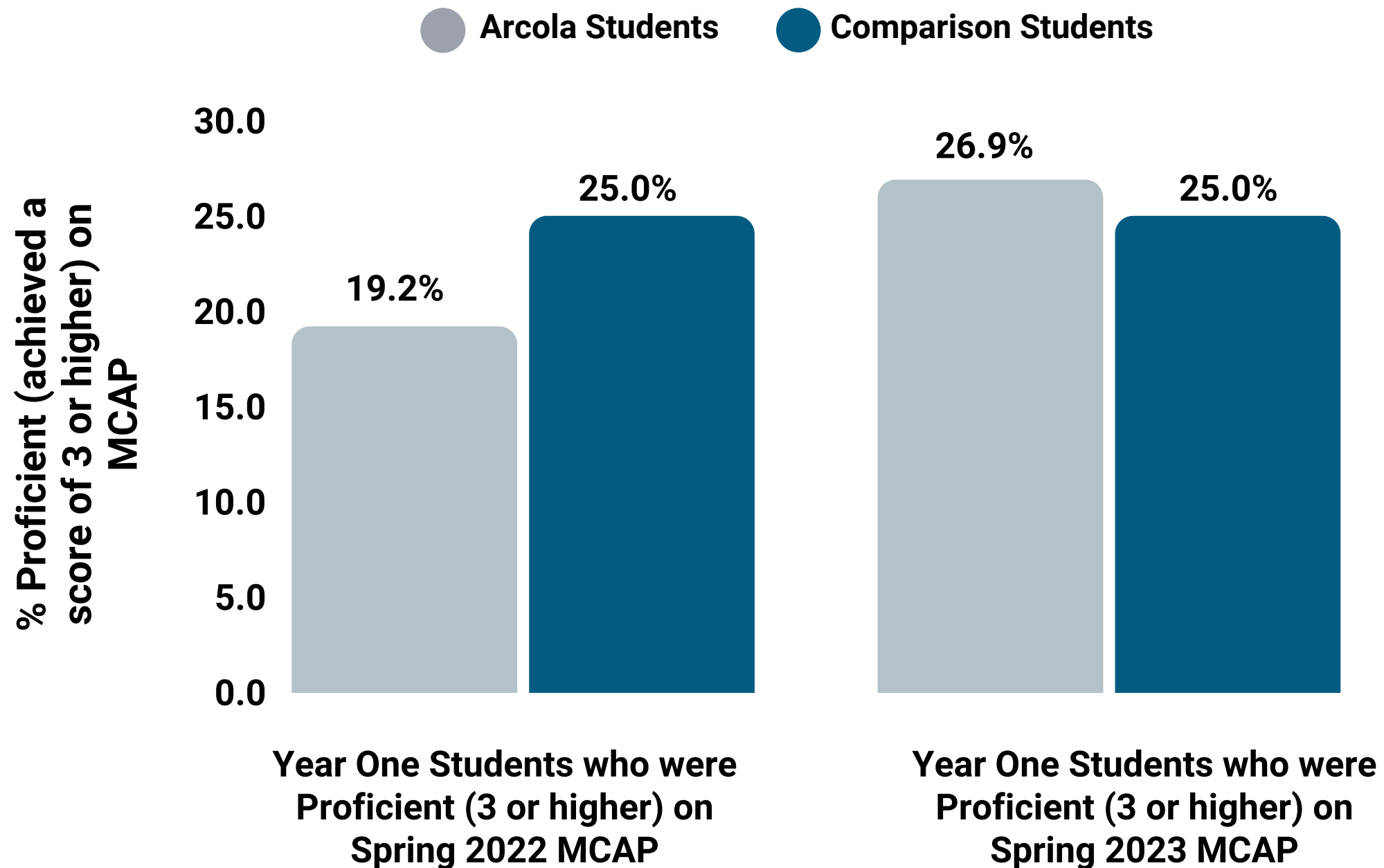
- Grade 4 comparison students experienced a 9.3% increase in the percentage of students meeting overall EOY EOL math from FY 2022 to FY 2023 and a 1.5% decrease from FY 2023 to FY 2024.

Evidence of Learning: Grade 5

Percentages of Grade 5 Students Meeting Overall EOL End of Year (EOY) Math

Note. For 2023-2024, EOL End of Year Data is preliminary.

Grade 5 EOY EOL Math Findings

- Both Grade 5 Arcola ES students and Grade 5 comparison students generally experienced a decline in the percentage of students meeting overall EOY EOL math with the exception of FY 2021 to FY 2022 for Grade 5 Arcola ES Students. During this time frame, there was a 7.5% increase in the percentage of students meeting overall EOY EOL math. It is important to note that this increase occurred from year one to year two of ISC implementation, but none of these differences were statistically significant across years.

- There was a 20.9% decrease in the percentage of students meeting overall EOY EOL math from FY 2022 to FY 2024 for Grade 5 Arcola ES students.

- There was a consistent decrease (16.1%) in the percentage of students meeting overall EOY EOL math from FY 2021 to FY 2024 for Grade 5 comparison students.

2

For students who began in Arcola during 2019–2020, are there differences in academic performance outcomes?
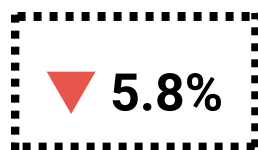
Longitudinal MCAP ELA Results

Percentages of Year One Arcola ES students and Matched Comparison Students that were Proficient on Spring 2022 MCAP and Spring 2023 MCAP

● Arcola Students   ● Comparison Students

Year One Students who were Proficient (3 or higher) on Spring 2022 MCAP

Year One Students who were Proficient (3 or higher) on Spring 2023 MCAP

Percentage Difference   ▼ 5.8%   ▲ 1.9%

Longitudinal MCAP ELA Findings
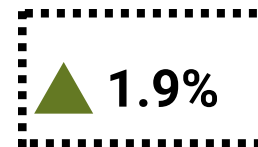
- Among Year One Arcola ES students and matched comparison students, comparison students achieved a higher percent proficiency (25.0%) on the Spring 2022 MCAP ELA in comparison to Year One Arcola Students (19.2%), but this 5.8% difference was not statistically significant.

- Among Year One Arcola ES students and matched comparison students, Year One Arcola ES students achieved a slightly higher percent proficiency (26.9%) on the Spring 2023 MCAP ELA in comparison to matched comparison students (25.0%), but this 1.9% difference was not statistically significant.

- The percentage of students achieving proficiency increased for Year One Arcola ES students over time but remained the same for comparison students. For Year One Arcola ES students, percent proficiency on Spring MCAP ELA increased by 7.7% from 2022 to 2023.
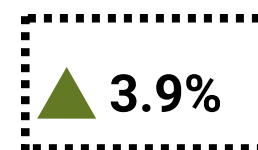
Longitudinal MCAP Math Results

Percentages of Year One Arcola ES students and Matched Comparison Students that were Proficient on Spring 2022 MCAP and Spring 2023 MCAP

Arcola Students ● **Comparison Students** ●

Percentage Difference

▲ **3.9%**

Longitudinal MCAP Math Findings
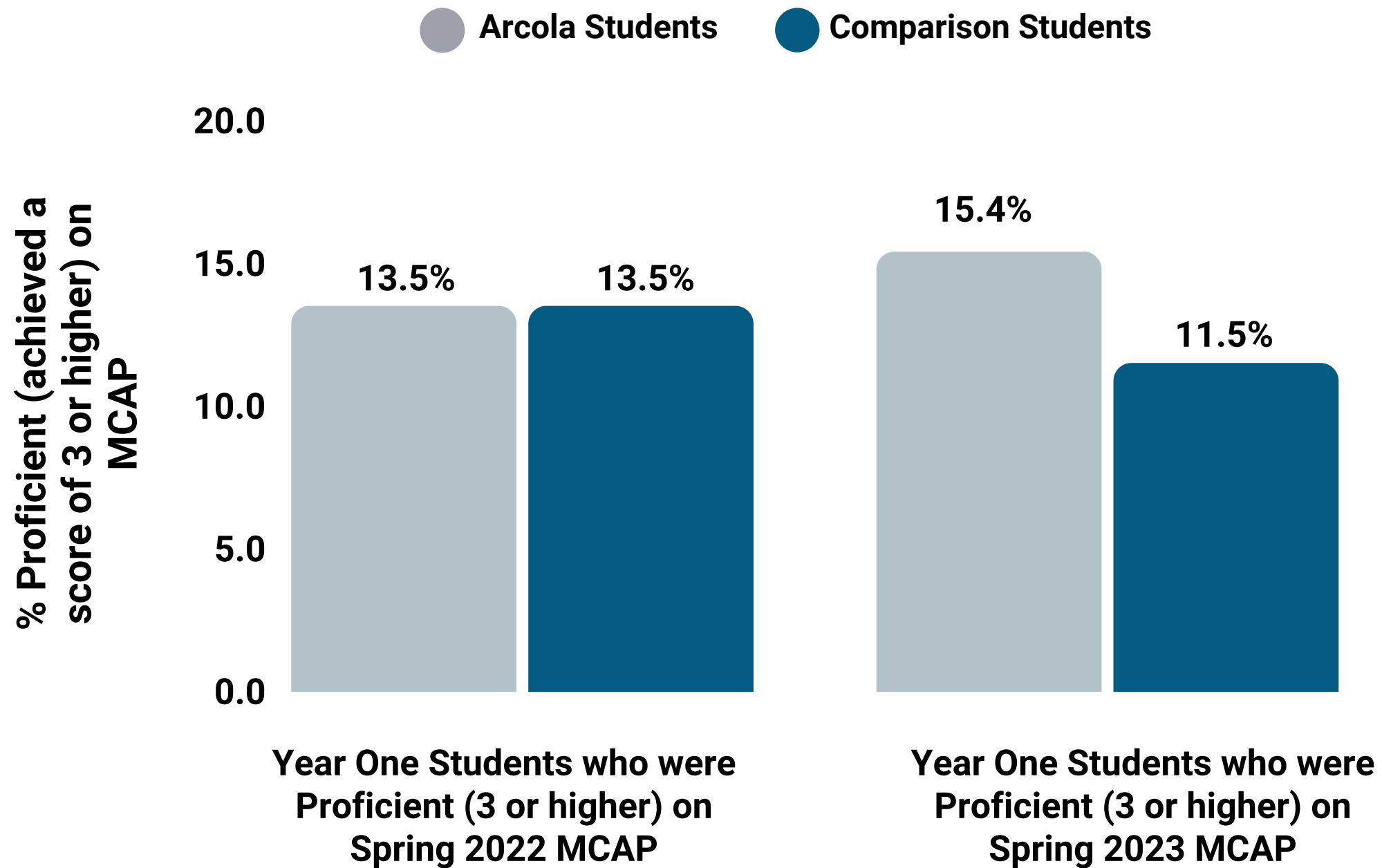
- Both Year One Arcola ES students and matched comparison students achieved the same percent proficiency (13.5%) on the Spring 2022 MCAP Math.

- Among Year One Arcola ES students and matched comparison students, Year One Arcola ES students achieved a higher percent proficiency (15.4%) on the Spring 2023 MCAP Math in comparison to matched comparison students (11.5%), but this 3.9% difference was not statistically significant.

- The percentage of students achieving proficiency increased for Year One Arcola ES students over time but decreased for comparison students. For Year One Arcola ES students, percent proficiency on Spring MCAP Math increased by 1.9% from 2022 to 2023. For matched comparison students, percent proficiency on Spring MCAP Math decreased by 2.0% from 2022 to 2023.

Longitudinal MAP Results

Average MAP-R and MAP-M RIT scores and distribution by matched comparison, gender, race/ethnicity, and service receipt.

Longitudinal MAP Findings

		2022 Average RIT Score Reading Spring	2024 Average RIT Score Reading Spring	2022 Average RIT Score Math Spring	2024 Average RIT Score Math Spring
Arcola		180	203	188	212
Comparison		185	200	188	208
Arcola					
Gender	Male	180	199	191	213
	Female	180	205	186	211
Race/Ethnicity	Asian	188	214	201	224
	Black or African American	193	214	198	217
	Hispanic/Latino	176	199	185	209
	White	200	220	204	229
	All Other Student Groups				
FARMS		176	197	188	210
EML/ReML		169	194	180	205
Special Education		171	192	176	201
Comparison					
Gender	Male	180	195	187	206
	Female	190	204	189	210
Race/Ethnicity	Asian	210	219	205	231
	Black or African American	198	212	199	221
	Hispanic/Latino	182	197	185	206
	White	195	205	205	214
	All Other Student Groups				
FARMS		180	198	184	206
EML/ReML		176	194	179	200
Special Education		171	190	173	187

Note. Only 2022 and 2024 scores are reported to reflect performance for Year One students since ISC began and current performance. Green font reflects an upward trend in scores from 2022 to 2024. Blanks reflect a lack of cases for that particular student group.

- Average scores for both MAP-R and MAP-M increased from 2022 to 2024 for both Year One Arcola ES students and matched comparison students. The increases from 2022 to 2024 were larger for Year One Arcola ES students.

- For Year One Arcola Students, average RIT scores for Spring MAP-R increased by 23 points, and average RIT scores for Spring MAP-M increased by 24 points. For matched comparison students, average RIT scores for Spring MAP-R increased by 15 points, and average RIT scores for Spring MAP-M increased by 20 points.

- Across racial/ethnic groups, gender, and services, there were consistent increases in average RIT scores for both Spring MAP-R and Spring MAP-M from 2022 to 2024 for both Year One Arcola ES students, and matched comparison students. The increases were larger for Year One Arcola ES students over time in comparison to the matched sample.

Longitudinal MAP-R Results

Percentages of Year One Arcola ES and Matched Comparison Students Meeting the 50th Percentile Benchmark on Spring MAP-R
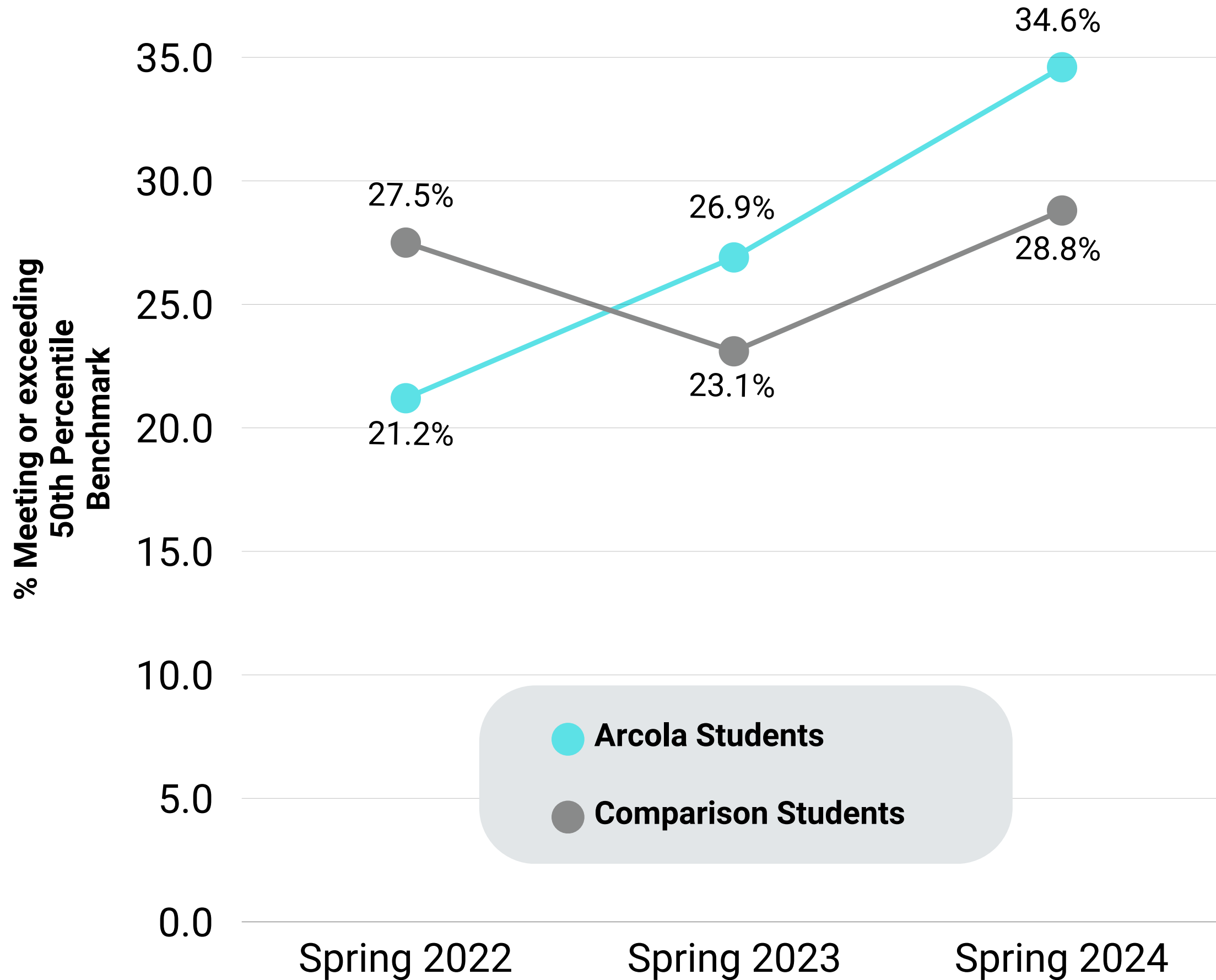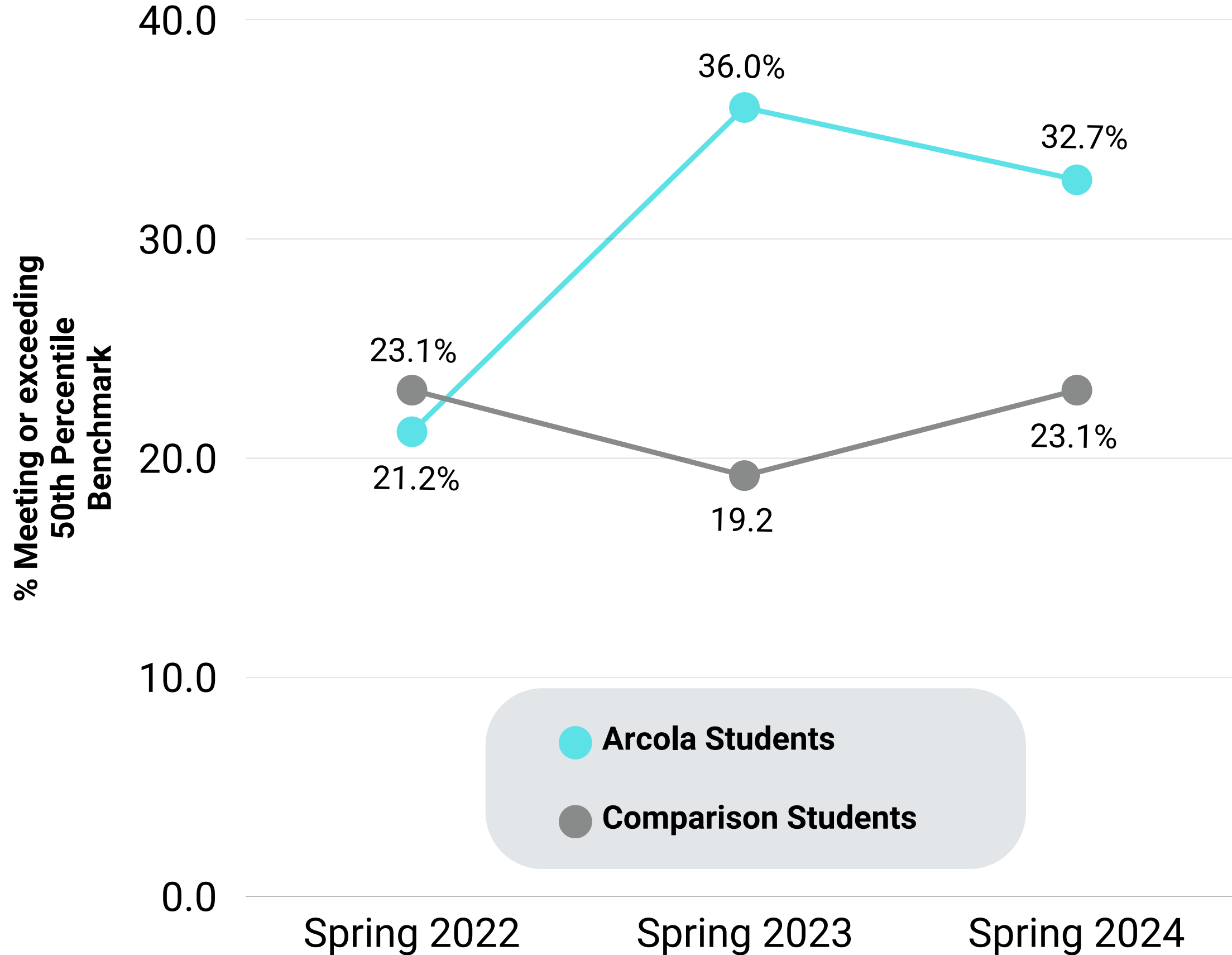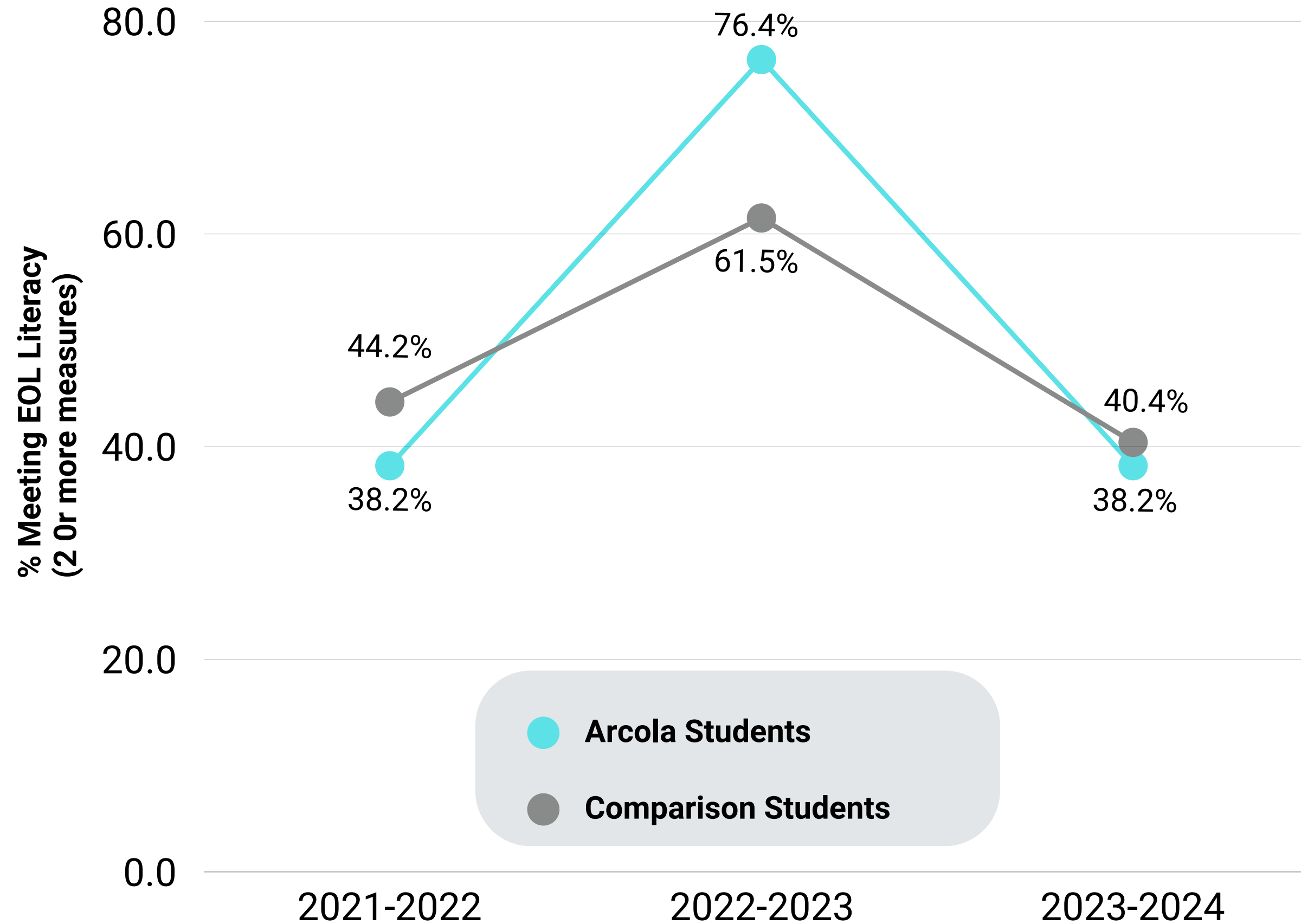
Longitudinal MAP-R Findings

- Among Year One Arcola ES students and matched comparison students, Year One Arcola ES students achieved higher percentages of meeting or exceeding the 50th percentile benchmark on Spring 2023 MAP-R (26.9%) in comparison to matched comparison students (23.1%) and on Spring 2024 MAP-R (34.6%) in comparison to matched comparison students (28.8%). These differences in students meeting or exceeding the 50th percentile benchmark were not statistically significant.

- For Year One Arcola ES students, from Spring 2022 to Spring 2024, there was a 13.4% increase in the percentage of students meeting or exceeding the benchmark for Spring MAP-R. For comparison students, there was an 4.4% decrease from Spring 2022 to Spring 2023. However, the percentage of students meeting or exceeding the the benchmark increased by 5.7% from Spring 2023 to Spring 2024.

Longitudinal MAP-M Results
Percentages of Year One Arcola ES and Matched Comparison Students Meeting the 50th Percentile Benchmark on Spring MAP-M

% Meeting or exceeding 50th Percentile Benchmark

- 36.0%
- 32.7%
- 23.1%
- 21.2%
- 19.2
- 23.1%

- Arcola Students
- Comparison Students

Spring 2022 Spring 2023 Spring 2024

Longitudinal MAP-M Findings

- Among Year One Arcola ES students and matched comparison students, Year One Arcola ES students achieved higher percentages of meeting or exceeding the 50th percentile benchmark on Spring 2023 MAP-M (36.0%) in comparison to matched comparison students (19.2%) and on Spring 2024 MAP-M (32.7%) in comparison to matched comparison students (23.1%). These differences in students meeting or exceeding the 50th percentile benchmark were not statistically significant.

- For Year One Arcola ES students, from Spring 2022 to Spring 2023, there was a 14.8% increase in the percentage of students meeting or exceeding the benchmark for Spring MAP-M. From Spring 2023 to Spring 2024, there was a 3.3% decrease in the percentage of students meeting or exceeding the benchmark. For comparison students, there was an 3.9% decrease from Spring 2022 to Spring 2023 However, the percentage of students meeting or exceeding the the benchmark increased by 3.9% from Spring 2023 to Spring 2024.
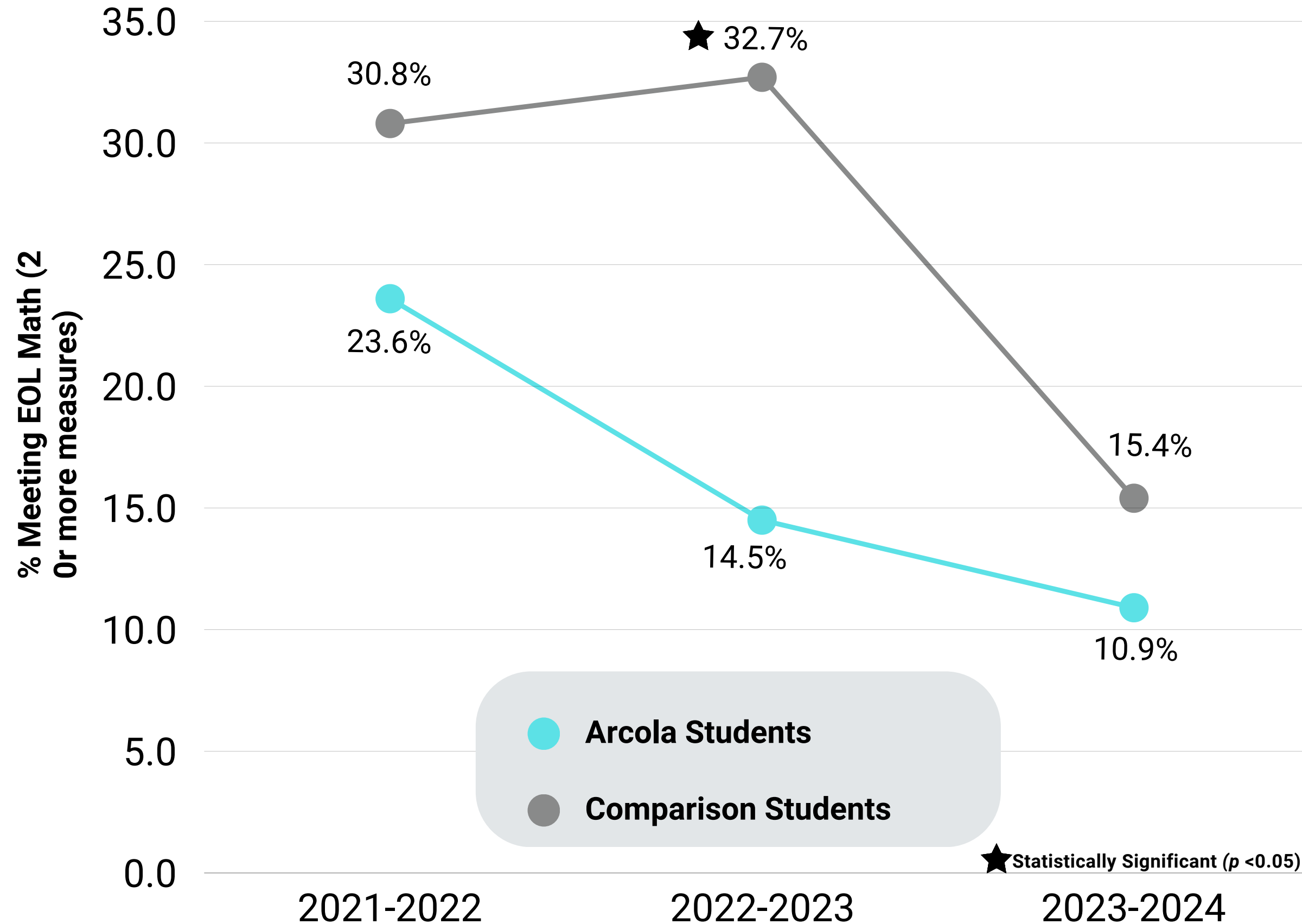
Evidence of Learning: Literacy

Percentages of Year One Arcola ES and Matched Comparison Students Meeting Overall EOL End of Year (EOY) Literacy

% Meeting EOL Literacy (2 0r more measures)

- 80.0
- 76.4% (Arcola, 2022-2023)
- 61.5% (Comparison, 2022-2023)
- 60.0
- 44.2% (Comparison, 2021-2022)
- 40.4% (Comparison, 2023-2024)
- 40.0
- 38.2% (Arcola, 2021-2022)
- 38.2% (Arcola, 2023-2024)
- 20.0
- 0.0

2021-2022   2022-2023   2023-2024

- ● Arcola Students
- ● Comparison Students

Note. For 2023-2024, EOL End of Year Data is preliminary.

Longitudinal EOY EOL Literacy Findings

- Across both groups, there was an increase in the percentage of meeting overall EOY EOL Literacy from 2021–2022 to 2022–2023 such that the increase was higher for Arcola ES students (38.2%) than for matched comparison students (17.3%). These differences were not statistically significant.

- Across both groups, there was a decrease in the percentage of meeting Overall EOY EOL Literacy from 2022–2023 to 2023–2024 such that the decrease was larger for Arcola ES students (38.2%) in comparison to matched comparison students (21.1%).

- Matched comparison students consistently showed higher percentages of meeting overall EOY EOL Literacy for 2021–2022 and 2023–2024 school years in comparison to Arcola ES students. The exception was seen during the 2022–2023 school year in which Arcola ES students demonstrated a higher percentage in meeting overall EOY EOL literacy (76.4%) in comparison to 61.5% of comparison students.

Evidence of Learning: Math

Percentages of Year One Arcola ES and Matched Comparison Students Meeting Overall EOL End of Year (EOY) Math

% Meeting EOL Math (2 Or more measures)

- 30.8%
- ★ 32.7%
- 23.6%
- 15.4%
- 14.5%
- 10.9%

Arcola Students

Comparison Students

★Statistically Significant *(p <0.05)*

2021-2022 2022-2023 2023-2024

Longitudinal EOY EOL Math Findings

- Matched Comparison students consistently achieved higher percentages of meeting overall EOY EOL math in comparison to Year One Arcola ES students. There was a statistically significant difference during the 2022−2023 school year such that 32.7% of matched comparison students met overall EOY EOL math in comparison to 14.5% of Year One Arcola ES students.

- Across both groups, there was a decrease in the percentage of meeting Overall EOY EOL Math from 2022−2023 to 2023−2024 such that the decrease was larger for matched comparison students (17.3%) in comparison to Arcola ES students (3.6%).

- Year One Arcola ES students consistently demonstrated decreases in the percentages of meeting overall EOY EOL math across years. Year One Arcola ES students showed a 12.7% decrease in meeting overall EOY EOL math from 2021−2022 to 2023−2024.

Note. For 2023-2024, EOL End of Year Data is preliminary.

3

Are there differences in chronic absenteeism rates?

Chronic Absenteeism
Arcola ES students

Legend: Grade 3 · Grade 4 · Grade 5 · All Arcola (K-5) Students

2019-2020
- Grade 3: 13.0%
- Grade 4: 12.8%
- Grade 5: 8.7%
- Overall: 28.4%

2020-2021
- Grade 5: 32.0%
- Grade 3: 31.9%
- Grade 4: 24.8%
- Overall: 28.5%

2021-2022
- Overall: 37.4%
- Grade 3: 34.5%
- Grade 4: 26.5%
- Grade 5: 22.3%

2022-2023
- Overall: 40.3%
- Grade 3: 36.2%
- Grade 4: 27.4%
- Grade 5: 26.2%
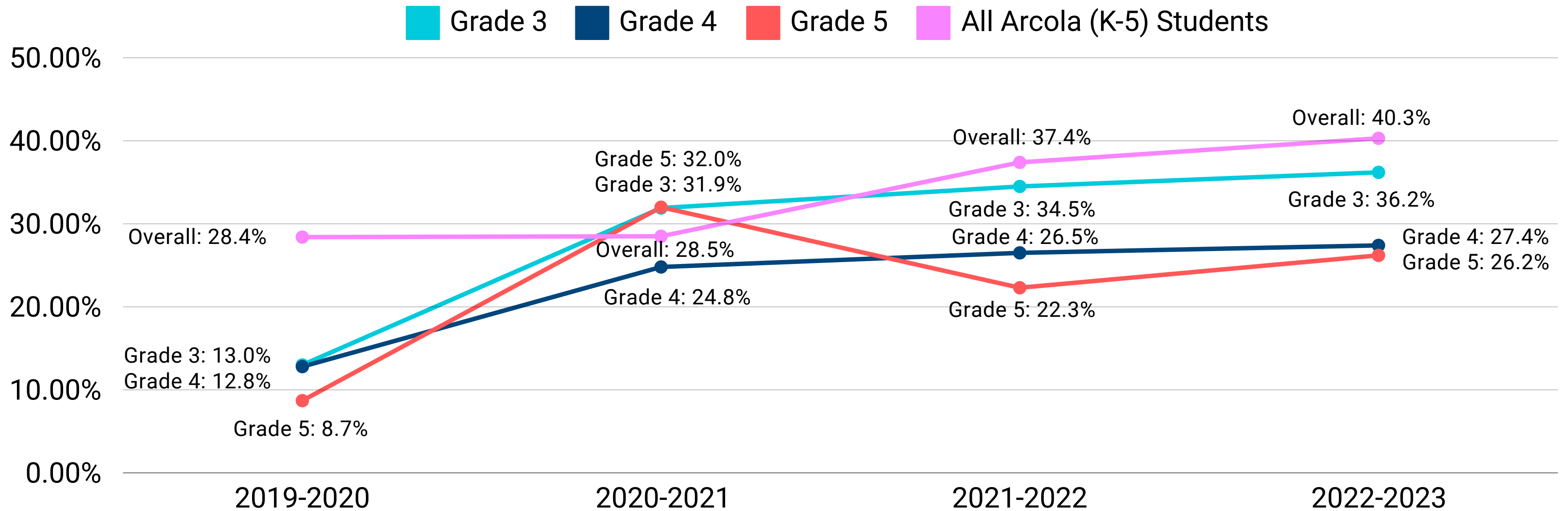
Findings

All (K-5) Arcola ES students showed increases in chronic absenteeism from 28.4% in FY 2020 to 40.3% in FY 2023. This trend was apparent across Grades 3, 4, and 5. The largest increase for chronic absenteeism occurred from FY 2019-2020, the first year ISC was implemented, to FY 2021 for Grade 3 (13.0% to 31.9%) , Grade 4 (12.8% to 24.8%) , and Grade 5 (8.7% to 32.0%).

Across grade levels examined, grade 5 students showed a decline in chronic absenteeism from FY 2021 (32.0%) to FY 2022 (22.3%).

4

Are there differences in self-reported perceptions of well-being among Grades 3, 4, and 5 Arcola ES students, school-based staff and parents?

Percentage of respondents who agreed with the survey item. Total averages are calculated for each group based on the percentage of agreement across students, parents, and staff for each item.

2023-2024 Climate Surveys Well-Being Results by Group							
Total Number of Student, Parent, and Staff Responses							
Arcola ES (*N* = 331)				Comparison (*N* = 2535)			
Overall, I feel like I belong.							
Students 78.3%	Parents 93.3%	Staff 77.5%	Total 83.0%	Students 79.2%	Parents 88.5%	Staff 57.3%	Total 75%
I feel connected to other (adults, students).							
Students 73.9%	Parents 82.1%	Staff 60.0%	Total 72.0%	Students 77.6%	Parents 72.2%	Staff 60.4%	Total 70.1%
How respectful are the relationships/adults or students show me respect.							
Students 64.7%	Parents 100.0%	Staff 65.0%	Total 76.6%	Students 64.3%	Parents 96%	Staff 68.1%	Total 76.1%
How safe do you feel/I feel safe.							
Students 79.4%	Parents 93.3%	Staff 77.5%	Total 83.4%	Students 80.4%	Parents 95.2%	Staff 63.0%	Total 79.5%

Findings

Overall, the data from Arcola ES students, staff and parents indicated differences across all items related to well-being in comparison to the matched sample, but a majority of these differences were minimal. It is important to note that students in Grades 3, 4, and 5 reported lower percentages of agreement on items related to belonging, connection, and safety. Belonging was included as it is an important source of well-being. Arcola ES school-based staff indicated lower percentages of agreement on items related to connection, and respect, with the item related to respect showing more of a difference (3.1%) compared to the matched sample staff response.

Based on the survey data, parents generally reported higher rates of agreement, and these percentages of agreement were higher among Arcola ES parents in comparison to the matched comparison sample.

Conclusions

Summary of Key Findings: Cohort Analysis

Academic Performance Outcomes

MCAP: There was a statistically significant difference on the Spring 2022 MCAP ELA for Grade 5 students. Grade 5 Arcola ES students achieved a higher percent proficiency in comparison to the matched sample. This means that the difference was due to the ISC program effect instead of a random occurrence. For Grade 3 Arcola ES students, performance on both Spring 2022 and Spring 2023 MCAP ELA, and performance on Spring 2022 MCAP Math showed a lower percent proficiency in comparison to Grade 3 matched students. The opposite was true for Spring 2023 MCAP Math in which Grade 3 Arcola ES students performed slightly higher than the comparison sample. For Grade 4 Arcola ES students, percent proficiency was lower than the comparison for both Spring 2022 and Spring 2023 MCAP ELA but percent proficiency was higher for both Spring 2022 and Spring 2023 MCAP Math. However, no differences in percent proficiencies on MCAP were statistically significant for both Grade 3 and Grade 4.

MAP: There was a marginal statistical significant difference in the percentage of Grade 3 students meeting or exceeding the benchmark for Spring 2024 MAP-R such that comparison students achieved a higher percentage in comparison to Grade 3 Arcola students. Grade 4 Arcola students met or exceeded the 50th percentile benchmark at a higher percentage than the matched sample and this was statistically significant for Spring 2024 MAP-R. These effects could be attributed to the effect of ISC enrollment instead of by chance. However, no differences in the percentage of meeting or exceeding the 50th percentile benchmark were statistically significant for Grade 5 students. It is important to note that Grade 5 Arcola ES students achieved higher percentages of meeting or exceeding the benchmark on MAP-R across all years examined and achieved higher percentages of meeting the benchmark from Spring 2021 to Spring 2023 for MAP-M with the exception of Spring 2024 for MAP-M.

EOY EOL: For Grade 3 Arcola ES students, the percentage of students meeting overall EOY EOL literacy and overall EOY EOL math was lower than the matched sample, and these were statistically significant differences for FY 2024. For Grade 4 Arcola ES students, the percentage of students meeting overall EOY EOL math was higher than the matched sample, and this was a statistically significant difference for FY 2024. For Grade 4 Arcola ES students, the percentage of students meeting overall EOY EOL math was lower than the matched sample, and this was a statistically significant difference for FY 2023. Grade 5 Arcola ES students demonstrated a higher percentage of meeting overall EOY EOL literacy than the comparison from FY 2021 to FY 2023 and FY 2022 for overall EOY EOL math but these differences were not statistically significant. Grade 5 students had slightly lower percentages in meeting overall EOY EOL math across grade levels examined, especially from FY 2023 to FY 2024, but none of these differences were statistically significant.

Summary of Key Findings: Longitudinal Analysis

Academic Performance Outcomes

MCAP: There were no statistically significant differences on the Spring 2022 MCAP ELA and Spring 2023 MCAP ELA for year one Arcola ES Students in comparison to the matched sample which means that these effects cannot be due to program effects, and is likely due to chance. Comparison students achieved a higher percent proficiency on the Spring 2022 MCAP ELA. For the Spring 2023 MCAP ELA, Year One Arcola ES students achieved a higher percent proficiency. **There were no statistically significant differences on the Spring 2022 MCAP Math and Spring 2023 MCAP Math.** For the Spring 2023 MCAP Math, Year One Arcola ES students achieved a higher percent proficiency in comparison to the matched sample.

MAP: There were no statistically significant differences on students meeting or exceeding the benchmark for Spring MAP-R and Spring MAP-M from 2022 to 2024 across both groups. For the majority of years examined, Year One Arcola ES students met or exceeded the benchmark for both MAP-R and MAP-M at higher rates in comparison to the matched sample. Additionally, descriptive analyses revealed that for both groups, average RIT scores on both MAP-R and on MAP-M increased over time.

EOY EOL: For Year One Arcola ES students, the percentage of students meeting overall EOY EOL math was lower than the matched sample, and this was a statistically significant difference during 2022−2023. The percentage of Year One Arcola ES students meeting overall EOY EOL math was lower than the matched sample across all years examined. **There were no statistically significant differences for EOY EOL literacy over time.** The percentage of Year One Arcola ES students meeting overall EOY EOL literacy was higher during 2022−2023 in comparison to the matched sample.

Conclusions

Summary of Key Findings

Impact Factors

Chronic Absenteeism

For all K-5 Arcola ES students, chronic absenteeism rates have increased since year one (2019–2020) ISC implementation. This same trend was apparent for both Grade 3 and Grade 4 Arcola ES students. However, for Grade 5 Arcola ES students, there was a decrease in chronic absenteeism from year three of ISC implementation (FY 2021) to year four of ISC implementation (FY 2022).

Well-Being

Survey results from the 2023–2024 Climate Survey items related to Well-Being for Students, Staff, and Parents **do not appear to show vast differences** in comparison to the matched comparison parents, staff and student responses. Generally, there seems to be a high rate of agreement across items, with the highest rate of agreement appearing for parents. The differences were minimal for students.

Conclusions

Implications

Grade-level and longitudinal academic performance outcome results are mixed since implementation of ISC, despite additional weeks of instruction occurring each school year since FY 2020. Based on the data reported, for some performance outcomes, Arcola ES students obtained higher rates of proficiency, higher rates of meeting or exceeding benchmarks, and higher rates of meeting EOL attainment in literacy and mathematics in comparison to other students from similar schools. This trend was seen for students in upper grade levels. In particular, Grade 5 Arcola ES students achieved a higher percent proficiency on the Spring 2022 MCAP ELA in comparison to the matched sample. During FY 2024, Grade 4 Arcola ES students achieved higher percentages of meeting or exceeding the benchmark on MAP-R, and on meeting overall EOY EOL Math. This suggests that there is a positive impact of ISC implementation over time, given that 2024 would be year five of the initiative. Similarly, Arcola ES students also performed lower on certain academic performance outcomes. In both cases, results from these performance outcomes vary across time, by assessment, and by grade-level.

These mixed findings align with the literature on impacts of traditional school year calendars vs. non-traditional school year calendars such as year-long calendars. Studies found that students enrolled in year-long calendars typically perform equal to or slightly better than their traditional school year calendar counterparts depending on the performance outcomes examined (Callahan, 2017; Von Hippel, 2015).

This report was intended to build on previous reports regarding ISC conducted in 2021 and in 2023 respectively by adding more data outcomes as suggested, and incorporating additional factors crucial for social and emotional development such as well-being and factors that impact student success such as absenteeism. In the case of absenteeism, these rates are increasing despite ISC program components. These rates have increased since the height of the COVID-19 pandemic, and could potentially be due to the implications associated with the return to in-person instruction. It is possible that there are other outcomes not examined in this report that could show more positive implications.

Given the lack of consistent results across years, a closer examination of program elements may be warranted as it relates to improving academic performance outcomes across grade levels.

Limitations

There were constraints based on data availability such that there was a lack of comparable scores from the start of the program for both groups. For the longitudinal outcomes analysis, the sample size was small (N = 107) for students who were enrolled in Arcola across all years examined. Furthermore, given the non-experimental design, causality could not be established. Thus, there should be caution in the interpretation of the results.

Conclusions

Recommendations

1 ### Data - Driven Decision Making

Continue to make decisions based on the data. Although academic performance results are mixed, it is important to have regular analysis of student performance because it will help Arcola ES ISC program leaders to tailor interventions that hopefully improve these outcomes on a more consistent basis. Furthermore, the use of data allows for ISC program leaders to allocate resources more effectively for areas such as professional development opportunities for staff, and the creation of new evidence based interventions which could ultimately enrich student experiences. Research demonstrates the importance of staff growth and implementing opportunities rooted in intellectual engagement, which can foster positive learning outcomes for students (Kennedy, 2016).

Based on the data, results across grade levels suggest that developmental implications must also be considered. Summer learning loss reduction impacts elementary aged children differently due to differences in cognitive and memory development (Lee et al., 2016). Therefore, it is helpful to be aware of these differences when creating interventions that are intended to improve specific grade-level performance outcomes.

2 ### Engagement and Collaboration

It is important to engage communities in order to improve the goals of the program and to gain stakeholder feedback. It is evident from the 2023–2024 Climate Survey Results that there is participation from stakeholders, in particular, the teachers and parents. Parents from Arcola ES may be able to offer feedback on their perceptions of the impact of the ISC initiative on their children, and teachers can also offer perspectives on how the program is impacting their students. Discussions with them can be beneficial for program developments. Parents and teachers provide unique perspectives that are not often captured in quantitative data. Similar to what was done for the the 2023-2024 superintendent search, feedback from those invested in MCPS is valuable, and thoughtful collaboration kand exchanging of ideas can be fruitful for program decision making.

This also could involve collaboration with the Office of Curriculum and Instructional Programs (OCIP), as suggested in previous reports, in order to enhance understanding of the current education materials that are being used for Arcola ES students. Furthermore, collaborating with OCIP can ensure whether these materials are yielding the intended outcomes for Arcola ES students.
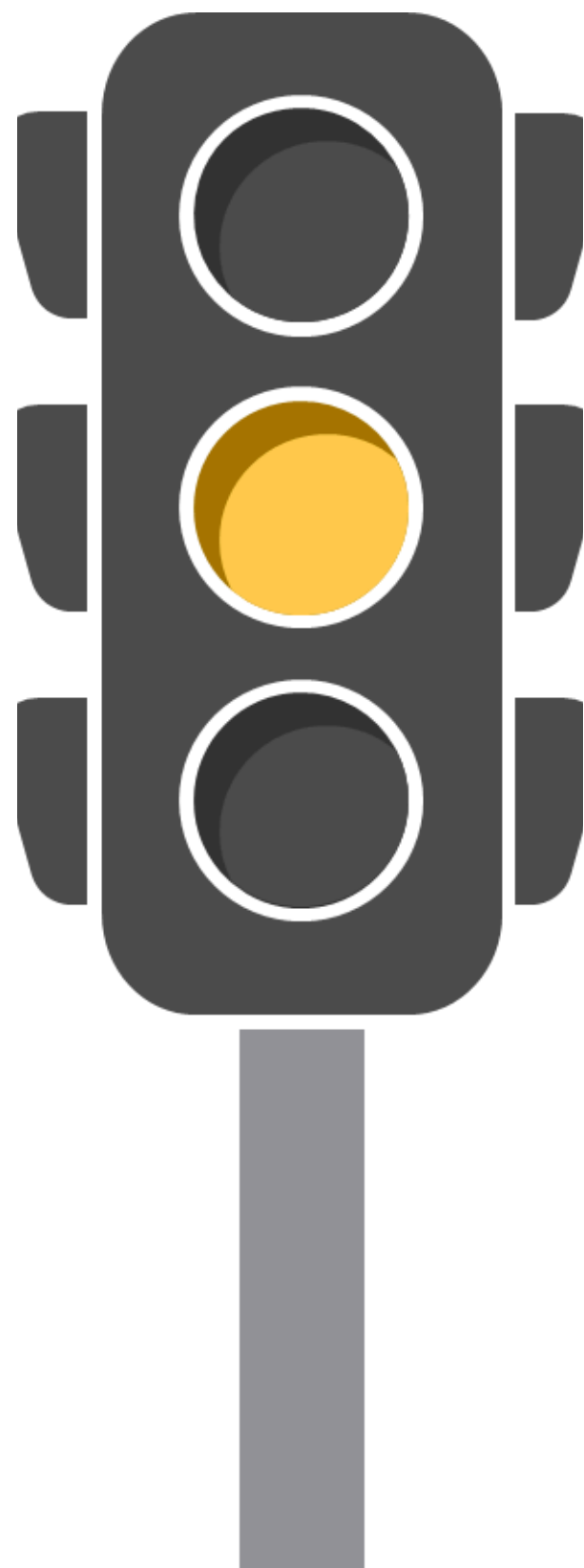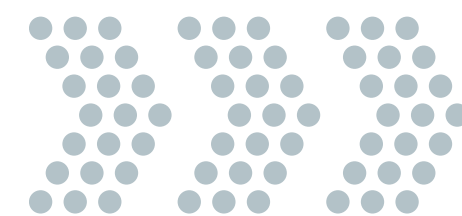
MAINTAIN CURRENT IMPLEMENTATION FOR ONE YEAR

It is recommended for the district to maintain current implementation of ISC for one additional year in alignment with the recommendations. The one additional year of implementation is useful for data-driven decision making and to determine whether modifications are needed. Findings from this report demonstrate that performance outcomes do vary across grade levels and for year one students across time.

Callahan, D. (2017). The influence of traditional vs. balanced school calendars on middle school mathematics achievement.

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Lee, J. K., Wendelken, C., Bunge, S. A., & Ghetti, S. (2016). A time and place for everything: Developmental differences in the building blocks of episodic memory. Child Development, 87(1), 194–210.

Princiotta, D., Liu, S., & Rosenbaum, K. (2023). Innovative School Calendar: Outcomes Evaluation 2022-2023. Rockville, MD: Montgomery County Public Schools.

Von Hippel, P. (2015). Year-round school calendars: Effects on summer learning, achievement, parents, teachers, and property values.

Wilson, H. W. (2021). Innovative School Calendar (ISC) initiative: Evaluation summary report. Rockville, MD: Montgomery County Public Schools.

Demographic Characteristics of Sample		
		Percent
Grade	Grade 3	35.7%
	Grade 4	32.9%
	Grade 5	31.5%
Gender	Male	50.7%
	Female	49.3%
Race/Ethnicity	Asian	5.0%
	Black or African American	20.7%
	Hispanic/Latino	70.7%
	White	2.5%
	All Other Student Groups	1.2%
FARMS		72.2%
EML/ReML		52.1%
Special Education		8.7%

Demographic Characteristics of Longitudinal Sample		
		Percent
Gender	Male	43.6%
	Female	56.4%
Race/Ethnicity	Asian	5.5%
	Black or African American	12.7%
	Hispanic/Latino	76.4%
	White	5.5%
FARMS		76.4%
EML/ReML		49.1%
Special Education		14.5%