



## THE DEPARTMENT OF RESEARCH & PERFORMANCE MANAGEMENT

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# ESSER Summer Learning Academy (SLA) 2024 Report

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## Key Findings

- 6,080 students attended Summer Learning Academy (SLA) for at least five days and had an attendance rate of 79.3%. Overall, 3,159 SLA students participated at a 90% or higher rate.
- SLA students had an average difference of 6.9 points from spring to fall English Language Arts (ELA) i-Ready tests, indicating that they did not experience summer-slide. They had a statistically significant difference, a 4 point higher score, than non-SLA students.
- SLA students had a higher average difference in math than non-SLA students and experienced less of a summer-slide.
- 87% of surveyed SLA families said their student enjoyed their SLA experience.
- 9.4% of those recommended to SLA met their target growth for SLA.
- 91.5% of those required to go to SLA met the state required 90% attendance rate.

## Program Overview

The Summer Learning Academy (SLA) is a four-week summer educational program, as part of the learning loss remediation and student acceleration program, that is designed to support student academic needs and remediate student learning loss. This program is optional for all students except for third graders who would otherwise be held back due to Tennessee's third grade retention law. SLA is required for these third graders/rising fourth graders if they are to move up to the fourth grade; full protocol of fourth grade promotion dictated by the state can be found in the link in the [references](#) (*Promotion & Retention Guidelines and Toolkit*, 2024). SLA provides additional reading and math instruction as well as intervention and activity for identified students. Students also participate in a STREAM course. The STREAM course provides remediation and engagement through programming in which students participate in real-world experiences and problem solving across several content areas.

SLA is one of the biggest ways for the District to reduce summer-slide, and thus the achievement gap. Summer slide is the loss of learning over the summer break. However, as research shows, summer slide often impacts low-income students more than their higher-income peers. “Almost all of the increase in the achievement gap over the elementary school years traced to differences across social lines in summer learning, and two-thirds of the reading comprehension gap separating children from low-income families and those from middle-income families in 9<sup>th</sup> grade (up to 3.5 grade equivalents at that point) likewise originated in differential summer learning over the elementary school years” (Alexander et al., 2016). Table 1 shows median summer gain/loss of i-Ready scale scores on a national level (data shown are from i-Ready in 2018–19). The overall national trend shows a 5-point decrease in math from spring to fall and a half point decrease in ELA.

**Table 1.**

Historical Median Summer i-Ready Scale Score Gain/Loss based on National Norms		
Grade Transition	Math	Reading
Kindergarten to 1st Grade	–2	2
1st Grade to 2nd Grade	–5	6
2nd Grade to 3rd Grade	–6	–3
3rd Grade to 4th Grade	–6	–1
4th Grade to 5th Grade	–9	0
5th Grade to 6th Grade	–7	–6
6th Grade to 7th Grade	–4	0
7th Grade to 8th Grade	–3	–2

### ***Program Goals/KPIs***

- Increase attendance at SLA for those enrolled.
- Increase the percentage of "SLA Required" rising fourth graders (those who scored in the below category) who meet or exceed the state's attendance requirement.
- Increase the percentage of "SLA Recommended" rising fourth graders (those who scored in the approaching category) who meet or exceed the state's attendance requirement.
- Increase the percentage of rising 4th graders who meet or exceed the state's attendance requirement (SLA required or recommended combined).
- Increase the percentage of "SLA Recommended" rising fourth graders who hit their SLA growth target for the state.
- Receive overall positive responses from families participating in the SLA program.

- Reduce the "summer-slide" based on i-Ready spring to fall diagnostics for students who participate in the SLA program with 90%+ attendance.

## Data and Methodology

All Summer Learning Academy attendance data are tracked in a dashboard created by Research and Performance Management's Decision Analytics and Information Management (DAIM) team. K–8 i-Ready assessments from spring 2023–24 and fall 2024–25 were used to compare summer slide between SLA attendees and their peers who did not attend SLA. There were 7,445 students who were initially enrolled in SLA; 6,080 students attended at least five days of SLA, and this subset was used for analysis. Table 2 shows the breakdown of enrollment and attendance rates by grade.

Rising fourth grade had the most students enrolled ( $n = 2,204$ , 36%) and had the highest average attendance rate of 85.3% (among those who attended at least five days), among the grade levels that went to the full 20-day program. Tenth through 12<sup>th</sup> grade students participated in a two-week ACT prep program.

**Table 2.**

SLA Student Enrollment & Attendance Rate by Grade				
Rising Grade	Any Student Initially Enrolled		Those who Attended at Least 5 Days	
	<i>N</i>	Attendance Rate	<i>N</i>	Attendance Rate
0	256	68.1%	233	74.1%
1	712	74.2%	675	77.6%
2	778	69.9%	711	75.4%
3	866	71.8%	810	75.9%
4	3,245	59.4%	2,204	85.3%
5	739	71.5%	679	76.8%
6	447	68.0%	415	72.3%
7	164	74.5%	152	77.2%
8	133	70.6%	122	75.9%
9	58	69.4%	53	74.8%
10	12	49.4%	5	76.2%
11	18	66.0%	12	83.3%
12	17	55.9%	9	87.2%
<b>All Students</b>	<b>7,445</b>	<b>65.9%</b>	<b>6,080</b>	<b>79.3%</b>

For the i-Ready/summer slide analysis, students were included if they attended SLA at least 90% and had a valid test for winter 2023–24 (to use as a predictive variable), spring 2023–24, and fall 2024–25 i-Ready assessment. There were 2,494 SLA students who had all three ELA

i-Ready assessments and 2,478 SLA students who had all math assessments. For non-SLA students there were 38,248 students who had all ELA, and 38,851 who had all math assessments.

## Methods

Propensity score and balance weighting methodology was used to create the most comparable control group for the evaluation. Students were identified as being in SLA, participating 90%, and having the correct assessments to be in the SLA group. To be in the non-SLA group, students needed to have the correct assessments and were not enrolled in SLA. Propensity score and balance weighting allows researchers a way to take observational data and pull a control group that is similar to a randomized control trial. Randomized control trials are the gold standard in science due to eliminating selection bias and thereby allowing researchers to claim causal effects (Markoulidakis et al., 2022). Propensity score and balance weighting achieves this by assigning a unit interval to each case within a dataset based on how likely each case is to being in the treatment group, in this case attending SLA.

This is done by including as many variables as possible that could influence a student to enroll in SLA. These variables include race/ethnicity (as four categories: Black/African American, Hispanic, white, and ‘other’), sex, grade level, previous i-Ready percentiles, Economically Disadvantaged status (ED), Student with Disability status (SWD), and English Learner status (EL). Students who attended SLA automatically get a “1”, indicating that it is the most likely they could go to SLA because ultimately, they did enroll and participate. All other students are given a unit interval based on how closely they resemble the SLA group. If a student has very dissimilar characteristics from the SLA group, they will get a very small unit interval, closer to 0. Therefore, students who have similar qualities to the SLA group will have a unit interval closer to 1 and will be weighted more heavily than those who are not similar. This allows the model to include all students, but it creates an Effective Sample Size (ESS) which takes all the non-SLA students and compiles them into what can be thought of as a random sample. On the charts below the non-SLA group is labeled with ‘ $n$  out of  $n$ ’; the second  $n$  is the entire group of non-SLA students, and the first  $n$  is the Effective Sample Size, which indicates the approximate number of cases the model is using once all students are weighed appropriately.

CoBWeb or “Covariate Balancing & Weighting Web App” was the program used in this process. Their app states, “the goal of this app is to robustly estimate the causal treatment effect in observational studies. It follows all the necessary steps to evaluate overlap of the treatment groups, obtain estimates of PS and balancing weights, check for covariate balance, estimate the causal treatment effect, and assess sensitivity to unobserved confounding” (Markoulidakis et al., 2022). To learn more about the process of using the app

and what all is involved, please see the references for a link to the site and their article. The application accurately balances students based on their confounders and runs a regression model on the outcome variable. This was done for i-Ready ELA and math, and the following charts will show the results of these regression models. The chi-square analyses were then run on the datasets produced from this app with the balancing weights added, and they are included below as well.

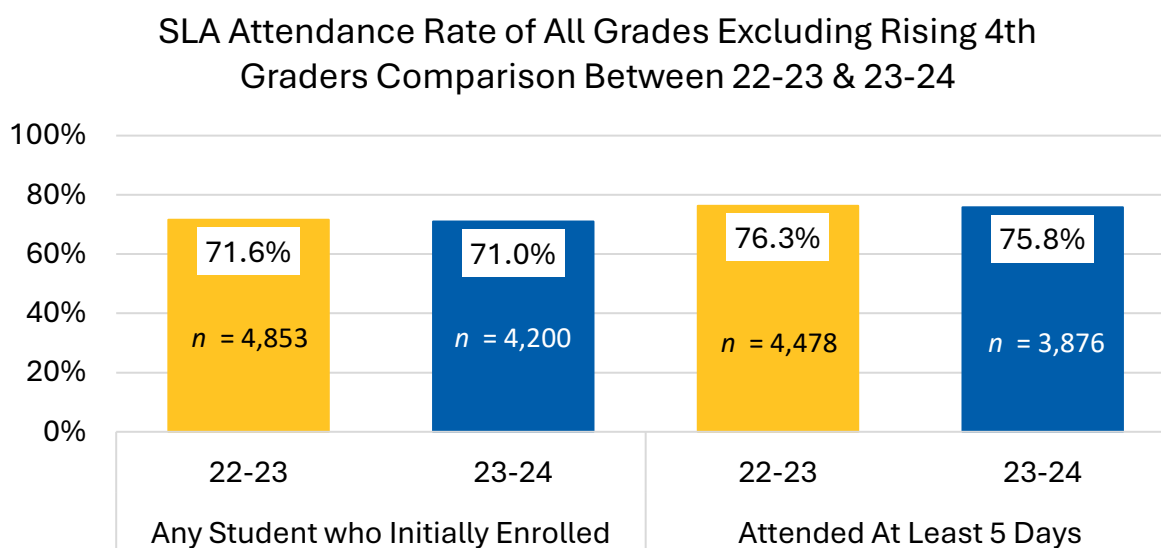
## Findings and Results

### Attendance Rates

#### KPI 1: Increase attendance rate at SLA for those enrolled.

The state had a specific attendance requirement for rising fourth graders attending SLA, so that grade has a separate KPI for attendance. All other grades are included in this KPI. SLA had less students enrolled this year than in 2022-23, with 4,200 students, excluding fourth graders, initially enrolled, in comparison to 2022-23's enrollment number of that group being 4,853. The attendance rate for this group was fairly consistent over the years, with 71.6% attendance rate in 2022-23 and 71.0% this year. When looking at those who attended at least five days of SLA, attendance over the two years was also consistent, with 4,478 students attending at a rate of 76.3% in 2022-23 and 3,876 students attending at a rate of 75.8% this year. Figure 1 below shows these attendance rates, excluding fourth graders.

**Figure 1.**



Including rising fourth graders, there were 7,445 students initially enrolled with an attendance rate of 65.9% in comparison to 8,812 students who were initially enrolled in SLA in 2022-23 with an attendance rate of 72.1%. When looking at all students who attended at

least five days of SLA, there were 6,080 students with an attendance rate of 79.3% this year, which is an increase of 1.5 percentage points from last year's attendance rate of 77.8%, which was among 8,013 students.

KPI 2: Increase the percentage of "SLA Required" rising fourth graders (those who scored in the below category) who meet or exceed the state's attendance requirement.

Due to Tennessee's third-grade retention law, SLA was required or recommended to students if they were in danger of being retained based on their ELA TCAP scores. As a path to promotion, students could enroll in SLA and attend 90% which was the state's required attendance rate. In total, there were 3,245 rising fourth graders who initially enrolled in SLA, regardless of requirements, meaning some of these students were required or recommended to enroll and others enrolled voluntarily. Rising fourth graders were required to attend SLA if they scored in the *below performance level* category on their third grade TCAP and were recommended to attend if they were in the *approaching performance level* category. There were 1,836 rising fourth graders who were required or recommended to enroll in SLA based on their ELA TCAP results. Of the 1,836, 976 of them were required to go to SLA. Ninety-two percent (91.5%;  $n = 893$ ) of those required to go to SLA met the state required 90% attendance rate. This is slightly higher than last year's attendance rate for this group at 90.9%. When only looking at students who attended at least five days, the attendance rate from last year was 93.3% and was maintained this year at 93.9%.

KPI 3: Increase the percentage of "SLA Recommended" rising fourth graders (those who scored in the approaching category) who meet or exceed the state's attendance requirement.

Of the 3,245 rising fourth graders who initially enrolled in SLA, 860 were recommended for SLA. Thirty-nine percent (39.4%;  $n = 339$ ) of those recommended for SLA met the state required 90% attendance rate. This rate is much lower than last year's recommended group rate of 58.7%. When looking at those who attended at least five days, the 2023-24 group had a slightly lower attendance rate than last year, 61.8% and 65.3%, respectively. This KPI does not consider that not all students who were recommended for SLA chose SLA as their pathway to fourth grade. Students' choice for how they wanted to move to fourth grade was not tracked this year, meaning it was not possible to isolate those students who only chose SLA as their pathway. If this were possible, it is likely that the attendance rate would increase, as students needed to meet the state attendance requirement as part of the completion for the pathway.

KPI 4: Increase the percentage of rising 4th graders who meet or exceed the state's attendance requirement (SLA required or recommended combined).

Overall, 67.1% of those required or recommended to go to SLA met this state attendance requirement (1,232 out of 1,836). This is slightly lower than last year's rate for this group of 72.3%. Figure 2 shows the breakdown of rising fourth graders into whether they were required, and that group is broken down further; these numbers reflect all fourth graders who enrolled in SLA, including those who did not attend at least five days. It is important to note there were 498 fourth graders (and 35 students in other grades) who were enrolled in SLA but did not attend a single day. Because many of these fourth graders who did not attend any of SLA were either required ( $n = 43$ ) or recommended ( $n = 158$ ), they are included in the attendance rates for the KPIs. Figure 3 shows the percentage of each group that met the state's 90% attendance rate requirement in comparison to last year's groups including all fourth graders. Figure 4 shows the percentage of each group that met the state's 90% attendance rate requirement in comparison to last year's groups when only looking at the fourth graders that attended at least five days. When looking at all fourth graders, attendance was generally better in 2022-23 than in 2023-24. When looking at attendance for only those that went at least five days, this year's students met the attendance rate requirement at a higher percentage in every group, besides the recommended group, in comparison to the prior year.

**Figure 2.**

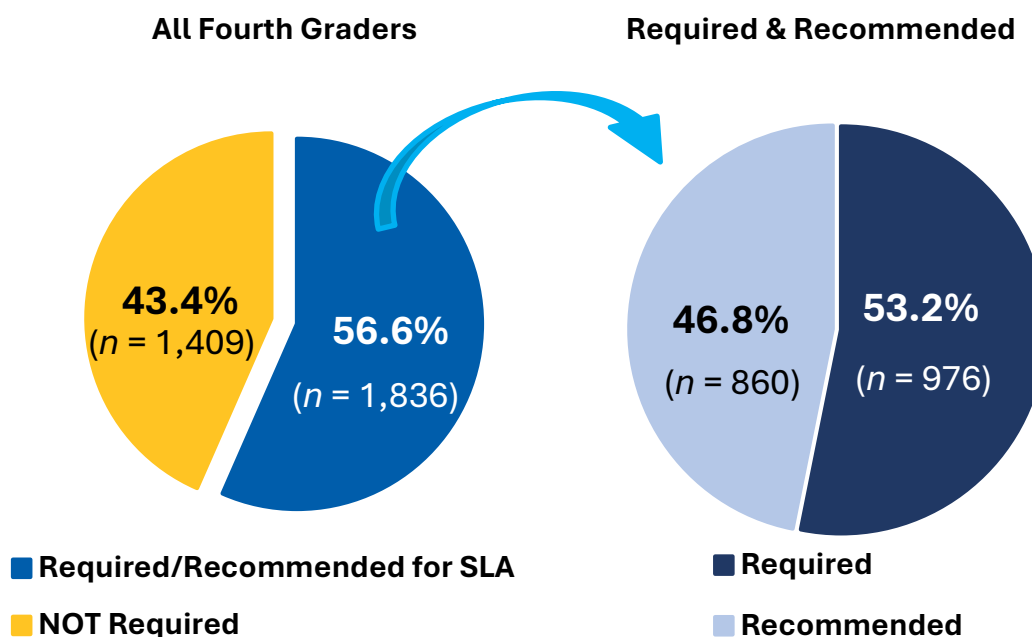


Figure 3.

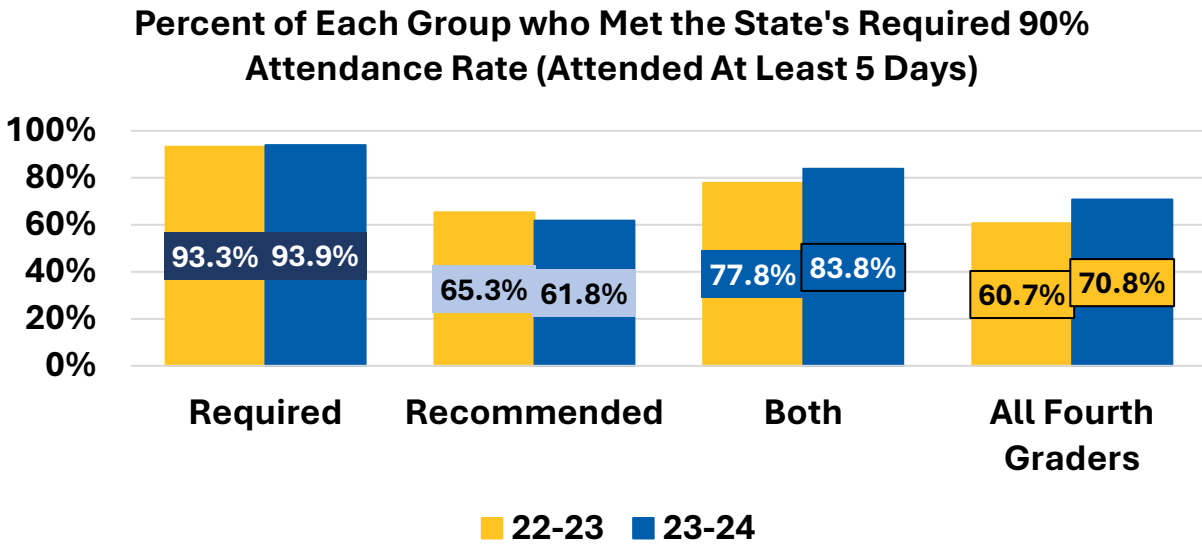
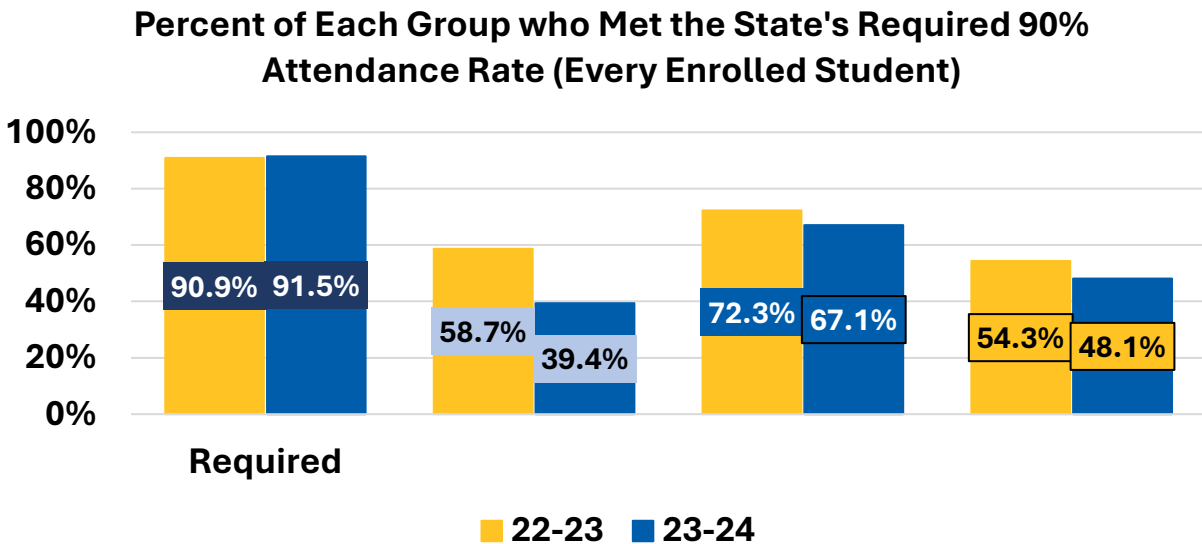


Figure 4.



### ***SLA Growth Target***

KPI 5: Increase the percentage of "SLA Recommended" rising fourth graders who hit their SLA growth target for the state.

As previously reported, students who were recommended for SLA were students who were in the "Approaching Expectations" performance level on their third grade spring TCAP. This



means that these students were not proficient in ELA, however, because they did not score within the “Below Expectations” performance level, they were not required to attend SLA. This is because there are several different pathways to promotion, according to the Tennessee State Board of Education. According to their Promotion and Retention Policy (3.300), pathway 4 indicates that a student can attend a “learning loss bridge camp” over the summer and maintain an attendance rate of 90%, as well as demonstrate adequate growth, which is defined as “a student improving scores between a baseline assessment and the post-test by at least five (5) percentage points” (Tennessee General Assembly, 2024).

For this year, there were 860 rising fourth graders who were recommended for SLA, meaning they needed to meet the previous criteria to be promoted to fourth grade using this pathway. This KPI focuses on the second portion of the pathway requirements—students hitting this SLA growth target, or in other words, achieving adequate growth. Of the 860 students who were recommended for SLA, 81 of them achieved this adequate growth. This means 9.4% of recommended SLA students met adequate growth. This percentage does not take into consideration the attendance rate portion of the pathway requirements.

Last year there were 922 students who were recommended for SLA and of those, 153 met adequate growth—meaning 16.6% of those recommended met adequate growth. Because only 9.4% of this year’s recommended students met adequate growth (7.2 percentage points below last year’s group), this KPI was not met.

This KPI does not take into account that not all students who were recommended for SLA chose SLA as their pathway to fourth grade. Students’ choice for how they wanted to move to fourth grade was not tracked this year, meaning it was not possible to isolate those students who only chose SLA as their pathway. If this were possible, it is likely the percentage of those who met the growth target would increase, as students needed to meet the growth target as a requirement for the pathway.

## ***Community Survey Responses***

### [KPI 6: Receive overall positive responses from families participating in the SLA program.](#)

A survey was sent out to families of students who attended SLA to gauge how well they liked the program, how involved their student was, if their student was required to go, and what went well during the program. Around 312 families completed most of the questions. Eighty-four percent (84.3%; 263 out of 312) of families who responded said that SLA was helpful in supporting their student’s learning needs. A little over 80% believed that SLA provided high quality instruction to their students. Nearly 85% of respondents said they were satisfied or

very satisfied with their student's SLA experience and 87% said that their student enjoyed their experience. When asked what they enjoyed most about the program, many families mentioned having an activity over the summer that their student could participate in at no cost to them. Others mentioned that the location of the SLA program was convenient for them and that their students were getting more designated time with an instructor, sometimes in a small classroom setting. The food provided and the temperature of the classrooms were among the few complaints families mentioned about SLA.

### ***i-Ready ELA & Math Findings***

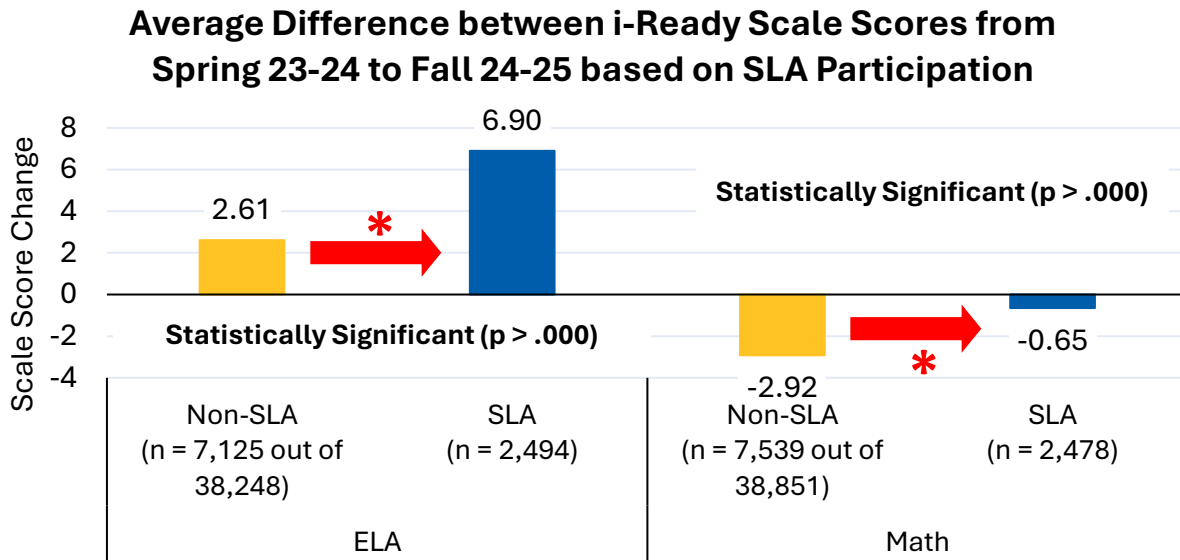
#### **KPI 7: Reduce the "summer slide" based on i-Ready spring to fall diagnostics for students who participate in the SLA program with 90%+ attendance.**

SLA students were compared to non-SLA students on the difference between their spring i-Ready and fall i-Ready scale scores. If a student's scale score was lower in the fall than their spring score, that would indicate they experienced summer slide. The hypothesis of this evaluation was that students who participated in SLA at the 90% attendance level or higher would experience less summer slide (or even optimistically, would maintain or gain in comparison to their spring scale score) than students who did not participate in SLA. Figure 4 shows the average difference in spring to fall scale scores for SLA and non-SLA students in both ELA and math.

SLA students had on average a fall ELA scale score that was 6.90 points higher than their spring scale score. This was statistically significantly different than non-SLA students who had a lower average difference of 2.61 points. This means that SLA students outperformed their non-SLA peers by over 4 scale score points. Neither group experienced summer slide, but rather on average gained scale score points in ELA. For math, SLA students on average lost 0.65 points from their spring scale score by the fall, while non-SLA students experienced more summer slide, with a decrease in their scale score of 2.9. This was also a statistically significant finding. Essentially, on average, students did not experience a summer slide in ELA. In math, however, on average, students were experiencing summer slide, but SLA students did not slide as much. There was a statistically significant difference between non-SLA and SLA students' average scale score difference, indicating that SLA was the reason for students not sliding as much as they could have, had they not participated in SLA.

The SLA group's average ELA scale score difference was 4.0 points higher than the average from last year's SLA group. In math, the SLA group had a scale score difference that was 1.15 points higher than last year. This group still experienced summer slide in math, but less significantly so.

Figure 5.



## Next Steps and Conclusion

Nearly 7,000 students participated in the 2024 Summer Learning Academy. In comparison to non-SLA students, SLA students who participated 90% or more of the time had a higher average difference between their spring and fall i-Ready scale scores in ELA and math. For math, SLA students on average had less summer slide than their non-SLA peers. In ELA, SLA students scored on average 4 points higher than their non-SLA peers; both groups scored higher in fall than they did in spring, indicating that they did not experience summer slide in ELA. Both of these findings were statistically significant, showing that SLA was effective in helping students achieve at a higher rate than if they were not in SLA. The SLA program should continue to encourage attendance for those participating, and participation for those who need help in ELA and math. As noted in the program overview, lower-income students are often more affected by summer slide. To combat this, the District should continue to fund and possibly grow the SLA program (longer program, smaller classrooms, include field trips, etc.) and continue to promote the program to lower-income students in years to come.

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