AMIRA
LEARNING

Clayton County Students Excel in Reading with Amira
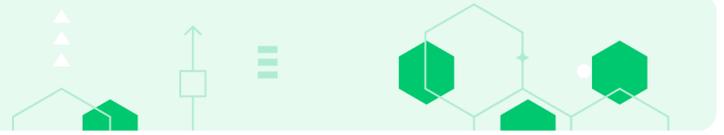
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Kelly Boden, PhD

Clayton County Students Excel in Reading with Amira

Key Findings:

1. **+10 Percentile Point Gains:** Students using Amira for 30+ minutes per week outperformed peers using it less than 10 minutes per week by an average of 10 percentile points on the MAP assessment.

2. **Consistent Impact Across All Groups:** Gains were consistent across all grades (K–5) and major demographic groups—including Black, Hispanic, and Other ethnicities—demonstrating equitable effectiveness.

3. **Efficient and Scalable:** Just 30 minutes of weekly use delivered significant academic benefits, making Amira a cost-effective, scalable alternative to traditional tutoring.

Overview

Amira was created for one purpose – to couple the Science Of Reading with AI, giving every child a pathway to the power of reading. Amira was born in academia, is delivering accelerated growth by reflecting the guidance of leading Reading Scientists, and is rapidly evolving to reflect every key element of Science of Reading Research.

Located just south of Atlanta, Clayton County Public Schools (CCPS) is Georgia's sixth-largest district, serving more than 52,000 students. With 100% minority enrollment, 62.5% economically disadvantaged students, and more than 72 languages spoken, CCPS faces both extraordinary diversity and significant challenges in literacy achievement.

After a successful pilot, CCPS expanded use of Amira to K-5 classrooms. The following examines the effectiveness of using Amira across grade levels, particularly when using it 30 minutes or more a week, which is the recommended amount of time.

Core Question:
1. What is the effect of meeting the Amira usage recommendation on students' performance as measured by the NWEA MAP assessment?

2. Does the effect vary by grade (K-5)?
3. Does the effect vary by Race/Ethnicity?

Methodology

Analytical Sample

Participants in this evaluation included Kindergarten through fifth grade students (n=19,779) from Clayton County School District. The analysis focused on the impact of Amira usage during the 2024–2025 school year, specifically comparing students who averaged 30 or more minutes per week to those who used the program less frequently. Among students with available demographic data, the majority identified as Black (64–67%), followed by Hispanic (25–28%), and Other racial/ethnic groups (8%), with approximately equal representation of male and female students. MAP Growth assessment data was used to evaluate academic outcomes. Students' End-of-Year (EOY) MAP scores and percentile ranks were analyzed, with controls for demographic variables. This method enabled a robust comparison across a broad and diverse student population while accommodating school-level variability in assessment timing and Amira implementation.

Analytical Strategy

The analysis employed Hierarchical Linear Modeling (HLM) to evaluate the impact of Amira usage on student reading performance, while controlling for demographic characteristics and school-level clustering. HLM was chosen specifically to account for the nested structure of the data, with students clustered within schools, ensuring that variability between schools did not bias the results. The primary comparison examined End-of-Year (EOY) MAP Growth scores and percentile ranks among students who averaged 30 or more minutes (averaged across 25 weeks) of Amira use per week versus those with less usage. Usage was also stratified into four weekly usage groups: (1) None, (2) Low (<10 minutes), (3) Mid (10–29 minutes), and (4) High (30+ minutes).
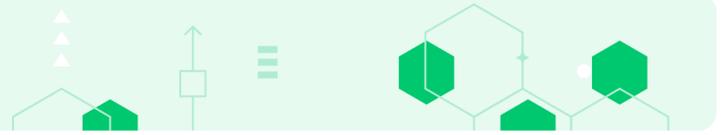
Results

Descriptives for Recommended Usage Group

Table 1 shows the number and percentage of students who reached the recommended usage of 30 or more minutes a week by grade level. As shown in the table, the percentage of students reaching recommended usage is nearly 50% of students for Kindergarten and 1st Grade, and decreases as grade level increases.

Table 1. Number of students meeting recommended level of usage by grade.

	30+ Mins (across 25 weeks)	Total Students
Kindergarten	1,509(52%)	2,922
1st Grade	1,532(49%)	3,132
2nd Grade	1,207 (38%)	3,208
3rd Grade	1,077 (30%)	3,546

4th Grade	945 (28%)	3,427
5th Grade	863(24%)	3,544

Table 2 shows the number and percentage of students who reached the recommended usage of 30 or more minutes a week by gender and race/ethnicity. As shown in the table, the percentage of student demographics are similar across students reaching the recommended usage and students not reaching the recommended usage.

Table 2. Number of students meeting recommended level of usage by gender and race/ethnicity.

	<30+ mins (across 25 weeks)	30+ mins (across 25 weeks)
Female	6,256 (50%)	3,644 (51%)
Black	8,527 (67%)	4,527 (64%)
Hispanic	3,148 (25%)	2,017 (28%)
Other Race/Ethnicity	971 (8%)	589 (8%)

MAP Analysis Across Sample

Figure 1 illustrates the comparison of End-of-Year (EOY) MAP Growth scores for those who used Amira for 30 or more minutes per week and those who used it less than 30 minutes. Controlling for demographic variables and clustering within schools through Hierarchical Linear Modeling (HLM), students in the 30+ minute usage group demonstrated significantly higher MAP scores, with an average score gain of +4 points ($p < .001$) compared to their peers with lower usage.
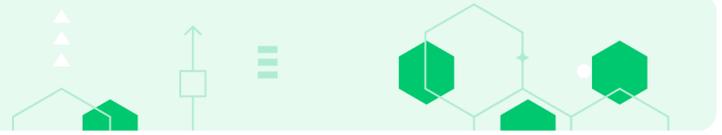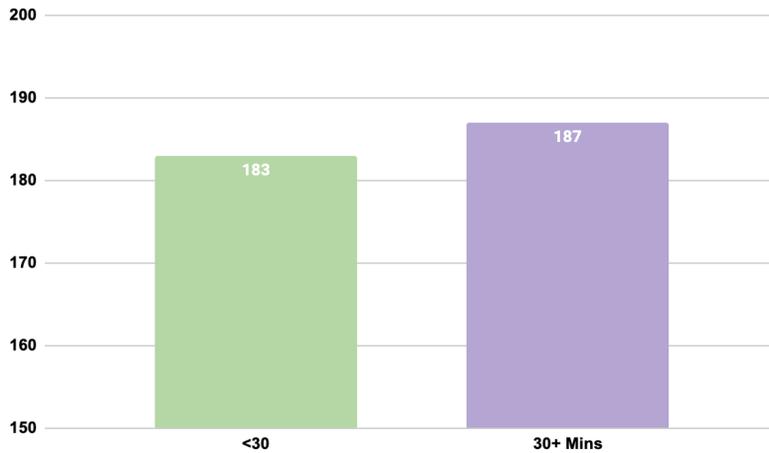
Figure 1. Average end-of-year MAP scores for students reaching 30+ mins vs. those <30 minutes.

* p < .001. Adjusted means are shown.

Figure 2 illustrates the comparison of End-of-Year (EOY) MAP Growth MAP Percentile Rank (PR) for those who used Amira for 30 or more minutes per week and those who used it less than 30 minutes. Controlling for demographic variables and clustering within schools through Hierarchical Linear Modeling (HLM), students in the 30+ minute usage group demonstrated significantly higher MAP PR, with an average gain of +6 (p < .001) PR compared to their peers with lower usage.

**Figure 2.** Average end-of-year MAP percentiles for students reaching 30+ mins vs. those <30 minutes.
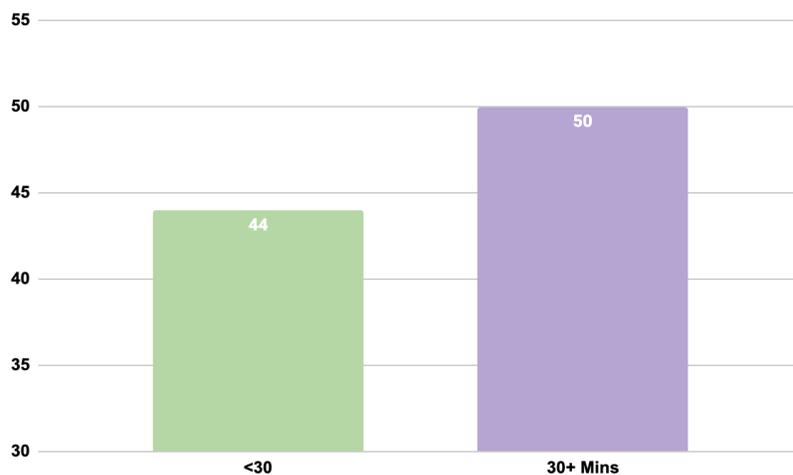
* p < .001. Adjusted means are shown.
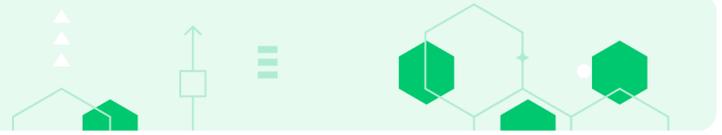
Further analysis segmented students into session time groups based on average weekly minutes (e.g., 0–9, 10–29, and 30+ minutes per week). This session-based comparison revealed a clear, positive linear relationship between weekly Amira usage and reading performance. As seen in Figure 3, students in the 30+ minutes/week group showed significantly higher MAP scores - +7 point MAP score gain (p < .001) compared to students using less than 10 minutes/week. Cohen's D effect size was .4 which represents a moderate impact, roughly equivalent to an additional 3 to 4 months of reading growth over the course of a school year.

Figure 3. Average end-of-year MAP scores by session time groups.
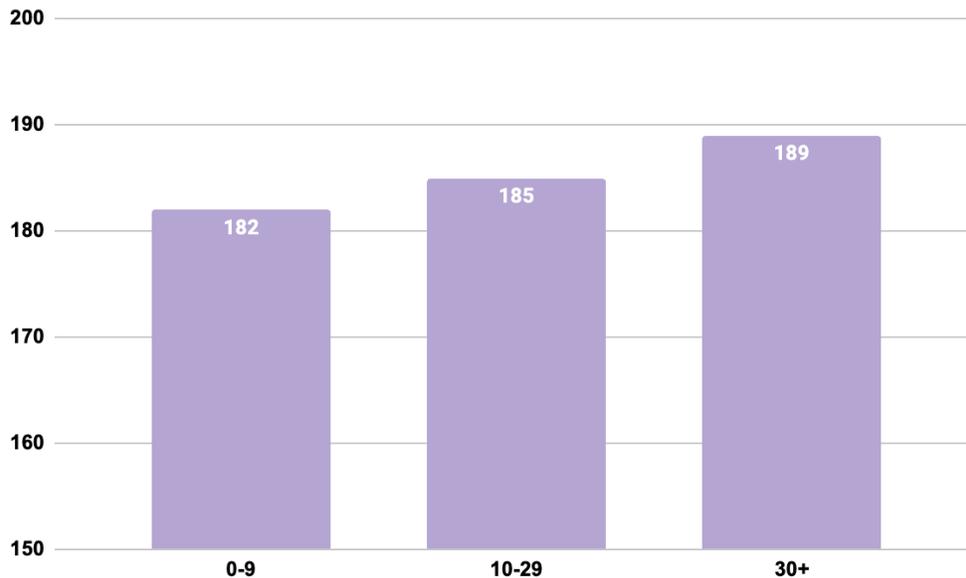
* p < .001. Adjusted means are shown.

This session-based comparison also revealed a clear, positive linear relationship between weekly Amira usage and MAP Percentile Rank (PR). As seen in Figure 4, students in the 30+ minutes/week group showed significantly higher MAP PR - +10 MAP PR (p < .001) compared to students using less than 10 minutes/week. Cohen's D effect size was .4 which represents a moderate impact, roughly equivalent to an additional 3 to 4 months of reading growth over the course of a school year.
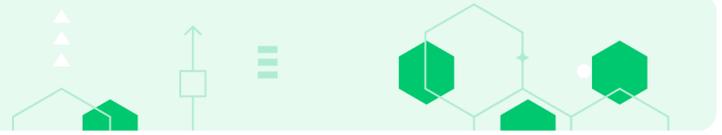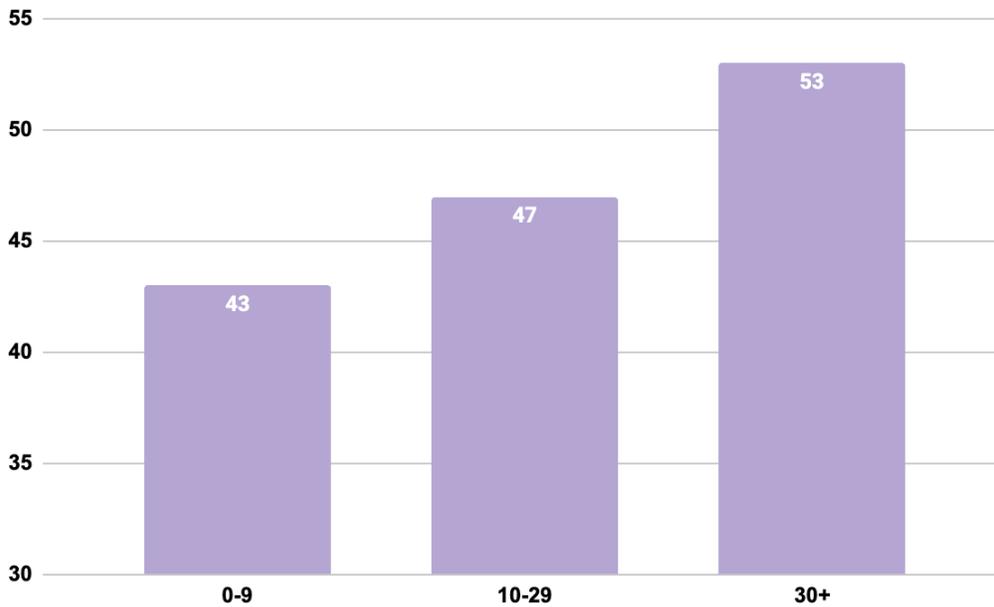
**Figure 4.** Average end-of-year MAP percentiles by session time groups.

* p < .001. Adjusted means are shown.

MAP Analysis by Grade and Race/Ethnicity

The effect of using Amira was also examined by grade level, again using session time groups based on average weekly minutes (e.g., 0–9, 10–29, and 30+ minutes per week). The analysis revealed a strong and consistent positive effect of Amira usage across all grade levels, from Kindergarten through 5th grade. Students who averaged 30 or more minutes of Amira usage per week experienced notable gains in MAP Percentile Rank (PR) when compared to their lower-usage peers.

As seen in Figure 5, Kindergarten students demonstrated the most substantial improvement, with an average +10 percentile point increase for those engaging with Amira for 30+ sessions—rising from 47 to 57. 1st and 2nd grade students also exhibited strong gains, each improving by +10 percentile points for the 30+ usage group (from 42 to 52). In 3rd and 4th grades, students showed steady progress, with percentile scores increasing by +9 and +10 points respectively, reinforcing that Amira's benefits extend beyond early readers. Notably, 5th graders also saw a meaningful +10 point improvement in the 30+ session group, although starting from a lower baseline (38 to 48), suggesting that even upper elementary students can
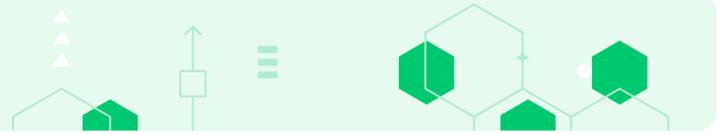
make significant strides with consistent usage.

These findings suggest that the positive impact of Amira is grade-agnostic—providing measurable reading growth benefits throughout the elementary years. The consistency across grades supports its use as a sustained intervention throughout K–5 schooling.

Figure 5. Average end-of-year MAP percentiles by session time groups and grade level.
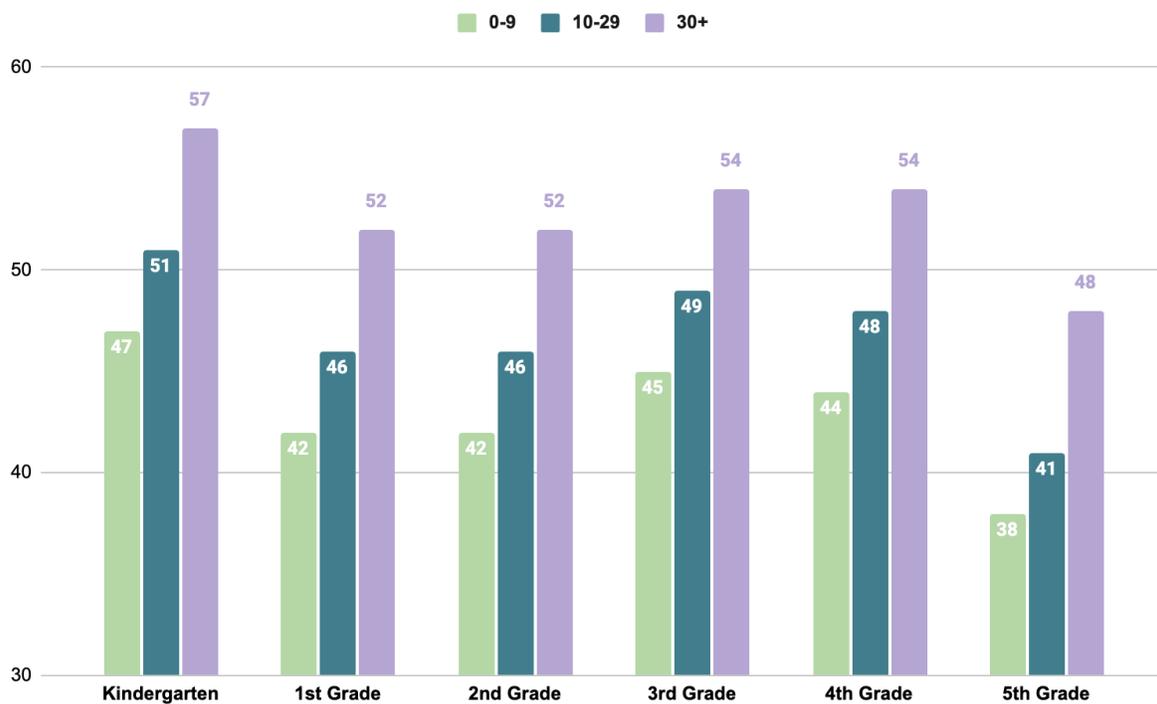
The effect of Amira usage was also examined by race and ethnicity, using session time groups based on average weekly minutes (e.g., 0–9, 10–29, and 30+ minutes per week). The analysis revealed a strong and consistent impact across racial and ethnic subgroups. Students who averaged 30 or more minutes of Amira usage per week consistently outperformed their lower-usage peers on MAP Percentile Rank (PR), demonstrating that the program delivers benefits regardless of students' demographic background.

As illustrated in Figure 6, Black students—the largest demographic group in the district—achieved an average +10 percentile point gain in MAP PR when meeting the 30-minute usage benchmark. Hispanic students also experienced a +10 percentile
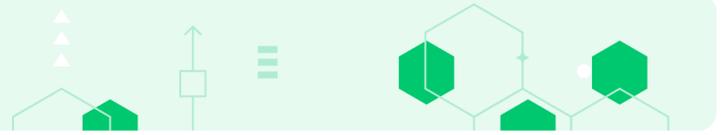
point improvement, indicating that Amira supports literacy development effectively across culturally and linguistically diverse learners. Likewise, students from other racial and ethnic groups, including multiracial and other non-Hispanic categories, saw an equivalent +10 percentile point gain.

These findings provide compelling evidence that Amira promotes equitable reading achievement outcomes, ensuring that students from all backgrounds have access to a high-quality, scalable intervention that can help close achievement gaps. The uniformity of gains across racial and ethnic lines underscores Amira's potential as a tool for fostering educational equity at scale.
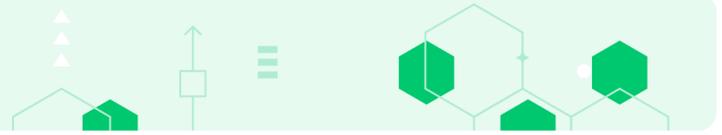
Figure 6. Average end-of-year MAP percentiles by session time groups and race/ethnicity.
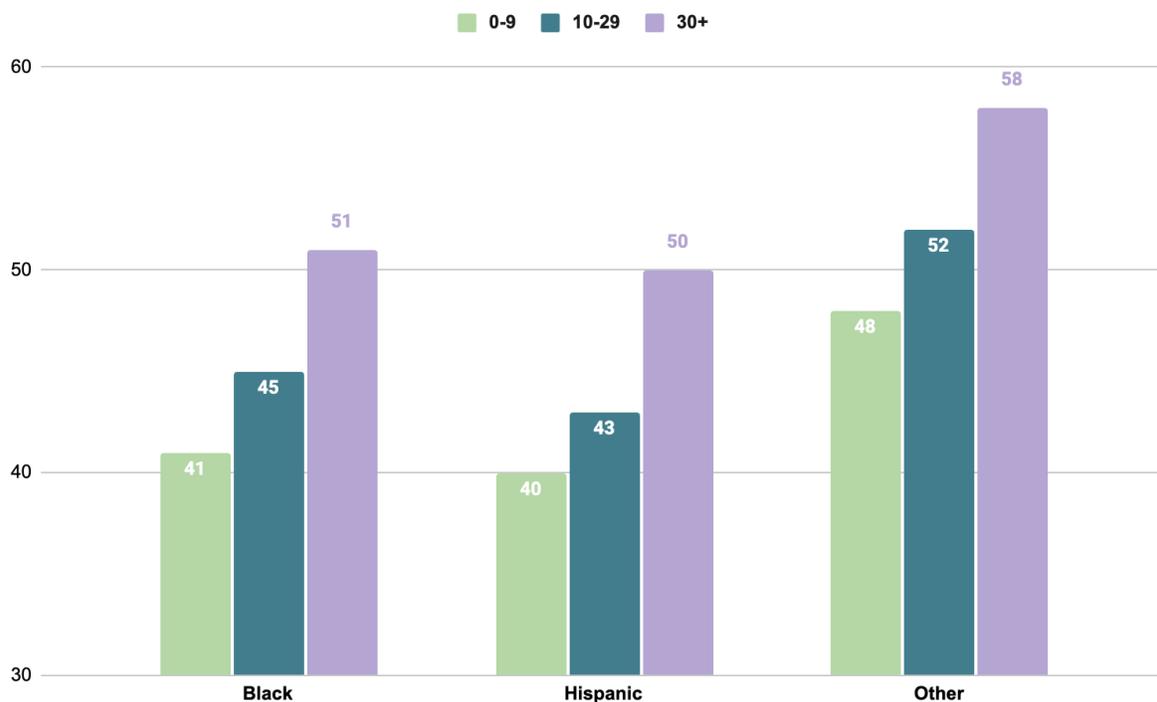
Discussion

The evaluation of Amira usage in Clayton County School District underscores the power of consistent

digital learning engagement. Students who averaged 30 or more minutes of Amira usage per week significantly

outperformed their peers with lower or no usage, both in MAP Growth scores and percentile rank gains. This effect held true across all grade levels, from Kindergarten through 5th grade, and across all racial and ethnic groups—providing strong evidence of Amira's ability to drive equitable, scalable literacy improvement.

Unlike models that suggest diminishing returns beyond a certain threshold, the Clayton County findings revealed a clear linear relationship between Amira usage time and academic gains. Students in the highest usage group consistently achieved the largest improvements, with +10 percentile point gains seen across most grades and demographic groups. This outcome suggests that the commonly cited "optimal usage zone" may, in this context, extend further—demonstrating that increased instructional time with Amira continues to provide meaningful returns on investment, particularly in the form of stronger reading outcomes.

The consistency of gains across racial groups—including Black, Hispanic, and Other students— reinforces Amira's strength as an equity-centered intervention. In a district where historically underserved populations represent the majority, the ability of a technology-based program to yield uniform benefits is both rare and

significant. These results suggest that when provided equitable access and sufficient time, all students can experience meaningful academic growth through digital literacy support.

Importantly, this study also illustrates the efficiency of Amira. With just 30 minutes of weekly usage, students experienced an average effect size of Cohen's d = 0.4, which corresponds to an estimated 3–4 months of additional reading growth—a level of impact comparable to that of high-quality, in-person tutoring, but achieved with far less cost, staffing burden, and scheduling complexity.

For school and district leaders, these findings highlight the importance of building structured, protected time for Amira usage into the school day. When implemented with fidelity, Amira delivers consistent and significant reading gains across diverse student populations, making it a powerful tool for addressing both achievement gaps and overall literacy improvement.

Conclusion

The Clayton County end-of-year evaluation clearly demonstrates the academic value of consistent
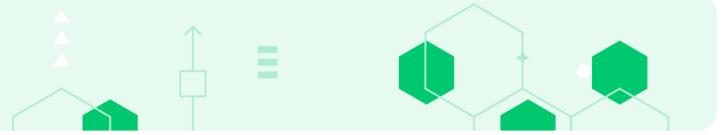
engagement with Amira. Key findings include:

- Significant reading gains (+10 percentile points) among students using Amira for 30+ minutes/week.
- Consistent benefits across all grade levels (K–5), with no evidence of diminishing returns at higher usage.
- Equitable outcomes across racial and ethnic groups, supporting the tool's role in addressing systemic gaps.
- Moderate effect size (d = 0.4), equivalent to 3–4 months of added reading growth from minimal weekly use.

These results provide a compelling model for other districts seeking scalable, cost-effective strategies to improve literacy outcomes. The evidence strongly supports integrating Amira into core instructional routines, with a focus on ensuring regular, sustained use. As schools continue to adopt digital interventions, Clayton County offers a clear example of how thoughtful implementation can yield substantial, equitable academic impact.