The following brief provides an overview of the [Measuring the Implementation and Impact of Utah's Early Interactive Software Program (EISP)](#) report by the Utah Education Policy Center. Please visit the link or scan the QR code to access the full report and learn more about the study.

bit.ly/UEPC-EISP-Report-2025

## What is the Early Interactive Software Program (EISP)?

The Early Interactive Software Program (EISP) is a program funded by the Utah State Legislature to provide public schools with personalized interactive literacy software licenses for the purpose of improving early literacy outcomes. Improving early literacy skills is vital because of how foundational these skills are for later academic success.[1]

In collaboration with the Utah State Board of Education (USBE) and Utah's early literacy software vendors, the Utah Education Policy Center (UEPC) evaluated the program to:

- "Determine the extent to which [public schools use] the early interactive reading software" and

- "Evaluate [students'] learning gains as a result of using early interactive reading software."[2]

Student performance data from USBE was combined with software usage data from Utah's early literacy software vendors to identify the impact of software usage on student literacy.

How is the program being implemented across Utah schools?

73% of all public-school K-3 students in Utah used early literacy software during the 2024-2025 school year.
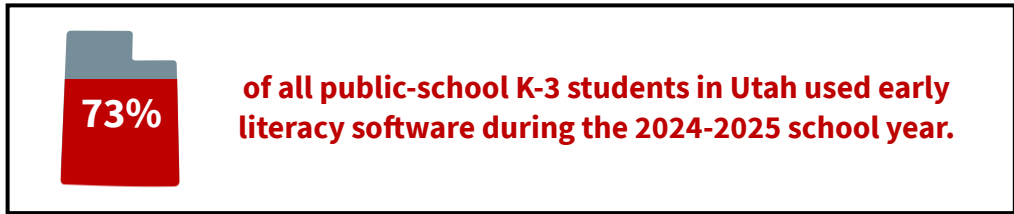
Source: UEPC Analysis of Literacy Vendor Usage Data for 2024-25

Usage records indicated that a total of 141,854 unique students in kindergarten through 3rd grade used early literacy software during the 2024-25 school year. This represents 73% of all public-school students in Utah in grades K-3.

Other noteworthy features of Utah students' participation in early literacy software for the 2024-2025 school year included:

- *Two platforms dominate Utah's early literacy software market:* Utah's early literacy software market is heavily concentrated among a few providers. Despite there being 12 early literacy software vendors in EISP, one platform accounts for 59% of students, and the top two vendors serve 83% of students.

- *Uneven usage of software among different student groups:* An analysis of time spent on literacy software revealed statistically significant differences among student demographic groups. Table 1 shows which student groups spent more or less time using software compared to their peers.

Table 1. Usage Rates by Student Demographics

Students with <u>Higher</u> Software Usage Rates
↑ Asian Students
↑ Students with Higher Beginning of Year Acadience Scores
Students with <u>Lower</u> Software Usage Rates
↓ Economically Disadvantaged Students
↓ Hispanic Students
↓ Multilingual Learner Students
↓ Native American Students
↓ Pacific Islander Students

Source: UEPC Analysis of Literacy Vendor Usage Data for 2024-25

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What is the impact of EISP on improving student literacy?

Method of Analysis: To provide more confidence in a cause-and-effect relationship between literacy software usage and reading ability, the UEPC used a quasi-experimental procedure called *covariate balancing propensity score weighting*. This approach assigns weights to individual students with the goal of reducing the correlations between student characteristics and level of software usage. This procedure has the same goal as a randomized experiment: to minimize any relationship between the alleged cause (e.g., software use) and plausible alternative causes (e.g., student characteristics). Please refer to the [full report](#) for more details on the analysis methods for this study.

Key Insight #1 – There is strong evidence of the effectiveness of the program at improving early literacy.

The results of the analysis concluded that students in kindergarten, 1st grade, and 3rd grade who used the literacy software for at least 100% of the vendor recommended level of use had significantly higher Acadience Reading Composite Scores compared to students who did not use the software. The effect was particularly strong for kindergarten students compared to the other grades.

Comparing students who did not use the literacy software with students who used the software for at least 200% of the vendor recommended length of time, all 4 grades of students (K-3) experienced significantly higher levels of end-of-year Acadience Reading Composite Scores.

Figure 2 portrays the dose-response curves for each grade level, with the colored lines representing the predicted score at each software usage level and the shaded areas representing the 95% confidence intervals.

Figure 2. Positive Relationship between Literacy Software Usage and Acadience Scores
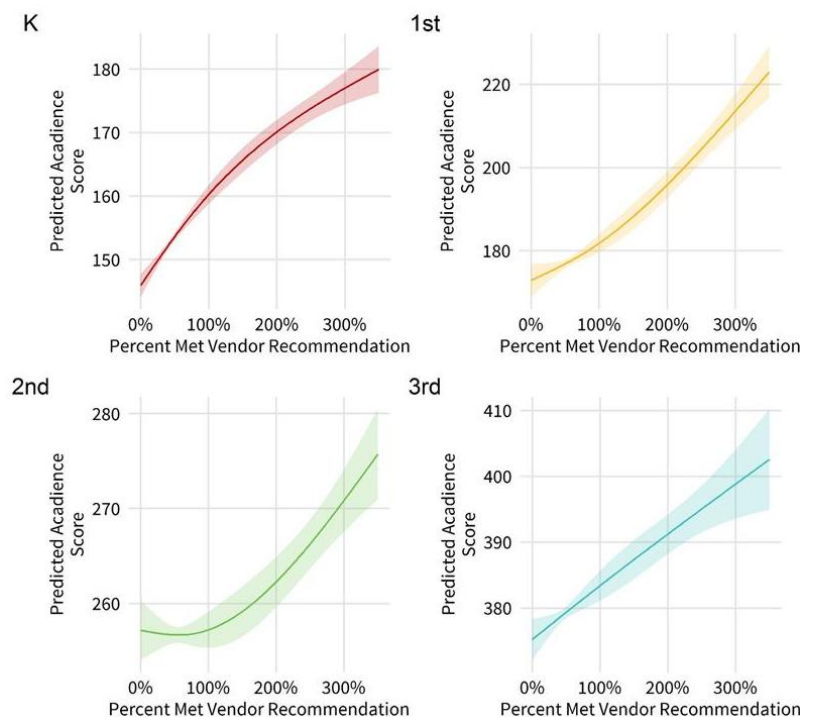
Source: UEPC Analysis of Literacy Vendor Usage Data for 2024-25

Figure 3. Projected Negative Impact of Removing Access to Early Literacy Software for 3rd Grade Students
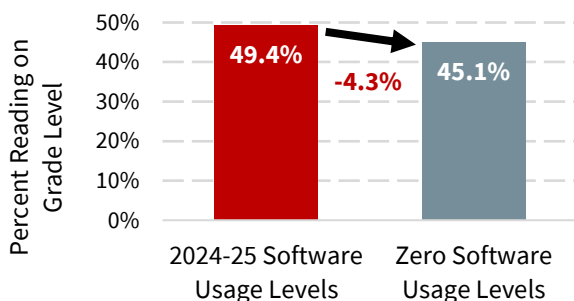
Source: UEPC Analysis of Literacy Vendor Usage Data for 2024-25

Another way to understand the impact of the program is to predict the impact of removing access to literacy software for Utah students, as shown in Figure 3.

Using 3rd grade students as an example, the analysis estimates that if software usage were to fall from the 2024-25 usage levels to zero software usage, the impact on the percentage of 3rd graders reading on grade level would be a decrease from 49.4% to 45.1%, representing a decrease of 4.3 percentage points in the students reading on grade level (approximately 1,800 students). This example demonstrates the important role that the EISP serves in improving early literacy among Utah students.

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Key Insight #2 – Early interactive literacy software helps struggling students catch up to their peers.

There is also encouraging evidence that using literacy software is effective at helping students who might be behind their peers in early literacy.

Table 2 shows that the benefits of using early literacy software are nearly twice as large for multilingual students, students receiving special education services, and students with lower beginning-of-year Acadience Reading scores than their counterparts. While usage rates among these groups are lower than their peers (see Table 1), early literacy software appears to be particularly beneficial for these students.

Table 2. Impact of Literacy Software Usage on Kindergarten Students

Going from 0% to 100% recommended software usage time for…	…Leads to an Average Increase in the End-of-Year Acadience Score of…
…Non-Multilingual Students…	+13.5 Points
…Multilingual Students…	+23.9 Points
…Students Not Receiving Special Education Services…	+13.8 Points
…Students Receiving Special Education Services…	+23.0 Points
…The Top 25% of Students on Beginning of Year Acadience Reading Scores…	+10.1 Points
…The Bottom 25% of Students on Beginning of Year Acadience Reading Scores…	+20.2 Points

Source: UEPC Analysis of Literacy Vendor Usage Data for 2024-25

What are the recommendations based on the results of this study?

Raise levels of literacy software use. Higher levels of early literacy software use are associated with higher scores on the Acadience Reading assessment even after controlling for student and school characteristics. However, many students are using the software at levels below vendor recommendations.

Focus on improving EISP participation among lower-performing students to reduce reading gaps. Despite early literacy software usage having larger beneficial impacts for multilingual learners, students receiving special education services, and students with lower beginning-of-year reading proficiency scores, usage rates are lower among all of these groups.

Further integrate EISP within Utah's broader strategy and instructional practices for improving early literacy. Coordinating EISP implementation with literacy coaching, ongoing professional learning, and other evidence-based interventions can help ensure that classroom instruction and digital learning reinforce one another.

Endnotes

[1] See the following:

Annie E. Casey Foundation. (2010). Early Warning: Why Reading by the End of Third Grade Matters. KIDS COUNT Special Report. Baltimore, MD. Retrieved from https://assets.aecf.org/m/resourcedoc/AECF-Early_Warning_Full_Report-2010.pdf

Lesnick, J., Goerge, R.M., & Smithgall, C. (2010). Reading on grade level in third grade: How is it related to high school performance and college enrollment? Chicago, IL: Chapin Hall at the University of Chicago.

[2] See Utah Code 53F-4-203.

About the Utah Education Policy Center

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Bridging Research, Policy, & Practice

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The Utah Education Policy Center (UEPC) is an independent, non-partisan, not-for-profit research-based center at the University of Utah founded in the Department of Educational Leadership and Policy in 1990 and administered through the College of Education since 2007. The UEPC's mission is to bridge research, policy, and practice by conducting rigorous and comprehensive research and evaluations, and providing expert and research-informed technical assistance and professional learning. We empower educators, policymakers, and leaders to make research actionable and impactful to transform education across early childhood education, K-12 schools, and higher education.

We are committed to supporting the understanding of whether educational policies, programs, and practices are being implemented as intended, whether they are effective and impactful, and how they may be improved and scaled-up and become sustainable.

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