

# Imagine Learning Partners with Johns Hopkins University to Measure the Impact of Imagine Language & Literacy with Emergent Bilingual Learners

Imagine Learning partners with school districts and third-party research firms to evaluate and document the effectiveness of Imagine Learning products. The intent of these research studies is to document student engagement and progress within Imagine Learning products, examine how Imagine Learning products affect student achievement and growth, and illuminate the barriers and successes during a first-year implementation. Through dissemination of study findings, Imagine Learning uses research results to support partner districts in their second-year implementation and to help other similar districts in understanding how to best leverage the product for their implementation and improve academic gains. This report will review the findings from such a first-year implementation study.

During the 2021–2022 school year, Imagine Learning partnered with a school district in North Carolina who implemented Imagine Language & Literacy with Emergent Bilingual Learners (EBL) in Grades K–5. This research partnership provided an opportunity to investigate the impact of the Imagine Language & Literacy program among EBLs and explore the implementation factors that may influence that association. It is important to note that the 2021–2022 school year represented a post-pandemic year where the district was striving toward “back to normal” for students and educators. This study was designed to answer four research questions (listed below), each ultimately helping Imagine Learning understand how the program impacted learning gains for the EBLs in the district and how implementation factors influence those gains.

To achieve these objectives and answer the research questions, Imagine Learning leveraged the expertise of the Center for Research and Reform in Education at Johns Hopkins University (JHU CRRE) as the evaluating third-party research firm to assess how Imagine Language & Literacy impacted students’ reading achievement using a randomized controlled trial. EBL students in Grades K–5 (analytic sample  $N = 324$ ) across five elementary schools were randomly assigned to either the treatment group (users of Imagine Language & Literacy) or control group (non-users of Imagine Language & Literacy). See Tables 1 and 2 for a breakdown of the analytic sample by grade and demographics.

**Table 1. Sample  $n$  by Grade**

Demographics	Treatment ( $n = 163$ )	Control ( $n = 164$ )
Grade K	22	23
Grade 1	25	25
Grade 2	25	25
Grade 3	33	32
Grade 4	32	31
Grade 5	26	28

**Table 2. Analytic Sample Demographics**

Demographics	Treatment ( $n = 161$ )	Control ( $n = 163$ )
% Black or African American	0.62%	0.61%
% Hispanic	68.32%	70.55%
% White (Non-Hispanic)	2.48%	1.23%
% Female	45.96%	44.79%

## DATA AND METRICS

Prior research on Imagine Language & Literacy has found that increased student engagement and progress in digital tools is directly correlated with student achievement and growth<sup>1</sup>. As such, student usage data from Imagine Language & Literacy was collected to provide a means of measuring adherence to program implementation recommendations and quantifying student engagement and progress via usage metrics within the program. The metrics that JHU CRRE used to measure students' engagement and progress were (1) total hours spent in Imagine Language & Literacy, (2) number of unique weeks logged into the program, (3) number of attempted lessons, and (4) number of passed lessons. Each of these metrics are reported by grade in Table 3. On average and across grades, students used Imagine Language & Literacy for 10–18 hours, below the recommended amount of 20 hours. Overall, Grade 1 had the highest usage, whereas Grade 5 had the lowest. This variation in usage across grades indicates that implementation (including student engagement and progress) across the grades varied significantly and should be considered as results are interpreted.

To measure students' literacy growth, we gathered the WIDA ACCESS, mCLASS DIBELS, and the i-Ready Diagnostic Reading assessments. WIDA ACCESS is a summative assessment specifically for EBL students and was administered a single time to all students in Grades K–5 between January and March. mCLASS DIBELS is a fluency assessment administered one-on-one to students in Grades K–3 in fall, winter, and spring. The i-Ready Diagnostic Reading assessment was administered to all students in Grades K–5 in fall, winter, and spring.

Finally, Imagine Language & Literacy teachers completed a questionnaire in the spring of 2022. The questionnaire addressed topics such as program implementation, general instructional practices, professional development, and program perceptions.

## RESEARCH QUESTIONS AND FINDINGS

**Research Question 1.** Do students in Grades K–5 who use Imagine Language & Literacy achieve greater reading gains than students in Grades K–5 who do not use Imagine Language & Literacy?

- **Findings.** No statistically significant difference between the control group (students who did not use Imagine Language & Literacy) and the intervention group (students who used Imagine Language & Literacy) was observed. It is important to note that the WIDA ACCESS is administered between January and March. Considering the school district began implementing in October, students only had access to Imagine Language & Literacy a few months before they were assessed for growth.

**Research Question 2.** Are changes in Imagine Language & Literacy participants' reading skills associated with how Imagine Language & Literacy is used?

- **Findings.** Usage metrics (hours, weeks, attempted lessons, and passed lessons) were correlated with all three reading achievement assessments (WIDA ACCESS, mCLASS, and i-Ready). Positive and statistically significant correlations were observed in several of the grade levels (Table 3).
  - These results indicate that when students are engaged and making progress, Imagine Language & Literacy has a positive effect on student performance on all three assessments.

<sup>1</sup>RMC Research. (2020). *Study of Imagine Language & Literacy in Grades K–2*. <https://www.imaginelearning.com/wp-content/uploads/2022/11/Study-Imagine-Learning-Literacy-Grades-K-2.pdf>

**Table 3. Imagine Language & Literacy Average Usage and Correlation with Reading Growth by Grade**

	Average Usage Metrics	WIDA ACCESS	mCLASS	i-Ready
<b>Kindergarten</b> (n = 22)	14 Hours			+
	22 Weeks			
	21 Attempted Lessons	+		+
	16 Passed Lessons	+	+	+
<b>Grade 1</b> (n = 25)	18 Hours			
	23 Weeks			
	38 Attempted Lessons		+	
	32 Passed Lessons		+	
<b>Grade 2</b> (n = 25)	14 Hours			
	21 Weeks	+		+
	32 Attempted Lessons			
	26 Passed Lessons			
<b>Grade 3</b> (n = 32)	11 Hours			
	20 Weeks		+	+
	27 Attempted Lessons	-		
	22 Passed Lessons			
<b>Grade 4</b> (n = 32)	14 Hours			
	22 Weeks			
	33 Attempted Lessons			
	26 Passed Lessons			
<b>Grade 5</b> (n = 26)	10 Hours			
	19 Weeks			
	20 Attempted Lessons			
	16 Passed Lessons			

Note: "+" indicates a positive and statistically significant correlation. "-" indicates a negative and statistically significant correlation.

**Research Question 3.** To what extent do teachers implement Imagine Language & Literacy with fidelity?

- Findings.** Although teachers implemented Imagine Language & Literacy for less than the recommended time (20 hours) over the course of the school year (see Table 3), the results to Research Question 2 indicate movement in the right direction — that is, the more students were engaged with and made progress in Imagine Language & Literacy, the better results they demonstrated on the assessments. Furthermore, according to results from the teacher questionnaire, most teachers used the recommended product features (classroom and student dashboard) to guide instruction based on student performance in the product.

**Research Question 4.** What are teachers' perceptions of Imagine Language & Literacy?

- Findings.** Teacher perceptions were overall positive; 7/7 teachers would recommend the product to other teachers, and 7/7 agreed it helped meet the needs of diverse learners. Some teachers indicated improvements to the program may be needed in helping students persist through difficult content.

## DISCUSSION

In this study, EBL students in Grades K–5 at our partnering school district utilized Imagine Language & Literacy in their first-year post-pandemic during a first-year implementation. We present lessons learned from this partnership to assist other districts in their implementation of Imagine Language & Literacy and to demonstrate ways Imagine Learning can support partner districts.

Although students' engagement and progress were generally below Imagine Learning's recommended levels, we encourage readers to take the first-year, post-pandemic context of the implementation into consideration. Particularly, given this context, we believe teachers may have needed additional support from Imagine Learning and the district to assist their students in utilizing the product to recommended levels. Furthermore, it is highly plausible that the underutilization of Imagine Language & Literacy may be, at least in part, responsible for the absence of statistically significant results that JHU CRRE found on the WIDA ACCESS, mCLASS DIBELS, and the i-Ready Diagnostic Reading assessments. However, it is important to note that JHU CRRE found positive and statistically significant correlations between usage metrics and reading achievement for several grades — indicating that as student engagement and progress approach recommended levels, Imagine Language & Literacy is likely to have an increasingly positive impact on reading achievement as measured by the reading assessments listed above. Additionally, all teachers who responded to the survey had favorable impressions of the program and used recommended components of the program to guide instruction.

Because upper elementary grades did not implement Imagine Language & Literacy according to recommended levels, Imagine Learning recommends that those interested in using the program with these grades should consider the built-in supports and resources offered to these students inside the platform to ensure they can maximize the benefits of Imagine Language & Literacy. Additionally, Imagine Learning will continue to investigate ways to promote engagement and progress for all students seeking the development of foundational literacy skills. This may include additional professional development support for teachers to better utilize all features of Imagine Language & Literacy.

Overall, this study provided critical information about how usage metrics, such as time in program, impacted student outcomes. In addition, the research partnership provided Imagine Learning with initial evidence that Imagine Language & Literacy may impact student outcomes when used with fidelity, but further research is needed within varied implementation contexts to establish those conclusions. We wish to thank our partnering district in North Carolina for their support and participation in this efficacy research study.