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EBLI Teacher and Student Lessons

Efficacy Study with Pull-Out Intervention for Special Education: Grades 3-6 with DIBELS

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PROMISING

LXD Research Recognition for EBLI

EBLI Evidence-Based Literacy Instruction

This product has been rigorously evaluated and is hereby acknowledged for meeting the educational impact criteria of the Every Student Succeeds Act (ESSA), warranting a Tier 3 for **"Promising" Evidence**. This recognition is based on its proven effectiveness in enhancing grade-level learning outcomes in multiple studies.

REVIEWED BY THE LXD RESEARCH EXPERT REVIEW PANEL

CERTIFIED BY:

ICEIE

Rachel Schechter, Ph.D.
Founder of LXD Research

January 25, 2025

DATE

Understanding ESSA Evidence

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Educators search for high-quality research and evidence-based interventions to strengthen grant applications, to support comprehensive and targeted schools, or to implement new programming in their schools. Evidence requirements under the Every Student Succeeds Act (ESSA) are designed to ensure that states, districts, and schools can identify programs, practices, products, and policies that work across various populations.

Educational programs document their evidence of design, effectiveness, and impact in order to be eligible for federal funding. While there is no singular authority that determines a program's tier, the Department of Education's Office of Educational Technology provides standards to assess the varying levels of strength of research for education products.

The categories for ESSA Evidence are: strong (Tier 1), moderate (Tier 2), and promising (Tier 3) evidence of effectiveness, or demonstrates a rationale to be effective (Tier 4).

This product meets the requirements for Tier 3:

- In correlational design, students who used the program are compared to normed referenced samples or other group averages for comparison.
- Multiple studies with the proper design and implementation with at least two teachers and 30 students show statistically significant, positive findings.
- The study uses a program implementation that could be replicated.
- A third-party research organization has reviewed the documentation for ESSA validation.

When product designers leverage learning sciences to design and evaluate their programs, educators can better target instruction, and students' skills soar. Through multiple correlational studies, a statistical evaluation shows that student growth is associated with higher student product use. This product meets the criteria for LXD Research's ESSA Tier 3 Evidence.

– Rachel Schechter, Ph.D., Founder of LXD Research

EBLI STUDY SUMMARY
DIBELS, GRADES 3-6
2023-2024

PROGRAM DESCRIPTION

EBLI is a literacy professional development platform that provides educators with essential tools to effectively teach sound-letter relationships, enhancing their ability to instruct students in both decoding and encoding. The approach incorporates interactive practice to boost retention and accelerate literacy development to improve reading comprehension. The provided structured lessons reduces planning time and increases teacher confidence.

STUDY DETAILS

Analysis Sample Sizes

49 students across grades 3-6

Demographics

80% White; 16% Hispanic | 59% Male

18% FRL | 2% ELL | 29% SPED

Time Frame

August 2023-June 2024

Implementation Description

Teachers used EBLI 3 to 5 times per week to provide targeted small-group reading instruction.

Methodology

Students DIBELS scores and benchmark levels were examined at the beginning, middle, and end of the school year as well as their state assessment (MCAS) scores.

STUDY CONTEXT

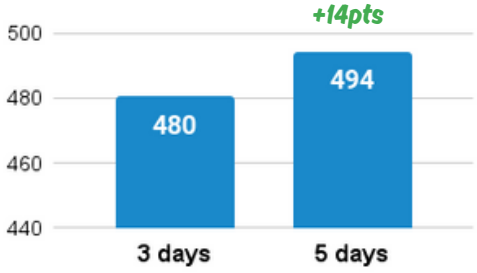
EBLI collaborated with LXD Research to evaluate the impact of EBLI Teacher and Student Lessons (ETSL) in a Massachusetts school district during the 2023-2024 school year. A selection of reading specialists and special education teachers volunteered to use ETSL for small-group instruction in various grades across three schools as part of the district's SPED and MTSS intervention plans. This report focuses on describing the growth made by the students who used EBLI.

KEY FINDINGS

- EBLI students made meaningful gains from the beginning to the end of the year.
  - All students started below grade level, but 37% closed the gap, making it to grade level by the spring.
  - At the end of the year, students averaged 96.3% progress toward their on-grade-level target composite score and 90.6% progress toward their oral reading fluency score, indicating many students were just below the on-grade threshold.
- Students with 30-minute EBLI lessons 5 times a week had significantly higher 2024 MCAS scores than students who had lessons 3 times per week.

EBLI students with a higher intervention frequency had higher Spring 2024 MCAS scores than students with a lower intervention frequency.

Average MCAS Scale Score by Intervention Frequency



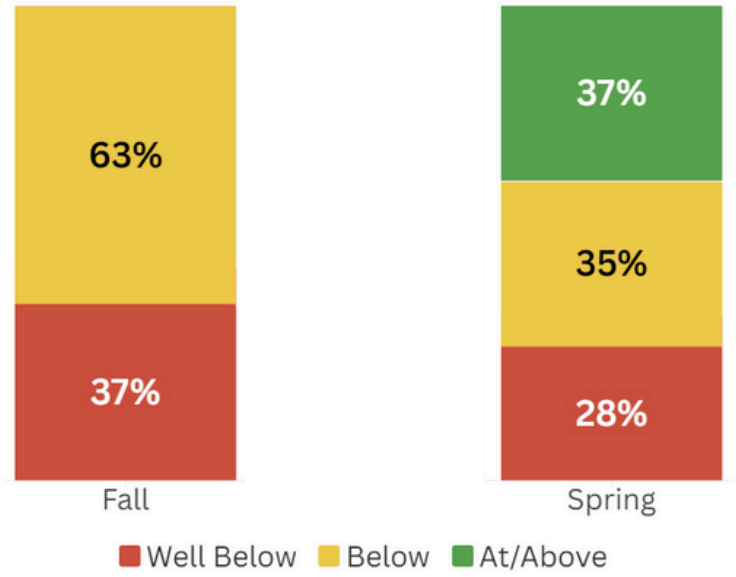
Notes

- Figure only shows significantly different groups, see full figure on pg. 3.
- Y-axis starts at 440, the lowest possible MCAS score, to better visualize difference between groups.
- $F(2, 43) = 4.56$, $p < .05$, partial eta-squared effect size = 0.17 (large effect)

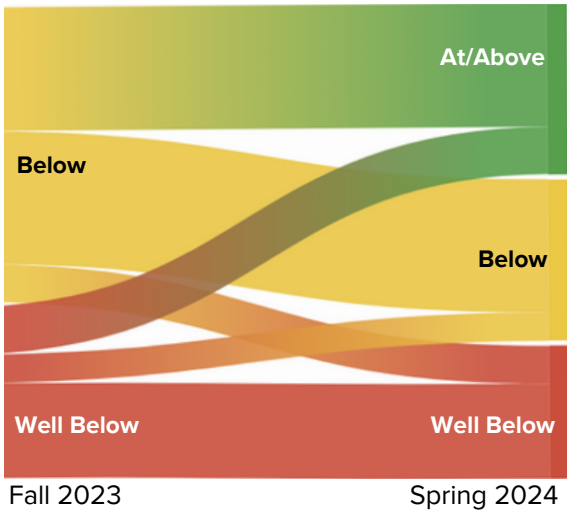
DIBELS COMPOSITE BENCHMARK FALL TO SPRING

All students started the year 'Below' or 'Well Below' grade level according to their composite DIBELS score. By Spring 2024, 37% of EBLI students had reached grade level or above. The proportion of students just below grade level also reduced from 63% in the Fall to 35% in the Spring. There was a very similar story for Oral Reading Fluency (ORF) measures as the composite score is composed only of ORF and MAZE for 4-6 graders.

DIBELS Composite Placement Levels
BOY-EOY Proportions



DIBELS Composite Placement Levels
Fall-to-Spring Movement

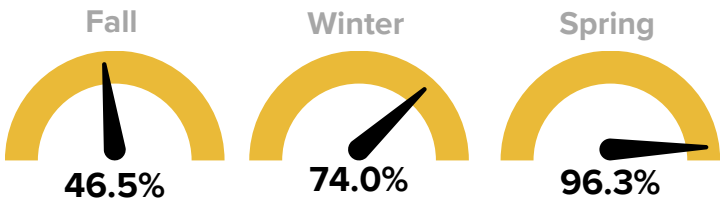


PROGRESS TO SPRING TARGET

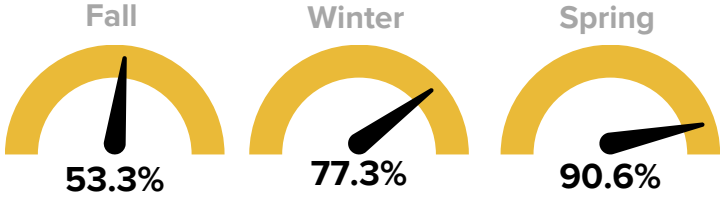
A progress scale metric was developed where 0% represented the lowest possible composite score (200 for all students), and 100% represented the spring on-grade-level target score. Each student's score was mapped between these points at each testing period, showing their percentage progress toward the target over time.

Students made meaningful progress toward their end-of-year on-grade-level score, achieving an average of 96.3% progress in DIBELS composite score and 90.6% in Oral Reading Fluency.

Average Progress to Spring Composite Target

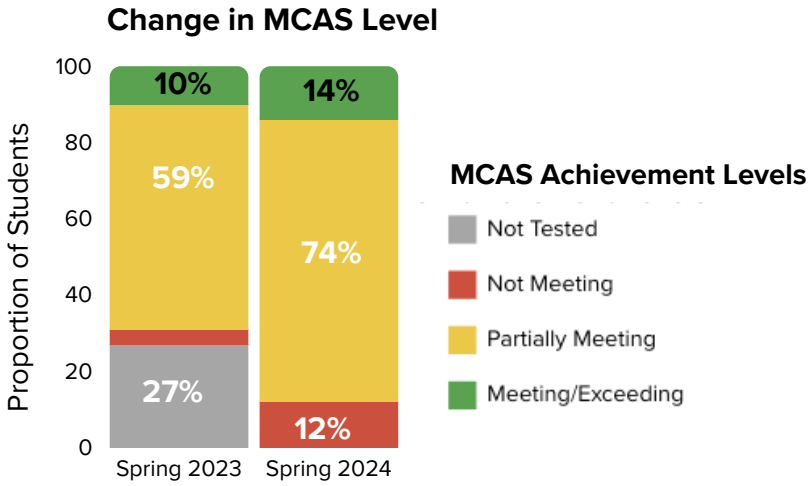


Average Progress to Spring ORF Target



STATE TEST ACHIEVEMENT LEVELS

In the spring, all students in 3rd grade and up take the Massachusetts Comprehensive Assessment System (MCAS), the statewide standardized test. Students in 3rd grade during the study were not tested in Spring 2023, but they were considered High Risk at the start of the third-grade year. Considering that all students in this study were at risk for not meeting literacy expectations in Fall 2023, it is very encouraging that most students (88%) ended the year at least Partially Meeting expectations, which is considered passing by Masschusetts standards.

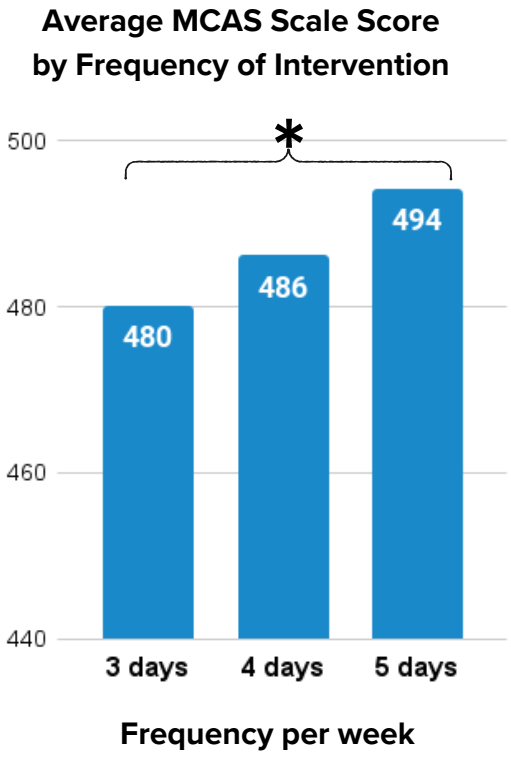


EBLI DOSAGE IMPACT ON STUDENT OUTCOMES

Students were divided into groups that received EBLI instruction either 3, 4, or 5 days per week, with each session lasting 30 minutes. A small number of students received EBLI instruction 3 days a week for 45 minutes but were excluded from the analysis due to the small group size. Results showed a significant difference in 2024 MCAS scores among the groups. Students who received EBLI 5 days per week scored significantly higher (M = 493.67, SD = 14.57) than those who received it 3 days per week (M = 479.94, SD = 12.74). This result remained consistent even after accounting for baseline DIBELS benchmark status.

Number of Students by Frequency Group

	3x30	4x30	5x30	5x45
Students	17	11	18	3



*F(2, 43) = 4.56, p < .05
Partial eta-squared (effect size) = 0.17 (large effect).

EDUCATOR VOICES

To understand the EBLI implementation perspective, LXD interviewed multiple reading specialists at two campuses in the participating school district.

Overall, they found EBLI to be a valuable way of increasing student confidence and interest in reading. They saw some crossover, with EBLI methods popping up in social studies, science, and spelling. Some noted issues with the organization of online materials but overall found worth in continuing to use them. All of them agreed that students are hugely enthusiastic about EBLI.

Usage

- Both campuses implemented EBLI with high fidelity. Notably, they both dropped Wilson and Orton Gillingham in favor of EBLI, using it exclusively with the students in their Tier 2 & 3 groups.

Comfort Level

- Teachers felt that EBLI was effective in presenting a lot of relevant material in a way that was quick for educators yet still accessible for students and was much more flexible than previous curriculum.
- They noted, however, that it was a stark contrast from previous training and took some time to adjust.

Students are engaging with more rigorous, grade-level texts than previous school years. Additionally, they are more confident when decoding multisyllabic words.

Students are doing research independently after reading EBLI passages.

Reading specialists reported high enthusiasm for EBLI among students, to the point that they request to stay longer to practice spelling and other key skills.

Students are showing greater confidence in reading and writing because of their EBLI lessons, especially among students who haven't responded to systems like Wilson or Orton Gillingham.

These educators really appreciated the flexibility of EBLI and feels more supportive than more "rigid" curricula used in past years.

EBLI Teacher and Student Lessons Efficacy Study with Pull-Out Intervention for Special Education: Grades 3-6 with DIBELS

Conducted by Rachel L. Schechter, Ph.D. & Anna Robinson, M.S., LXD Research at Charles River Media

Abstract

This study investigates the effectiveness of Evidence-Based Literacy Instruction (EBLI) Teacher and Student Lessons for special education students in grades 3-6. Conducted in a Massachusetts school district during 2023-2024, this research evaluated outcomes across 49 students receiving pull-out intervention. DIBELS assessment data showed that 37% of initially below-grade-level students reached grade-level benchmarks by spring, with the cohort averaging 96.3% progress toward target scores. Oral reading fluency improved substantially, with over one-third of students achieving grade-level proficiency. On state standardized tests, 88% of students at least partially met expectations—notable for students who began at high risk. Intervention frequency proved significant: students receiving EBLI five days weekly scored higher on assessments ($M = 493.67$, $SD = 14.57$) than those receiving it three days weekly ($M = 479.94$, $SD = 12.74$), with a large effect size (partial eta-squared = 0.17). Educator feedback highlighted increased student engagement and improved decoding skills while identifying areas for program refinement. These findings suggest that EBLI's speech-first approach offers an effective intervention for struggling readers, particularly when implemented with sufficient frequency.

Recommended citation:
Schechter, R. L., & Robinson, A. (2024). EBLI Teacher and Student Lessons Efficacy Study with Pull-Out Intervention for Special Education: Grades 3-6 with DIBELS. LXD Research

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Introduction

Enhancing the caliber of primary reading instruction is of paramount importance. There has been a growing concern that the core reading curriculum for the elementary years has not been improving reading scores in the US (The Condition of Education 2020). Consequently, the need to cultivate educators' proficiency in nurturing literacy skills through well-crafted curricula and precise interventions has become an increasingly pressing imperative within the classroom. The pandemic has exacerbated these concerns, with many students falling significantly behind in their reading and literacy skills due to disrupted learning environments and the increased reliance on remote education. Achievement data from over 9 million students in grades 1-8 highlight the pressing need for post-COVID-19 academic recovery, with reading and math achievements lagging and more students aiming to catch up to grade level. (Curriculum Associates, 2023).

The Science of Reading, which advocates a systematic, multi-year approach to skill development (The Reading League, 2022), underscores the importance of enhancing access to rigorous academics while providing targeted support in schools (Lambert & Sassone, 2020). In this pursuit of effective literacy instruction, Nora Chahbazi, who transitioned from a career in neonatal nursing to literacy advocacy, discovered an innovative, speech-first approach that enabled her daughter to learn to read in just three hours. Recognizing the widespread need for effective literacy instruction, Nora delved into literacy expertise and established a reading center. She also partnered with school districts to offer teacher training and research-aligned practices to improve reading, spelling, and writing. This initiative led to the founding of EBLI (Evidence-based literacy instruction), LLC, which developed a new phonics core curriculum to replace conventional phonics lessons. Evidence (Petscher et al., 2020) suggests that linguistic phonics outpaces traditional methods in developing phonemic awareness, letter-sound knowledge, decoding skills, and enhancing reading comprehension. Unlike traditional programs, which typically follow a print-to-speech approach and may leave gaps and inefficiencies (Dr. Louisa Moats, 1998), EBLI's structured linguistic literacy seeks to eliminate these gaps.

Structured linguistic literacy programs like EBLI's central tenet is to begin with the foundational aspect of learning: sounds. Linguistic phonics is grounded in five key principles: the development of oral language precedes other literacy skills, letters are symbols that represent speech sounds, sounds can be represented by one or more letters, sounds can have multiple spellings, and letters can represent multiple sounds. While both traditional and linguistic phonics methodologies are effective, an increasing body of evidence suggests that linguistic phonics, as exemplified by EBLI, accelerates students' development of phonemic awareness, letter-sound knowledge, and decoding skills, resulting in improved reading comprehension.

Program Key Features

Teachers can enhance their classroom literacy instruction with the EBLI Teacher Training and Student Lessons (ETSL) that follow a speech-first approach. This approach recognizes the vital role of speech and language skills in a child's ability to decode and comprehend written text effectively. Rather than providing a rigid set of workbooks and teacher guides, EBLI offers comprehensive teacher training and ongoing support that empowers educators to adapt instructional strategies to students' unique needs. The program follows an accelerated, systematic, explicit, and integrated instructional approach that recognizes the vital role of speech and language skills in developing reading proficiency. EBLI materials provide explicit instruction in the five essential components of reading—phonemic awareness, phonics, fluency, vocabulary, and comprehension—as well as handwriting, spelling, and writing.

What distinguishes EBLI from conventional phonics programs is its speech-first approach, where students learn the 44 speech sounds represented by the alphabet's 26 letters. This methodology aligns with research suggesting that encoding activities (speech-to-print) in code-focused reading lessons produce better results than decoding (print-to-speech) alone. The program includes over 100 instructional activities delivered through a gradual release model where teachers initially learn alongside students through asynchronous videos before eventually taking full ownership of lesson delivery (see Figure 1). Research indicates this structured linguistic literacy approach develops students' phonemic awareness, letter-sound knowledge, and decoding skills more efficiently than traditional programs, making it particularly effective for struggling readers.

Study Setting

EBLI collaborated with Learning Experience Design (LXD) Research to independently evaluate EBLI Teacher and Student Lessons (ETSL). This quasi-experimental study occurred in a Massachusetts school district during the 2023-2024 school year, in which a selection of reading specialists and special education teachers volunteered to use ETSL for small-group instruction in various grades across three schools as part of the district's SPED and MTSS intervention plans. The Massachusetts Regional School District comprises six schools and serves a student population of approximately 2,225. Within the district, 12.2% of enrolled students represent minority groups, while 16.6% come from economically disadvantaged backgrounds (MA Department of ESE).

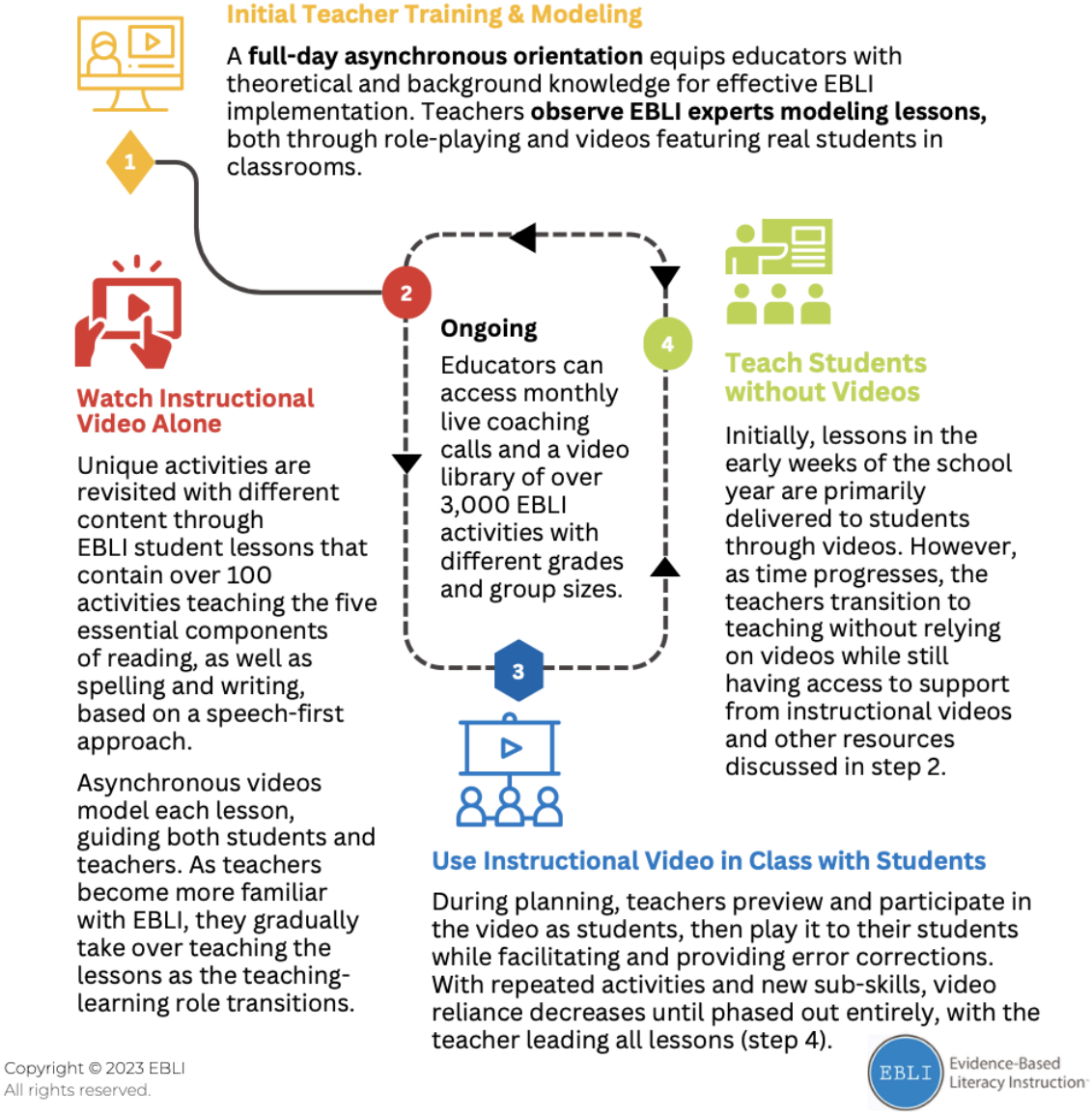
Evaluation Questions

The evaluation aims to answer the following questions:
"How does implementing ETSL impact student achievement in both formative and summative reading assessments?"

1. What defines the nature and depth of ETSL implementation?
2. How is ETSL typically introduced and integrated into intervention practices?
3. How do instructors and administrators perceive the quality and impact of ETSL?

4. What suggestions do they propose for enhancing the program?

Figure 1. EBLI Teacher & Student Lessons Description



Methods

Design

This study utilizes a mixed-methods approach that includes teacher and administrator interviews and student achievement data collection. This comprehensive methodology provides researchers with a means to delve into the program's implementation within classrooms, gather significant feedback from teachers, evaluate the perceived impact of the program, and assess academic achievements. The study focuses on students and educators who actively implemented the program during the 2023-2024 academic year.

As an incentive for participating in the study, district leaders were granted additional complimentary access to the ETSL platform for the academic year 2023-2024. At the commencement of the academic year, all students underwent initial assessments within the first four weeks using the DIBELS reading assessments. Further assessments occurred in Winter 2024 and Spring 2024.

Understanding Baseline DIBELS Scores

Researchers collected Fall 2023 literacy assessment data and examined the differences in scores between ESTL and non-ETSL students. DIBELS Composite Scores cannot be directly compared across grades, so researchers examined student outcomes in terms of at or below grade-level status according to DIBELS Benchmark Goals. For grades 3-5, EBLI intervention and comparison intervention groups showed no statistically significant differences in the percentage of students who were below or well below grade level, largely due to the small sample size. However, there was a small effect size that indicates groups were not equivalent (phi-coefficient = .22). Due to the small sample size, the growth on DIBELS and the spring scores were also similar between the two groups. Since the outcomes for each group were similar, the remainder of this paper will focus on understanding the progress of EBLI students in different dosage groups in the context of DIBELS sores and growth norms.

Assessment Descriptions

Benchmarking Assessments

DIBELS® (Dynamic Indicators of Basic Early Literacy Skills) is an assessment tool designed to gauge the acquisition of foundational literacy skills in grades K-8. These swift, one-minute assessments particularly emphasize foundational skills. DIBELS 8th Edition ensures inclusivity by catering to diverse student demographics, including those in Title 1 schools, special education programs, and students with specific learning disabilities like dyslexia.

The DIBELS 8 Edition offers six subtests intended to assess component reading skills: Letter Naming Fluency (LNF), Phonemic Segmentation Fluency (PSF), Nonsense Word Fluency (NWF), Word Reading Fluency (WRF), Oral Reading Fluency (ORF), and Maze. Specific subtests vary

across grades in a way that matches expected grade-level skill development. For instance, Letter Naming Fluency and Phonemic Segmentation Fluency are exclusive to kindergarten and first-grade students, while Oral Reading Fluency assessments commence in first grade. The subtests support four of the “big five” ideas in beginning reading identified by the National Reading Panel (National Reading Panel, 2000), including phonemic awareness, phonics (alphabet principle), fluency, and comprehension (See Table 1).

Table 1. Reading Concepts and the DIBELS 8 Subtests

Reading Concept	LNF	PSF	NWF	WRF	ORF	Maze
Phonemic awareness		♦				
Alphabet principle			♦	♦	♦	
Fluency with text				♦	♦	♦
Comprehension					♦	♦

The DIBELS 8 composite score is derived from combining scores across all relevant subtests for a particular grade, offering an overall assessment of student literacy skills. Due to variations in the scores used across grades and assessment periods, the composite score isn't suitable for directly tracking growth over time or making cross-grade comparisons. However, the consistency in benchmark goal establishment procedures allows for comparison of the percentage of students meeting or exceeding benchmarks across different grades and times of assessment.

State Test

The MCAS (Massachusetts Comprehensive Assessment System) is the standardized state assessment administered to public school students throughout Massachusetts. Implemented in 1993 as part of the state's education reform, this annual exam evaluates student achievement across multiple subjects, including reading, mathematics, and science. The reading portion specifically measures students' literacy skills, comprehension abilities, and text analysis capabilities against grade-level standards established by the Massachusetts curriculum frameworks. Schools and districts use MCAS results to identify learning gaps, inform instructional decisions, monitor student growth, and meet accountability requirements, with scores categorized into performance levels that indicate whether students are meeting, exceeding, or falling below grade-level expectations.

Student Sample Description

Five Interventionists and Special Education teachers received teacher training, coaching, support, and school-level planning support at the start of the year. Schools in this district use a combination of in-class instructional support and pull-out intervention support. This model leads to flexible intervention and integration of core instructional materials with all students. For

simplicity, only pull-out interventionists used EBLI. A dozen or more students received EBLI in grades 3-5, and fewer were in grade 6.

Table 2. Number of EBLI Students per Grade

Grade	3	4	5	6	**Total**
Student Count	12	14	16	7	**49**

Demographics & BOY Reading Scores

The demographics between the groups were relatively similar, with most students reported as White and both groups having a higher percentage of male students than female students. The widest demographic difference between groups was the percentage of students in Special Education, with the comparison group comprising of a much higher percentage (62%) than the EBLI group (28%). This was due to Individualized Education Plans already being set at the time of participant selection, so only select students were able to be included in the EBLI group for study.

Table 3. Demographic Data for Students by Group

	Race/Ethnicity		**Gender**		**Free/Reduced Lunch**	**Special Edu.**
3-6 students (N=49)	White Hispanic Asian Multiple	80% 16% 2% 2%	Male Female	59% 41%	18%	29%

Table 4. Number of Students by EBLI Intervention Dosage (Days x Minutes per Day)

	3 x 30	**4 x 30**	**5 x 30**	**5 x 45**
Grade 3		7	5	
Grade 4	3	4	4	3
Grade 5	7		9	
Grade 6	7			
Total	**17**	**11**	**18**	**3**

Beginning of Year (BOY) DIBELS Scores

Composite Scores

Because the DIBELS Composite score cannot be used to compare results across grades and the sample sizes per grade are too small to analyze at the grade level, LXD researchers examined metrics that could be compared across the grades. Researchers also examined baseline standing by situating each student in terms of the progress toward their grade-level Spring score cutoff for core support (i.e., on-grade level threshold). Specifically, this was done by creating a Distance to Target scale metric where 0% represents the lowest possible composite score (200 for all students), 100% represents the target composite score for on-grade-level in Spring, and each student's current score is mapped between these two points. This provides a percentage indicating how far a student has progressed toward the Spring target.

Table 5. BOY Benchmark Status and Distance to Target

Grade	Number of Students	Benchmark Status		Distance to Target	
		Below	Well Below	Mean	SD
3-6	49	63%	37%	46.5%	5.4

Oral Reading Fluency

About half of the students were Well Below Benchmark in their reading rate, but only about a third were in that same range for accuracy. This suggests that faster decoding and building automaticity would be key to the intervention's success.

Table 6. BOY ORF Benchmark Status by Condition

Subtest	Number of Students	Benchmark Status		
		At	Below	Well Below
Words Correct Per Minute	43	0%	51%	49%
Accuracy	43	33%	30%	37%

Table 7. BOY Words Correct Per Minute Percent to Target by Condition

Subtest	Number of Students	Mean Progress to Target	SD	% of Words Read Correctly	SD
Words Correct Per Minute	43	49.4%	16.2	90.3%	9.2

Results

Educator Voices

Reading specialists and special education teachers who implemented ETSL were interviewed about their experience using EBLI. Student engagement and academic progress emerged as particularly notable areas of success. Reading specialists consistently reported increased student confidence and enthusiasm for learning, with many students actively requesting additional practice time during lessons. This heightened engagement was especially remarkable among students who had previously struggled with other intervention approaches. The program's impact extended beyond motivation to tangible academic gains, as students demonstrated the ability to engage with more challenging grade-level texts and showed improved capacity for decoding multisyllabic words. Additionally, teachers noted improvements in spelling performance and documented gains in oral reading fluency scores.

The implementation process itself revealed both strengths and areas for refinement. Teachers praised ETSL's flexibility and comprehensive approach, noting that the program effectively covered substantial material while maintaining student engagement. Program fidelity aligned with expectations, though experiences with specific components varied. For instance, the Point Game behavior management system yielded mixed results, proving beneficial in some groups while creating unnecessary distractions in others.

Despite the overall positive implementation, educators identified several opportunities for program enhancement. A primary concern centered on resource organization and accessibility, with teachers expressing the need for more streamlined access to online materials and training resources. They also highlighted the importance of grade-level and role-specific support communities to facilitate better collaboration and resource sharing. Additionally, educators requested more targeted support for specific implementation challenges, particularly regarding students with diverse learning needs, such as those requiring additional support with speech or fine motor skills.

The transition from previously established intervention programs emerged as another area warranting attention. Teachers indicated a need for more comprehensive guidance when shifting from other methodologies, suggesting the value of expanded coaching opportunities organized by grade level or specific skill areas. This feedback highlighted the importance of sustained professional development support throughout the implementation process.

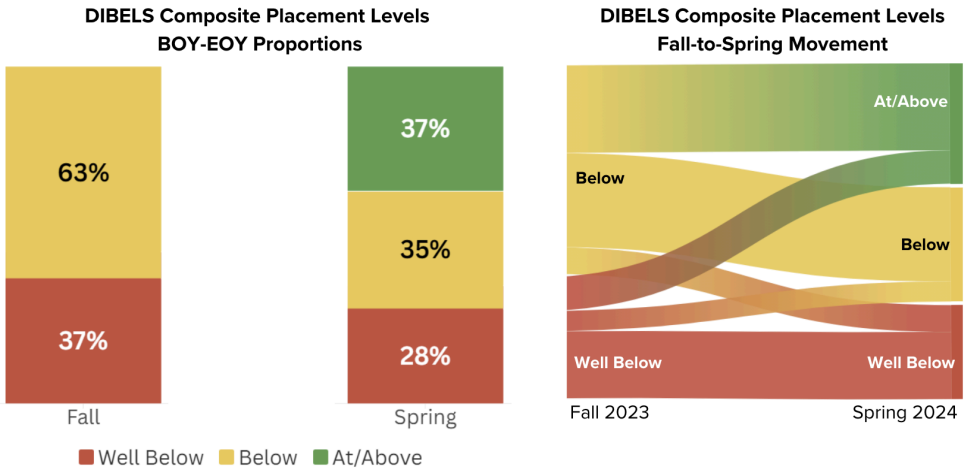
Overall, the results indicate that ETSL has successfully established itself as an effective small-group intervention tool, demonstrating particular strength in fostering student engagement and reading achievement while highlighting specific areas where additional support and refinement could further enhance program effectiveness.

Student Outcomes

DIBELS Outcomes

EBLI students demonstrated meaningful academic growth throughout the 2023-2024 school year. Though all students began below grade level, 37% successfully reached grade-level benchmarks by spring (Figure 1), with the cohort averaging 96.3% progress toward their on-grade-level target composite scores and 90.6% progress toward oral reading fluency targets—indicating many students were just shy of crossing the grade-level threshold (Figure 2).

Figure 1. Movement of Composite Placement Level from Fall to Spring

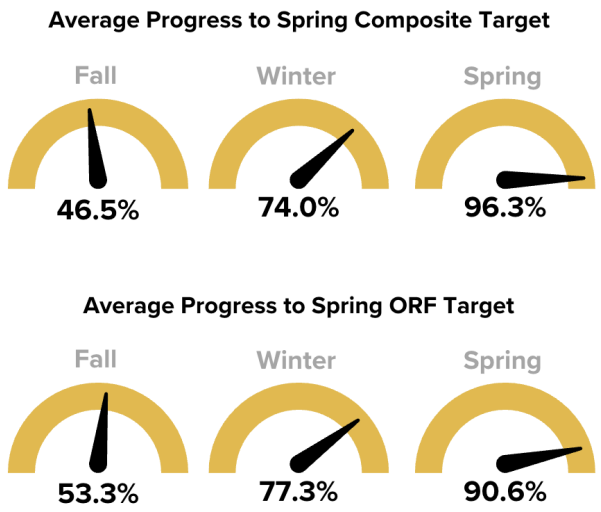


The progress was particularly evident in Oral Reading Fluency (measured by Words Correct Per Minute), where all students began the year "Below" or "Well Below" grade expectations, yet more than a third reached grade-level proficiency by spring. Comprehension skills were assessed using the Maze measure, a group-administered test for grades 2-8 where students select the correct word from three options for every seventh word removed from a passage, with final scores calculated as correct selections minus half of the errors made within three minutes.

Table 8. Assessment Results by Testing Period

Assessment		Fall 2023		Winter 2024		Spring 2024	
Measure	**N**	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**
Composite (% to Target)	49	46.5%	5.4	74.0%	9.3	96.3%	9.0
ORF WCPM (% to Target)	49	53.3%	17.1	77.3%	20.4	90.6%	20.0
Maze Score	49	10.24	5.94	15.08	6.77	19.47	7.27

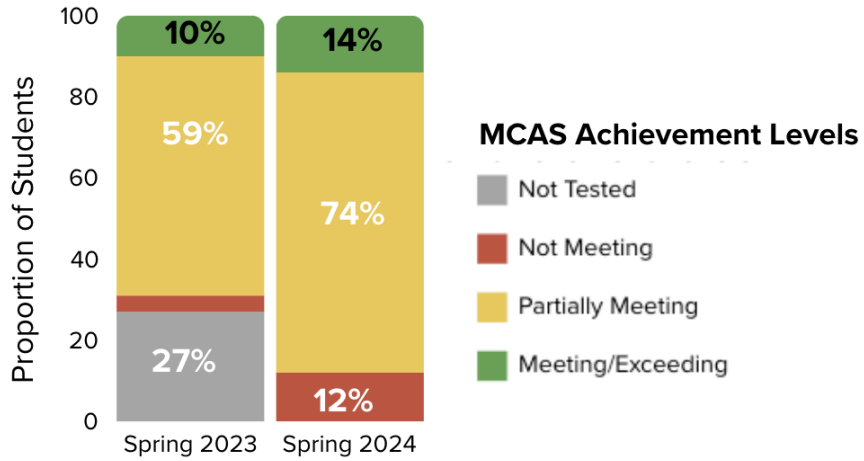
Figure 2. Distance to Target Progress Composite and ORF



Year over Year MCAS Outcomes

In the spring, all students in 3rd grade and up take the Massachusetts Comprehensive Assessment System (MCAS), the statewide standardized test. Students in 3rd grade during the study were not tested in Spring 2023, but they were considered High Risk at the start of the third-grade year. Considering that all students in this study were at risk for not meeting literacy expectations in Fall 2023, it is very encouraging that most students (88%) ended the year at least Partially Meeting expectations, which is considered passing by Massachusetts standards.

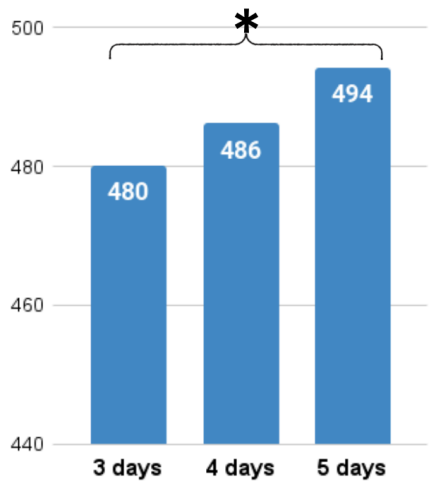
Figure 3. MCAS Level from Pre-EBLI and Post-EBLI



EBLI Dosage on MCAS Outcomes

Students were divided into groups that received EBLI instruction either 3, 4, or 5 days per week, with each session lasting 30 minutes. A small number of students received EBLI instruction 3 days a week for 45 minutes but were excluded from the analysis due to the small group size. Results showed a significant difference in 2024 MCAS scores among the groups. Students who received EBLI 5 days per week scored significantly higher (M = 493.67, SD = 14.57) than those who received it 3 days per week (M = 479.94, SD = 12.74). Statistical analysis confirmed this difference was significant ($F(2, 43) = 4.56$, $p < .05$) with a large effect size (partial eta-squared = 0.17), indicating the substantial impact of intervention frequency on reading achievement as measured by Massachusetts' standardized assessment. This result remained consistent even after accounting for baseline DIBELS benchmark status.

Figure 4. Average MCAS Scale Score by Intervention Frequency



Conclusions and Recommendations

These promising results highlight EBLI's potential as an effective reading intervention, particularly for students who have previously struggled to respond to other approaches. The significant gains made by students receiving more frequent instruction underscore the importance of intervention intensity and suggest that consistent, structured literacy support can help bridge achievement gaps even for those with persistent reading difficulties.

One notable limitation is the selective nature of the sample. As participants were hand-picked students who had demonstrated resistance to previous interventions and were taught by volunteer instructors, the generalizability of these findings may be somewhat constrained. Additionally, the relatively small sample size, while showing statistically significant effects, warrants caution when extrapolating these outcomes to broader student populations.

Based on these findings, we recommend implementing EBLI with higher frequency intervention—ideally five 30-minute sessions per week rather than three—as the data clearly demonstrates stronger outcomes with increased instructional time. Schools should establish comprehensive professional development and coaching support for educators, even though volunteers achieved success in this study. A tiered implementation approach would be strategic, reserving EBLI for students who demonstrate resistance to tier one and standard tier two interventions while integrating consistent data collection protocols to monitor progress and adjust instruction accordingly. Despite current limitations, the substantial progress made by these previously struggling readers suggests that EBLI warrants further exploration as a targeted intervention, particularly when implemented with sufficient frequency and fidelity.

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