

**Product Evidence Base**

# **Lexia LETRS**

# **Efficacy Research**

December 2025



## Introduction

Lexia Learning is the Structured Literacy expert. For more than 40 years the company has focused solely on literacy. Today, Lexia provides a full spectrum of solutions for both students and teachers. Included in the Lexia portfolio is the Language Essentials for Teachers of Reading and Spelling (LETRS) Suite, which includes LETRS 3<sup>rd</sup> Edition (LETRS 3E), LETRS for Administrators, and LETRS for Early Childhood Educators. LETRS teaches the skills needed to master the fundamentals of reading instruction – phonological awareness, phonics, fluency, vocabulary, comprehension, writing, and language. It is designed for educators with an interest in improving literacy. Educators who complete LETRS gain the deep knowledge needed to be literacy and language experts in the science of reading.

As the number of professional learning products focused on the science of reading continues to grow, it is important to understand the impact of the products on improving teacher knowledge, instructional practices, and – indirectly – student reading outcomes. Evidence obtained from both experimental and observational quantitative research can be used to differentiate LETRS from other interventions. This report provides a summary of all empirical research published on the LETRS suite to date, and it constitutes the evidence base for LETRS.

# Key Findings

Across multiple studies, we have found:

- **Educators perceive LETRS training to be valuable.**

Studies that address educator perceptions found that they view LETRS training as playing a valuable role in improving student reading.

- **Improved instructional knowledge.**

Teachers who completed LETRS training demonstrated higher levels of instructional knowledge based on a variety of objective and self-rated measures.

- **Improved quality of instruction.**

Teachers who completed LETRS training demonstrated improved instructional practice as documented in observational studies.

- **LETRS training linked to improved student outcomes.**

Numerous studies have reported improved reading achievement scores for students whose teachers were trained with LETRS.

- **LETRS training tied to better implementation of an evidence-based reading intervention.**

Students who used Lexia Core5 Reading and had teachers trained with LETRS met Core5 usage targets more frequently and had higher reading scores than Core5 students whose teachers did not use LETRS.

LETRS has evolved through multiple editions over the years. Originally developed by renowned literacy expert Dr. Louisa Moats, LETRS was designed to help teachers learn and apply scientific, research-supported methods to improve reading outcomes and prevent reading difficulties. LETRS 3<sup>rd</sup> Edition introduced new features to enhance the program's efficacy and user engagement, including an online delivery model, engaging videos, embedded assessments, reporting capabilities on user progress, and the option for users to receive credit from two universities for completion of college coursework. The content of LETRS is divided into two four-unit volumes, as opposed to the modules of previous editions.

The [LETRS 3E Logic Model](#) illustrates how LETRS 3<sup>rd</sup> Edition is expected to impact schools, educators, and students. It operationally defines the key inputs and activities involved in a LETRS implementation, and the outcomes expected to result. The LETRS 3E Logic Model helps satisfy the "Demonstrates a Rationale" level of evidence for the effectiveness of an educational program as described by the *Every Student Succeeds Act* (ESSA).

A **logic model** is a visual representation of the assumptions and theory of action that underlie the structure of an education program ([IES](#)).

---

LETRS is a professional learning course for educators who aim to improve literacy outcomes for students.

---

The primary purpose of LETRS is to improve teacher knowledge and instructional practices. It is not an instructional intervention for students. When conducting research studies or evaluations, many researchers and state education agencies have paired LETRS with other interventions, such as literacy coaches and instructional programs, to promote improved student reading outcomes. In these studies, the observed effects cannot be attributed to either LETRS or to the other professional learning component(s) in isolation. Despite this limitation, we consider the findings from studies that combine LETRS together with other interventions to present evidence on how the program is used in real-world, complex environments.

The studies summarized in the following tables provide an evidence base establishing the efficacy of LETRS. Included are early studies on LETRS 1<sup>st</sup> and 2<sup>nd</sup> Editions<sup>1</sup> – together with more recent empirical studies on LETRS 3<sup>rd</sup> Edition. Studies on earlier editions demonstrate a rationale that LETRS 3<sup>rd</sup> Edition would be effective for educators and their students. Although research on LETRS 3<sup>rd</sup> Edition is limited, the weight of empirical evidence suggests it can improve teacher knowledge and instruction when used as intended. Evidence for the efficacy of LETRS is described relative to the categories created by the *Every Student Succeeds Act* (ESSA).

## Peer-Reviewed Publications

Lexia values peer-reviewed research. The peer-review process subjects research studies and findings to the scrutiny of other experts in the same field. This process is considered necessary to ensure academic scientific quality. As of August 2025, there are 4 peer-reviewed scientific studies of LETRS as listed below.

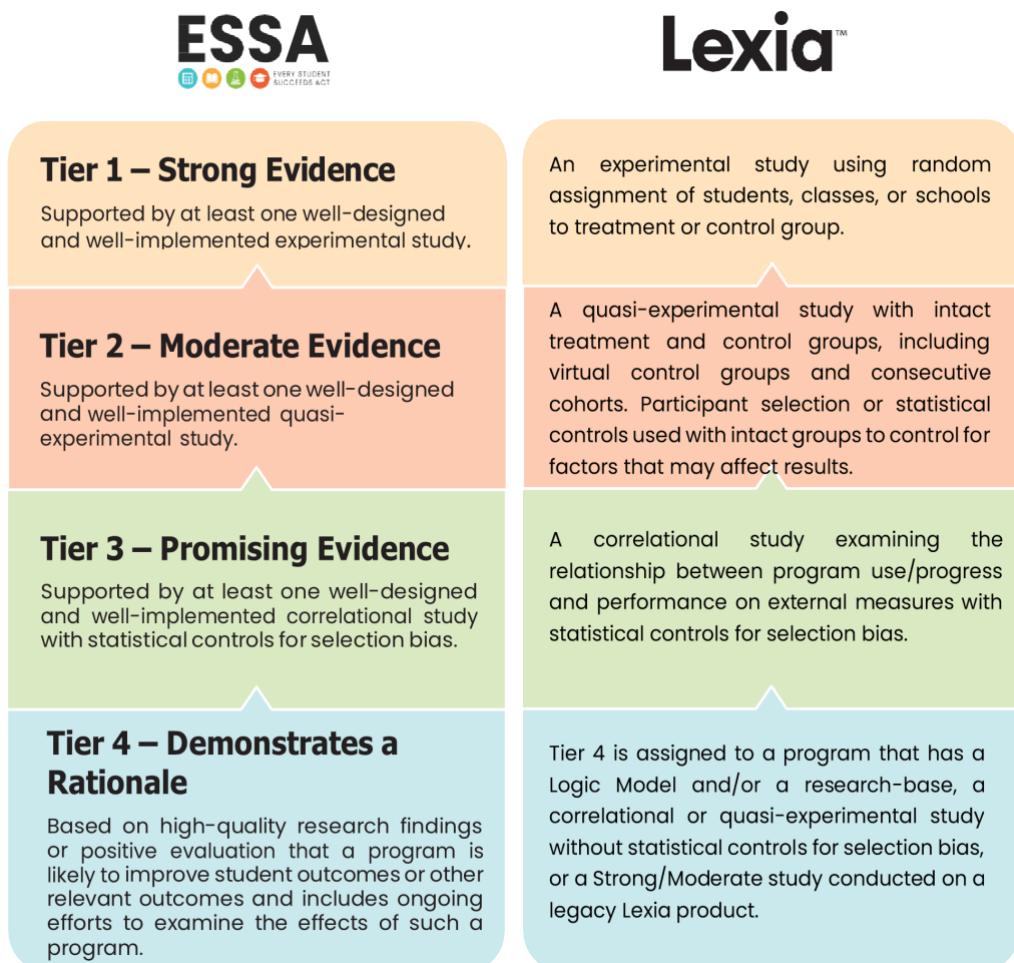
Table 1.  
*Peer-Reviewed Publications of LETRS.*

#	Year	ESSA Tier	Outcomes	Grades	# Students	Targeted Demographics
1	2025	Moderate	Educator Knowledge, Reading Scores	3	-	-
2	2024	Rationale	Reading Fluency	1-5	434	-
3	2011	Rationale	Instruction, Reading Fluency	1	981	Non-Proficient
4	2008	Rationale	Reading Fluency, Word Analysis, Comprehension	2	1,512	Non-Proficient

<sup>1</sup> LETRS 1<sup>st</sup> Edition consisted of 10 modules delivered through print material and in-person professional development sessions. LETRS 2<sup>nd</sup> Edition consisted of 12 modules delivered through print material, in-person professional development sessions, and an online platform. LETRS 3<sup>rd</sup> Edition consists of two four-unit volumes delivered through an online platform, print material, and optionally, professional learning unit sessions.

# Every Student Succeeds Act (ESSA) Evidence Ratings

The *Every Student Succeeds Act* (ESSA) was signed into law in 2015. It was developed by a bipartisan group of legislators to reauthorize the 50-year old *Elementary and Secondary Education Act* (ESEA), the nation's national education law that attempts to provide equal opportunities for all students. One provision of ESSA is the inclusion of tiers of evidence for educational interventions, strategies, and approaches. The left side of the figure on the next page reproduces the language contained in federal statute (ESSA) that describes the four evidence tiers. The right side contains descriptions that permit these tiers to be applied to individual research studies on Lexia products.



Federal law does not provide technical guidelines for how to classify individual research studies into evidence tiers. Consequently, implementation of ESSA has resulted in multiple interpretations of what legislators meant by “Strong,” “Moderate,” and “Promising” studies. For example, the US Department of Education itself has multiple distinct definitions of the evidence tiers on its website ([2019](#), [2022](#), [2025a](#), [2025b](#), [2025c](#)). Additionally, research review organizations like the What Works Clearinghouse and Evidence for ESSA have adopted different and more stringent guidelines to support decision-making that elaborate upon the definitions contained within statute. Importantly, these research review organizations differ in terms of the technical criteria they select for study and program classification.

While Lexia recognizes the value of external research clearinghouses to provide information to support local decision-making, Lexia has always relied on the scientific peer-review process to substantiate our research claims. Lexia uses peer-reviewed publications to provide evidence that individual studies on Lexia products meet ESSA’s intention of “well-designed” and “well-implemented” studies. Although the peer-review process is not perfect, submitting research studies for peer-review is the hallmark of the scientific process. The peer-review process allows for multi-faceted research questions, the use of innovative methods to answer these questions, and richer discussion of the implications for the field of educational technology. This process ensures that the technical quality of a research study and its contribution to the field are vetted by anonymous experts prior to publication.

Lexia’s commitment to peer-review ensures that findings from our research studies can also be used to improve the product for changing customer needs. This continuous cycle of product improvement is reflected in our decision to classify studies on legacy Lexia products as “Demonstrating a Rationale” that the current version of the product will be effective. The peer-review process has persisted across multiple reauthorizations of ESEA, and it allows for variability in study design while preserving the intent of the ESSA descriptions that encourage rigor and evidence. As shown in Table 1 above, **LETRS has six peer-reviewed publications that fit the ESSA criteria of Moderate Evidence**. Thus, Lexia classifies LETRS as having ESSA Moderate Evidence.



External organizations unaffiliated with Lexia have also reviewed LETRS research, and their conclusions about the efficacy of the product vary depending on their review criteria. What Works Clearinghouse has reviewed one study on LETRS ([link](#)).

## Third-Party Evaluations

Several third-party evaluations have been conducted to assess the effectiveness of LETRS. These studies, summarized in Table 2, are independent, professional evaluations commissioned by states or other organizations. They provide external confirmation that LETRS is an effective program.

Table 2.

*Third-Party Evaluations of LETRS.*

#	Year	ESSA Tier	Outcomes	Grades	# Educators	Targeted Demographics
5	2024	Rationale	Themes based on Interviews and Focus Groups	K-3	44	
6	2023	Rationale	Educator Experiences and Perceptions, Reading Achievement	PK-3	1,094	-
7	2023	Rationale	Self-Rated Benefits	PK-3	1,000	-
8	2020	Rationale	Reading Achievement, Risk for Disability	PK-3	584	-
9	2018	Moderate	Letter Naming, Nonsense Word, Segmentation, Oral Reading Fluency	K-1	160	Non-Proficient
10	2018	Rationale	Teacher Knowledge and Practice	K-3	7,638	Non-Proficient
11	2008	Rationale	Reading Content Knowledge, Instructional Practice	2	270	Urban

# State and Federal Evaluations



[Link to Evaluation](#)



[Link to Evaluation](#)



[Link to Evaluation](#)



[Link to Evaluation](#)



[Link to Evaluation](#)



[Link to Evaluation](#)

## Doctoral Dissertations

Several graduate students have published dissertations on LETRS to fulfill requirements to earn a doctoral degree. Table 3 provides summaries of these doctoral studies.

Table 3.

*Doctoral Dissertations on LETRS.*

#	Year	ESSA Tier	Outcomes	Grades	# Educators	Targeted Demographics
<u>12</u>	2024	Rationale	EOG Scores and Growth	3-5	-	Students of Color
<u>13</u>	2024	Rationale	SC READY Scores, MAP Scores	3-5	-	Students of Color, Families Living in Poverty
<u>14</u>	2023	Rationale	Reading Fluency, Teacher Proficiency	K-3	17	-
<u>15</u>	2023	Rationale	Teacher Knowledge, Student Reading	K-2	14	-
<u>16</u>	2022	Rationale	Reading, Vocabulary, Comprehension	1	17	Rural, Families Living in Poverty
<u>17</u>	2021	Rationale	Ratings of self-efficacy, instructional practice	3-5	174	-
<u>18</u>	2018	Rationale	Reading Growth	3	10	Non-Proficient
<u>19</u>	2017	Rationale	Reading Growth	K-3	63	Non-Proficient

## Internal Research and Reports

Lexia also publishes results from internal research to communicate the impact of LETRS. These reports include Research Briefs and Implementation Analyses (see Table 4). A Research Brief is a short, accessible report that provides relevant details about a research study, focusing on key findings. A brief is often released before a full-length manuscript is published with results from the study. An Implementation Analysis examines the impact of Lexia's support services (Success

Partnerships) on the implementation of LETRS. Because these services are intended to promote implementation, outcomes include completion rates and knowledge gains.

Table 4.  
*Research Briefs on LETRS.*

#	Year	ESSA Tier	Outcomes	Grades	# Educators or Students	Targeted Demographics
<u>20</u>	2024	Rationale	Completion Rates, Knowledge Gains	-	865 Educators	-
<u>21</u>	2023	Moderate	Core5 Usage, Reading Scores	K-5	2,302 Students	-

## Future Research

The evidence base for LETRS will expand as a result of a [5-year grant](#) (Award Number R305A240315) awarded to the University of California, Irvine by the U.S. Department of Education, Institute of Education Sciences. The grant entitled “Investigating the Impact of the LETRS Program on Teacher Knowledge, Instructional Practice, and Student Literacy Outcomes” will include a large-scale, ESSA Strong study in which schools will be randomly assign to LETRS or business-as-usual conditions. The researchers will examine LETRS implementation as well as teacher and student outcomes via surveys, classroom observations, and pre-post testing.



[Link to Funded Grant Page](#)

The 21 research studies summarized in the above tables constitute the evidence base for LETRS, providing support for the claim that LETRS is effective at improving educators' knowledge of the science of reading. The studies also demonstrate that LETRS has the potential to improve student outcomes, especially when paired with student interventions. The remainder of this document provides detailed information about the 21 studies that have been completed on LETRS, including links to the original publications where appropriate. As additional evidence about the effectiveness of LETRS becomes available, this document will be updated.



# Schools	335
# Educators	-
# Students	-
Assessment	Colorado Measures of Academic Success (CMAS)
Duration	5 Years
ESSA Tier	Tier 2 (Moderate)
Evaluators	Lexia Research
Grades	3
Program	LETRS
State	Colorado
Targeted Demographics	-
Treatment (Planned)	LETRS Volumes 1 and 2
Treatment (Uptake)	74% – 90% Completion
Year	2025

This study examined student reading scores on the CMAS for schools that used LETRS and matched comparison schools that had other professional development under Colorado's Read Act. It was found that *educators finished, on average, between 74% and 90% of the LETRS course*. This shows that in real-world settings with minimal support from researchers or the state, LETRS can be implemented at scale. Each volume of LETRS consists of an identical pre- and post-test of knowledge of reading instruction. *Educators improved their knowledge of word reading and spelling instruction up to 33 percentage points and knowledge of oral language, vocabulary and reading comprehension instruction up to 26 percentage points*. Students in LETRS schools and comparison schools showed no difference in CMAS reading scores: LETRS mean = 729.2; comparison mean = 731.0. This suggests that LETRS is comparable to other PD programs at improving reading scores. There were no differences in CMAS scores between schools that adopted LETRS early and matched comparison schools, and between schools that had educators with low pretest scores and matched comparison schools. A likely explanation for these null results concerns the nature of the treatment contrast. This study contrasted LETRS to an active comparison group – schools using other PD experiences – rather than to business-as-usual, which differs from most research on the effects of PD programs.



# Schools	1 School
# Educators	-
# Students	434 Students
Assessment	Oral Reading Fluency
Duration	5 Years
ESSA Tier	Tier 4 (Demonstrates a Rationale)
Evaluators	External Researchers
Grades	1-5
Program	LETRS
State	New York
Targeted Demographics	-
Treatment (Planned)	-
Treatment (Uptake)	-
Year	2024

This five-year longitudinal study examined the use of professional development in the Science of Reading (SoR) and its impact on student reading outcomes. Participants were 434 students in grades 1 – 5 enrolled in an urban public school district. Professional development was provided by an (unnamed) organization with a mission to shift teaching practices to align with the SoR. Additional training was offered to coaches and reading specialists through LETRS. Treatment fidelity was established by examining coaching logs and interviewing literacy coaches at the end of the study. By the fifth year of the study, about 90% of teachers were reported to be implementing instruction in alignment with the SoR. Oral Reading Fluency (ORF) scores were collected each spring to measure reading outcomes. No data were collected in 2020 due to the pandemic so interpolated data were used for this year. Both the study group and national norms showed upward trends in ORF scores; however, *the study group showed significantly greater growth than the national norms*. The rate of growth over time was 9% for the study group and 6% for the norms. The researchers attribute the greater growth in the study group to the Science of Reading training and its impact on reading outcomes.

# Schools	25 Schools
# Educators	73 Teachers
# Students	981 Students
Assessments	DIBELS, Surveys
Duration	2 Years
ESSA Tier	Tier 4 (Demonstrates a Rationale)
Evaluators	External Researchers
Grades	1
Outcomes	Instruction, Nonsense Word Fluency, Teacher Attitudes and Perceptions
Program	LETRS 1 <sup>st</sup> Edition
State	Michigan
Targeted Demographics	Non-Proficient
Treatment (Planned)	9 Seminars
Treatment (Uptake)	80% Completely Delivered
Year	2011

This study compared teacher responses, classroom instruction, elements of school context, and student learning in first-grade classrooms that received a LETRS-based seminar with PD coaching and a LETRS-based seminar without PD coaching. The quasi-experimental results showed no differences in teachers' attitudes toward the LETRS-based seminar, the support of their principal, or opportunities for collaboration with other teachers. However, the LETRS-based seminar plus coaching classrooms delivered more phonics instruction, and students made greater improvements in word decoding from fall to spring. *Survey results suggest that educators generally believed that LETRS deepened their understanding of reading subject matter and led them to change their instruction regardless of whether they were supported by a coach.* On the item, "the professional development deepened my understanding of subject matter," 83% of the PD Coach and 90% of the PD No Coach teachers agreed or strongly agreed. These ratings suggest that teachers learned about reading from the LETRS seminars. Supplementary analyses suggested that principal support contributed to the observed results.

# Schools	49 Schools
# Educators	-
# Students	1,512 Students
Assessments	DIBELS, Iowa Test of Basic Reading Skills
Duration	2 Years
ESSA Tier	Tier 4 (Demonstrates a Rationale)
Evaluators	External Researchers
Grades	2
Outcomes	Oral Reading Fluency, Word Analysis, Listening Comprehension, Reading Comprehension
Program	LETRS 1 <sup>st</sup> Edition
State	Michigan
Targeted Demographics	Non-Proficient
Treatment (Planned)	-
Treatment (Uptake)	-
Year	2008

This study examined reading development in second-grade students with specific learning disabilities following the implementation of Michigan's Reading First program. The Michigan Reading First program consisted of (1) LETRS training for general and special education teachers, (2) progress monitoring with DIBELS, (3) flexible instructional grouping for students, and (4) structured and explicit instruction in the five components of early reading. *Students identified with specific learning disabilities grew at the same rate as their peers without disabilities in reading comprehension*, but grew more slowly in oral reading fluency, listening comprehension, and word analysis. The analysis does not compare the Reading First program to a comparison condition, so causal conclusions about the intervention cannot be drawn.

# Schools	-
# Educators	44
# Students	-
Assessments	Researcher Constructed Interviews and Focus Groups
Duration	-
ESSA Tier	Tier 4 (Demonstrates a Rationale)
Evaluators	External Researchers
Grades	K-3
Outcomes	Themes based on Interviews and Focus Groups
Program	LETRS
State	South Carolina
Targeted Demographics	-
Treatment (Planned)	-
Treatment (Uptake)	-
Year	2024

A 2023-24 Appropriations Bill in South Carolina required the Department of Education to provide training in foundational literacy skills to every educator certified in early childhood, elementary or special education who works with students in grades K-3. Lexia LETRS was selected as the professional development course. Researchers interviewed five literacy specialists, six district leaders and seven principals, and conducted five focus groups consisting of 26 teachers, school reading coaches, and interventionists. Four themes were gleaned from the interviews and focus groups. First, interviewees from all four groups in five districts reported that *LETRS training was most successful in schools where administrators were engaged in training and served as instructional leaders*. Second, it was reported that *completing training as a school was highly beneficial* – it created a sense of togetherness. Third, the interviewees said that *LETRS equipped them with important skills, tools, and strategies that increased their ability to identify and address students' needs*. Lastly, it was concluded that *reading coaches are integral to the success of LETRS*. The most frequently cited support for teachers are reading coaches, who were often in charge of managing LETRS training in the schools and helping teachers put what they learned into classroom practice.

# Districts	5 Districts
# Educators	1094 Teachers
# Students	22,605 Students
Assessments	Acadience Reading (DIBELS), iReady Reading Diagnostic, STAR Assessment
Duration	2 Years
ESSA Tier	Tier 1 (rationale)
Evaluators	External Researchers
Grades	K-5
Outcomes	Educator Perceptions, Reading Achievement
Program	LETRS
State	Oregon
Targeted Demographics	Underserved Students, English Learners
Treatment (Planned)	Volumes 1 and 2
Treatment (Uptake)	90% completed Volume 1 and were working on (or completed) Volume 2
Year	2023

This study completed by Pacific Research and Evaluation (PRE) offered the state of Oregon information to help decide on investing in LETRS training statewide. Over two years, educators from five school districts engaged in LETRS training. The study included educator surveys and assessments of student outcomes. Educators generally perceived the combination of LETRS training and their district's literacy curriculum to have a positive impact on student learning. However, lack of time for curriculum preparation made transfer of LETRS training to classroom practices difficult. PRE compared reading scores for students with and without LETRS-trained teachers. Though many LETRS teachers were in early stages of training, promising outcomes were found. In one district *Students of LETRS-trained teachers were 1.71 times more likely to have reading scores at/above benchmark than non-LETRS students*. Further, English Learners (ELs) with LETRS-trained teachers were 2.67 times more likely to have reading scores at/above benchmark than non-LETRS ELs. Similar results were obtained for historically underserved students. Promising outcomes were also found in one of the remaining districts.

# Schools	-
# Educators	1,000 Teachers
# Students	-
Assessments	Researcher Constructed Survey
Duration	-
ESSA Tier	Tier 4 (Demonstrates a Rationale)
Evaluators	External Researchers
Grades	PreK-3
Outcomes	Self-Rated Benefits
Program	LETRS
State	Utah
Targeted Demographics	-
Treatment (Planned)	-
Treatment (Uptake)	-
Year	2023

To improve educational outcomes, the Utah State Board of Education (USBE) awards “Grants for Professional Learning” to Local Education Agencies (LEAs) to use for their teachers in preschool through grade 3. In the 2022–23 school year, 106 LEAs received grant money to fund professional learning in early literacy. At the end of the school year, the USBE received survey feedback from educators about whether the professional learning opportunities had an impact. Approximately 1,000 educators who received professional learning through LETRS responded to the survey. *Nearly all of the educators (99%) said that LETRS challenged them to always or sometimes think differently about their instructional practice.* Over 95% of educators responded that: 1) LETRS deepened their understanding of early literacy; 2) they directly used the knowledge, skills and strategies learned in LETRS with their students; and 3) LETRS helped them to continue to grow as professionals. These outcomes support the claim that LETRS can serve as an effective professional learning tool in early literacy.

# Schools	24 Schools
# Educators	584 Teachers
# Students	8,083 Students
Assessments	Ohio's Reading Achievement Test, State Approved Reading Assessments, Reading Tiered Fidelity Inventory
Duration	4 Years
ESSA Tier	Tier 4 (Demonstrates a Rationale)
Evaluators	External Researchers
Grades	Pre-K-3
Outcomes	Reading Achievement, Risk for Disability
Program	LETRS 3 <sup>rd</sup> Edition
State	Ohio
Targeted Demographics	-
Treatment (Planned)	Volumes 1 and 2, staggered by cohort
Treatment (Uptake)	86% of Cohort 1 and 92% of Cohort 2 completed LETRS
Year	2020

This report describes the results of an Early Literacy Pilot that involved changes to the state and regional infrastructures; the creation of a real-time data system for use at the local, regional, and state levels; and the provision of LETRS to two cohorts of K-3 teachers from 2016 to 2018. *Improvement in educator knowledge during the pilot was statistically significant in both cohorts of educators.* Implementation of a multilevel system of support also significantly improved in both cohorts. *Students in both cohorts improved on a variety of curriculum-based measures.* The percentage of students with disabilities scoring proficient or higher on Ohio's Third Grade English Language Arts Achievement Test improved for Cohort 1, but not Cohort 2. The percentage of students on track for reading proficiency increased for both cohorts. The results of this study are not uniquely attributable to LETRS because the methods do not account for its use alongside other innovations.

# Schools	42 Schools
# Educators	160 Teachers
# Students	2,736 Students
Assessments	DIBELS
Duration	2 Years
ESSA Tier	Tier 2 (Moderate)
Evaluators	External Researchers
Grades	K-1
Outcomes	Letter Naming Fluency, Nonsense Word Fluency, Phonemic Segmentation Fluency, Oral Reading Fluency
Program	LETRS 2 <sup>nd</sup> Edition
State	Pennsylvania
Targeted Demographics	Non-Proficient
Treatment (Planned)	3 Modules
Treatment (Uptake)	-
Year	2018

This study used a quasi-experimental design to estimate the effectiveness of the classroom program portion of the Pennsylvania Dyslexia Screening and Early Literacy Intervention Pilot Program with two cohorts of students. The classroom program consisted of LETRS training, additional professional development aligned with recommendations from the National Reading Panel, and enhanced core and supplemental reading instruction. *Students in kindergarten Cohort 2 scored significantly higher than comparison students in Letter Naming Fluency and Nonsense Word Fluency.* There were no significant differences between groups for Cohort 1 or on Phonemic Segmentation Fluency or Oral Reading Fluency. This study met What Works Clearinghouse standards with reservations and demonstrates moderate evidence of effectiveness.



# Schools	-
# Educators	7,638 Teachers
# Students	-
Assessments	Teacher Knowledge of Early Literacy Skills (TKELS), Classroom Observation Tool
Duration	2 Years
ESSA Tier	Tier 4 (Demonstrates a Rationale)
Evaluators	External Researchers
Grades	K-3
Outcomes	Teacher Knowledge & Practice
Program	LETRS 2 <sup>nd</sup> Edition
State	Mississippi
Targeted Demographics	Non-Proficient
Treatment (Planned)	8 Modules – Online Platform, Print and Professional Learning
Treatment (Uptake)	29% of Educators Completed 8 Modules
Year	2018

This report describes results from an evaluation funded by the Institute of Educational Sciences (IES) of a statewide professional development initiative in Mississippi in which all K-3 educators were provided access to LETRS from January of 2014 to June of 2016. A subsample of 63 high-needs schools were also provided with literacy coaches. The Mississippi Department of Education administered a survey of teacher knowledge to all participants twice each year. *Average teacher knowledge increased from the 48<sup>th</sup> percentile in the Spring of 2014 to the 59<sup>th</sup> percentile in the Fall of 2015.* Instructional practices were rated through observations of 316 teachers in the high-needs schools from winter of 2014 to spring of 2015. *Quality of instruction increased from the 31<sup>st</sup> to the 58<sup>th</sup> percentile. Student engagement during instruction increased from the 37<sup>th</sup> to the 53<sup>rd</sup> percentile. Teaching competencies increased from the 30<sup>th</sup> to the 44<sup>th</sup> percentile.*

# Schools	90 Schools
# Educators	270 Teachers
# Students	5,530 Students
Assessments	Reading Content and Practice Survey (RCPS), Classroom Observations, District Literacy Measures
Duration	2 Years
ESSA Tier	Tier 4 (Demonstrates a Rationale)
Evaluators	External Researchers
Grades	2
Outcomes	Reading Content Knowledge, Instructional Practice
Program	LETRS 1 <sup>st</sup> Edition
State	Eastern and Midwestern States
Targeted Demographics	Urban
Treatment (Planned)	6 of 12 Modules – 8 In-Person Days
Treatment (Uptake)	93.5% of Planned PD Delivered
Year	2008

This study funded by the Institute of Educational Sciences (IES) used a randomized control trial to compare the effects of (1) an 8-day LETRS seminar, (2) the 8-day LETRS seminar paired with instructional coaching from the Consortium on Reading Excellence, and (3) business-as-usual control conditions. The study reported that *both the LETRS seminar and the LETRS seminar plus coaching significantly improved teacher knowledge and teacher use of explicit instruction*. LETRS and LETRS plus coaching respectively had the following effect sizes: 0.37 and 0.38 on teacher knowledge, 0.35 and 0.39 on word-level knowledge, 0.21 and 0.26 on meaning-level knowledge, 0.32 and 0.53 on use of explicit instruction, and 0.08 and 0.03 on student reading scores. The treatment groups also had positive effects on meaningful knowledge and student reading achievement, but the effects were not statistically significant.

# Districts	39
# Educators	-
# Students	-
Assessment	North Carolina End of Grade (EOG) Assessment
Duration	3 years
ESSA Tier	Tier 4 (Demonstrates a Rationale)
Evaluators	External Researchers
Grades	3-5
Outcomes	EOG Scores and Growth Indices
Program	LETRS
State	North Carolina
Targeted Demographics	Students of Color
Treatment (Planned)	-
Treatment (Uptake)	-
Year	2024

This study investigated the impact of LETRS professional development on students in grades 3-5 over three school years. The students in the study achieved scores at Levels 3-5 (proficient reading) on the North Carolina End of Grade (EOG) test. *In all three grades the students showed improvements in mean EOG scores from Year 1 to Year 3.* Students in grades 3 and 4 showed more growth than students in grade 5. The students in grades 3 and 4 had more instruction in foundational skills – the focus of Year 1 in LETRS training. The mean growth index score on the EOG test were .14 and .24 for Years 1 and 2. Schools in the districts showed a proficient amount of growth in both years. *All demographic subgroups – except Asian – showed statistically significant gains in mean EOG scores from Year 1 to Year 3.* This suggests that *LETRS had a positive influence on White, Black, Hispanic, and Multiracial subgroups.* There were, however, significant differences between subgroups in each grade. The Asia subgroup had the highest mean EOG score followed in order by White, Multiracial, Hispanic and Black subgroups. Achievement gaps were most apparent comparing Black and Hispanic subgroups to the White subgroup. The largest disparities between subgroups occurred in grade 5. Even after two years of professional development, achievement gaps in reading scores persisted.



# Schools	3
# Educators	-
# Students	247
Assessment	South Carolina College- and Career-Ready (SC READY) Northwest Academic Evaluation Measures of Academic Progress (NWEA MAP)
Duration	4 years
ESSA Tier	Tier 4 (Demonstrates a Rationale)
Evaluators	External Researchers
Grades	3
Outcomes	SC READY Scores, NWEA MAP Scores
Program	LETRS
State	South Carolina
Targeted Demographics	Students of Color, Families Living in Poverty
Treatment (Planned)	-
Treatment (Uptake)	-
Year	2024

It has been suggested that Black students in South Carolina have struggled with reading due to insufficient support in literacy instruction. This study targeted three elementary schools in a Title 1 rural school district. Black male students in grade 3 were selected from classrooms with teachers who had LETRS training that lasted for around two years. The aim of the study was to examine the effect of LETRS on the success of students on the SC READY summative test and the NWEA MAP. This study considered the year before LETRS (2019), the 2 years of LETRS training (2021, 2022), and the post-training year (2023). *One significant difference was found on the SC READY. Black students in grade 3 scored an average of 63.9 points higher in 2023 compared to 2021.* Analyses did not show any significant differences in NWEA MAP scores across years. Overall, the main positive finding was a significant difference in SC READY scores from the start of LETRS training to the year after training ended. It was concluded that LETRS training had an impact on the academic performance of Black students in grade 3.

# Schools	1 School
# Educators	17 Teachers
# Students	1,265 Students
Assessment	Acadience Reading
Duration	4 years
ESSA Tier	Tier 4 (Demonstrates a Rationale)
Evaluators	External Researchers
Grades	K-3
Outcomes	Acadience Reading Scores, Proficiency Scores on LETRS
Program	LETRS
State	Utah
Targeted Demographics	-
Treatment (Planned)	LETRS Volumes 1 and 2
Treatment (Uptake)	LETRS Volume 1 (plus)
Year	2023

This study addressed two research questions: (1) How did students' reading scores change during the COVID-19 pandemic? (2) What was the relationship between students' reading scores and teachers' proficiency scores in LETRS? The sample consisted of 1,265 students enrolled in a Utah elementary school during the pandemic and 17 teachers who taught in the same school. Students took the Acadience Reading test at the beginning of year (BOY) and end of year (EOY) in each school year. The teachers completed LETRS training over two years. Their proficiency scores on LETRS Volume 1 posttest were used in analyses. Results showed more severe learning loss in the second year than the first year of the pandemic, and younger students had greater learning loss and recovered more slowly than older students. For question (2), change scores were found for each student by subtracting BOY from EOY composite reading scores during the 2021-22 school year. An average change score was calculated for students with the same teacher. *A positive correlation of  $r = .398$  was found between class average change scores and teachers' LETRS proficiency scores*, which suggests LETRS training may have contributed to better reading scores for students during the pandemic.

# Schools	1 School
# Educators	14 Teachers
# Students	-
Assessment	Phonological Awareness Literacy Screening
Duration	5 years
ESSA Tier	Tier 4 (Demonstrates a Rationale)
Evaluators	External Researchers
Grades	K-2
Outcomes	Student Reading Growth
Program	LETRS
State	Virginia
Targeted Demographics	-
Treatment (Planned)	4 Units
Treatment (Uptake)	4 Units
Year	2023

This study focused on using LETRS training to increase teacher knowledge in the science of reading and consequently improve reading achievement of students. Fourteen teachers received LETRS training. Before beginning LETRS, teachers completed a pre-assessment of their instructional reading knowledge. The pre-assessment mean was 73% correct. Following LETRS, their performance rose to 94% correct. In addition to LETRS training, teachers received instructional feedback on implementing effective intervention strategies. They completed three Plan-Do-Study-Act (PDSA) cycles. For each cycle, data were analyzed to determine the effectiveness of the intervention. Also implemented were 30-day intervention plans. The teachers tiered students and targeted areas of weakness to address each 30-day period. The PALS was used to measure reading achievement. At the beginning of the study, 68% of students met PALS benchmarks. *By the end of the third PDSA cycle, there was an improvement to 82% of students meeting PALS benchmarks.* These findings suggest that providing teachers with LETRS training and instructional feedback leads to better reading outcomes for the students.

# Schools	8 Schools
# Educators	17 Teachers
# Students	359 Students
Assessments	iReady Diagnostic
Duration	1 Year
ESSA Tier	Tier 4 (Demonstrates a Rationale)
Evaluators	External Researchers
Grades	1
Outcomes	Foundational Skills, Vocabulary, Comprehension
Program	LETRS 3 <sup>rd</sup> Edition
State	South Carolina
Targeted Demographics	Rural, Non-Proficient
Treatment (Planned)	-
Treatment (Uptake)	Teachers completed 75% of LETRS
Year	2022

This study examined whether average first grade reading ability differed in two rural school districts: one in which educators completed LETRS and one in which they did not. The study used *t*-tests to compare the fall, winter, and spring iReady benchmark scores of the students enrolled in the two districts. Educators completed 25% of LETRS by the time of the fall benchmark, 50% of LETRS by the winter benchmark, and 75% by the spring benchmark. *Though there was no significant difference in student reading performance on the fall benchmark, students in the LETRS district had higher average scores by the winter benchmark, and this difference was significant by the spring benchmark.*

# Districts	
# Educators	174
# Students	-
Assessment	Teachers' Sense of Efficacy scale, Framework for Teaching
Duration	1 year
ESSA Tier	Tier 4 (Demonstrates a Rationale)
Evaluators	External Researchers
Grades	3-5
Outcomes	Self-efficacy ratings and self-ratings of instructional practice
Program	LETRS
States	Northeastern States
Targeted Demographics	
Treatment (Planned)	12 Modules
Treatment (Uptake)	3-6 Modules
Year	2021

The purpose of this study was to determine whether reading teachers' participation in LETRS® was effective in enhancing their self-efficacy and reading instructional. The researcher used a convenience sample of reading teachers in grades 3- 5. There were 89 teachers who participated in LETRS professional development (PD group) and 85 teachers who did not use LETRS (NPD group). Teachers' Sense of Efficacy scale was used to assess self-efficacy on a 10-point scale. On the student engagement subscale, the PD group scored an average of 7.11 and the NPD group scored an average of 7.02. On the instructional strategies subscale, the PD group averaged 7.34 and the NPD group averaged 7.34. On the classroom management subscale, the PD group averaged 7.11 and the NPD group averaged 7.35. Framework for Teaching was used to assess teachers' reading instructional practice. Teachers rated themselves on a 4-point scale. The PD group averaged 3.15 and the NPD group averaged 3.22. None of the group differences on these scales were statistically significant. As noted by the researcher, a main limitation with using self-assessment measures is that teachers' responses may reflect a desirability bias – especially when rating their own instructional practice.



# Schools	1 School
# Educators	10 Teachers
# Students	47 Students
Assessments	STAR Reading, Mississippi Academic Assessment Program (MAAP), Mississippi Kindergarten-3 Assessment (MKAS)
Duration	2 Years
ESSA Tier	Tier 4 (Demonstrates a Rationale)
Evaluators	External Researchers
Grades	3
Outcomes	Student Reading Growth
Program	LETRS 2 <sup>nd</sup> Edition
State	Mississippi
Targeted Demographics	Non-Proficient
Treatment (Planned)	15 Sessions – Online Platform, Print and Professional Learning
Treatment (Uptake)	9 of 10 Teachers Completed the Training
Year	2018

In this mixed methods study, ten third-grade teachers completed 15 sessions of LETRS and implemented the Collaborative Classroom intervention. Growth scores for 47 of their students in the bottom quartile of reading performance were compared to their growth scores for the previous academic year. *Post-intervention growth scores were significantly higher than pre-intervention growth.* There was no improvement in the distribution of student proficiency ratings. *Ninety-eight percent of the students in the post-intervention year passed one of the required state achievement tests.* Because the LETRS training occurred alongside the implementation of Collaborative Classroom, the results cannot be attributed solely to LETRS or Collaborative Classroom.

# Schools	4 Schools
# Educators	63 Teachers
# Students	1,208 Students
Assessments	Early Literacy Student Achievement in Reading (STAR)
Duration	1 Year
ESSA Tier	Tier 4 (Demonstrates a Rationale)
Evaluators	External Researchers
Grades	K-3
Outcomes	Student Reading Growth
Program	LETRS 2 <sup>nd</sup> Edition
State	Mississippi
Targeted Demographics	Non-Proficient
Treatment (Planned)	-
Treatment (Uptake)	-
Year	2017

This study compared reading growth trends in four lower performing elementary schools in Mississippi. The Mississippi Department of Education supplied two schools with literacy coaches that had been trained in LETRS and the Transformational Coaching Process. The comparison schools were lower performing schools that did not receive literacy coaches. *Kindergarten students in schools with coaches had significantly higher growth levels than students in comparison schools.* First grade students had significantly lower levels of growth than students in comparison schools. There was no statistically significant difference in growth levels between groups in second and third grade.



# Districts	5
# Educators	865
# Students	-
Assessment	Completion Rates, Knowledge Gains
Duration	2 Years
ESSA Tier	Tier 4 (Demonstrates a Rationale)
Evaluators	Lexia Research
Grades	-
Program	LETRS
Implementation Support	Lexia Success Partnerships
State	-
Targeted Demographics	-
Treatment (Planned)	LETRS Volumes 1 and 2
Treatment (Uptake)	86% Completion
Year	2024

This study was conducted to examine the impact of Lexia Success Partnerships on LETRS progress, completion of the full two-volume course of study, and knowledge gains obtained in LETRS. Five districts from the same geographic region were included in the study. Teachers in all districts received access to LETRS. In addition, District 1 received implementation support via a Success Partnership, while Districts 2, 3, 4 and 5 did not receive support. At the completion of the LETRS program, district-level data were analyzed to compare progress through and completion of LETRS and associated knowledge gains across the five districts. All analyses compared District 1 outcomes with aggregated data from the four comparison districts. It was found that *teachers in District 1 completed LETRS at a significantly higher rate (86%) than teachers in the comparison condition (60%)*. On average, teachers in District 1 finished LETRS in 128 fewer days and completed 18.5% more LETRS units than comparison teachers. Lastly, *teachers in District 1 displayed 4.17 more knowledge point gains in LETRS Volume 1 and 4.12 more knowledge point gains in LETRS Volume 2 than comparison teachers*. These outcomes point to the value of Success Partnerships to support the implementation of LETRS.

# Schools	8 Schools
# Teachers	114 Teachers
# Students	2,302 Students
Assessments	Acadience Reading
Duration	1 Year
ESSA Tier	Tier 2 (Moderate)
Evaluators	Lexia Research
Grades	K-5
Outcomes	Core5 Usage, Acadience Reading Scores
Programs	Lexia LETRS, Lexia Core5 Reading
State	-
Targeted Demographics	-
Treatment (Planned)	Volumes 1 and 2
Treatment (Uptake)	57%
Year	2023

A quasi-experimental study examined the added value of LETRS-trained teachers in classrooms using Core5. The sample included 2,302 students in grades K-5. The treatment group consisted of Core5 students whose teachers began or completed LETRS. The control group was made up of Core5 students whose teachers did not begin LETRS. Analyses used propensity score matching to estimate the added value of using Core5 and LETRS together in terms of 1) students' meeting Core5 usage targets, and 2) their Acadience composite reading scores. Propensity score matching ensured that the two groups were similar in initial reading ability and various demographic characteristics. Multilevel regression models were used to account for clustering of students within classrooms. In the first analysis, *students whose teachers used LETRS met Core5 usage targets more frequently than students whose teachers did not use LETRS*. In the second analysis, there were no significant differences between groups in beginning-of-year and middle-of-year reading scores. However, *at the end-of-year students whose teachers used LETRS had higher reading scores than students whose teachers did not use LETRS. The difference was statistically significant with an effect size of 0.26*. Overall, this study shows the added benefits of LETRS training for teachers who use Core5.

## References

Brady, S.H.R. (2023). Understanding Elementary Student Reading Outcomes and their Relationship with Required Teacher Professional Development during the COVID-19 Pandemic. [William Howard Taft University].  
<https://www.proquest.com/openview/ca7a7785994eb6b16d67b328f890cab4/1?pq-origsite=gscholar&cbl=18750&diss=y>

Burk, K., Folsom, J., Oakley, N., & Smith, K. (2018). Educator outcomes associated with implementation of Mississippi's K-3 early literacy professional development initiative. U.S. Department of Education, Institute of Education Sciences, Regional Educational Laboratory Program.  
<http://ies.ed.gov/ncee/rel/Products/Region/southeast/Publication/3859>

Campbell, T. (2024). *The Impact of the Science of Reading Required Training on the Reading Proficiency Levels of Third-Grade African American Male Students* (Publication No. 31301294) [Doctoral dissertation, Gardner-Webb University]. ProQuest Dissertations Publishing.

Carlisle, J. F., & Berebitsky, D. (2011). Literacy coaching as a component of professional development. *Reading and Writing*, 24(7), 773–800. <https://doi.org/10.1007/s11145-009-9224-4>

Clark, J., Anderson, L., Wiebke, S., & Thronson, J. (2023). Grant for Professional Learning and Elementary Teacher Preparation Assessment Grant. The Utah State Board of Education, Report to the Education Interim Committee. <https://files.eric.ed.gov/fulltext/ED638403.pdf>

Duffy, M.A., Mazzye, D.L., Storie, M., & Lamb, R.L. (2024). Professional development and coaching in the science of reading: Impacts on oral reading fluency in comparison to national norms. *International Journal of Instruction*, 17(1), 533-558. [https://www.e-iji.net/dosyalar/iji\\_2024\\_1\\_28.pdf](https://www.e-iji.net/dosyalar/iji_2024_1_28.pdf)

Durrance, S., & Johnson, B. (2024). *South Carolina LETRS Training Implementation Analysis*.  
[https://region6cc.uncg.edu/wp-content/uploads/2024/10/SCLETRSImplementationAnalysis2023-24\\_RC6\\_028.pdf](https://region6cc.uncg.edu/wp-content/uploads/2024/10/SCLETRSImplementationAnalysis2023-24_RC6_028.pdf)

Garet, M., Cronen, S., Eaton, M., Kurki, A., Ludwig, M., Jones, W., Uekawa, K., Falk, A., Bloom, H., Doolittle, F., Zhu, P., & Sztejnberg, L. (2008). The Impact of Two Professional Development Interventions on Early Reading Instruction and Achievement. National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

<https://ies.ed.gov/pubsearch/pubsinfo.asp?pubid=NCEE20084034>

Greene, M.M. (2023). Low Reading Achievement in Primary Grades. [Radford University].  
[https://wagner.radford.edu/1051/9/MGreene\\_Dissertation\\_FINAL.pdf](https://wagner.radford.edu/1051/9/MGreene_Dissertation_FINAL.pdf)

Hart, B. (2024). *An Initial Investigation of Measuring Change in Reading Proficiency During LETRS Implementation* (Publication No. 31632599) [Doctoral dissertation, Gardner-Webb University]. ProQuest Dissertations Publishing.

Houser, A. C. (2021). *Effects of the LETRS® Reading Professional Development on Teachers' Self-Efficacy and Reading Instruction* (Publication No. 28317184) [Doctoral dissertation, Grand Canyon University]. ProQuest Dissertations Publishing.

Katz, L. A., Stone, C. A., Carlisle, J. F., Corey, D. L., & Zeng, J. (2008). Initial progress of children identified with disabilities in Michigan's Reading First schools. *Exceptional Children*, 74(2), 235–256. <https://doi.org/10.1177/001440290807400206>

Kuchle, L., Brown, S., & Coukoulis, N. (2018). Annual Evaluation Report for the Pennsylvania Dyslexia Screening and Early Literacy Intervention Pilot Program: Pilot Year 2, 2016–2017 School Year. American Institutes for Research.

<https://files.eric.ed.gov/fulltext/ED582923.pdf>

Lexia. Impact of Lexia® LETRS® on Lexia® Core5 Usage and Students' Reading Ability.  
<https://www.lexialearning.com/resources/research/dual-impact-of-lexia-english-and-core5-on-the-language-and-literacy-achievement-of-emergent-bilingual-students>

Lexia. Lexia Success Partnerships Support Lexia LETRS® Progress and Knowledge Gains. [Lexia Success Partnerships Support Lexia LETRS Progress and Knowledge Gains | Lexia](https://lexialearning.com/partnerships/lexia-success-partnerships-support-lexia-progress-and-knowledge-gains)

Ohio Department of Education Office for Exceptional Children (2020). Ohio's Part B State Systemic Improvement Plan Phase III Year 4 Report. <https://education.ohio.gov/getattachment/Topics/Special-Education/Early-Literacy/Ohio-Part-B-SSIP-Phase-III-Year-4-Report.pdf.aspx?lang=en-US>

Pacific Research and Evaluation (2023). LETRS Implementation & Impacts in Multnomah County. <https://www.oregon.gov/ode/rules-and->

[policies/StateRules/Documents/Division%202022%20Documents/GEER%20LETRS%20Final%20Report%2011-14.pdf](https://www.olemiss.edu/policies/StateRules/Documents/Division%202022%20Documents/GEER%20LETRS%20Final%20Report%2011-14.pdf)

Tillman, T. (2018). Improving Reading Achievement at Greenleaf Elementary School: A Mixed Methods Study [University of Mississippi]. <https://eric.ed.gov/?id=ED591206>

Trivelli-Bowen, B. (2017). The Impact Literacy Coaches Have on Mississippi's Lower Performing Schools [University of Mississippi].

<https://egrove.olemiss.edu/cgi/viewcontent.cgi?article=1476&context=etd>

Woodward, V. (2023). Science of Reading

Professional Development: A Quantitative Study in Two Rural First Grades [Charleston Southern University].

<https://www.proquest.com/openview/0ebaf75eb437f53fdcaa7f6d6f572ef93/1?pq-origsite=gscholar&cbl=18750&diss=y>



Lexia®, a Cambium Learning Group company, is the Structured Literacy expert. For more than 30 years, the company has focused solely on literacy, and today provides science of reading-based solutions for both students and educators. With robust offerings for differentiated instruction, personalized learning, assessment, and professional learning, Lexia helps more learners read, write, and speak with confidence.



[lexialearning.com](https://lexialearning.com)

© 2025 Lexia, a Cambium Learning Group company. Lexia®, LETRS®, and other trademarks, names, and logos used herein are the property of Lexia and/or its subsidiaries, and are registered and/or used in the United States and other countries. Additional trademarks included herein are the property of their respective owners. All rights reserved.