The Arkansas Department of Education (ADE), in collaboration with the University of Florida Literacy Institute (UFLI) and B&W Evaluation, proposes the ***UFLI Arkansas Effectiveness Study (UFLI-AR)*** for the U.S. Department of Education's Education Innovation and Research (EIR) Mid-Phase program. The project will rigorously evaluate and scale a comprehensive, evidence-based system for developing foundational reading skills within a multitiered framework. Designed to ensure that every child in Arkansas—particularly those in rural and under-resourced communities—reads proficiently by third grade, UFLI-AR integrates three aligned innovations that together form a coherent continuum of literacy supports. UFLI Foundations provides universal K–2 instruction grounded in the science of reading (SoR), systematically building phonological awareness, decoding, encoding, and oral reading fluency. The UFLI Assessment and Planning Portal automates progress-monitoring analysis and generates data-driven small-group lesson plans, enhancing teachers' capacity to deliver responsive instruction. Finally, UFLI Intervention and the Project Read AI Tutor extend support through high-impact small-group and one-on-one tutoring for students requiring intensive assistance. Collectively, these components create a full, scalable model for ensuring *all* students in Arkansas gain the skills needed to become confident, proficient readers.

For the first time, this project will integrate the full UFLI continuum of resources, including the UFLI Toolbox, Project Read AI collaboration tools, UFLI Intervention, and the professional development system anchored by the UFLI Academy, for statewide implementation. This cohesive model unites instructional content, teacher training, and data systems into a fully aligned, sustainable framework for improving K-2 literacy outcomes across Arkansas. The project directly addresses the EIR Mid-Phase program's **Absolute Priority: Promoting Evidence-Based Literacy** and meets both **Competitive Preference Priorities**. Under **Priority**

1, UFLI-AR is led by the Arkansas Department of Education and will serve eighty elementary schools, with a focus on rural and high-poverty districts within the state's *Reading Initiative for Student Excellence (R.I.S.E.)* network. Under **Priority 2**, the project equips educators to integrate UFLI Intervention within their classrooms and implement it with fidelity, and introduces an innovative, research-based application of artificial intelligence (AI) for high-impact tutoring. The Project Read AI Tutor operates as a high-impact tutoring intervention within the UFLI continuum, delivering frequent, data-driven, and adaptive one-on-one instruction aligned with core classroom lessons. By linking assessment and instruction in real time, it demonstrates how AI can integrate, extend, and sustain evidence-based literacy practice at scale.

Building on UFLI's reputation for transforming early literacy instruction, UFLI-AR will produce rigorous evidence of effectiveness and embed the tools, professional learning systems, and state infrastructure necessary for lasting, scalable impact. UFLI's growth has been driven by educators who, through word-of-mouth, adopted its evidence-based tools to strengthen reading instruction. Building on this grassroots foundation, UFLI-AR will scale to systematic, statewide implementation, positioning Arkansas as a national leader in evidence-based literacy reform.

A. Significance

Reading proficiency is the foundation of academic success and lifelong opportunity. Children who do not read proficiently by third grade are four times more likely to drop out of high school (Hernandez, 2011) and face lasting barriers to education, employment, and civic participation. Weak literacy skills perpetuate intergenerational poverty and increase the likelihood of incarceration (World Literacy Foundation, 2018). Thus, ensuring that every child receives high-quality early literacy instruction is one of the most urgent priorities in education.

Despite decades of research on how children learn to read, far too many students continue to struggle. In 2024, only 31% of fourth-grade students nationwide performed at or above the *Proficient* level on the National Assessment of Educational Progress (NAEP), while 40% scored below *Basic*, indicating only partial mastery of grade-level skills. Outcomes were still lower for vulnerable groups—just 10% of students with disabilities and 20 percent of students from low-income families reached proficiency (National Center for Education Statistics [NCES], 2024). The challenge in Arkansas is even more severe: only 28% of fourth graders performed at or above *Proficient* and 44% scored below *Basic*. These figures underscore the need for scalable, sustainable models of evidence-based early literacy instruction.

A Proven Scientific Foundation for Innovation. The *Simple View of Reading* (Gough & Tunmer, 1986; Hoover & Gough, 1990; Hoover & Tunmer, 2022) defines reading comprehension as the product of decoding and language comprehension. Research confirms that automatic word recognition is a prerequisite for comprehension (Catts et al., 2006; Lonigan et al., 2018). Foundational skills—phonemic awareness, decoding, and encoding—enable fluent reading and efficient comprehension (Samuels & Flor, 1997; Torgesen & Hudson, 2006; Kim et al., 2021). When these skills are weak, early difficulties compound over time (Leach et al., 2003; Ehri, 2014, 2020; Moats, 2020). Explicit and systematic phonics instruction is one of the few practices supported by broad scientific consensus (Foorman et al., 2016; National Reading Panel, 2000; [redacted]), yet national surveys show that only about one in five early-elementary teachers employ it consistently (Kurtz et al., 2019). Bridging this persistent research-to-practice gap requires interventions that are both scientifically grounded and feasible for real classrooms.

Integrating Proven and Emerging Components. UFLI Foundations is a structured-literacy program providing explicit, systematic instruction in phonemic awareness, decoding, encoding, and connected-text reading for grades K–2 ([redacted]). Designed to make research-based phonics instruction practical and affordable, particularly in rural and under-resourced schools, its instructional design reflects decades of research on how children develop orthographic knowledge (Ehri, 1992, 1997, 2014, 2020). Lessons employ connected phonation (Gonzalez-Frey & Ehri, 2021) and articulatory-gesture awareness (Boyer & Ehri, 2011; Castiglioni-Spalten & Ehri, 2003) to strengthen the connection between sounds and letters for efficient word recognition.

UFLI is more than a single program—it is an integrated system of tools that strengthen instruction, data use, and professional capacity. The UFLI Assessment & Planning Portal turns classroom progress-monitoring data into actionable insights, automatically grouping students and generating lesson plans to keep instruction responsive. The UFLI Intervention extends these data by helping teachers design precise, skill-focused lessons for students needing additional support while staying aligned to the instructional sequence. The UFLI Academy anchors ongoing learning through concise modules and virtual coaching that translate the science of reading into daily practice. Embedded within this continuum, the Project Read AI Tutor extends UFLI's reach through adaptive, high-impact tutoring that listens as students read aloud, detects phoneme–grapheme errors in real time, and provides individualized feedback and scaffolding. Using speech-recognition and natural-language-processing technologies, the Tutor generates decodable texts that precisely match each learner's mastery level and provides teachers with analytics on accuracy and growth—reducing the burden of manual data interpretation while deepening instructional precision. Functioning as an integrated element of UFLI's multi-tiered framework, the Tutor connects seamlessly with the Portal and Intervention Companion so that supplemental practice and tutoring remain fully aligned with core instruction. Together, these components create a dynamic infrastructure that unites teaching, assessment, and intervention within a coherent, scalable system for sustained literacy improvement.

Advancing the Field Through Rigorous Evaluation. UFLI-AR represents the next stage in this evolution. For the first time, the project will integrate the full UFLI continuum—including Foundations, the Portal, the Intervention, the Academy, and the Project Read AI Tutor—into a unified, statewide literacy framework. The impact study will rigorously test this system through a randomized controlled trial across 80 elementary schools in Arkansas. The evaluation will generate high-quality causal evidence on the effectiveness and scalability of a fully integrated, technology-enabled literacy system.

What distinguishes UFLI-AR as an innovative EIR Mid-Phase project is its introduction of an emerging AI-enabled tutoring component within a proven, evidence-based continuum. Using data from the UFLI Portal, the AI Tutor delivers frequent, adaptive one-to-one or small-group practice aligned with each student's instructional trajectory. Real-time corrective feedback strengthens accuracy, automaticity, and fluency, while analytics inform teacher decision-making. By embedding the Tutor within—not apart from—the UFLI system, the project demonstrates a transparent model for leveraging AI to enhance rather than replace teacher expertise.

Building on a Strong Evidence Base. Preliminary evidence demonstrates that UFLI Foundations substantially improves early reading achievement across multiple contexts. A quasi-experimental study with 21 schools found that students receiving UFLI Foundations outperformed matched peers by large margins (g = 1.20 for kindergarten; g = 1.42 for grade 1; [redacted]). Most recently, [redacted] conducted a quasi-experimental evaluation of UFLI Foundations implemented as part of a multi-tiered system of supports (MTSS) in a large, high-poverty district. The study found significant, positive treatment effects on key early literacy outcomes. The largest effects were for decoding (NWF-CLS; g = 0.44), phonemic awareness (PSF; g = 0.29), and oral-reading accuracy (ORF; d = 0.20). Together, these studies provide converging evidence that UFLI Foundations strengthens Tier 1 instruction within MTSS frameworks and accelerates foundational reading growth, particularly in low-income schools. UFLI-AR will extend this evidence by testing the full continuum under authentic statewide conditions using random assignment to meet WWC standards without reservations.

Design for Sustainability and Scale. UFLI-AR also advances innovation in implementation and sustainability. Teachers participate in approximately 12 hours of professional learning that combine essential reading science with hands-on practice. The UFLI Academy supports this preparation through asynchronous modules, webinars, and coaching. Teachers upload brief lesson videos reviewed by trained UFLI coaches via the GoReact platform, receiving time-stamped feedback and collaborative goal-setting (a model currently used successfully with 1,300+ educators). This virtual approach reduces cost while maintaining fidelity to core instructional principles (Archer & Hughes, 2011; McLeskey et al., 2017). District and school-based coaches reinforce learning through local feedback and planning sessions, creating a sustainable professional infrastructure.

The UFLI Portal further enhances scalability by automating data analysis and instructional planning. Teachers enter weekly progress-monitoring results; the system analyzes responses, groups students, and recommends targeted review lessons. For students needing more intensive support, UFLI Intervention provides structured decision rules for selecting target skills and monitoring mastery. Collectively, these features operationalize a true multi-tiered system of supports (MTSS) while reducing the cognitive and logistical demands on teachers.

From Grassroots to Statewide Implementation. UFLI's growth to date has been largely organic, driven by teachers and districts that discovered its effectiveness through word-of-mouth. Thousands of educators nationwide have adopted UFLI resources independently to strengthen foundational instruction. UFLI-AR marks the transition from grassroots adoption to systematic statewide implementation under ADE leadership. Embedding UFLI within Arkansas's literacy infrastructure will test how a coherent, evidence-based continuum can be scaled and sustained across diverse local contexts. This shift positions Arkansas as a national leader in the next generation of literacy innovation—combining the rigor of structured literacy with the precision and responsiveness of AI-supported tutoring.

Contribution to the Field. UFLI-AR will generate generalizable knowledge on how to scale evidence-based literacy systems responsibly and effectively. The study will identify conditions under which (a) a fully integrated structured-literacy model produces meaningful improvements in foundational reading skills under real-world conditions, (b) automated data tools and coaching maintain fidelity and impact across contexts, and (c) AI-enabled tutoring enhances outcomes without increasing teacher burden. The findings will inform both policy and practice by clarifying how states can align professional learning, data systems, and technology within multi-tiered frameworks to accelerate reading proficiency.

By integrating explicit, systematic instruction with automated data-driven supports, embedded professional learning, and adaptive AI tutoring, UFLI-AR embodies the EIR Mid-Phase goal of testing and refining innovative, evidence-based models for large-scale impact. Through this effort, Arkansas will not only improve reading outcomes for its youngest learners but also offer the nation a replicable framework for uniting structured literacy and technology to ensure that every child reads proficiently by third grade.

B. Strategy to Scale

B.1. Unmet demand for broader implementation aligned with the proposed level of scale

UFLI has already demonstrated extraordinary reach and demand. As of September 2025, more than 600,000 teachers worldwide use UFLI Foundations, serving an estimated 10 million students annually across all 50 states, every Canadian province, and more than 60 countries. In Arkansas alone, approximately 180 of the state's 534 elementary schools have adopted some component of the UFLI continuum. This widespread, organic growth reflects educators' urgent search for coherent, evidence-based literacy materials aligned with the science of reading. Yet the overwhelming demand for training and implementation support far exceeds available capacity: while over 600,000 teachers use UFLI, only about 100,000 have received formal professional development, and most rely on free webinars or peer-led communities for guidance.

Arkansas offers a uniquely ready yet under-supported context for statewide implementation. The Right to Read Act (2017) and LEARNS Act (2023) require all K–6 teachers to demonstrate proficiency in the SoR and mandate district alignment with evidence-based practices. The Arkansas Department of Education (ADE) has invested heavily in literacy coaches and professional learning, yet outcomes remain stagnant. On the 2024 NAEP, 70% of Arkansas fourth graders scored below proficient in reading, nearly identical to national rates. Statewide Arkansas Teaching and Learning Assessment System (ATLAS) results show only 35% of students in grades 3–12 meeting English Language Arts (ELA) standards, with especially low performance in rural and high-poverty districts. These persistent gaps reveal a critical need for a coherent, scalable system that translates state mandates into daily classroom practice.

Educators across Arkansas have voiced this need clearly. Teachers and administrators cite fragmented resources, limited coaching, and inconsistent alignment between core instruction and intervention. Rural districts struggle most to sustain professional learning and data-driven supports. Early ADE-UFLI pilots demonstrated precisely the coherence educators have sought—structured, ready-to-use lessons, integrated data systems, and embedded professional learning. As a result, ADE identified the UFLI continuum as a top priority for statewide expansion.

The UFLI-AR project responds directly to this demand by scaling the full continuum across 80 elementary schools—a scope large enough to capture Arkansas's geographic and demographic diversity yet manageable for statewide coordination and rigorous evaluation. This initiative will meet the state's literacy mandates, strengthen teacher capacity, and provide a scalable national model for implementing SoR with fidelity and impact. Table J.1 presents key indicators of early literacy need in Arkansas relative to national averages, highlighting persistent proficiency gaps and the concentration of need in rural and low-income communities.

B.2. Feasibility of the Management Plan

The ADE has designed a management structure that ensures all project objectives are achieved on time, within budget, and with high fidelity. The plan builds on each partner's proven capacity for large-scale implementation, rigorous evaluation, and efficient fiscal oversight, organized into three sequential phases—Planning and Readiness, Implementation and Evaluation, and Synthesis and Scale-Up—with clearly defined responsibilities, communication protocols, and data dashboards for ongoing monitoring and adaptive improvement.

Project Leadership and Governance. ADE will serve as fiscal agent and lead organization, providing statewide coordination and alignment with state literacy initiatives. [redacted] and [redacted] will act as co-Project Directors, overseeing subcontracts and reporting. UFLI will serve as Implementation Partner, led by [redacted], [redacted]*, and* [redacted], responsible for professional learning, coaching, and refinement of instructional materials and data tools. *B & W Evaluation*, directed by [redacted] *and* [redacted], will lead the randomized controlled trial (RCT), fidelity monitoring, cost analysis, and SEER-aligned data-sharing protocols. Together, these organizations form the UFLI-AR Innovation Leadership Team (ILT), which meets weekly to review progress, approve deliverables, and address implementation barriers (see Appendix J for organizational chart and Table J.2. Person Loading Table).

Phase 1: Planning and Readiness (Jan–Aug 2026). ADE executes subawards, finalizes recruitment, and secures district MOUs. B & W randomizes finalizes all data collection protocols and fidelity measures, randomizes first cohort of schools and conducts baseline data collection. UFLI prepares Arkansas-specific professional learning and integrates the Portal and AI Tutor with school data. All schools are onboarded and fidelity systems operational by August 2026.

Phase 2: Implementation and Evaluation (Fall 2026–Summer 2029). Over three school years, the UFLI Continuum will be implemented statewide in phased cohorts, supported by intensive professional learning and fidelity monitoring. B & W Evaluation will direct the randomized trial, integrating real-time data dashboards to inform ongoing improvement and ensure methodological rigor. Milestones include ≥ 85 percent fidelity, 100 percent teacher training completion, and timely submission of all federal evaluation reports and impact briefs.

Phase 3: Synthesis and Scale-Up (Fall 2029–Dec 2030). ADE, UFLI, and B & W synthesize impact, fidelity, and cost findings into an actionable *UFLI Implementation Support Hub*—a digital repository of professional learning modules, exemplar lessons, and planning templates tailored for Arkansas's regional cooperatives. ADE will embed these materials in its statewide coaching network and teacher-preparation programs, ensuring sustainability beyond the grant. A 2030 *Literacy Innovation Summit* in Little Rock and national dissemination through publications, policy briefs, and interactive dashboards will position Arkansas as a national model for scaling evidence-based literacy systems. A detailed quarter-by-quarter project timeline outlining all major tasks, milestones, and responsible partners is provided in Appendix Table J.3.

B.3. Relevance and Commitment of Project Partners

ADE, UFLI, and B & W Evaluation bring highly complementary expertise and a shared commitment to ensuring every Arkansas student reads proficiently by third grade. Each partner has made concrete, long-term investments in the design, implementation, and sustainability of UFLI-AR, collectively providing the full continuum of capacity required for statewide implementation, rigorous evaluation, and lasting systems change. **ADE** provides statewide leadership, fiscal management, and policy alignment to ensure coherence and sustainability. The agency has dedicated staff to oversee implementation, coordinate with regional cooperatives, and integrate UFLI-AR with state initiatives. ADE will maintain and disseminate the *UFLI Implementation Support Resources Hub* beyond the grant period as part of its permanent literacy infrastructure. **UFLI** serves as the implementation and professional learning partner, with nationally recognized expertise in translating the science of reading into scalable, teacher-friendly tools. UFLI's leadership has committed access to the **UFLI Portal**, time from [redacted], [redacted], and [redacted], and its network of 42 implementation specialists, including three based in Arkansas. **B & W Evaluation** leads the independent evaluation, contributing deep experience in large-scale RCTs, cost and fidelity analysis, and continuous improvement. Led by [redacted] and [redacted], the team's prior collaboration with UFLI ensures methodological rigor aligned with WWC and SEER standards.

Each partner's role is mission-critical and mutually reinforcing: ADE provides system-level leadership and sustainability, UFLI ensures instructional and professional learning excellence, and B & W guarantees analytic rigor and transparency. Collectively, the partners have committed more than 19 staff and over $1 million in in-kind resources, including training platforms, data systems, and personnel time. These investments reflect relevance and capacity and a shared vision for establishing a sustainable, statewide model for literacy improvement.

B.4. Plan to Deliver Project Services Efficiently at Scale and Maintain Effectiveness

UFLI-AR is designed to scale efficiently while maintaining the integrity, quality, and impact of implementation. The project leverages existing state infrastructure, technology-enabled delivery systems, and continuous improvement feedback loops to extend reach without diluting effectiveness. ADE, UFLI, and B&W have anticipated the common barriers that limit statewide expansion of evidence-based initiatives and embedded design features to overcome each one.

Barrier 1: Variability in District and School Readiness. Scaling across 80 schools representing different geographic and socioeconomic contexts introduces wide variation in leadership capacity, staff experience, and existing literacy practices. To address this, the UFLI-AR team will use readiness assessments during recruitment to identify district strengths and needs, then tailor onboarding supports accordingly. UFLI's professional learning system offers multiple entry points and asynchronous modules that allow districts to progress at a pace consistent with their capacity, ensuring consistency of quality without rigid uniformity.

Barrier 2: Maintaining Fidelity During Scale-Up. As initiatives expand, implementation fidelity often erodes. UFLI-AR mitigates this through a multilayered fidelity-monitoring system combining teacher self-assessments, coach observations, and automated analytics within the UFLI Portal and AI Tutor. Fidelity data feed into a real-time dashboard managed by B&W Evaluation, enabling rapid identification of implementation gaps and targeted supports. Quarterly reviews among ADE, UFLI, and B&W establish continuous feedback loops that sustain high fidelity across cohorts.

Barrier 3: Professional Development and Coaching Capacity. Scaling high-quality professional learning statewide can exceed available training capacity. UFLI-AR addresses this by leveraging ADE's regional service cooperatives and the existing *R.I.S.E.* coaching infrastructure to cascade training efficiently. UFLI will certify a cohort of Arkansas-based facilitators to lead professional learning and coaching beyond the grant period, ensuring continuity and reducing dependence on external trainers.

Barrier 4: Cost and Resource Efficiency. Cost is a critical constraint to sustaining literacy reforms at scale. UFLI-AR maximizes efficiency through digital delivery of materials, centralized data dashboards, and AI-enabled assessment tools that reduce teacher burden and recurring costs. B&W's cost-effectiveness analysis will calculate the resources required per student and per 0.10 SD gain in literacy outcomes, supporting ADE's budget planning.

Barrier 5: Sustaining Effectiveness Beyond the Grant Period. ADE will embed UFLI-AR structures, including the *Implementation Support Resources Hub* and facilitator network, within its statewide literacy infrastructure. Partnerships with Arkansas institutions of higher education will further institutionalize the SoR by integrating UFLI resources into pre-service teacher preparation, establishing a sustainable teacher pipeline aligned with UFLI-AR.

Through these integrated strategies, UFLI-AR transforms scale-up from a replication effort into a sustainable system for continuous improvement—one that delivers cost-effective, evidence-based literacy instruction to every Arkansas classroom.

B.5. Dissemination and Replication Plan

The UFLI-AR partners will implement a strategic, multi-faceted dissemination and knowledge-mobilization plan designed to translate project findings into practical, accessible tools that support replication and continuous improvement across diverse educational contexts. Dissemination is embedded as a core project function—not a final activity—so that evidence, tools, and lessons learned are shared in real time with educators, policymakers, and researchers.

Educator and Practitioner Dissemination. ADE and UFLI will make all project-developed resources freely available through the UFLI Toolbox, the ADE Literacy website, and the R.I.S.E. Arkansas network. The refined *UFLI Implementation Hub*—including professional-learning modules, fidelity tools, coaching protocols, exemplar lessons, and cost models—will serve as a central open-access repository for replication. These materials will be downloadable, modifiable, and licensed for statewide and national adaptation. ADE will spotlight findings through statewide newsletters, webinars, and their annual Literacy Leadership Institute, reaching district administrators, literacy coaches, and classroom teachers across Arkansas.

Policy and Systems Dissemination. Project results will be synthesized into policy briefs, implementation guides, and cost-effectiveness summaries for use by state education agencies, technical-assistance providers, and funders. ADE and UFLI will collaborate with the Council of Chief State School Officers (CCSSO) and the National Association of State Directors of Special Education (NASDSE) to present lessons learned through national convenings, state policy forums, and literacy leadership networks. These activities will position Arkansas as a model for how states can operationalize the SoR at scale through a coherent system of supports.

Research and Development Dissemination. B & W Evaluation will ensure full transparency and replicability by archiving de-identified datasets, analytic code, and study instruments on the Open Science Framework (OSF). Peer-reviewed manuscripts will be submitted to journals such as *Reading Research Quarterly* and *Scientific Studies of Reading*, and findings will be presented at major conferences including AERA, SREE, SSSR, and CEC.

Sustainability and Ongoing Dissemination. To extend reach beyond the grant period, ADE will partner with **A**rkansas institutions of higher education to integrate UFLI-based content into pre-service teacher-preparation programs. UFLI will maintain a national on-demand webinar series and interactive professional-learning community to support adaptation by other states and districts. A Dissemination Working Group, housed within the UFLI-AR Innovation Leadership Team, will oversee messaging, quality assurance, and dissemination metrics.

C. Quality of the Project Design

C.1. Conceptual Framework and Logic Model

The UFLI-AR project is grounded in a clear, empirically supported theory of change that connects teacher learning, instructional practice, and student outcomes. Its conceptual foundation lies in the SoR, an interdisciplinary body of evidence explaining how children learn to read and how instruction can best support that process (National Reading Panel, 2000; Seidenberg, 2017; Petscher et al., 2020). This research converges on the interaction between word recognition and language comprehension as the foundation of skilled reading (The Reading League, 2022). UFLI-AR translates these principles into practice through systematic, explicit instruction in phonological awareness, decoding, encoding, and fluency, while emphasizing motivation and self-efficacy as essential enablers of reading development (Snow, 2020; Scarborough, 2001).

Building on the SoR, UFLI-AR also draws from implementation science, which recognizes that effective interventions depend on the systems and supports that enable consistent, high-fidelity use (Fixsen et al., 2005; Foorman et al., 2016). Within this framework, teacher knowledge, instructional self-efficacy, and data-informed practice are the primary mechanisms through which evidence-based literacy instruction produces student gains. Teachers first deepen their understanding of the structure of language and reading development, then acquire pedagogical expertise to deliver explicit, systematic instruction. As knowledge and confidence increase, so does the consistency and quality of instruction—driving measurable improvements in student learning. This framework connects the micro-level processes of classroom practice with the macro-level systems of policy, coaching, and professional development that sustain improvement at scale (Joyce & Showers, 2002; Sailors et al., 2014).

The UFLI-AR logic model operationalizes this conceptual framework as a coherent system of inputs, mechanisms, and outcomes. The project's instructional components, UFLI Foundations, UFLI Small Group, UFLI Intensive, and the Project Read AI Tutor, deliver direct, evidence-based instruction aligned with the SoR. These components are supported by professional-learning systems, including the UFLI Academy, leader training sessions, online coaching, and the UFLI Assessment and Planning Portal, which automates progress monitoring and instructional planning. Collectively, these supports are designed to strengthen teachers' knowledge, efficacy, and fidelity of implementation.

In the short term, teachers are expected to demonstrate increased understanding of foundational reading instruction, greater confidence in using structured literacy practices, and higher implementation fidelity. As these proximal teacher-level changes occur, corresponding student-level improvements emerge in phonemic awareness, decoding, and word reading accuracy. Over time, these short-term gains accumulate into measurable increases in oral reading fluency, comprehension, and motivation. Ultimately, sustained implementation across multiple cohorts is expected to yield long-term effects at the school and system levels, including higher rates of Grade 3 reading proficiency, improved schoolwide ELA performance, and reduced need for intensive intervention. Mediating variables—particularly teacher knowledge, instructional self-efficacy, fidelity, and students' baseline proficiency—are hypothesized to explain the mechanisms by which the intervention produces change (Tschannen-Moran & Hoy, 2001; Durlak & DuPre, 2008). Continuous feedback loops embedded in the implementation plan link fidelity and outcome data to professional learning refinements, ensuring ongoing alignment between evidence-based principles and classroom realities.

Together, the conceptual framework and logic model form a cohesive, testable theory of action that integrates the science of reading with implementation science. They explain how professional learning and instructional supports interact to improve teacher practice, accelerate student literacy growth, and build the sustainable systems necessary to ensure every Arkansas student reads proficiently by third grade. The complete logic model appears in Appendix G.

C.2. The Goals, Objectives, and Outcomes Clear, Measurable, and Ambitious

The goals and measurable objectives of UFLI-AR define a coherent and achievable progression from refining the full UFLI professional-learning continuum to testing its impact on student literacy outcomes and embedding the model within Arkansas's statewide literacy infrastructure for lasting sustainability. Each goal directly aligns with the purpose of the EIR Mid-Phase program (to strengthen, evaluate, and scale evidence-based innovations) and with the project's theory of action described in Section C.1.

Table C.1. Measurable Goals, Objectives, and Outcomes

Goal	Objective	Key Outputs	Measurable Outcomes
Goal 1. Integrate All UFLI Components into a Coherent Professional Learning and Resource Continuum			

	1.1 Refine and integrate UFLI components into a complete continuum.	• Aligned instructional guides and coaching protocols • Updated professional learning modules	• All continuum components finalized and field-tested by Aug 2026 • ≥ 85% teacher satisfaction and perceived usability on survey
	1.2 Develop asynchronous and hybrid PD options for statewide delivery.	• Virtual modules • Facilitator guides • Virtual coaching platform piloted	• At least 10 educators test online modules • ≥ 85% teacher satisfaction and perceived usability on survey
	1.3 Package the full continuum for state deployment as the 1.0 *UFLI Implementation Support Resources Hub.*	• UFLI Hub including Portal manuals, AI Tutor guides, Academy session plans • Integrated fidelity and coaching protocols	• *UFLI Implementation Hub* completed and and ready for RCT • ≥ 75% of peer reviewers of UFLI Hub report satisfaction and perceived usability on survey
Goal 2. Implement and Evaluate the UFLI Continuum with 80 Arkansas Elementary Schools			
	2.1 Recruit 80 schools across three cohorts (2026–2029) and randomize to treatment and wait-list control.	• MOUs with districts • Random assignment lists • Baseline data collected	• 80 schools participating • ≥ 95% school retention across years

	2.2 Train teachers, coaches, and leaders via UFLI PD, Academy, and ongoing coaching.	• PD attendance logs • Coaching logs • Fidelity checklists	• ≥ 85% fidelity across treatment schools • ≥ 360 educators trained (treatment schools)
	2.3 Integrate UFLI within district MTSS frameworks.	• Tier 1/2 fidelity • MTSS alignment reports	• ≥ 75% schools show data-based decision making improvements
	2.4 Embed continuous improvement loops.	• Data dashboards • Implementation reviews	• Quarterly dashboards produced • PD adjustments documented each cycle
Goal 3. Improve Students' Early Literacy Skills and Reading Performance			
	3.1 Collect baseline and follow-up literacy assessments and track progress annually.	• Student-level datasets • Portal reports • Longitudinal linkage to Gr 3 ELA	• ≥ 0.25 SD average gain in decoding/fluency/comprehension • ≥ 10-point increase in Gr 3 proficiency rate by 2030
	3.2 Identify students needing Tier 2/3 supports with Portal analytics.	• Automated risk flags • Small-group plans • Tier 2/3 rosters	• ≥ 90% accuracy between Portal flags and teacher ratings • ≥ 25% fewer students requiring Tier 3 by Year 4
	3.3 Provide differentiated practice	• AI Tutor usage logs • Phoneme-level growth reports	• ≥ 80% students use AI Tutor weekly

	via UFLI and Project Read AI Tutor.		• ≥ 25% improvements in phoneme accuracy
	3.4 Estimate project impacts on literacy skills and state achievement.	• RCT impact analyses • WWC-ready reports • Publications	• Study meets WWC Standards without reservations • ≥ 5 peer-reviewed articles submitted
Goal 4. Ensure Sustainability, Dissemination, and Statewide Scale-Up			
	4.1 Partner with Arkansas IHEs to embed UFLI and SoR content in teacher-preparation programs.	• Revised course syllabi • Pre-service practica • Faculty training sessions	• At least 3 IHEs integrate content • ≥ 100 pre-service teachers complete practicum using UFLI tools
	4.2 Build ADE and district capacity for long-term coaching and PD.	• Certified UFLI facilitator cohort • Annual Academy events	• At least 20 state/district coaches certified • UFLI Academy institutionalized in ADE PD calendar
	4.3 Disseminate findings and tools to support replication.	• UFLI Hub • Statewide Literacy Innovation Summit • Webinars	• UFLI Hub materials downloaded > 100 times • Summit attended by ≥ 300 educators/policymakers • ≥ 3 webinars open to educators nationwide

D. Quality of the Project Evaluation

B & W Evaluation will lead the UFLI-AR evaluation, adhering to the Institute of Education Sciences (IES) Standards for Excellence in Education Research (SEER) to ensure methodological rigor, transparency, and practical relevance. The evaluation is designed to produce rigorous, actionable evidence on the effectiveness, implementation, and scalability of the full UFLI continuum. The centerpiece is a cluster randomized controlled trial (RCT) that will estimate the effects of the UFLI continuum on teacher knowledge, instructional practice, and student literacy outcomes. Complementary components include a comprehensive implementation and fidelity study to examine how professional learning, coaching, and digital supports are enacted in schools; an exploratory analysis of mediators and moderators that explain or influence observed impacts; and a complete cost-effectiveness study assessing the resources required to achieve gains and guide statewide scale-up. All components align with SEER principles, including preregistration, open data and materials, documentation of implementation, attention to generalizability, and integration of cost analysis. Together, these efforts will yield a coherent body of evidence meeting WWC Standards Without Reservations and advancing EIR's dual aims: determining the effectiveness of evidence-based innovations and generating practical knowledge to inform large-scale, sustainable literacy improvement.

D.1. Extent to Which the Evaluation will Meet the WWC Standards Without Reservations

The evaluation is guided by the following research questions:

Table D.1. Research Questions by Evaluation Domain

Domain	**Research Question**	**Data Sources**
1. Confirmatory Impact Research Questions		

	RQ1a. What is the impact of the UFLI continuum, relative to business-as-usual literacy instruction, on students' early literacy skills, including phonological awareness, decoding, word recognition, fluency, and comprehension, measured in grades K–2?	DIBELS 8 subtests (PA, NWF, WRF, ORF, MAZE)
	RQ1b. What is the impact of the UFLI continuum on Grade 3 English Language Arts (ELA) achievement as measured by the Arkansas state assessment?	ATLAS ELA Assessment
	RQ1c. What is the impact of the UFLI continuum on teachers' knowledge of foundational reading instruction and instructional self-efficacy?	TULIP Survey; Reading Teaching Efficacy Instrument (RTEI)
2. Mediation and Moderation Research Questions		
	RQ2a (Mediation). To what extent do changes in teacher knowledge, instructional self-efficacy, and implementation fidelity mediate the effects of the UFLI continuum on student literacy outcomes?	Teacher knowledge and self-efficacy measures; UFLI Portal fidelity data
	RQ2b (Moderation). Do program impacts vary by school characteristics (e.g., locale, poverty, baseline literacy performance), teacher characteristics (e.g., years of experience, baseline knowledge), or student characteristics (e.g., disability, English learner status)?	Administrative data; baseline survey data

	RQ2c (Compliance/Exposure). What are the effects of UFLI among schools, teachers, or students with high implementation fidelity (i.e., CACE analyses)?	Portal usage analytics; fidelity rubrics
3. Implementation and Cost-Effectiveness Research Questions		
	RQ3a. To what extent is UFLI implemented with fidelity across schools, and how do fidelity, coaching, and professional learning supports evolve across cohorts?	Coaching logs; fidelity checklists; Portal and AI Tutor usage data
	RQ3b. What contextual factors (e.g., leadership engagement, district support, coaching structures, use of digital tools) facilitate or hinder successful implementation?	Focus groups, interviews, implementation surveys
	RQ3c. What is the total and per-student cost of implementing the UFLI continuum, and how does cost-effectiveness compare to other literacy interventions?	Cost analysis logs; ADE budget data; cost model ratios
	RQ3d. How do findings from UFLI-AR inform the scalability and sustainability of science-of-reading–aligned professional learning and instructional models in other states or contexts?	Cross-state policy scan; dissemination records

D.2. Impact Evaluation Design

B & W Evaluation will lead the RCT involving 80 elementary schools from primarily rural sites serving approximately 720 teachers and 14,400 students in grades K–2, with Grade 3 ELA outcomes used for follow-up analyses. Schools will be assigned across three sequential cohorts: Cohort 1 (2026–27), Cohort 2 (2027–28), and Cohort 3 (2028–29). Within each cohort, half of the schools will implement the full UFLI continuum, while the remaining schools will continue business-as-usual (BAU) literacy instruction during that academic year.

Randomization will occur at the school level to prevent treatment contamination and because UFLI is typically adopted school wide. To ensure equivalence between conditions, B & W will use blocked random assignment based on (a) district, (b) prior-year school-level literacy proficiency from the 2025 ATLAS ELA assessment, and (c) Title I status as an indicator of socioeconomic disadvantage. Attrition will be tracked continuously at the school, teacher, and student levels. Following WWC 5.0 guidance, we will compute and report overall and differential attrition and conduct sensitivity analyses to confirm robustness under plausible attrition scenarios. To minimize loss, the evaluation will employ a proactive retention management system that includes (a) modest financial incentives to offset local participation costs, (b) a live retention dashboard monitoring PD attendance, survey completion, and leadership turnover, and (c) an escalation playbook to trigger rapid-response supports (e.g., onsite coaching sprints or scheduling adjustments) when multiple risk indicators appear. Principals will complete quarterly recommitment checks to surface potential issues early.

At the student level, missing data due to mobility or testing absences will be documented and addressed under an intent-to-treat (ITT) framework, maintaining all randomized schools in the analytic sample. Missingness for covariates will be handled using multiple imputation under the missing-at-random assumption and full-information maximum-likelihood (FIML) estimation within multilevel models, consistent with WWC and SEER standards. Analytic samples will exclude post-randomization joiners to preserve baseline equivalence. All attrition procedures, decision rules, and analytic thresholds will be preregistered in REES prior to baseline data collection, with code, documentation, and detailed attrition reports publicly archived on the OSF to ensure transparency and replicability.

D.4. Statistical Power

Minimum detectable effect sizes (MDES) were estimated in R (PowerUpR) for a three-level clustered design with 80 schools, an average of 9 teachers and 20 students per classroom, balanced treatment assignment, $\alpha = .05$ (two-tailed), and 80% power. Assuming intraclass correlations of $\rho_2 = .05–.15$ (school) and $\rho_3 = .10–.20$ (teacher) and covariate adjustment explaining 25–75% of variance across levels, the study is powered to detect MDES of 0.13–0.19 SD on key literacy outcomes. Full assumptions and sensitivity analyses appear in Appendix J.

D.5 Measures

The UFLI-AR evaluation uses validated instruments aligned directly with the project's logic model across three domains—student literacy outcomes, teacher knowledge and self-efficacy, and instructional fidelity—for coherence across analytic levels and research questions. Full descriptions, scoring procedures, and psychometric properties are provided in Appendix J.4.

Student literacy outcomes. Foundational reading skills will be measured with the Dynamic Indicators of Basic Early Literacy Skills, 8th Edition (DIBELS 8), one of Arkansas's approved K–2 screening and progress-monitoring assessment. Composite and subtest scores (phonological awareness, decoding, oral reading fluency, and comprehension) provide reliable indicators of early reading growth. Grade 3 reading achievement will be measured with the ATLAS ELA assessment, Arkansas's statewide summative test aligned with state standards.

Teacher knowledge and self-efficacy. Teachers will complete the Teacher Understanding of Literacy Constructs and Evidence-Based Instructional Practices (TULIP; Hall et al., 2024) Survey and the Reading Teaching Efficacy Instrument (RTEI; Szabo, S., &

Mokhtari, K. (2004) pre- and post-intervention. These validated measures assess teachers' SoR knowledge, instructional decision-making, and self-efficacy related to teaching reading.

Implementation and fidelity. Implementation data will be triangulated from UFLI fidelity rubrics, coaching logs, and Portal and AI Tutor usage analytics to capture adherence, dosage, and quality of instructional delivery. Quantitative fidelity indices will support both implementation analyses and mediation models linking teacher practice to student outcomes.

D.6. Analytic Approach (SEER: Causal Inference and Generalizability)

All analyses will follow an ITT framework based on randomized school assignment (UFLI vs. business-as-usual). Because randomization occurs at the school level, models will account for the nesting of students within teachers within schools using multilevel modeling to yield unbiased standard errors and appropriate degrees of freedom. Student outcomes (e.g., DIBELS, ATLAS ELA) will be analyzed with three-level hierarchical linear models (students nested in teachers nested in schools), and teacher outcomes (e.g., TULIP, RTEI) with two-level models (teachers nested in schools). Models will adjust for baseline scores, demographic covariates, and blocking factors to increase precision and ensure equivalence. Dichotomous outcomes (e.g., proficiency at or above benchmark) will be estimated using generalized linear mixed-effects models with a logit link. Full analysis plan in Appendix J.

To examine noncompliance, complier average causal effect (CACE) models will estimate impacts among schools and teachers demonstrating full implementation. Mediation analyses will test hypothesized mechanisms linking professional learning, teacher knowledge, instructional fidelity, and student literacy outcomes using multilevel structural equation modeling (MSEM) (Preacher et al., 2010). All models will apply sampling weights to account for differential participation and produce estimates representative of all participating schools. Standard errors will be clustered at the level of randomization, with significance tested using two-tailed $\alpha = .05$. Confirmatory outcomes will be adjusted for multiple comparisons via the Benjamini–Hochberg False Discovery Rate procedure. Effect sizes will be reported as Hedges' *g* for continuous outcomes and odds ratios for binary outcomes. Sensitivity analyses will include alternative model specifications and missing-data checks using multiple imputation and FIML methods.

D.7. Cost Analysis (SEER: Practical Value)

B & W Evaluation will conduct an ingredients-based cost analysis to document the full economic cost of implementing the UFLI continuum and estimate its cost-effectiveness relative to BAU literacy instruction. Following *IES Cost Analysis: A Starter Kit* (2020), all implementation resources (personnel, professional learning, materials, technology, and facilities) will be cataloged, priced using local wage and market data, and adjusted for inflation. Total and per-student costs will be linked to RCT impact findings to calculate incremental cost-effectiveness ratios (ICERs), such as cost per 0.10 SD gain in literacy. All assumptions, data sources, and details are presented in Appendix J.

D.2. Effective Strategies for Replication and Scale

The UFLI-AR evaluation is explicitly designed to reveal *how* and *why* the intervention works, identifying which elements must be replicated with fidelity and which can be adapted to local contexts. Guided by the project's logic model, the evaluation will decompose the UFLI continuum into its instructional and support components to isolate core functions that drive impact from context-flexible features. Implementation activities, such as coaching dosage, PD modality, and leadership routines, will be coded using an implementation-science taxonomy specifying the actor, action, dose, and mechanism of change. Linking these strategies to the barriers they address will generate a barrier-to-strategy map, enabling new adopters to select supports that best fit their context. Fidelity and strategy-use data will be combined into an annual Fidelity Index (0–100) for adherence, dosage, and quality, helping identify "strategy bundles" most predictive of high-quality implementation.

Findings will be translated into three replicable implementation packages: (a) a Minimum Viable Implementation (MVI) model for schools with typical readiness, specifying the essential components and minimum staffing structure needed to achieve core impacts; (b) an Enhanced Support (ES) model for lower-readiness sites that integrates additional coaching, extended onboarding, and readiness-building activities; and (c) a Scale Package (SP) for multi-district deployment that leverages asynchronous professional learning, virtual coaching, and automated fidelity tracking to reduce per-school costs. Each package will include detailed staffing, time, and cost profiles derived from the cost-effectiveness study, providing clear return-on-investment metrics (e.g., dollars per 0.10 SD literacy gain) and guidance on implementation pacing, dosage, and fidelity thresholds. Packages will also include exemplar implementation calendars, fidelity scoring rubrics, and adaptation guides that clarify what elements must remain intact to preserve impact versus which can flex for local context. Collectively, these packages will enable state and district leaders to select the model that best matches their capacity and readiness level while maintaining scientific integrity and instructional quality. Table J.5 summarizes the three implementation packages, detailing their core and adaptable components.

D.3. Fidelity of Implementation

The UFLI-AR evaluation employs a comprehensive, theory-driven fidelity system to ensure findings are interpreted in light of implementation quality. Fidelity is operationalized across five dimensions, each linked to observable indicators and data sources (see Table J.6 for a complete description of fidelity components): *Adherence:* delivery of required lessons and sequence-critical routines; *Dosage:* exposure measured by minutes of instruction, lessons completed, and PD participation; *Quality of Delivery:* precision and fluency of instruction, rated on a 0–3 behaviorally anchored rubric; *Participant Responsiveness:* teacher engagement, reflection, and student participation; *Differentiation:* verification that UFLI-specific components do not occur in BAU controls.

Data will be triangulated from the UFLI Portal and AI Tutor telemetry, professional learning and coaching records, teacher and coach logs, and external observation rubrics (three per year). Each teacher will receive standardized 0–100 scores across dimensions, aggregated into a Fidelity Index (FI) weighted by theoretical leverage: Adherence (30%), Dosage (30%), Quality (25%), Responsiveness (10%), and Differentiation (5%). FI scores will be interpreted using "traffic-light" thresholds: Green (high fidelity)—Adherence ≥80%, Dosage ≥75%, Quality ≥2.5; Yellow (moderate)—Adherence 60–79% or Quality 2.0–2.49; and Red (low)—Adherence <60% or Quality <2.0. Teachers rated Green on Adherence/Dosage and at least Yellow on Quality will be classified as *compliers* for causal analyses. To link fidelity with impact, analyses will test (a) moderation of treatment effects by contextual factors, (b) dose–response relationships between dosage/quality and student gains, and (c) CACE estimates isolating the effect of implementing UFLI to standard. Together, these analyses will determine the fidelity levels and contextual supports required for replicable, high-impact implementation.

D.4. Information to Guide Replication

UFLI-AR is designed to generate practical, transferable evidence that supports scale and adaptation in diverse contexts. The evaluation will specify a transportable logic model distinguishing core components essential for impact from adaptable elements that can flex to local conditions. All fidelity rubrics, coaching tools, and professional learning materials will align to this classification so adopters can implement UFLI with confidence and contextual fit. A structured adaptation log will record who modified what, why, and with what effect, allowing effective adaptations to be codified as sanctioned options, combining scientific rigor with field-based insight. Consistent, reliable measurement across cohorts will ensure results are comparable and reusable. Fidelity will be assessed across five pre-specified dimensions using multiple data sources and standardized 0–100 indices with Green/Yellow/Red thresholds. Outcomes (e.g., DIBELS, ATLAS ELA) will be tested for reliability and measurement invariance across subgroups. The 80-school cluster RCT will produce evidence meeting WWC standards, complemented by CACE and dose–response analyses identifying impacts achievable at varying fidelity levels. Findings will culminate in an Implementation Playbook and three scalable Strategy Bundles (see Table J.5) made available through the *UFLI Implementation Hub*.

The *UFLI Implementation Hub* will serve as a national clearinghouse for implementation tools, training assets, and evidence syntheses produced through UFLI-AR. The Hub will host (1) annotated fidelity rubrics and coaching protocols with exemplar videos; (2) downloadable professional learning modules and observation tools keyed to the transportable logic model; (3) a searchable database of vetted adaptations with contextual metadata (school type, grade span, demographics, rationale, outcomes); (4) cost calculators and staffing templates aligned to SEER cost analysis standards; and (5) replication resources, including IRB-ready instruments, analytic code, and deidentified data dictionaries archived on the OSF. An interactive dashboard will visualize fidelity, cost, and impact data across participating schools to illustrate feasible implementation ranges and support continuous improvement. Together, these resources will transform UFLI-AR findings into an actionable, open-access infrastructure that supports other SEAs and LEAs in replicating and sustaining effective literacy implementation at scale.

References

Adams, M. J. (1990). *Beginning to read: Thinking and learning about print.* MIT Press.

Archer, A. L., & Hughes, C. A. (2011). *Explicit instruction: Effective and efficient teaching.* Guilford Press.

Arkansas Division of Elementary and Secondary Education (DESE). (2024). *ATLAS assessment technical manual.* Author.

Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice, 5*(1), 7–74. https://doi.org/10.1080/0969595980050102

Boyer, N., & Ehri, L. C. (2011). Contributions of phonemic segmentation instruction with letters and articulation pictures to word reading and spelling in beginners. *Scientific Studies of Reading, 15*(5), 440–470. https://doi.org/10.1080/10888438.2010.520778

Brady, S. A. (2020). A 2020 view of phonics instruction: Correcting some misconceptions. *Reading Research Quarterly, 55*(S1), S45–S60. https://doi.org/10.1002/rrq.343

Brunmair, M., & Richter, T. (2019). Similarities and differences between distributed and interleaved practice: A systematic review and meta-analysis. *Psychological Bulletin, 145*(11), 1023–1054. https://doi.org/10.1037/bul0000209

Catts, H. W., Adlof, S. M., Hogan, T. P., & Weismer, S. E. (2006). Are specific language impairment and dyslexia distinct disorders? *Journal of Speech, Language, and Hearing Research, 48*(6), 1378–1396. https://doi.org/10.1044/1092-4388(2005/096)

Castiglioni-Spalten, M. L., & Ehri, L. C. (2003). Phonemic awareness instruction: Contribution of articulatory gestures and letter names. *Scientific Studies of Reading, 7*(1), 25–52. https://doi.org/10.1207/S1532799XSSR0701_03

Castles, A., Rastle, K., & Nation, K. (2018). Ending the reading wars: Reading acquisition from novice to expert. *Psychological Science in the Public Interest, 19*(1), 5–51. https://doi.org/10.1177/1529100618772271

[redacted]

Cummings, K. D., Good, R. H., & Kaminski, R. A. (2022). *Technical adequacy of DIBELS 8th edition.* University of Oregon.

Ehri, L. C. (1992). Reconceptualizing the development of sight word reading and its relationship to recoding. In P. B. Gough, L. C. Ehri, & R. Treiman (Eds.), *Reading acquisition* (pp. 107–143). Lawrence Erlbaum.

Ehri, L. C. (1997). Learning to read and learning to spell are one and the same, almost. In C. A. Perfetti, L. Rieben, & M. Fayol (Eds.), *Learning to spell: Research, theory, and practice across languages* (pp. 237–269). Lawrence Erlbaum.

Ehri, L. C. (2005). Learning to read words: Theory, findings, and issues. *Scientific Studies of Reading, 9*(2), 167–188. https://doi.org/10.1207/s1532799xssr0902_4

Ehri, L. C. (2014). Orthographic mapping in the acquisition of sight word reading, spelling memory, and vocabulary learning. *Scientific Studies of Reading, 18*(1), 5–21. https://doi.org/10.1080/10888438.2013.819356

Ehri, L. C. (2020). The science of learning to read words: A case for systematic phonics instruction. *Reading Research Quarterly, 55*(S1), S45–S60. https://doi.org/10.1002/rrq.334

Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). *Implementation research: A synthesis of the literature.* University of South Florida.

Foorman, B. R., Coyne, M. D., Denton, C. A., Dimino, J., Hayes, L., Justice, L., Lewis, W., & Torgesen, J. (2016). *Foundational skills to support reading for understanding in kindergarten through 3rd grade* (NCEE 2016-4008). Institute of Education Sciences, U.S. Department of Education.

Fryer, R. G., Levitt, S. D., & List, J. A. (2021). Scaling productive education interventions. *AEA Papers and Proceedings, 111*, 191–197.

[redacted]

Gonzalez-Frey, A., & Ehri, L. C. (2021). Connected phonation as a better method for teaching beginning readers to decode unfamiliar words. *Scientific Studies of Reading, 25*(5), 427–439. https://doi.org/10.1080/10888438.2020.1833658

Good, R. H., & Kaminski, R. A. (2021). *DIBELS 8th edition technical manual.* University of Oregon.

Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education, 7*(1), 6–10. https://doi.org/10.1177/074193258600700104

[redacted]

Hernandez, D. J. (2011). *Double jeopardy: How third-grade reading skills and poverty influence high school graduation.* Annie E. Casey Foundation.

Hoover, W. A., & Gough, P. B. (1990). The simple view of reading. *Reading and Writing, 2*(2), 127–160. https://doi.org/10.1007/BF00401799

Hoover, W. A., & Tunmer, W. E. (2022). The simple view of reading: Three assessments of its validity. *Scientific Studies of Reading, 26*(1), 1–19. https://doi.org/10.1080/10888438.2021.1915491

Institute of Education Sciences. (2020). *Cost analysis: A starter kit.* U.S. Department of Education.

Kim, Y.-S. G., Petscher, Y., Schatschneider, C., & Foorman, B. (2021). The relation of text reading fluency and reading comprehension: A longitudinal study from grades 1 to 12. *Scientific Studies of Reading, 25*(1), 3–18. https://doi.org/10.1080/10888438.2019.1642837

Kurtz, J., Will, M., & Sawchuk, S. (2019, June 5). Most teachers still use "balanced literacy," but more now embrace phonics. *Education Week.* https://www.edweek.org

[redacted]

[redacted]

[redacted]

Leach, J. M., Scarborough, H. S., & Rescorla, L. (2003). Late-emerging reading disabilities. *Journal of Educational Psychology, 95*(2), 211–224. https://doi.org/10.1037/0022-0663.95.2.211

Levin, H. M., & McEwan, P. J. (2001). *Cost-effectiveness analysis: Methods and applications.* Sage.

Lonigan, C. J., Burgess, S. R., & Schatschneider, C. (2018). Examining the simple view of reading with elementary school children: Still simple after all these years. *Remedial and Special Education, 39*(5), 260–273. https://doi.org/10.1177/0741932518764833

[redacted]

McLeskey, J., Barringer, M.-D., Billingsley, B., Brownell, M., Jackson, D., Kennedy, M., & Ziegler, D. (2017). *High-leverage practices in special education.* Council for Exceptional Children.

Moats, L. C. (2020). *Teaching reading is rocket science (2020 update).* American Federation of Teachers.

National Center for Education Statistics (NCES). (2024). *National Assessment of Educational Progress (NAEP) reading assessment results, 2024.* Institute of Education Sciences, U.S. Department of Education. https://nces.ed.gov/nationsreportcard

National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction.* National Institute of Child Health and Human Development.

Rose, J. (2006). *Independent review of the teaching of early reading.* Department for Education and Skills (UK).

Samuels, S. J., & Flor, R. F. (1997). The importance of automaticity for developing expertise in reading. *Reading & Writing Quarterly, 13*(2), 107–121. https://doi.org/10.1080/1057356970130202

[redacted]

Sutherland, K. S., & Wehby, J. H. (2001). Exploring the relationship between increased opportunities to respond and academic and behavioral outcomes of students with EBD. *Remedial and Special Education, 22*(2), 113–121. https://doi.org/10.1177/074193250102200205

Szabo, S., & Mokhtari, K. (2004). Developing the Reading Teacher Efficacy Instrument (RTEI). *Reading Psychology, 25*(5), 375–395.

Torgesen, J. K., & Hudson, R. F. (2006). Reading fluency: Critical issues for struggling readers. In S. J. Samuels & A. E. Farstrup (Eds.), *What research has to say about fluency instruction* (pp. 130–158). International Reading Association.

Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17*(7), 783–805.

Vadasy, P. F., & Sanders, E. A. (2021). Benefits of structured phonics instruction for kindergartners with low phonological awareness and alphabet knowledge. *Reading and Writing, 34*(8), 1989–2020. https://doi.org/10.1007/s11145-021-10138-z

World Literacy Foundation. (2018). *The economic and social cost of illiteracy: A white paper.* Author.