

Education Innovation and Research Program (EIR) Project Abstract

Applicant Name: Indiana Department of Education

Project Title: Strengthening State Infrastructure for High-Impact Tutoring: Scaling Evidence-Based Literacy Support Through Cognitive Science

Type of Grant Requested: (select one) Early-Phase Mid-Phase Expansion

Absolute Priorities the Project Addresses: (select all that apply)

Absolute Priority 1-- Field-Initiated Innovations: Promoting Evidence-Based Literacy

Competitive Preference Priorities the Project Addresses: (select all that apply)

Competitive Preference Priority 1— Returning Education to the States

Competitive Preference Priority 2— Education Choice (High-Impact Tutoring)

Total number of students to be served by the project: The project will serve at least 9,000 students (100% high-need), including at least 2,000 very high-need students who will receive direct, high-impact tutoring aligned with the design principles for effective tutoring during the school day.

Grade level(s) to be served by the project: Second and Third Grade

Definition of high-need students: Our primary definition of high-need students is those attending schools with IREAD pass rates below 85%. A secondary definition identifies very high-need students as second- and third-grade students who are not yet on track to pass IREAD.

Brief description of project activities: This project scales Tutor-CogSci capacity-building model across regions in Indiana. Tutor-CogSci integrates high-impact tutoring with workforce development. College and high school students, instructional aides, and other school-connected adults are organized into interdisciplinary learning design teams embedded within elementary schools. The initiative strengthens schools' capacity to deliver and sustain effective literacy support while generating generalizable evidence for the field. The goal is to build the human infrastructure to meet Indiana's reading goals, develop the youth-serving workforce, and ensure continuous improvement through data-driven, design-based implementation.

Summary of project objectives and expected outcomes: The project aims to expand access to evidence-based literacy tutoring for high-need students while strengthening Indiana's educator pipeline. Objectives include: (1) building statewide capacity to recruit, train, and support high-impact tutors; (2) improving reading fluency among second- and third-grade students and partnering schools' IREAD pass rates; and (3) developing sustainable systems for data-driven continuous improvement. Expected outcomes include measurable gains in literacy achievement, increased numbers of tutors and caring adults trained in the science-of-reading across high-need schools, and a scalable, research-informed model for integrating tutoring and workforce development statewide.

Summary of how the project is innovative: The project is innovative in integrating high-impact tutoring with workforce development through interdisciplinary learning design teams that connect cognitive scientists,

Education Innovation and Research Program (EIR) Project Abstract

teacher educators, schools, and community partners. This capacity-building approach transforms tutoring from a temporary intervention only focused on a small number of students into a sustainable system for improving literacy outcomes and developing the educator pipeline. By embedding continuous improvement and research within implementation, the project generates generalizable evidence while strengthening Indiana’s long-term capacity to meet its reading goals. Additionally, the integrates two often competing approaches in education: those that focus on generating robust causal evidence and testing “what works” and those that focus on service to practitioners engaged in programs and practices in context. Tutors start with evidence-based programs; then, they implement those programs using iterative cycles of implementation in context, evaluation, design, and reflection. Proposed solutions feed back into implementation, and evaluation includes both user-design research and A/B experiments. All team members gain valuable experience with both research and tutoring practice. The goal is to build a reciprocal interface between basic research in the learning and cognitive sciences and the problems and practices that tutors face in their day-to-day work. This approach not only allows the team to learn what works for tutors and students, but also creates a non-hierarchical culture of collaboration, support, innovation, and excellence.

Other studies related to the proposed project: We plan to iteratively improve and evaluate a high-impact tutoring program that integrates three existing conceptual frameworks, each of which has strong theoretical rationale and prior evidence of success: (a) a tutoring structure based on design principles for effective tutoring (Nickow, Oreopoulos, & Quan, 2020; Robinson, Kraft, Loeb, & Schueler, 2021), (b) programs and instructional practices that are considered evidence-based according to WWC and/or ESSA evidence standards (e.g., Sound Partners, Vadasy et al., 2005), (c) a design-based approach to implementation (Brown, 1992; Bryk, 2009; The Design-Based Research Collective, 2003). Additionally, our tutor training and support is focused on helping tutors iteratively improve their tutoring sessions based on several relevant WWC Practice Guide recommendation (e.g. Foundational Skills to Support Reading for Understanding in Kindergarten through 3rd Grade).

Proposed implementation sites: Implementation sites will include Indiana schools with IREAD pass rates below 85% and at least 40 third-grade students. Model implementation will occur in ten South Bend Community School Corporation (SBCSC) schools who have helped iteratively improve the treatment, with at least 10 additional treatment sites in Northern Indiana, as the main Tutor-CogSci hub (Tutor-ND) has a long waiting list. Additional regional hubs will be selected through a competitive RFA process. Statewide, 361 schools currently meet the participation criteria, and state Science-of-Reading policy has increased demand for this type of support. We anticipate strong demand.

Organizations partnering with this project: Partner organizations include the Indiana Department of Education (IDOE), the University of Notre Dame, WestEd, and the South Bend Community School Corporation (SBCSC, where the pilot project and model design teams operate). Additional regional hubs will be selected through a competitive process, with letters of interest included from Purdue University, Indiana University–Bloomington, Ball State University, Butler University, Valparaiso University, and the University of Louisville (serving nearby high-need Indiana schools in Clarksville). Additional participating schools will be identified based on project eligibility criteria.