Response to Request for Input on

How the Federal Government and Communities Can Improve Literacy

April 5, 2024

Submitted to:
The Honorable Bill Cassidy, M.D.
Ranking Member
Senate Committee on Health, Education, Labor and Pensions
Washington, DC 20510

Submitted by:
Mathematica
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RE: Request for Input on How the Federal Government and Communities Can Improve Literacy

Dear Ranking Member Cassidy:

Mathematica appreciates your raising awareness of the urgent need to improve literacy outcomes for students in the United States and your strong support for using instructional strategies based in the science of reading. We welcome the opportunity to respond to the call for input included in Preventing a Lost Generation, the recent report on student literacy from the Senate Committee on Health, Education, Labor and Pensions.

Mathematica is a nonpartisan organization committed to producing research and evidence in support of the public good and translating that research into policy and practice. Our education research focuses on improving the quality of education and the competitiveness of the U.S. workforce. We identify, evaluate, and advance policies and practices to improve our nation’s education system, from early childhood to K–12 to postsecondary and adult education. We also advance efforts to strengthen the quality of education research and disseminate evidence-based practices to guide educators.

Our response focuses on Preventing a Lost Generation’s second question for input: how existing federal or state programs or funding streams can support implementation of evidence-based practices. Our deep experience with two federal programs informs our response to this question: the What Works Clearinghouse (WWC) and the Regional Educational Laboratories (RELs). Both have worked steadily to develop a substantial set of evidence summaries, training, tools, and other materials for educators and families on the science of reading. These products are in the public domain and available via the internet for anyone to use. We suggest that the federal government can encourage states and districts to use Title II-A resources under the Elementary and Secondary Education Act to support educators’ professional development on strategies based in the science of reading, including through accessing WWC and REL materials and training. Finally, we recommend that the federal government support development, testing, and scaling of innovations based in the science of reading in the Education Innovation and Research program, using a competitive priority for literacy.

If you have follow-up questions or seek additional information or clarification related to our responses, I am happy to connect you with our subject matter experts who contributed to this response. We are also prepared to arrange an in-person meeting at your convenience. For any questions about our response, please contact Mike Burns, senior director for Communications and Public Affairs, at MBurns@mathematica-mpr.com.

Sincerely,

Jill Constantine
Senior Vice President and General Manager, Human Services
Responses to specific questions

2. What existing programs or funding streams are accessible from a federal and/or state perspective that would support implementation of evidence-based best practices? How can these programs be improved?

To support implementation of evidence-based literacy instruction, we recommend that the federal government pursue three efforts:

1. Build on two currently authorized federal programs—the What Works Clearinghouse (WWC) and the Regional Educational Laboratories (RELs)—that have a substantial track record of providing information, training, and other support for practices based on the science of reading.

2. Encourage states to use resources from Title II-A of the Elementary and Secondary Education Act (ESEA) to promote WWC and REL products and trainings, such as by allotting time for educators to use REL materials in long-term, job-embedded professional development.

3. Under the Education Innovation and Research (EIR) program of the U.S. Department of Education (ED), establish a competitive priority for literacy innovations based on the science of reading.

Recommendation 1: The federal government can build on the WWC and the RELs, two current programs with a record of developing and disseminating resources for educators based on the science of reading.

The WWC and the RELs—two programs administered by the Institute of Education Sciences (IES) at ED—work together to summarize and disseminate evidence-based practices for educators and support their use. A subset of their work has focused on developing resources related to the science of reading. Indeed, the WWC and the RELs are the primary ED sources of information for states and districts about evidence-based reading instruction.

The WWC has used the best scientific research available to create reading-focused practice guides for educators (Exhibit 1). These guides, developed by experienced educators and panels of distinguished experts in the science of reading, provide recommendations, strategies, and examples based on careful reviews of research. IES’ Standards and Review Office conducts rigorous peer reviews of all WWC practice guides. The WWC then disseminates these resources through its website and by connecting with the RELs to support implementation.

IES and the science of reading

Supporting the scientific study of reading has been an activity of IES since it was authorized in 2002 as the nonpartisan research, evaluation, and statistics arm of ED.

The first IES director, Dr. Grover (Russ) Whitehurst, appointed by President George W. Bush, was an expert in language and pre-reading development in children. Under his leadership, IES began investing in scientific research on reading, as well as developing programs to summarize, disseminate, and provide support for use of evidence, including resources on reading instruction.

IES can now call on these resources, nurtured with more than 20 years of federal investment in science and research and development, to further support and help address the nation’s student literacy crisis.
Exhibit 1. Reading-focused Practice Guides from the WWC

- Foundational Skills to Support Reading for Understanding in Kindergarten Through 3rd Grade. This guide includes recommendations related to vocabulary, phonemic awareness, decoding, and accuracy, fluency, and comprehension.

- Providing Reading Interventions for Students in Grades 4–9. The recommendations focus on decoding, fluency, comprehension, and making sense of challenging text.

- Teaching Academic Content and Literacy to English Learners in Elementary and Middle School. This guide addresses developing vocabulary, integrating oral and written English language instruction into content-area teaching, providing structured opportunities to write, and providing small-group instruction for struggling students.

- Improving Adolescent Literacy: Effective Classroom and Intervention Practices. This guide focuses on explicit instruction in vocabulary and comprehension strategies, providing opportunities for extended discussion of text meaning and interpretation, and increasing students’ motivation and engagement in literacy learning.

RELs have a strong record of developing high-quality educator training materials and other products based on WWC practice guides.

The RELs partner with the WWC to create numerous follow-on products and trainings that support implementing practice guide recommendations (Exhibit 2 provides examples). In 2024 and 2025, RELs will work with school districts across the country to develop and test the effectiveness of 10 additional online teacher professional development toolkits, each based on a different WWC practice guide. These toolkits will provide ready-to-implement professional development materials, including guides, activities, videos, and instruments to assess current practice. As a result of this work, in 2026 IES and the RELs will publish three new toolkits on literacy instruction as well as toolkits on other topics, all based on WWC practice guides.

Exhibit 2. REL-produced resources based on one WWC Practice Guide (Foundational Skills to Support Reading for Understanding in Kindergarten Through 3rd Grade)

- A professional learning kit to promote understanding and implementing the recommendations in the practice guide. This kit includes a facilitator’s guide, participants’ activities, and numerous videos showing instructional practices in action (see an example here).

- A First Grade Teacher’s Guide to Supporting Family Involvement in Foundational Reading Skills, developed by REL Southeast in partnership with the Georgia Department of Education. This guide provides a set of activities, flyers, and videos that teachers can use to help families engage in reading activities with their children. The videos, like this one, show families engaging in recommended activities. REL Southeast also produced guides for kindergarten teachers, 2nd-grade teachers, and 3rd-grade teachers.

- Supporting Your Child’s Reading at Home is a set of online resources, including videos, for parents of children in kindergarten through 3rd grade.

- Twelve lessons for pre-service teacher training in reading instruction, aligned to the WWC practice guide on foundational reading. This product includes lesson outlines, handouts, activities, and videos.

- A form for school leaders to communicate expectations to teachers about offering instruction based in the science of reading and to observe implementation of these practices in classrooms.
RELs also provide additional support for education agencies interested in aligning their instruction with the science of reading. Examples of current projects include the following:

- **REL Midwest** is working with the Michigan Department of Education and the Lansing and Battle Creek school districts to support instruction based on the science of reading, including a summer institute; a facilitated professional learning community; and on-site, job-embedded coaching. In 2022, REL Midwest produced this documentary about the importance of the science of reading in the post-pandemic context.

- **REL Southeast** is working with the Mississippi Department of Education and three school districts to improve adolescent literacy. A motivation for this project was concern about the state’s National Assessment of Educational Progress scores. The REL provided six training and coaching sessions over the 2022–2023 school year to build the knowledge and ability of teachers of English, social studies, and science in grades 6 through 12 to implement the recommendations from two WWC practice guides in their classrooms.

The REL program engages nationally recognized experts in the science of reading to produce high-quality materials for educators.

- For example, the Florida Center for Reading Research at Florida State University has held the REL Southeast contract since 2012. From 2012 to 2022, Dr. Barbara Foorman, a national expert in the science of reading, was the director of REL Southeast, and Dr. Nicole Terry-Patton, also an expert in reading, now directs that REL. Both are authors of scholarly work on the science of reading, such as the 2021 article *How the Science of Reading Informs 21st-Century Education*.

Although the WWC and the RELs have produced a considerable number of resources based on the science of reading, there is an opportunity and capacity for them to develop additional resources. For example, although the RELs have developed 12 lessons for a teacher preparation course, they could do much more to develop materials for teachers about (1) differentiating instruction, (2) supporting English learners, and (3) improving adolescent literacy. Further, they could develop materials for parents about how to assess whether the reading instruction their child receives aligns with evidence-based practices. With additional resources, the RELs could do so much more.

**Recommendation 2: Encourage states to use resources from Title II-A of the ESEA to promote WWC and REL products and trainings, such as by allotting time for educators to use REL materials in long-term, job-embedded professional development.**

The WWC and the RELs can develop and disseminate a range of useful resources grounded in the science of reading, including training materials for educators, but they cannot compel the use of these resources or provide support for educators’ time at scale. However, Title II-A of the ESEA provides a much larger pot of resources (about $2 billion annually) that states can distribute to districts to support educators’ professional development. The current ESEA authorization emphasizes state discretion over the use of Title II-A funds, but ED can help ensure that states are aware of the resources through communications from the Secretary and ESEA program leadership. Further, ED can identify and disseminate examples of how states have used Title II-A funds to provide training and coaching on instructional practices based in the science of reading.
Recommendation 3: ED’s EIR program could establish a competitive priority for literacy innovations that builds on the science of reading, such as literacy tutoring programs.

The EIR program could be a key federal lever for expanding innovations that build on the science of reading. To further spur development and scaling of innovations that incorporate the science of reading, the Department could establish a competitive priority for such innovations in an upcoming 2026 EIR competition.

EIR, funded at $273 million for fiscal year 2023, provides grants for developing, testing, and scaling field-initiated innovations in education. EIR often establishes grant priorities for innovations that meet certain criteria, such as STEM (science, technology, engineering, and mathematics), social and emotional learning, and teacher recruitment and learning. However, EIR has never had a competitive priority related to literacy, though literacy programs have received EIR grant awards.

High-dosage tutoring has strong evidence of effectiveness in promoting literacy, and EIR could promote the further development and scaling of tutoring through a literacy priority.

Through the EIR program, the federal government could contribute significantly to the further development, testing, and scaling of literacy tutoring innovations that include approaches and materials based on the science of reading. Tutoring is one of the most effective interventions to accelerate students’ learning—more effective, on average, than reducing class size, extending the school day or year, or offering summer school. When designed for stronger effect, tutoring can double the learning growth normally experienced in a year—the kind of boost students would need to make substantial literacy gains. Such high dosage tutoring is delivered regularly, over an extended period, during the school day, individually or in small groups, by teachers or paraprofessional tutors, using instructional materials aligned to the curriculum (Nickow, Oreopoulos, and Quan, 2020; White, Groom-Thomas, and Loeb, 2023).

With a competitive priority for literacy, the EIR program could support development, testing, and scaling of literacy innovations based on the science of reading that complement and reinforce classroom instruction, such as family–child literacy programs and out-of-school-time activities.

Involving parents and other caregivers in supporting literacy learning can reinforce classroom instruction and strengthen parents’ understanding of the type of instruction their children should experience, especially in the early grades. Further, out-of-school-time programs (after-school or summer) that align well with the science of reading and are engaging and easily implemented with a small amount of training could, if shown to be effective, provide important content for the federally funded 21st Century Community Learning Centers program.