Raising the Bar for Literacy with High-Quality Instructional Materials

High-quality instructional materials are essential to effective literacy instruction. State policy makers and education leaders can improve access to these materials by supporting decisions-makers in adopting proven literacy programs and strategies. When evaluating literacy programs, whether for

curriculum, supplemental, or intervention purposes, educators must consider these three elements:

- Alignment to research about the science of learning to read
- Rigorous research studies
- Effective outcomes

Structured Literacy: Applying the Science of Reading in the Classroom

The science of reading is the accumulation of decades of gold-standard research and evidence about effective reading instruction and reading acquisition, and Structured Literacy is the application of the science of reading in the classroom. Structured Literacy was coined and trademarked by the International Dyslexia Association® to differentiate reading instruction or programs that are truly informed by the science of reading from those that state they are but are not.

Many reading approaches and programs claim to be research-based, evidence-based, or scientifically based to qualify for federal funding. There are also approaches and programs that profess to be informed by the science of reading but cherry-pick the evidence to accommodate certain beliefs. When evaluating programs and strategies, two critical hallmarks of Structured Literacy instruction are:

- the WHAT: teaches ALL the components (phonemic awareness, phonics, fluency, vocabulary, and comprehension) that evidence from the science of reading has found to be foremost in ensuring reading success.
- the HOW: employs principles of Structured Literacy (explicit, systematic, cumulative, and diagnostic) for the delivery of instruction of each component.



One Study Does Not Constitute an Evidence Base

The fact that all research is not created equal has long been an issue for educators—one study does not constitute an evidence base, and research that has not been externally reviewed may be labeled by vendors as more rigorous than it actually is. At the highest level, programs should be able to speak to a diverse and comprehensive body of evidence that includes multiple examples of evaluations, research studies and reviews, and their internal research.

Rigorous Study Design

Passed in 2015, the Every Student Succeeds Act (ESSA) promotes evidence-based programs by ensuring their capacity to produce results and improve outcomes. ESSA levels of evidence reflect the quality, rigor, and statistical significance of research study designs and findings. Under ESSA, there are four tiers, or levels, of evidence and programs.

A Diverse, Comprehensive Body of Evidence

- Independent Third-Party
 Evaluations
- Peer-Reviewed Published Research Studies
- Reviews by Research Organizations
- Internal Research and Reports

ESSA Tiers of Evidence

TIER 1—STRONG EVIDENCE:

supported by one or more well-designed and well-implemented randomized control experimental studies.

TIER 3—PROMISING EVIDENCE:

supported by one or more well-designed and well-implemented correlational studies (with statistical controls for selection bias).

TIER 2—MODERATE EVIDENCE:

supported by one or more well-designed and well-implemented quasi-experimental studies.

TIER 4—DEMONSTRATES A RATIONALE:

practices that have a well-defined logic model or theory of action, are supported by research, and have some effort underway by an SEA, LEA, or outside research organization to determine their effectiveness.



The Significance of Effect Size

It is possible for literacy programs to receive a strong ESSA rating because of one, or even multiple well-designed studies, and still not demonstrate effective outcomes. For this reason, effect size is an important addition to levels of evidence for evaluating rigor of efficacy. Effect size helps determine if a program is statistically significant and meaningful. Because effect size is standardized, it allows comparison of the effectiveness of different programs on the same outcome. Effect size helps educators understand how students who received instruction from a particular program performed against students who did not experience the program. It is important to note that for studies in education, 0.2 is a large effect size.



Examples of States Raising the Bar

Even with all factors identified, educators are still left to determine whether a literacy program is grounded in up-to-date research, proven to be an effective teaching tool, and capable of addressing their students' unique needs. For educators working to evaluate literacy programs' effectiveness, policy and legislation can serve as a lens of guidance. Below are several examples of states incorporating the science of learning to read, ESSA evidence levels, and effect size into their legislation and policy.

Florida CARES Act "Ensuring the B.E.S.T. Curriculum for Reading" Grant Includes Effect Size

Select a K-3 program and/or an instructional practice aligned to the B.E.S.T. ELA Standards and the science of reading (explicit and systematic instruction in phonological awareness, phonics, fluency, vocabulary, and comprehension, as applicable to need) with strong, moderate, or promising levels of evidence as defined by ESSA, has an effect size of .20, at a minimum, and meets the needs of the target population.

Utah Includes a Statutory Requirement for Independent Evaluation of Early Intervention Reading Software

U.C.A. Section 53F-4-203 requires the State Board of Education and the contracted independent evaluator to report annually on the results of the evaluation to the Education Interim Committee. The independent evaluator is required to:

- (i) evaluate a student's learning gains as a result of using the provided early interactive reading software; reading software; and
- (iii) determine the extent to which a public school uses the early interactive reading software.
- (ii) for the evaluation, use an assessment not developed by a provider of early interactive reading software.

Nevada Department of Education Policy Guidance Requires ESSA Levels of Evidence

A public school that receives money pursuant to section 8 of SB178 must use the money only on programs or services which are evidence-based, as defined in ESSA. Schools and districts using these funds must adhere to ESSA evidence-based intervention tiers 1-4, as stipulated in SB178. Failure to demonstrate that funds are used for interventions meeting these evidence requirements may result in disqualification from the next year's qualifying funds.

Massachusetts Provides Grant Funding to Replace Low-Quality Curriculum

Schools and districts currently using popular curricular materials that do not meet expectations for quality from EdReports and CURATE receive priority for replacing the low-quality materials. These include:

- Fountas & Pinnell Classroom K-5 (Heinemann)
- Holt McDougal Literature 6-12 (HMH)
- Journeys K-6 (HMH)
- Reach for Reading K-6 (National Geographic/ Cengage)
- Reading Street Common Core K-6 (Pearson)
- Units of Study in Reading, Writing, and Phonics K-5 (Heinemann)
- Wonders K-2, publication year 2017 (McGraw Hill)

1 Kraft, M. A. (2020). Interpreting effect sizes of education interventions. Educational Researcher, 49(4), 241–253.

