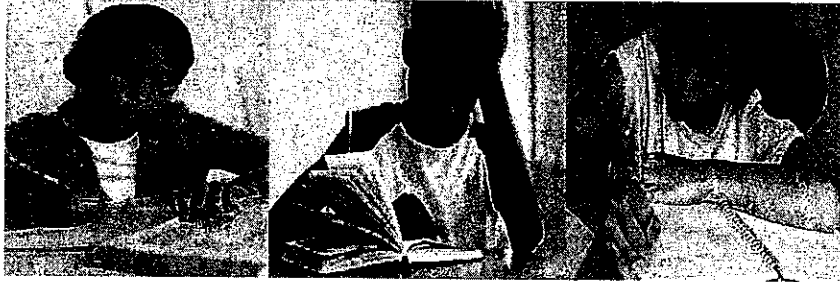


Response to Intervention: A Comprehensive and Systematic Process for Preventing Reading Failure



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Professional References

- Cortiella, C. (2009). *The State of Learning Disabilities*. New York, NY: National Center for Learning Disabilities.
- Dorn, L. & Henderson, S. (2010). A comprehensive intervention model: A systems approach to response to intervention. In M. Lipson & K. Wixson (Eds.). *Approaches to Response to Intervention: Evidence-based framework for preventing reading difficulties*, 88-120. Newark, DE: International Reading Association.
- Gersten, R. & Dimino, J. (2006). RtI (Response to Intervention): Rethinking special education for studying reading difficulties (yet again). *Reading Research Quarterly*, 41, 99-108.
- Gersten, R., Ruchs, L. S., Williams, J. P. & Baker, S. (2001). Teaching reading comprehension strategies to students with learning disabilities: A review of research. *Review of Educational Research*, 71, 279-320.

Professional References

- Henderson, S. & Dorn, L. (2011). Supporting students who struggle with comprehension of text during literature discussion groups in grades 3-6. In R. L. McCormack & J. R. Paratore (Eds.), *After early intervention then what? Teaching struggling readers in grades 3 and beyond*, 137-161. Newark, DE: International Reading Association.
- Lyon, G. R., Fletcher, J. M., Shaywitz, S. E., Shaywitz, B. A., Torgesen, J. K., Wood, F. B. et al. (2001). Rethinking learning disabilities. In C. E. Finn, Jr., R. A. J. Rotherham, & C. R. Hokanson, Jr. (Eds.), *Rethinking special education for a new century*, 259-287. Washington, DC: Thomas B. Fordham Foundation and Progressive Policy Institute.
- 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*. Bethesda, ME: Author.

Professional References

- Scammacca, N., Vaughn, S., Roberts, G., Wanzek, J., & Torgenson, J. K. (2007). *Extensive reading interventions in grades K-3: From research*. Portsmouth, NH: RMC Research Corporation, Center on Instruction.
- West, M. (2016). From evidence-based programs to an evidence-based system: Opportunities under the Every Student Succeeds Act. In *Evidence Speaks Series*, Number 23, Brookings Institute. <http://www.brookings.edu/research/papers/2016/02/05-evidence-based-system-opportunities-under-essa-west>
- Vellutino, F. R., Scanlon, D. M., Sipay, E.R., Small, S. G., Pratt, A., Chen, R., Y& Denckla, M. B. (1996). Cognitive profiles of difficult-to-remediate and readily remediated poor readers: Early intervention as a vehicle for distinguishing between cognitive and experiential deficits as basic causes of specific reading disability. *Journal of Educational Psychology*, 88(4), 601-638.

Things to Think About

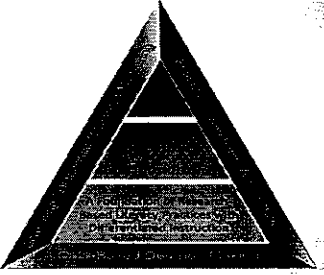


- 80-90% of children identified as LD are impaired in reading.
- Many children in special education may be instructional casualties because they did not get adequate instruction prior to identification.

Things to Think About

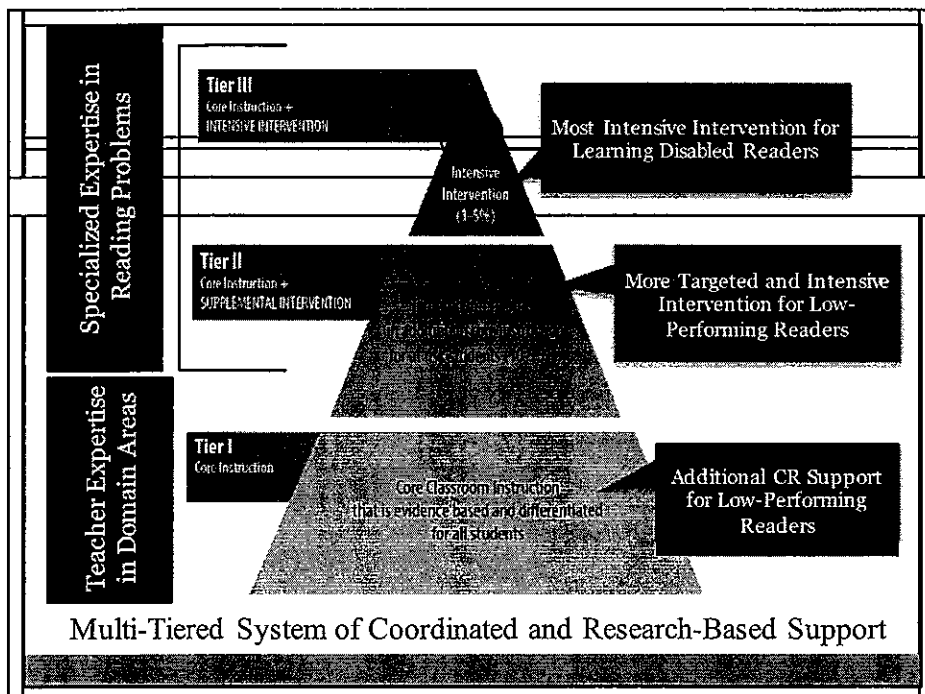


- Inappropriate reading instruction might lead children to practice inappropriate processing behaviors, which become very resistant to intervention.
- Therefore, these confused readers are ‘learning to be learning disabled with increasing severity as long as the inappropriate responding continues’.



Arkansas
Department of
Education

<http://www.arkansased.gov/divisions/learning-services/curriculum-and-instruction/rti>



The RtI Framework

- Provides teachers with a problem-solving framework for assessing students' progress and informing instruction.
- Combines progress monitoring data and specific interventions, along with diagnostic information, to provide a data-based profile of how well the student is responding to instruction.
- Requires classroom and supplemental teachers to work together on assessments and best practices.
- Uses degrees of intensive and precision teaching to meet the needs of struggling readers.
- Results in more accurate identification of students with reading disabilities.

Gersten, R. & Dimino, J. (2006). RtI (Response to Intervention): Rethinking special education for studying reading difficulties (yet again). *Reading Research Quarterly*, 41, 99-108.

Review of Beginning Reading Interventions

Over prediction occurs when predictive measures mistakenly over-identify children at risk for becoming RD (reading disabled). Indeed, most efforts to identify reading problems before receiving reading instruction over predicts reading disabilities. Sixty-nine percent of the children predicted to be at risk in Felton's (1992) study, for example, were good readers by third grade; only 58% of Badian's (1994) at-risk preschoolers had confirmed reading problems. (Jenkins & O'Connor, 2000, p. 112).

RtI – Decision-Making Process

- Given the limited resources that schools possess, providing intensive reading intervention to students who do not need it is a serious problem and a serious potential flaw. (Gerstein & Domino, 2006).
- RtI provides a data-driven process for differentiating between students with low achievement (based on poor instruction, poverty, and other environmental factors) and students with reading disabilities.

Tier 1: Universal Classroom Instruction

- Classroom instruction can be considered effective if at least 80% are meeting established benchmarks with clear goals:
 1. What exactly do we expect all students to learn?
 2. How will we know if and when they've learned it?
 3. How will we respond when some students don't learn?

For Readers Slightly Below Benchmark

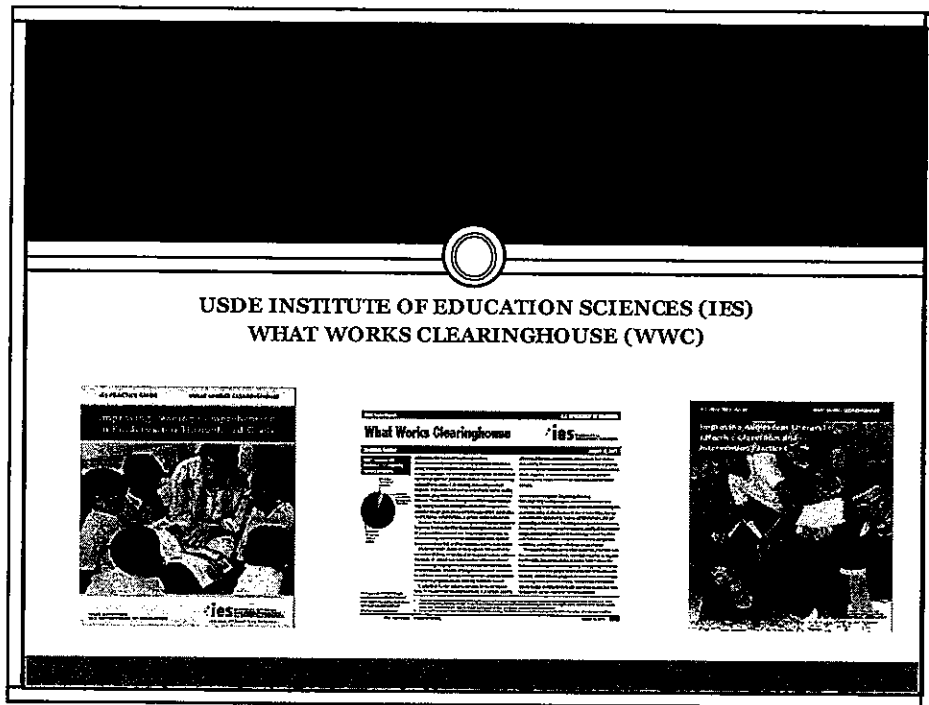
- These students are almost at grade level and should be able to reach proficiency with additional support in the classroom.
 - Classroom teacher monitors student progress to determine if a more intensive intervention is needed.
 - Differentiated instruction includes scaffolding techniques for tailored support for low-performing readers.
 - Literacy coaches can assist classroom teachers in implementing research-based practices for low-performing readers.

Tier 11: Core + Supplemental

- These students are considered at risk for reading failure and are placed immediately in a more intensive intervention, where their progress is systematically monitored.
 - Intervention is generally 30 minutes a day with a reading specialist or intervention specialist.
 - Evidence-based programs and research-based practices from USDE What Works Clearinghouse are proven effective.
 - Classroom teacher and specialist should consult at frequent intervals to determine progress across settings.

Tier III: Core + More Intensive Intervention

- These are the students for whom special education or some type of specialized intensive intervention may be appropriate.
 - Special education teachers should be trained in research-based methods for meeting the specialized needs of struggling readers.
 - Special education teacher and classroom teacher collaborate on ways to support student across both settings.
 - Progress is monitored at designated intervals.



What Works Clearinghouse: Beginning Readers

- Shanahan, T., Callison, K., Carriere, C., Duke, N. K., Pearson, P. D., Schatschneider, C., & Torgesen, J. (2010). *Improving reading comprehension in kindergarten through 3rd grade: A practice guide* (NCEE 2010-4038). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S., Department of Education. Retrieved from whatworks.ed.gov/publications/practiceguides.



Six Critical Skills for Reading

1. Word-level skills (phonemic awareness, word analysis strategies, sight word vocabulary, and practice to increase fluency while reading)
2. Vocabulary knowledge and oral language skills (strategies to build vocabulary and strengthen listening comprehension)
3. Broad conceptual knowledge (information-rich curriculum that develops students' background knowledge that is necessary for good reading comprehension)

Six Critical Skills for Reading

4. Comprehension strategies (cognitive strategies for problem-solving within texts)
5. Thinking and reasoning strategies (making inferences as text becomes more complex)
6. Motivation to understand and work toward academic goals (persistence and mental effort to stay engaged in a task)

Recommendations and Levels of Evidence

1. Teach students to use reading comprehension strategies. (Strong)
2. Teach students to identify and use the text's organizational structure to comprehend, learn, and remember content. (Moderate)
3. Guide students through focused, high-quality discussion on the meaning of the text. (Minimal)
4. Select texts purposely to support comprehension development. (Minimal)
5. Establish an engaging and motivating context in which to teach reading comprehension. (Moderate)

What Works Clearinghouse: Adolescent Readers

- Kamil, M. L., Borman, G. D., Dole, J., Kral, C. C., Salinger, T. & Torgensen, J. (2008). *Improving adolescent literacy: Effective classroom and intervention practices: A practice guide* (NCEE#2008-4027). Washington, DC: National Center for Education and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://ies.edu.gov/ncee/wwc>.

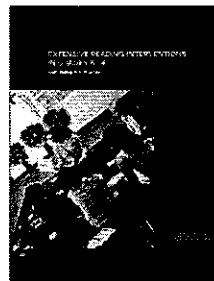


Recommendations and Level of Evidence

1. Provide explicit vocabulary instruction (Strong)
2. Provide direct and explicit comprehension strategy instruction (Strong)
3. Provide opportunities for extended discussion of text meaning and interpretation (Moderate)
4. Increase student motivation and engagement in literacy learning (Moderate)
5. Make available intensive and individualized interventions for struggling readers that can be delivered by trained specialists (Strong)

Research-Based Resource

- Scammacca, N., Vaughn, S., Roberts, G., Wanzek, J., & Torgenson, J. K. (2007). *Extensive reading interventions in grades K-3: From research.* Portsmouth, NH: RMC Research Corporation, Center on Instruction.



Elements of Research-Based Interventions

- Phonological awareness, decoding, and word study
- Independent reading of progressively more difficult texts
- Writing activities
- Engaging students in practicing comprehension while reading meaningful texts

Elements of UALR Dyslexia Planner

Phase One:

- Fast practice of previously taught concepts
(focus on letter recognition, phonemic awareness, and sight words)
- New concept teaching
(systematic focus on letter recognition, phonemic awareness, phonics, and sight word development)
- New text reading
(connection to authentic texts, multiple genres, focus on meaning, new language structures, and comprehension strategies)

Elements of UALR Dyslexia Planner

Phase Two:

- Fast practice of previously taught concepts
(letter recognition and phonemic awareness, writing of letters and words)
- New concept teaching
(systematic handwriting instruction of letters and systematic spelling instruction of words)
- Writing/Composition
(dictated sentences or composition of text)

UALR Dyslexia Planner -Alignment with Elements of Research-Based Interventions

- Phonological awareness, decoding, and word study: **Phases One & Two**
- Independent reading of progressively more difficult texts: **Phase Two**
- Writing activities: **Phase Two**
- Engaging students in practicing comprehension while reading meaningful texts: **Phase Two**

UALR Center for Literacy Longitudinal Research Agenda

- **Phase I (in progress):** Develop/implement teacher training program; monitor/study case study results, focus group interviews, and survey data from teachers to refine dyslexia planner for second cohort.
- **Phase II (2016-2019):** Create resource website to support candidates; assemble interdisciplinary team (SE, EC, SLP, READ, GT, and UAMS) to design research methodology and seek IRB approval for 3 year study.
- **Phase III (2017-2020):** Replicate design with multiple state partners (Kentucky, Maine, Georgia, South Carolina, Washington), disseminate findings; continue to collect longitudinal data.

West, M. (2016). From evidence-based programs to an evidence-based system: Opportunities under the Every Student Succeeds Act. In *Evidence Speaks Series*, Number 23, Brookings Institute. <http://www.brookings.edu/research/papers/2016/02/05-evidence-based-system-opportunities-under-essa-west>

Opportunity for Evidence: What Works?



ESSA is the first federal education law to define the term “evidence-based” and to distinguish between activities with “strong,” “moderate,” and “promising” support based on the strength of existing research. Crucially, for many purposes the law also treats as evidence-based a fourth category comprising activities that have a research-based rationale but lack direct empirical support—provided, that is, that they are accompanied by “ongoing efforts to examine the effects” of the activity on important student outcomes.

Opportunity for Evidence: What Works?



Those six words, if taken seriously and implemented with care, hold the potential to create and provide resources to sustain a new model for decision making within state education agencies and school districts—a model that benefits students and taxpayers and, over time, enhances our knowledge of what works in education.

BROOKINGS

SERIES: Evidence Speaks | Number 23 of 26

Note | February 5, 2016

From evidence-based programs to an evidence-based system: Opportunities under the Every Student Succeeds Act

By: Martin R. West

Coverage of the recent enactment of the Every Student Succeeds Act (ESSA), a major rewrite of the much-maligned No Child Left Behind Act (NCLB), has rightly focused on Congress's decision to give states greater control over key issues such as the design of school accountability systems and the certification and evaluation of teachers. How states handle their newfound authority will directly affect student and teacher experiences and determine whether ESSA turns out to be an enduring shift in education governance or merely a temporary reversal of the decades-long trend toward greater federal control.

As important over the long run, however, may be a series of provisions in the law encouraging the use of evidence to inform the kinds of decisions states are now empowered to make. ESSA is the first federal education law to define the term "evidence-based" and to distinguish between activities with "strong," "moderate," and "promising" support based on the strength of existing research. Crucially, for many purposes the law also treats as evidence-based a fourth category comprising activities that have a research-based rationale but lack direct empirical support—provided, that is, that they are accompanied by "ongoing efforts to examine the effects" of the activity on important student outcomes. Those six words, if taken seriously and implemented with care, hold the potential to create and provide resources to sustain a new model for decision-making within state education agencies and school districts—a model that benefits students and taxpayers and, over time, enhances our knowledge of what works in education.

To understand the value of the law's approach to evidence, it is useful to contrast ESSA with its predecessor. NCLB also sought to make the American education system more data-driven, famously using the term "scientifically based research" some 110 times in an attempt to limit

the use of federal funds to activities with proven results.[i] It also defined scientifically based research narrowly, emphasizing the need for experimental or quasi-experimental studies (and expressing a clear preference for the former). The problem with this approach was that, in many areas, there simply weren't any studies that met the law's criteria. Education researchers had for decades largely ignored the emergence of more rigorous methods for program evaluation and, as a result, the evidentiary cupboard was bare. In some key areas, such as early reading instruction, NCLB did encourage the adoption of programs with a proven track record. It may also have played a constructive role by highlighting the lack of evidence concerning key questions of education policy and practice. As a practical matter, however, its evidence requirements became mere words on a page.

Fifteen years later, our nation's education research infrastructure is much improved. While investment in education research and development still pales in comparison to other sectors, the Institute of Education Sciences has used its limited resources to push the field decisively toward the routine use of experimental methods to study program effectiveness. Federal investment in the creation of state longitudinal data systems that track students' achievement over time has cut the cost of conducting rigorous program evaluations. The Obama Administration's Investing in Innovation program set an important precedent by using a tiered model to align the amount of funding a grantee received to the strength of the evidence to support its effectiveness and requiring that its work be subjected to independent evaluation. The federally funded What Works Clearinghouse reviews and compiles the available studies on a range of topics to support state and local decision-makers.

Even so, the search remains on for proven strategies to address many of our most pressing education challenges. According to the Coalition for Evidence-Based Policy, the vast majority of the education experiments that have been conducted over the past decade have yielded null effects on student outcomes. This should be no surprise. As in the pharmaceutical industry, most of the new ideas tested in education at any point in time are unlikely to work. What is needed is a way to identify the small subset of ideas that actually do.

This is what makes ESSA's definition of what it means for an activity to be evidence-based potentially so powerful. Consistent with existing Department of Education standards, the law defines as "strong" evidence showing a statistically significant effect on student outcomes from at least one experimental study. The terms "moderate" and "promising" require, respectively, evidence from a quasi-experimental study or a correlational study that makes statistical corrections for selection bias. When using federal funds to pay for interventions in low-performing schools, the law requires states and school districts to include activities that meet

at least the promising standard.[jii] In order to have their accountability plans approved, states will need to demonstrate to the Department's satisfaction that they have adhered to this requirement.

Everywhere else the law is more flexible, encouraging states and school districts to adopt "evidence-based" programs under numerous funding streams but permitting them to do so by subjecting novel programs to "ongoing" evaluation. These provisions do not require that funds be spent on evidence-based activities. In each case, doing so is simply listed as an allowable use of funds allocated for a particular purpose, such as improving teacher quality, engaging families, or meeting the needs of English language learners. But the clear implication is that states may use a portion of their federal funds to pay for the ongoing evaluation of untested programs; otherwise the evaluation activities would effectively constitute an unfunded mandate.

To eliminate any uncertainty, the Department of Education should issue guidance to clarify that federal funds can be used to support evaluation activities under any program within the law that provides states the "evidence-based" option. One benchmark could come from the Investing in Innovation program, under which many grantees have devoted as much as 20 percent of their awards to required independent evaluations. Such a step would dramatically increase the resources available for evaluation activities across the education sector. The Department should also specify that, if federal funds are used, those evaluations must be sufficiently strong to reach the "promising" standard and provide technical assistance to states and school districts in meeting that goal. Clearly Congress did not intend for the fourth category within its definition to serve as a permanent justification for a program to be considered evidence-based, but rather hoped to increase the supply of programs with empirical support.

To be clear, with the exception of interventions in low-performing schools, ESSA's language on evidence-based activities is permissive rather than binding. The opportunity to use federal funds for evaluation purposes will only make a difference if state officials choose to exploit it. While some may have preferred a more heavy-handed approach, the NCLB era revealed that although the federal government can make states and school districts do something, it is hard to ensure that they do it well. This same logic surely applies to research and evaluation, and many states lack either the appetite or the capacity to engage in evidence-based policymaking.

Fortunately, there are steps that entities beyond the Department of Education can take to encourage states to take advantage of the opportunities the law provides to become more evidence-based systems. The law itself directs the Regional Educational Laboratories to

provide technical assistance to states engaged in evidence-based activities, a responsibility that should become their top priority. Foundations could invest in developing states' analytic capacity and condition their other philanthropy on the routine evaluation of new and existing programs. The National Governors Association and Council of Chief State School Officers could lead the development of common standards for evidence use within state school systems and encourage their implementation. An incoming presidential administration could even seek congressional approval for competitions to reward states and school districts for collecting, using, and disseminating evidence.

As with so much in the new law, what happens as a result of ESSA's evidence provisions will depend less on what they require of states and more on what states make of the opportunities that they create. Let's hope—and work to ensure—that states take full advantage.

[i] Manna, P. & Petrilli, M. J. (2008). "Double Standard? 'Scientifically Based Research' and the No Child Left Behind Act." In F. M. Hess, ed. *When Research Matters: How Scholarship Influences Education Policy*. Harvard Education Press.

[ii] The Department is also required to give priority to applicants with strong, moderate, or promising evidence within seven competitive grant programs with combined funding of \$832.5 million in fiscal year 2017.



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