2018 WEBINAR SERIES

ESSA and Evidence of Effectiveness:
Looking More Critically at Evidence-Based Research

VOYAGER SOPRIS LEARNING®

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- We will save five to 10 minutes at the end the presentation for Q&A with our presenter. Please share your questions via the 'Question Box' at the right of your screen at any time during today's presentation.
- Following the webinar, all registrants will receive an email including a link to the recording of today's webinar. Those attending the live presentation also will receive a certificate stating that they attended a one-hour webinar with Voyager Sopris Learning®.

Alisa Dorman

- Former Executive Director, Office of Literacy for the Colorado Department of Education.
- Vice President of Research and Product Effectiveness at Voyager Sopris Learning.

Participants will learn to:

- Apply knowledge of evidence types to various information sources.
- Evaluate the quality of evidence related to product effectiveness.
- Categorize evidence according to ESSA criteria.
- Better help teachers become critical consumers of product information.

Current Educational Context

- Every Student Succeeds Act (ESSA) continues the commitment to public education and the belief that all students deserve high-quality education regardless of background or circumstances.
- ESSA offers state education agencies the opportunity to use evidence to support school improvement and better outcomes for all students.
- This evidence-based approach encourages state and district leaders to consider multiple tiers of evidence and examine the strength of evidence in decision making.

Four Types of Evidence

- It is important to understand the types of evidence and how to assess the quality of each to become more critical consumers of product information.
- Each type of evidence has the potential to contribute to a consumer's decision regarding the use of a product.

Anecdotal	**Correlational**
Descriptive	**Causal**

Source: Mathematica. (2016). *Understanding Types of Evidence: A Guide for Educators* [Brochure].

Anecdotal Evidence

- **Represents Impressions from User Experience**
  - Includes personal descriptions or claims from one (or more) person's own experience
  - May include claims of product effectiveness or another feature not related to effectiveness

Strengths	Limitations
• May provide an indication of the context in which the product or feature may be expected to be effective. • May identify aspects from user experience that may enhance or reduce effectiveness. • May help identify products that are promising enough to warrant more rigorous research.	• Cannot provide strong support for claims based on subjective impressions.

Example

Common Source of this Evidence Type: **Marketing Materials**

LANGUAGE! Live has been effective with English learners, dyslexic students, students with language deficits and specific reading difficulties, and more.

> *100 percent of the students who have participated in the* **LANGUAGE! Live** *program have seen significant growth.*

> *They've been in elementary school for six years and they come to me as a 2nd grade reader. They leave here a near grade-level reader; a literate adult-level reader when they leave here with three years of* **LANGUAGE! Live** *intervention.*

> *When we went from negatives and now my kids are scoring in the five to six hundreds, it tells me the program works.*

Descriptive Evidence

- **Measures of Outcomes Over Time**
  - Summarizes characteristics of program participants and their outcomes

Strengths	Limitations
• May help identify products that are promising enough to warrant more rigorous research.	• Does not include a comparison group. So, impossible to know what would have happened without the program. • Cannot *alone* provide strong support for claims about effect on outcome of interest.

Example

Common Source of this Evidence Type: **Marketing Materials, New Articles**

LANGUAGE! Live 2015–2016 National Results

Overall Results

During the 2015–2016 school year, 9,063 students had scores for all three benchmark assessments and one or more WT and TT units. These students came from 576 schools in 215 districts located in 41 states and 1 Canadian province. Figure 1 shows the results for *LANGUAGE! Live* students with matched scores for all students and split into those who were receiving instruction in Level 1 and Level 2. The PAR results are reported in Lexiles, and the TOSCRF and TWS-4 results are reported using Percentile Rank (PR). The beginning of year (BOY) and end of year (EOY) results are shown for each assessment. It is important to remember the PAR is a grade-level assessment and the TOSCRF and TWS-4 are norm-referenced assessments, meaning through the use of these tests, students are being compared to their grade-level and age-level peers.

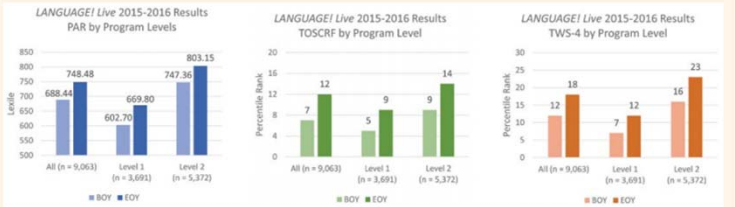


Figure 1. *LANGUAGE!* Live 2015–2016 Results by Benchmark Assessment and Program Level

Correlational Evidence

- **Shows Comparison of Users and Non-Users**
  - Can be used to identify relationship between an educational condition and a specific outcome

Strengths	Limitations
• Useful starting point when learning about new product.	• Cannot conclusively demonstrate that product gets results because it cannot rule out other possible explanations for differences in outcomes among users and non-users.

Examples

Common Source of this Evidence Type: **Blog Posts, News Articles**

Less Common Source: **Grey Literature**

Study: Mississippi Professional Development Initiative Significantly Improves Quality of K–3 Teacher Instruction, Student Engagement

Posted on May 17, 2017

LETRS, Literacy, research

DALLAS, May 17, 2017 (GLOBE NEWSWIRE) -- A statewide early literacy professional development initiative by the Mississippi Department of Education (MDE) is showing dramatic improvement in the quality of teacher instruction and student engagement, according to a study recently released by the Regional Educational Laboratory (REL) Southeast administered by Florida Center for Reading Research (FCRR) at Florida State University.

In the wake of the state's Literacy-Based Promotion Act of 2013 (LBPA), which called for all Mississippi students to read at grade level by the end of grade 3, MDE began providing professional development and literacy coaching to all K–3 educators using the *LETRS®* (*Language Essentials for Teachers of Reading and Spelling*) program from Voyager Sopris Learning®. According to the 18-month REL Southeast study, teachers who participated in the *LETRS* professional development program through online and face-to-face workshops:

Gained knowledge of early literacy skills;
Improved the quality of their early literacy skills instruction; and
Saw better student engagement during instruction.

READ COMPLETE REPORT

Read the complete report to examine how educators' knowledge and classroom practices changed with the implementation of LETRS.

Causal Evidence

- **Measure Effectiveness Accurately**
  - "Apples-to-apples" comparison
  - Randomized controlled trial is "gold standard" in causal analysis

Strengths	Limitations
• Determines effectiveness with confidence. • Ensures only difference between treatment group and comparison group is the product itself.	• Not readily available for many educational products.

Example

Common Source of this Evidence Type: **Independent Evaluations**

Less Common Source: **News Articles**

Effects of a Year Long Supplemental Reading Intervention for Student With Reading Difficulties in Fourth Grade

Jeanne Wanzek
Vanderbilt University

Yaacov Petscher
Florida State University

Stephanie Al Otaiba, Brenna K. Rivas, and Francesca G. Jones
Southern Methodist University

Shawn C. Kent
University of Houston

Christopher Schatschneider
Florida State University

Paras Mehta
University of Houston

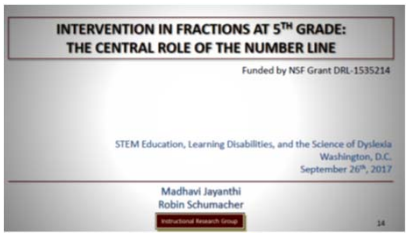
Journal of Educational Psychology
2017, Vol. 109, No. 8, 1103–1119

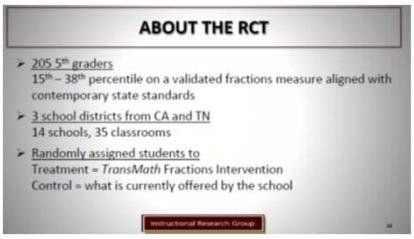
Research examining effective reading interventions for students with reading difficulties in the upper elementary grades is limited relative to the information available for the early elementary grades. In the current study, we examined the effects of a multicomponent reading intervention for students with reading comprehension difficulties. We used a partially nested analysis with latent variables to adequately match the design of the study and provide the necessary precision of intervention effects. We examined the effects of the intervention on students' latent word reading, latent vocabulary, and latent reading comprehension. In addition, we examined whether these effects differed for students of varying levels of reading or English language proficiency. Findings indicated the treatment significantly outperformed the comparison on reading comprehension (Effect Size = 0.38), but no overall group differences were noted on word reading or vocabulary. Students' initial word reading scores moderated this effect. Reading comprehension effects were similar for English learner and non-English learner students.

Examples

Common Source of this Evidence Type: **Independent Evaluations**

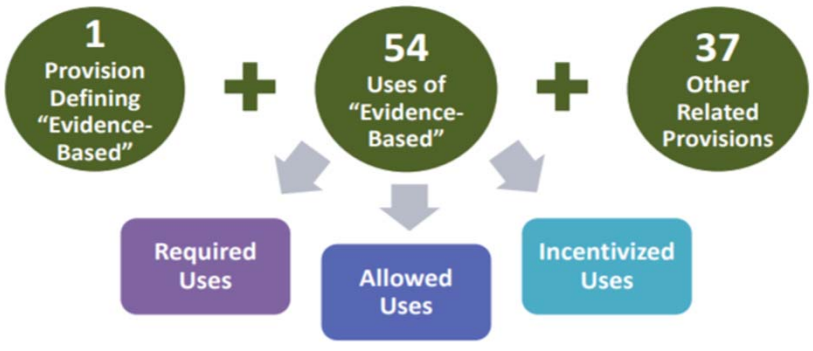
Less Common Source: **News Articles**





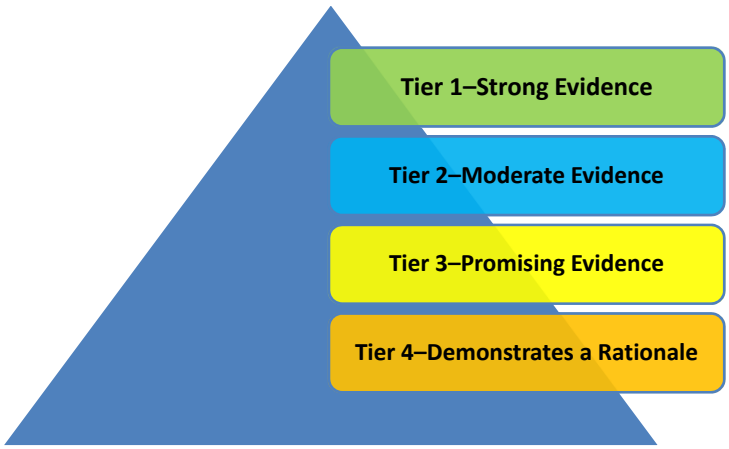
Evidence in the Era of ESSA

Evidence-Based Provisions Under ESSA



Source: Presentation by Martin West, Ph.D. at the American Youth Policy Forum, March 2017

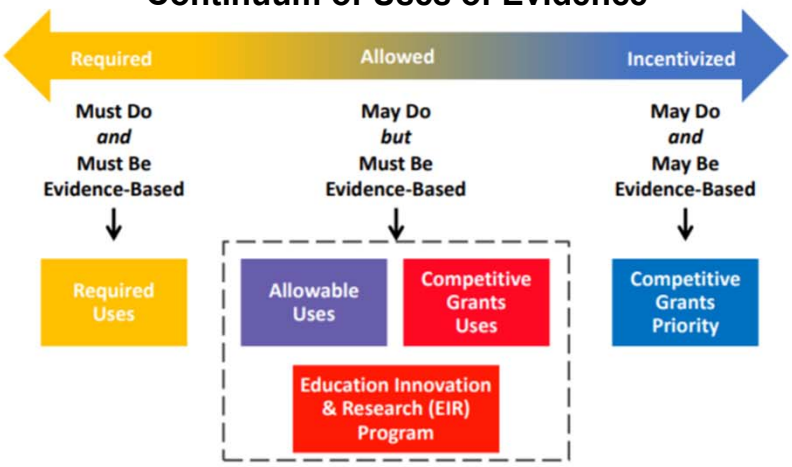
Four Levels of Evidence Under ESSA



Differences Among Each Tier

- Tier 1 – Strong Evidence: Supported by one or more well-designed and well-implemented randomized control experimental study.
- Tier 2 – Moderate Evidence: Supported by one or more well-designed and well-implemented quasi-experimental study.
- Tier 3 – Promising Evidence: Supported by one or more well-designed and well-implemented correlational study (with statistical controls for selection bias).
- 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.

Continuum of Uses of Evidence



Source: Presentation by Martin West, Ph.D. at the American Youth Policy Forum, March 2017

Required Use of Evidence-Based by Program in ESSA

Tiers 1–3
- Title I, Section 1003 (School Improvement)

Tiers 1–4
- Other Title I
- Title II
- Title III
- Title IV

Next Steps and Resources

- Check State Plans submitted under ESSA: checkstateplans.org
- Check for specific State Department of Education guidance (link to websites): ed.gov/about/contacts/state/index.html

- US Department of Education: ED.gov/ESSA
- Evidence-Based Guidance: Using Evidence to Strengthen Education Investments: ed.gov/policy/elsec/leg/essa/guidanceuseseinvestment.pdf
- Institute of Educational Sciences (IES) Resources: ies.ed.gov
- What Works Clearinghouse: ies.ed.gov/ncee/wwc
- ERIC: eric.ed.gov
- Results First Clearinghouse Database: pewtrusts.org/en/research-and-analysis/issue-briefs/2014/09/results-first-clearinghouse-database
- Evidence for ESSA: evidenceforessa.org
- Best Evidence Encyclopedia: bestevidence.org

Summary of Tiers 1–3

Demonstrates a statistically significant effect on improving student outcomes or other relevant outcomes.	1	Strong Evidence	Based on at least one well-designed and well-implemented experimental study.
	2	Moderate Evidence	Based on at least one well-designed and well-implemented quasi-experimental study.
	3	Promising Evidence	Based on at least one well-designed and well-implemented correlational study with statistical controls for selection bias.

Source: Adapted from Chiefs for Change, 2016

What are Evidence-Based Interventions?

- Evidence-based interventions are activities, strategies, practices, or programs that are effective at producing results and improving outcomes when implemented.
- The type of evidence described in ESSA has generally been produced through formal studies and research.

Examples of ESSA Levels Applied to Voyager Sopris Learning Products

Product	ESSA Level	Evidence Citation
Passport	Tier I	Wanzek, J., Petscher, Y., Otaiba, S., Rivas, B., Jones, F., Kent, S., Schatschneider, C., & Mehta, P. (2017). Effects of a Year Long Supplemental Reading Intervention for Students with Reading Difficulties in Fourth Grade. Journal of Educational Psychology, 109(8), 1103-1119.
Sound Partners	Tier I	Vadasy, P. F., & Sanders, E. A. (2011). Efficacy of Supplemental Phonics-Based Instruction for Low-Skilled First Graders: How Language Minority Status and Pretest Characteristics Moderate Treatment Response. Scientific Studies of Reading, 15(6), 471–497. Vadasy, P. F., & Sanders, E. A. (2010). Efficacy of supplemental phonics-based instruction for low-skilled kindergarteners in the context of language minority status and classroom phonics instruction. Journal of Educational Psychology, 102(4), 786–803.
Stepping Stones to Literacy	Tier I	Nelson, J. R., Benner, G. J., & Gonzalez, J. (2005). An investigation of the effects of a prereading intervention on the early literacy skills of children at risk of emotional disturbance and reading problems. Journal of Emotional and Behavioral Disorders, 13(1), 3–12.
TransMath	Tier I	National Science Foundation Grant DRL-1535214 (manuscript and presentation at PCRC Conference, 2018)
LETRS Classic	Tier III	Folsom, J. S., Smith, K. G., Burk, K., & Oakley, N. (2017). Educator outcomes associated with implementation of Mississippi's K–3 early literacy professional development initiative (REL 2017–270). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southeast. Retrieved from http://ies.ed.gov/ncee/edlabs.

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Summary of Tier 4

Demonstrates a rationale based on high-quality research findings or positive evaluation that such activity, strategy, or intervention is likely to improve student outcomes or other relevant outcomes.	4	Demonstrates Rationale	Includes ongoing efforts to examine the effects of such activity, strategy, or intervention.

Source: Adapted from Chiefs for Change, 2016

Examples of ESSA Levels Applied to Voyager Sopris Learning Products

Product	ESSA Level	Evidence to support Tier IV
LANGUAGE! Live	Tier IV	White paper, Case Studies, National Summary of Data, Research Foundations paper, Standards Alignment
Read Well	Tier I	What Works Clearinghouse (for English Language Development) Frasco, R. D. (2008). Effectiveness of Reading First for English language Learners: Comparison of two programs (Doctoral dissertation, Walden University, 2008). Dissertation Abstracts International, 69(03A), 141-879.
	Tier IV	Case Studies, Research Foundations paper, FCRR Review, Summary of Effectiveness Report.
Step Up to Writing	Tier IV	Research Foundations paper, Dissertation studies, Research studies
LETRS	Tier IV	Research alignment, implementation evaluations, Alignment to IDA's Knowledge and Practice Standards.

Partners in the Work

Voyager Sopris Learning:

- wants to partner with schools and districts to support transparent review of product evidence.
- wants to provide source documents as needed for inclusion in local product reviews and improvement planning processes, grants submissions and other application processes.
- wants to work with schools and districts interested in being research partners.

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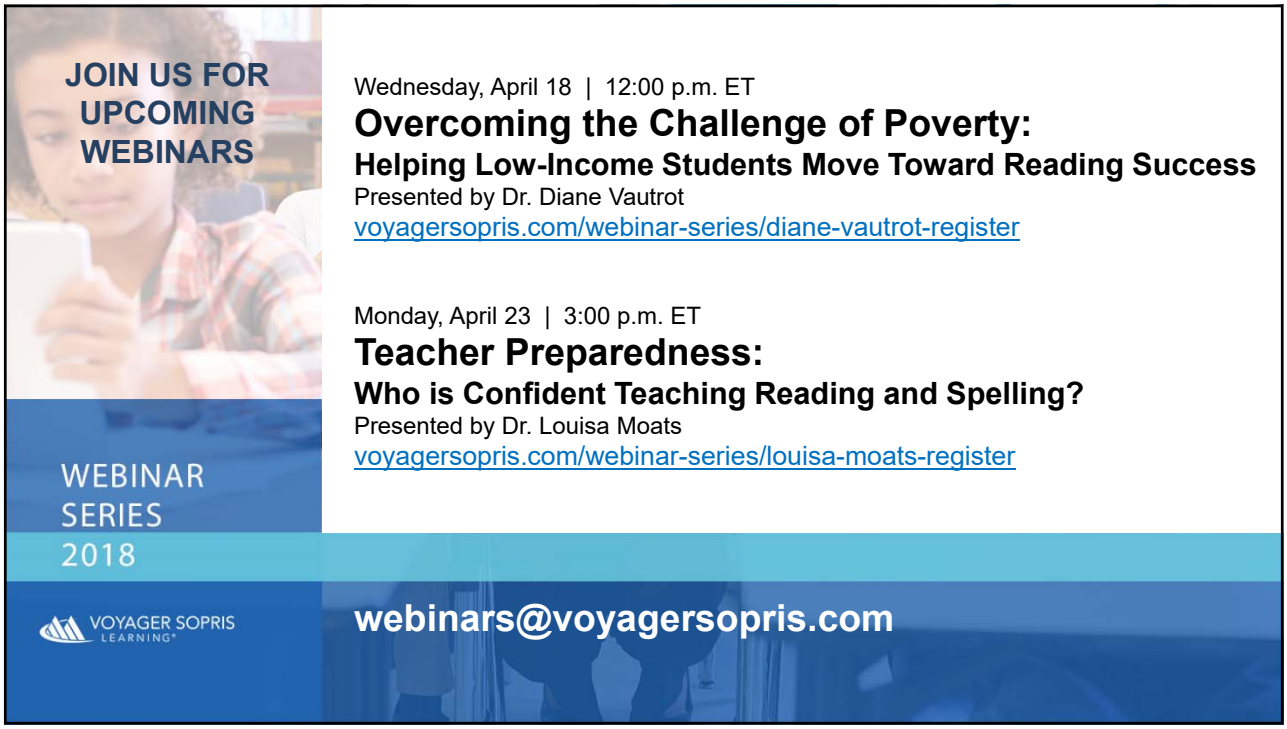
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Wednesday, April 18 | 12:00 p.m. ET
Overcoming the Challenge of Poverty:
Helping Low-Income Students Move Toward Reading Success
Presented by Dr. Diane Vautrot
voyagersopris.com/webinar-series/diane-vautrot-register
Monday, April 23 | 3:00 p.m. ET
Teacher Preparedness:
Who is Confident Teaching Reading and Spelling?
Presented by Dr. Louisa Moats
voyagersopris.com/webinar-series/louisa-moats-register
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