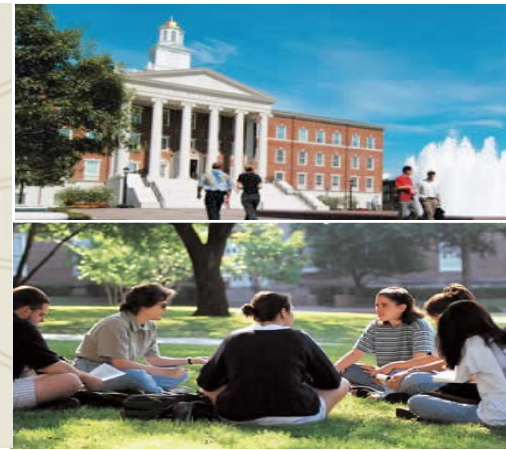




MTSU Fox Reading Conference March 26, 2022



Supporting Effective Instruction and Interventions within Response to Intervention and Multi-tiered Systems of Support

Dr. Stephanie Al Otaiba

Simmons School of Education, Southern Methodist University, Dallas, TX

Purpose of Presentation

- The primary purpose of my presentation is to describe effective interventions to improve reading outcomes within RTI and MTSS and to describe school systems supports for effective implementation.
 - First, I'll imagine your role in this and provide a brief rationale for why what you do makes a difference!
 - Second, I'll contrast what has and has not worked in schools to support effective MTSS implementation
 - Third, I'll describe features of evidence-informed interventions by:
 - Summarizing findings in a recent review of reviews
 - Highlighting promising newer studies that support Tier 1 and 2 interventions
 - Focusing on a study that provided Tier 3 right away
 - Describing examples of reading interventions combined with motivational or social and emotional learning (SEL) components
 - Fourth, I'll describe an ongoing design project for kindergarten classroom instruction that is based on the evidence-based practice Dialogic Reading and SEL themes
 - Finally, I will provide resources to use and share that are consistent with the science of reading to Response to Intervention and Multi-tiered Systems of Support in the elementary grades.

(First) Your Role(s)



- *First and foremost, be kind and compassionate to yourself*
- Engage in ongoing learning about instruction, interventions, and data
- Connect with families, other professionals and advocate
- Share the research with your colleagues and school teams

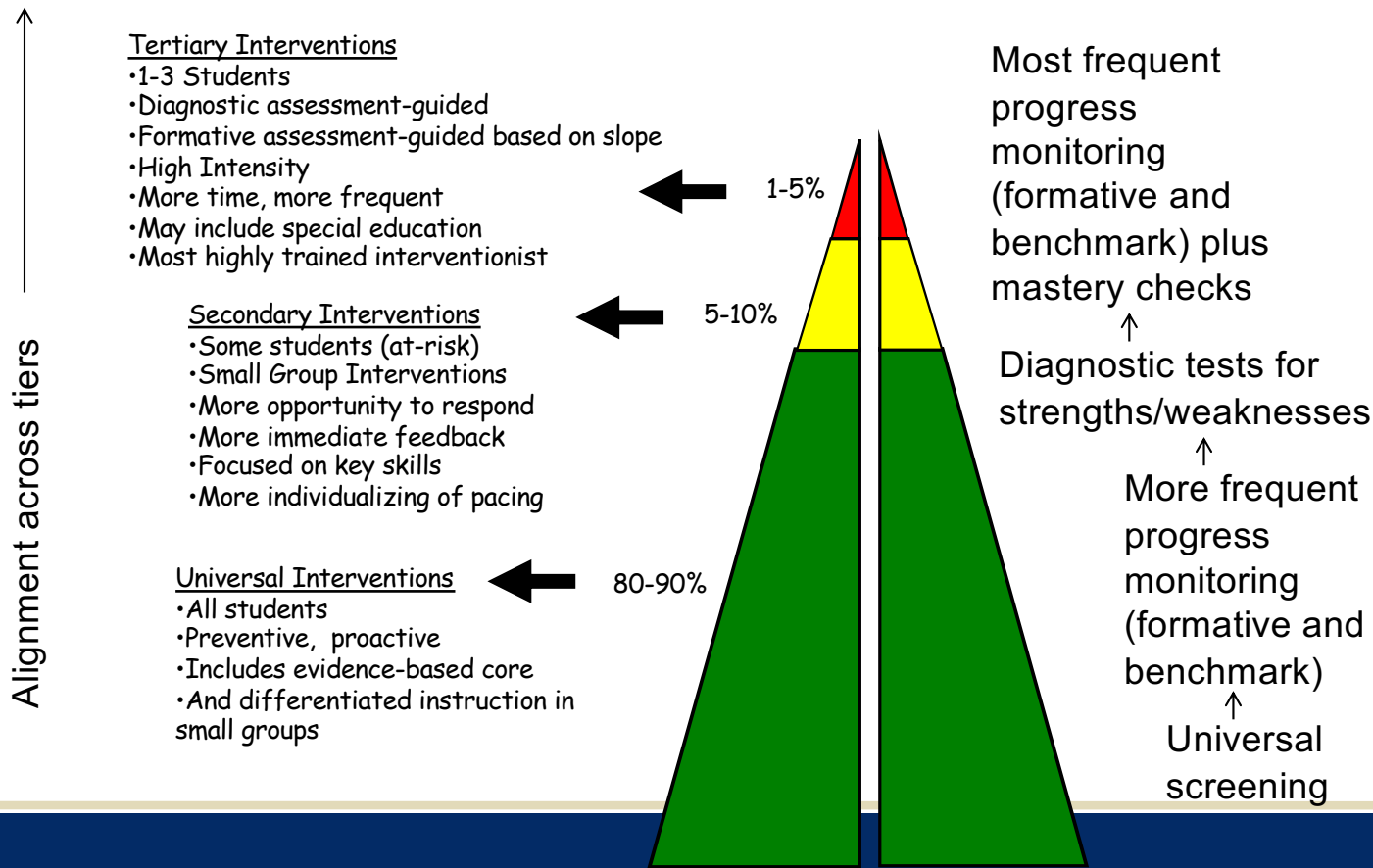
Why Is Your Role Important?



- Only about 36% of fourth graders can read proficiently on grade level material in schools in the US (National Assessment of Educational Progress (NAEP; <https://nces.ed.gov/nationsreportcard>, 2015).
 - Rate is lower (18-21%) for vulnerable minority (e.g., African American, Hispanic) children and for children living in poverty (i.e., qualify for the National School Lunch Program).
 - A majority (67%) of fourth grade students with disabilities read below even a basic level (NAEP, 2015).
- Consequences of poor reading:
 - related social, emotional, and behavioral issues (Alliance for Excellent Education, 2002)
 - higher risk for high school dropout (Alliance for Excellent Education, 2002)
 - higher risk for delinquency (Center on Crime, Communities, and Culture, 1997)
 - higher risk of future unemployment (National Center on Education Statistics, 2005)

Situating Your Role Within RTI and MTSS

(updated from Fuchs, Fuchs, & Compton, 2012)



Response to Intervention and Multi-tiered Systems of Support

Common Core Components

1. Systematic and explicit core literacy instruction
2. Universal screening to spot students who struggle to learn to read
3. Interventions that target student needs increase in intensity as needed
4. More frequent progress monitoring to inform instruction and intervention and to assess response

(e.g., Gersten et al., 2008)

Response to Intervention and Multi-tiered Systems of Support

Common Core Components

1. Systematic and explicit core literacy instruction
2. Universal screening to spot students who struggle to learn to read
3. Interventions that target student needs increase in intensity as needed
4. More frequent progress monitoring to inform instruction and intervention and to assess response

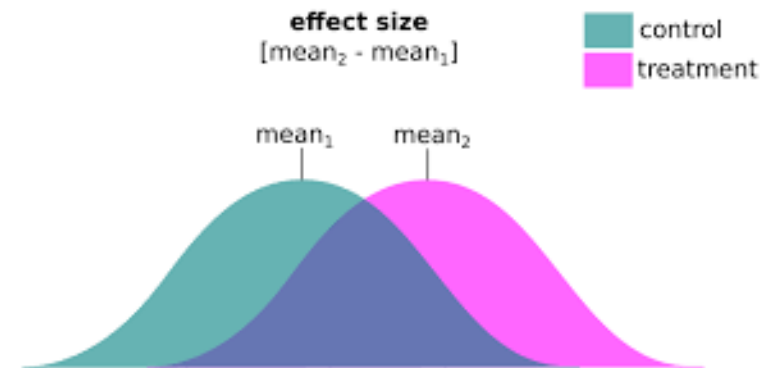
(e.g., Gersten et al., 2008)

- **But MTSS includes a broader array of supports**
- **Every Student Succeeds Act Defines MTSS as**

“a continuum of evidence-based, systematic practices to support a rapid response to students’ needs, with regular observation to facilitate data-based instructional decision making”

Let's Keep in Mind that Research Evidence Is Evolving

- “Evidence-based” findings come from quasi-experimental and experimental studies demonstrating significant differences between treatment(s) and control conditions.
- A meaningful effect means that the effect size favoring treatment over control or comparison is greater than 0.20. And effect size of 1 indicates about a standard deviation of difference in groups. So this represents about a fifth of one standard deviation.
- You and your school team (including parents) may hear various terms:
 - Scientifically based reading practice, Evidence-based practice, High-leverage practice, Science of reading research, Evidence-informed
- **Caveat: “No evidence” does not always mean it does not work, often just that it has not been tested empirically (Yet!)**



Let's also Keep in Mind: Cumulative Risk and Resilience Model

- Catts & Petscher, 2022 recently described a model of how risks accumulate for students who have persistent difficulties in reading.
- Their model has implications for understanding these levels or layers of implementation.
- They explain that within resilience factors, some (like explicit and systematic instruction or effective parenting) promote better outcomes for all individuals (no matter their risk factors).
- Some factors may also be most impactful, or *protective*, for individuals who are most at risk.

Catts and Petscher

173

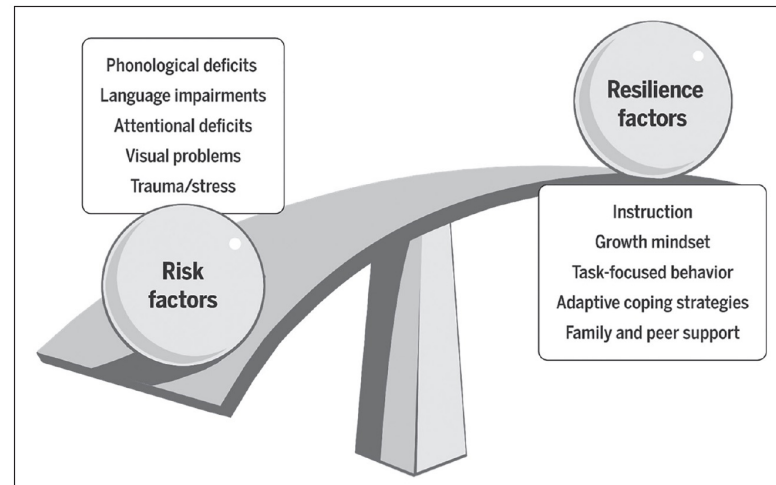
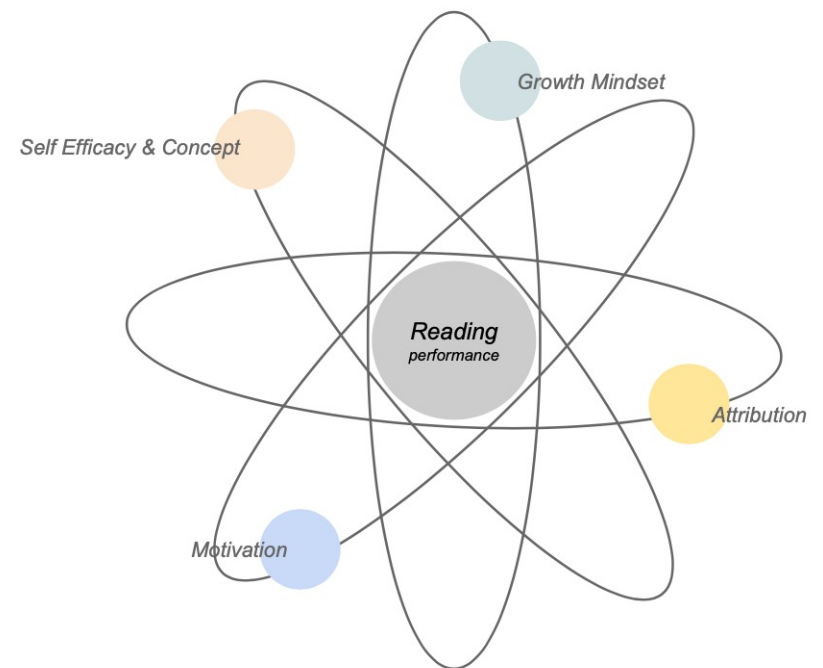


Figure 1. Cumulative risk and resilience model of dyslexia.

MTSS Includes Social and Emotional Learning and Positive Behavior Supports

The Collaborative for Academic, Social, and Emotional Learning (CASEL, n.d.)

- “the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.”
- These include a constellation of related constructs, including
 - **Growth mindset**
Dweck, 2008; Duckworth & Yeager, 2015; Sisk et al., 2018
 - **Attribution theory**
Cox & Yang, 2012; Kistner et al., 1988; Tabassam & Grainger, 2002
 - **Motivation**
Toste et al., 2020, Conradi et al., 2014
 - **Self efficacy & self concept** Bandura, 1977; Chapman & Tunmer, 2003



Thanks to Mai Zaru and Dayna Russell Freudenthal!

Pause and Reflect

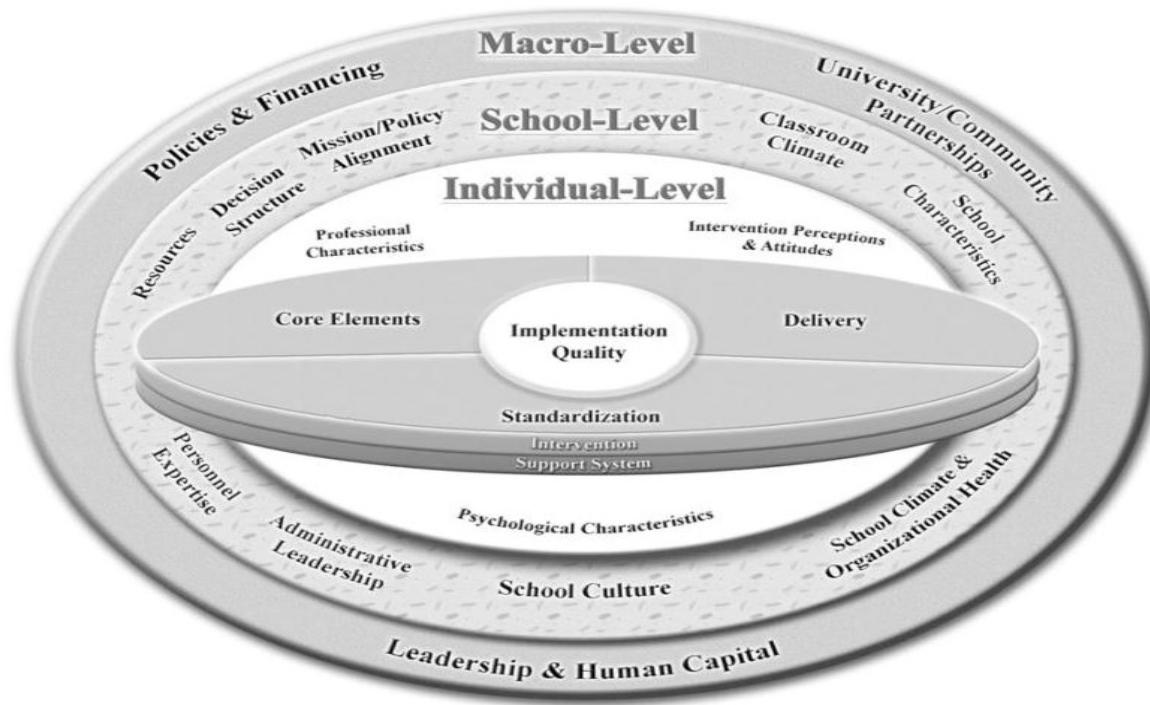


- Please jot down any questions to share in the chat.
- **In this second section of the presentation, I'll describe some aspects of what has not worked in schools to support MTSS and prepare to contrast these aspects with others that do work.**



(Second) Systems and School Supports for MTSS Implementation- It's not just you by yourself

FIGURE 1



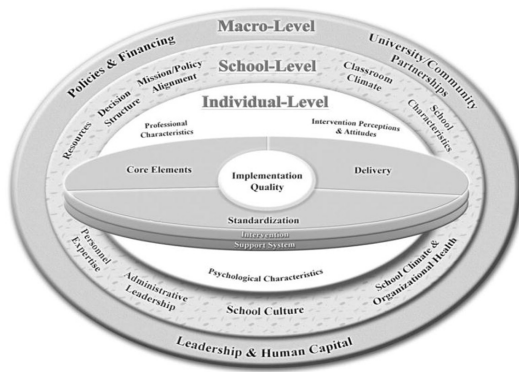
Factors that Can Affect Implementation Quality: A Multi-Level Model

Maximizing the Implementation Quality of Evidence-Based Preventive Interventions in Schools: A Conceptual Framework

Domitrovich et al., 2015

Implementation for MTSS at the School Level: What Did Not Work

FIGURE 1



Factors that Can Affect Implementation Quality: A Multi-Level Model

- A widely cited study examined students on one side or the other of a grade-level benchmark who either did or did not receive Tier 2 intervention (researchers use the term regression discontinuity design)
- Balu et al (2015) reported that students receiving tiered interventions performed similarly or worse than students in Tier 1.

Implementation for MTSS at the School Level: More Details

- *BUT!*
 - This was an evaluation of typical practice
 - Schools were not provided any support systems for RTI/MTSS
 - There was no consistent standardized implementation
 - Inconsistent screeners or progress monitors
 - No consistent programs or interventions
 - No consistent PD, coaching, or monitoring of fidelity or dosage for instruction or intervention

PROJECT

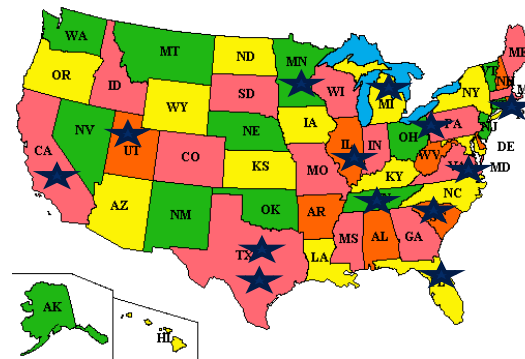


- A comprehensive study of key factors associated with reading outcomes for students receiving Tier 3 and/or special education reading interventions
- Participating schools will represent a variety of RTI models, geographic and socioeconomic locations to incorporate a range of school risk.

PI: Stephanie Al Otaiba

Co-PIs: Jill Allor, Aki Kamata, and Paul Yovanoff

Southern Methodist University



The research reported here was supported by the Institute of Education Sciences, U.S. Department of Education, through Grant R324A160132 to Southern Methodist University. The opinions expressed are those of the authors and do not represent views of the Institute or the U.S. Department of Education.

Preliminary Findings from Interviews with RTI Administrators

RQ (1) How do schools use assessments to identify risk?

- Universal Screening tools were commonly the only assessment measure used to identify students for intervention.
- Progress Monitoring assessments varied in frequency of administration and were not always key in driving decisions on moving students between tiers.
- Behavior screening and monitoring were indicated as an area of need for most principals.

RQ (2) Were data-based decision-making processes in place?

- Relatively little criteria to guide moving students between tiers.
- Cut scores did not always indicate if a student would receive intervention support or not.

Take Away- Our Preliminary Findings Suggested MTSS Supports Are Needed

RQ (3) What data-based decision-making process typically informed planning for tiered intervention?

- Discussions across grade levels are typically informal.
- RTI data discussion typically occurs monthly within grade level planning meetings.

RQ (4) How have schools established knowledge for RTI implementation?

- Ongoing professional development is lacking.
- Very few trainings available for those that are implementing intensive intervention

At a More Macro Level Changes over the Past Decade in RTI/MTSS Implementation

- RTI/MTSS are now considered support systems for all, not merely a pathway to referral for special education or dyslexia services.
 - 21 states now use “MTSS,” 5 use “MTSS/RTI” interchangeably, 17 states use “RTI” (Berkeley et al., 2020).
- Many states have passed dyslexia legislation (some part some in addition to MTSS with requirements for teacher training, screening, and some specific interventions (National Center on Improving Literacy, 2020; Petscher et al., 2020; Youman & Mather, 2018))

FIGURE 1



Factors that Can Affect Implementation Quality: A Multi-Level Model

Pause and Reflect



- Before we shift to learn more about interventions that can work.....
- Jot down any questions to share in the chat.
- Begin thinking about what school system resources and supports you have and what you might ask for.
- Later I'll share some specific resources.
- **In this third section of the presentation, I'll describe features of evidence-informed interventions**



Recent Review of Reviews about Literacy Interventions over the Past Decade: Primary Grades

- First, we examined average effects reported by syntheses and large meta-analyses conducted in the primary grades (Al Otaiba et al., 2018; Austin et al., 2017; Gersten et al., 2020; Slavin et al., 2011; Stevens et al., 2021; and Wanzek et al., 2018).
- The majority of the early literacy interventions were preventative in nature (i.e., relatively more studies were conducted in kindergarten and first grade), and targeted beginning code-focused, foundational reading skills, provided in small groups or one to one.
- Findings provided causal evidence for the efficacy of these explicit and systematic interventions; small to moderate effects were reported on standardized measures of code-focused skills (ES ranged from 0.41 to 0.62).
- Slightly smaller effects were reported on measures of meaning-focused, comprehension skills (ES ranged from 0.32 to 0.36).



Upper Elementary and Beyond

Second, we examined average effects reported by meta-analyses that included students in of upper elementary, or older (Donegan & Wanzek, 2021, Flynn et al., 2012; Scammacca et al., 2013; Wanzek et al., 2013)

- Explicit and systematic interventions focused on foundational or comprehension skills; most were implemented in small groups.
- Findings provided causal evidence for the efficacy of these interventions delivered to a variety of struggling readers for code-focused standardized measures (ES ranged from 0.09 to 0.22).
- And for standardized measures of meaning-focused, comprehension skills (ES ranged from 0.10 to 0.73).



READING RESEARCH QUARTERLY

Special Issue Article

What We Know and Need to Know about Literacy Interventions for Elementary Students with Reading Difficulties and Disabilities, including Dyslexia

Stephanie Al Otaiba, Kristen McMaster, Jeanne Wanzek, Mai W. Zou

First published: 12 January 2022 | <https://doi.org/10.1002/rmq.458>

Read the full text >

Abstract

The purpose of this paper is to describe what we know and what we still need to learn about literacy intervention for children who experience significant difficulties learning to read. We reviewed 14 meta-analyses and systematic reviews of experimental and quasi-experimental studies published in the last decade that examined the effects of reading and writing interventions in the elementary grades, including research focused on students with reading difficulties and disabilities, including dyslexia. We attended to moderator analyses, when available, to further refine what we know and need to learn about interventions. Findings from these reviews indicate that explicit and systematic interventions focusing on the code and meaning dimensions of reading and writing, and delivered one-to-one or in small groups, are likely to improve foundational code-based reading skills, and to a lesser extent, meaning-based skills, across elementary grade levels. Findings, at least in the upper elementary grades, indicate that some intervention features including standardized protocols, multiple components, and longer duration can yield stronger effects. And, integrating reading and writing interventions shows promise. We still need to learn more about specific instructional routines and components that provide more robust effects on students' ability to comprehend and individual differences in response to interventions. We discuss limitations of this review of reviews and suggest directions for future research to optimize implementation, particularly to understand for whom and under what conditions literacy interventions work best.

Writing Instruction K-12

Third, we examined effects reported in meta-analyses about writing instruction on students' reading outcomes (Graham & Hebert, 2011; Graham & Santangelo, 2014; Graham et al., 2018).

- There were positive effects of transcription and sentence-level writing on fluency (0.32) and word reading (0.39-0.51), with smaller effects on comprehension (0.17-0.32)
- Explicit spelling instruction had a moderate effect of phonological awareness (0.55) and on overall reading (0.44).



READING RESEARCH QUARTERLY

Special Issue Article

What We Know and Need to Know about Literacy Interventions for Elementary Students with Reading Difficulties and Disabilities, including Dyslexia

Stephanie Al Otaiba, Kristen McMaster, Jeanne Wanzek, Mai W. Zuru

First published: 12 January 2022 | <https://doi.org/10.1002/rmq.458>

Read the full text >

Abstract

The purpose of this paper is to describe what we know and what we still need to learn about literacy intervention for children who experience significant difficulties learning to read. We reviewed 14 meta-analyses and systematic reviews of experimental and quasi-experimental studies published in the last decade that examined the effects of reading and writing interventions in the elementary grades, including research focused on students with reading difficulties and disabilities, including dyslexia. We attended to moderator analyses, when available, to further refine what we know and need to learn about interventions. Findings from these reviews indicate that explicit and systematic interventions focusing on the code and meaning dimensions of reading and writing, and delivered one-to-one or in small groups, are likely to improve foundational code-based reading skills, and to a lesser extent, meaning-based skills, across elementary grade levels. Findings, at least in the upper elementary grades, indicate that some intervention features including standardized protocols, multiple components, and longer duration can yield stronger effects. And, integrating reading and writing interventions shows promise. We still need to learn more about specific instructional routines and components that provide more robust effects on students' ability to comprehend and individual differences in response to interventions. We discuss limitations of this review of reviews and suggest directions for future research to optimize implementation, particularly to understand for whom and under what conditions literacy interventions work best.

Findings from Our Recent Chapter on Early RTI: What Has Worked When Researchers Supported Implementation of Tier 1 and Tier 2

- Explicit and systematic instruction for Tier 1 and Tier 2
- We conceptualized a continuum of a hybrid of standardized plus some individualization to highly individualized interventions
 - Reliable screeners and progress monitoring data
 - Consistent routines and support (rules) for tiers
 - Teachers or interventionists provided PD and/or coaching to support fidelity
 - Tier 1 and 2 were usually aligned in terms of materials and instructional routines
 - Reading and (sometimes) resilience were promoted

Russell-Freudenthal, Zaru, & Al Otaiba (2022) **Early Literacy and Multi-Tiered Systems of Supports** in the Handbook of Science on Early Reading

Table 1.

Hybrid
(n = 6)

	Tier	Study	GL	Participants	Intervention	Measures	Findings
T	1-2	Solari et al., 2018 (RCT)	1	At-risk (T ₁ + T ₂ ; n = 61) < 4 wrc and at-risk on listening comp (Texas Primary Reading Inventory); BAU (n = 37).	Supplemental Reading Rules [RR] (68 sessions) Tier 1 whole-class, Tier 2 small group word study, comp, and fluency: T ₁ = coached teachers, T ₂ = uncoached, BAU = typical.	Phoneme Segmentation (Yopp, 1995); WJ-III ⁸	Moderate effects favoring RR conditions on word reading, fluency, and comprehension (g = 0.41 - 0.72)
R	2	Foorman et al., 2018 (RCT)	K-2	Students below 30th percentile on vocabulary and reading skills (T ₁ : n = 1653, T ₂ : n = 1764).	Students received T ₁ : stand-alone (81 sessions) in small groups, or T ₂ : foundational instruction aligned with the core reading program.	FRA (Foorman et al., 2016)	T ₁ and T ₂ started below 10 th and improved to 20 th percentile; K students experienced the largest growth.
R	2	Coyne, 2018a (QED; RDD)	1-3	Tier 2 (T: n = 318) 1 st below grade on NWF, 2 nd and 3 rd below ORF benchmark. Tier 1 (BAU: n = 360).	Students in T received: supplemental for 4 days/ week, Nov.- June; or BAU.	ORF; WRMT-R ¹²	Effects favored T on phonemic awareness and decoding (ES = 0.39, 0.36).
R	2	Burns, 2020 (QED)	2-3	Students below 10 th percentile on ORF, not SpEd (T: n = 92). SpEd (n = 22). Tier 1: (BAU: n = 385).	Students received T: small group phonics or fluency; SpEd: school-delivered services; BAU (Reading Mastery).	PRESS decoding (PRESS, 2014); ORF	Effects favored T over SpEd, and BAU over SpEd on reading growth (g = 0.74, 0.68).
R	2	Lovett et al., 2017 (QED)	1-3	Scored at/below 85 on reading measure (T: n = 172, BAU: n = 47)	Students received T: small group 100-125 sessions of PHAST + RAVE-O; or BAU (typical instruction).	[RM], PIAT-R (Lazarus, 1990); SRI-2 ⁵ ; WRMT ¹¹ ; TOWRE ⁶ ; GORT-4 ³	Effects favored T on [RM] measures (d = 1.44 - 1.82), and code-focused (d = 0.57 - 1.39) & meaning-focused norm referenced (d = 0.63-0.90).
T	2	Fien et al., 2021 (RCT)	1	At-risk (10-30 th percentile) on SAT-10 (Harcourt, 2002): (n = 757).	Students received T (n = 406): Tier 2 Enhanced Core Reading Instruction [ECRI] aligned with Tier 1 or BAU (n = 406).	DIBELS NWF ² , ORF, WRMT ¹²	Effects favored T on NWF and word attack (g = 0.31, 0.48).

Table 1.
Cont'd

Individualized
($n = 3$)

R	2	Savage et al., 2018 (QED)	1	Students (T: $n = 119$; CBP: $n = 82$) < 30 th percentile on WRAT-4.	Small groups received (22-24 sessions) T: Direct Mapping & Set Variability of phonics, or CBP: current/best practices	WRAT-4 ¹⁰ , WJ-III ⁸ , ORF, PPVT-4 ⁴	Effects favored T on word reading, vocab, spelling, sight word, ORF ($d = 0.08 - 0.41$); delayed posttest ($d = 0.18 - 0.30$).
T	2	Vernon-Feagans et al., 2018 (RCT)	K-1	Students < 35 th percentile 1+ WJ III subtest; T ($n = 305$), BAU ($n = 251$).	Students received T: TRI (30-40 sessions) 1:1 (re-reading fluency, word-work, guided oral reading, and pocket phrases), or BAU.	WJ-III ⁹	Effects favored T on letter-word, word attack, spelling, & comp ($g = 0.26, 0.28, 0.26, 0.16$).
T	3	Weiser et al., 2019 (QED)	K-8	Students ($n = 452$) with reading disabilities in SpEd or resource rooms.	Teachers ($n = 44$) were randomized in one of 3 coaching groups (face-to-face, on demand, and technology based).	CTOPP ¹ ; TOWRE-2 ⁷ , ORF, TWS-5 (Larsen et al., 2013), WJ-III ⁸	Effects favored students with teachers in tech-coaching on their phonemic awareness, decoding, fluency, writing, spelling ($d = 0.22 - 1.01$).

Note. T = teacher-implemented. R = researcher-implemented.

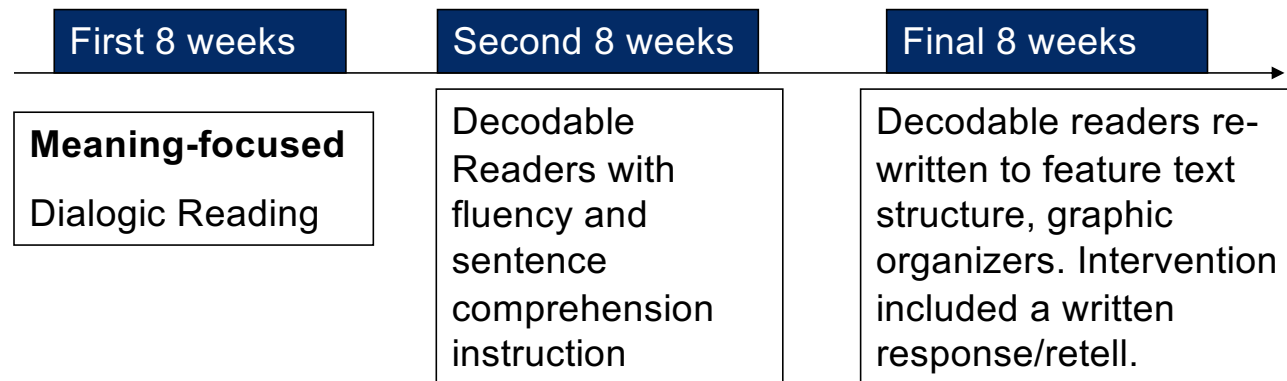
Providing Intensive Intervention Immediately

Al Otaiba, S., Connor, C. M.,
Folsom, J. S., Wanzek, J.,
Greulich, L., Schatschneider, C.,
Wagner, R. K. (2014).

- This study used a randomized controlled trial, with children randomized within classrooms, and compared the efficacy of two RTI models on first graders' reading performance.
- We documented high quality implementation of Tier 1 through observations.
- Both models were identical in terms of the type of interventions provided in Tier 2 and 3, but differed in terms of when students began tiered intervention.

Simple View of Reading
Reading = Decoding X
Comprehension
Gough & Tunmer, 1986

Interventions: Code and Meaning focused



Code-focused: Explicit segmenting, blending, decoding and sight word intervention

Tier 3: *Early Interventions in Reading* (Mathes et al., SRA) (groups of 1-3 four days per week 45 m.)

Tier 2: *Open Court Interventions* (groups of 5-7 twice weekly 30 m)

Tier1: *Open Court Imagine It!* (Teacher led 90 m daily)

Differences across RTI Models

“Typical RTI”

- Universal screening
- All students began in Tier 1
- Re-screened after 8 weeks and if not responding, then eligible to receive Tier 2
- Re-screened after 8 weeks and if responding continue to receive Tier 2, or if not responding, receive Tier 3

“Dynamic RTI”

- Universal screening
- Students were eligible receive either Tier 2 or 3 immediately
- Rescreened after 8 weeks and if responding, continue in same Tier, or if not responding to Tier 2, then receive Tier 3



Study Participants

7 Schools; 34 classrooms; $n = 521$
Students

44.5 % Female

– 40.9 % Caucasian

– 47.2 % Black

– 1.9% Asian

– 10.0 % Other (Hispanic, Multi-racial,
Not Reported)

– 56.6 % Eligible for Free or Reduced
Lunch

Initial Screeners

- **Teacher nomination: If a student's teacher rated him or her as being below or well below grade level (Speece et al., teacher judgment of reading severity)**
- **Scores below a local school-based 40th norm (< 5 mins)**
 1. **AIMSweb Letter-Sound Fluency**
 2. **Fuchs Sight Word Fluency**
 3. **TOWRE Sight Word Efficiency**
 4. **TOWRE Phonemic Decoding Efficiency**
- **Exclusionary Criteria**
 - **If a student scored at or above the nationally normed 95th percentile on both the WCJ Passage Comprehension and Letter-Word Identification subtests, he or she was not eligible for intervention regardless of any of his or her other scores**

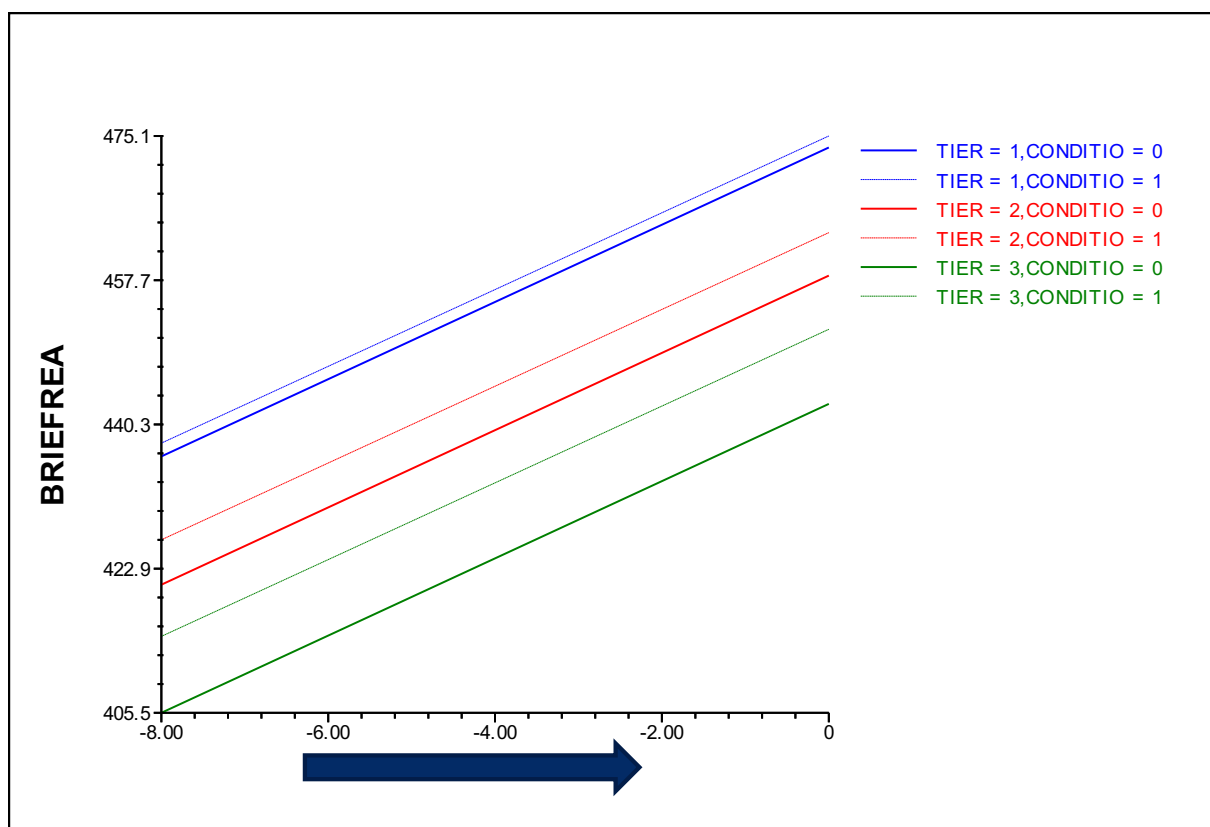
In Dynamic RTI: Eligibility for Assignment to Tier 3

Tier 2



- Tier 3 eligibility
 - Once eligible for intervention, a student was assigned to Tier 3 if they scored below the school-based 40th percentile on all four screener measures and the teacher indicated that the student struggled with at least four of the areas mentioned above
- Tier 2 eligibility
 - Once eligible for intervention, a student was assigned to Tier 2 if he or she was below the school-based 40th percentile on three out of four screener measures or if the student's teacher indicated that the student struggled in reading skills.

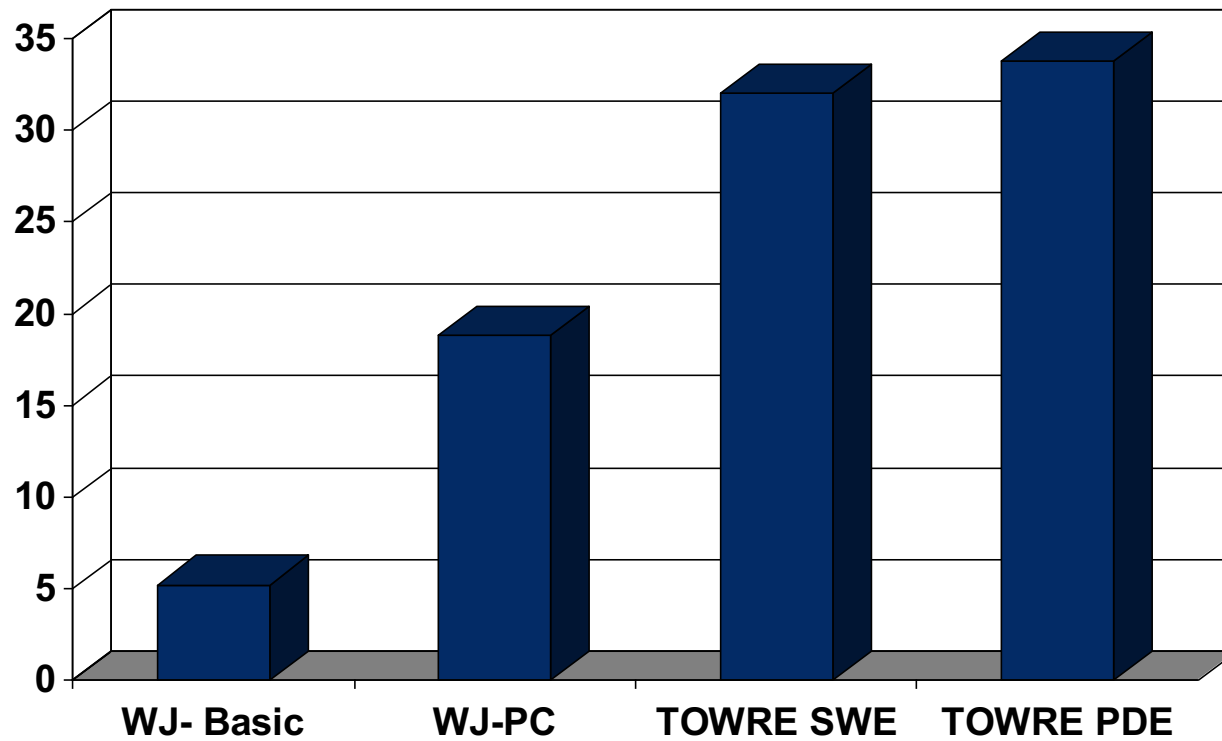
Findings: WJ-III Brief Reading Outcomes by Tier and Condition



Effect
size of
0.36

Figure 1. A hierarchical linear model was run to examine w score outcomes on Woodcock Johnson Brief Reading by Tier and condition. Time on the x-axis is in months centered at the end of the year.

Percent of Students Scoring Below SS of 91 (25th percentile) by Measure



Back to the Cumulative Risk and Resilience Model

- Catts & Petscher, 2022 recently described a model of how risks accumulate for students who have persistent difficulties in reading.
- Their model has implications for understanding these levels or layers of implementation.
- They explain that within resilience factors, some (like explicit and systematic instruction or effective parenting) promote better outcomes for all individuals (no matter their risk factors).
- Some factors may also be most impactful, or *protective*, for individuals who are most at risk.

Catts and Petscher

173

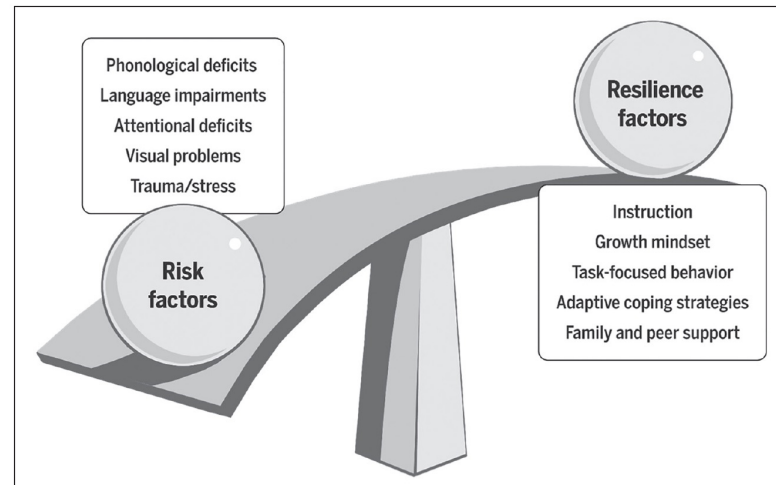


Figure 1. Cumulative risk and resilience model of dyslexia.

What Characteristics Were Associated with Response?

- For this study, we used at or below the 25 percentile on the WJ-III Basic reading cluster as “inadequate response.”
- Only 20 students did not meet this criteria.
- We coded videos of intervention to compare them with “responders”
 - engagement
 - emotions (hope, pride, anxiety, shame, hopelessness).



[This Photo](#) by Unknown Author is licensed under [CC BY-ND](#)

Greulich, L. Al Otaiba, S., Schatschneider, C., Wanzek, J., Ortiz, M., & Wagner, R.K. (2014).

Engagement vs.

Avoidance



This Photo by Unknown Author is licensed under [CC BY-ND](#)



This Photo by Unknown Author is licensed under [CC BY-NC-ND](#)

- **Physical**-standing, rocking, leaving the group
- **Verbal**-yelling out answers, humming, talking, singing
- **Interaction**-(peer-to-peer, student-to-teacher) arguing with teacher, talking with peer, arguing with peer, touching peer

Negative Emotions from Inadequate Responders

Anxiety

- Answering quietly
- Sponging
- Distancing self away from instruction
- Not following along
- “Yuck”
- “I can’t do this”
- Increased from fall to spring

Shame

- Withdrew from group
- When corrected refused to answer
- Refuse to complete activity if corrected
- “It is too hard”
- Bury face in arms



[This Photo](#) by Unknown Author is licensed under [CC BY](#)

Positive Emotions from Adequate Responders



[This Photo](#) by Unknown Author is licensed under [CC BY-NC](#)

Hope

- Smiling
- Answering questions without coaxing
- Pointing to words
- Continued attempts with teaching model (i.e. My turn..)

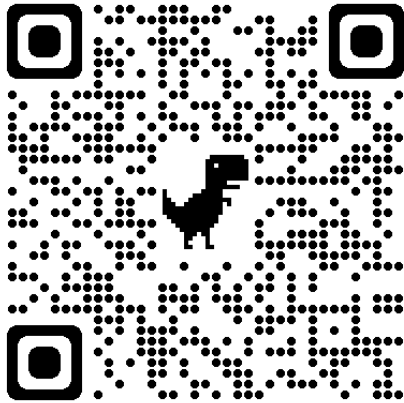
Pride

- Volunteering to participate
- Doing independent practice on activities
- Helping other students with words
- “Can we do it again?”
- “Can I do that?”

Implications from Our Typical vs Dynamic Study and Understanding Response from Risk/Resilience Perspective

- Findings indicate that early intervention with appropriate intensity can greatly reduce risk.
- It was more effective to send students with greatest need directly to our Tier 3.
- Some students needed ongoing support, with larger proportions in the fluency and comprehension domains.
- Even though we provided positive behavior intervention supports, many of our students would likely need ongoing help in an MTSS system.
 - Greater time, dosage, smaller group size.
 - More explicit and systematic reading intervention at their independent level.
 - Support to transfer word reading accuracy to fluency and comprehension.
 - Support for positive attributions, motivation, goal setting, engagement, and a growth mindset.

Recent Chapter on Reading and Mindset Interventions



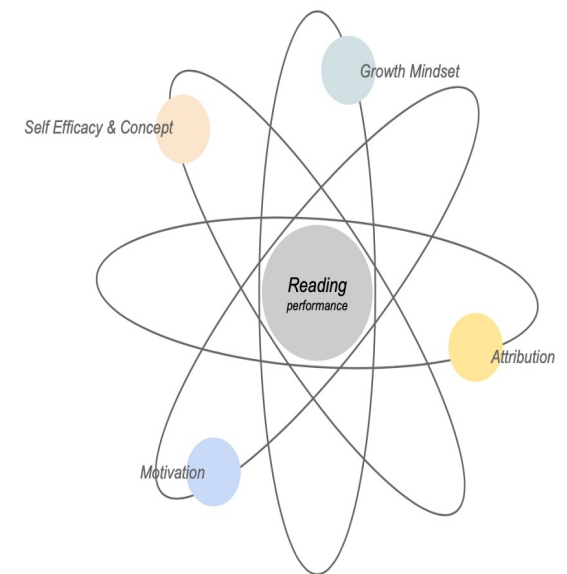
Scan the QR code to read our chapter on reading achievement and growth mindset of students with reading difficulties or reading disabilities coming soon in the *Handbook of Special Education Research*.

Reading and Resilience: Social and Emotional Learning Factors

SEL factors (e.g., anxiety, attributions, mindset, motivation, self-efficacy etc.) may be related to general education success (Blackwell et al., 2007; Burnette et al., 2018; Catts & Petscher, 2022; Daley & McCarthy, 2021; Sisk et al., 2018; Yeager & Walton 2011).

Recent reviews examined the relation between reading achievement and dimensions of reading mindset (Conradi et al., 2014; Schiefele et al., 2012; Toste et al., 2020; Unrau et al., 2018).

We found limited experimental research examining the intersection of reading interventions, motivation-related interventions, and students with dyslexia.



A Few Sample Studies from the Chapter that Show Promise of Combined Interventions

- Orkin et al., (2018)
 - *RAVE-O* and *Wilson* (Wolf, 2010; Wilson, 2011) plus motivation
 - Summer Intervention, 2-4th grade
 - Posttest reading favored treatment condition (ES = 0.24) with increased engagement (ES = 0.37) and reduced avoidance behaviors (ES = 0.52).
- Wanzek et al., (2020)
 - *Lindamood Phoneme Sequencing Program (LiPs)*; Lindamood & Lindamood, 2011) with or without Brainology.
 - School-based intervention, 4th grade
 - Posttest effects favored both treatment conditions compared to the control on nonword reading (ES = 0.29 to 0.35), phonological processing (ES = 0.20 to 0.28), and reading comprehension (ES = 0.19 to 0.23), but not on growth mindset.

Toste and colleagues (Toste et al., 2019)

- Toste and colleagues
 - Multi-syllabic word reading strategies (warming up recognizing vowel patterns, recognizing and manipulating affixes, spelling multi-syllabic words, practicing reading lists, and practice reading sentences and passages).
 - With or without attribution re-training and goal setting
 - Participants were struggling readers in Grades 4-5; small group 4 times per week 40 sessions
 - Effects favored students in treatment conditions (with or without attribution training) relative to control groups for standardized measures of decoding (0.17 to 0.43, spelling (0.25), and comprehension (0.25). No differences in self-concept.

Lovett and colleagues (Lovett et al., 2020)

- Small group intervention using PHAST (word reading strategies for sounding out words, identifying words by analogy with frequent spellings, peeling off for affixes, alerting to vowels with variable vowel pattern pronunciations, and spying parts of new words that are familiar)
 - Two treatment groups: PHAST plus either comprehension or fluency strategies
 - Embedded motivational aspects: attribution training, motivation, goal planning, acknowledging the “challenge” of multi-syllabic words, especially in content texts
- Participants were struggling readers grades 6-8 (small group instruction provided for 100-125 hrs with 40-60 mins per day)
- Effects favored the two PHAST groups over BAU (ES ranged from 0.56 to 0.78 for word reading; 0.36 for comprehension; 0.61 for sense of reading competence).

Pause and Reflect



- That was a lot, thanks for listening.
- Jot down any questions.
- In this fourth section, I'll describe an early intervention that is based on the evidence-based practice Dialogic Reading and SEL themes



Design Project: Project GROW

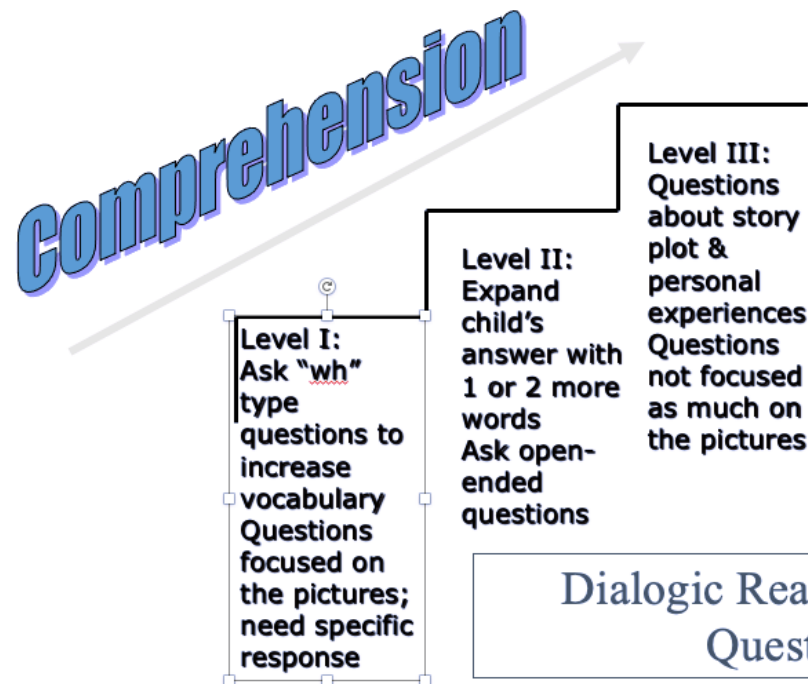
Promising findings of read-alouds in the form of dialogic reading on vocabulary and listening comprehension (Foorman et al., 2016; Shanahan et al., 2010; Whitehurst, et al., 1988; WWC on Dialogic Reading)

- We are designing a class-wide KG shared book reading program that weaves together: dialogic reading and SEL concepts.
 - Commercially available multi-cultural books
 - Lesson plans support explicit vocabulary instruction
 - Lesson plans include dialogic reading questions that increase in the level of difficulty across 3 sessions per week.



Kindergarten Shared Book Reading (Dialogic Reading; Whitehurst et al)

Goal: Increase a child's vocabulary while further developing their overall language skills through levels of questioning.



CROWD-HS

Completion Question: “My heart is full of _____” (feelings; *what’s another word we learned that means feelings; emotions*)

Recall: The main character is who the story is about. Who is the main character? (*girl*)









Open-ended question: What emotion is she feeling when her heart is hot? (She was angry, *Why do you think she was angry?*)

Wh-question: Why does the girl hide her heart? (she feels shy; *what does she like to do when she feels shy? To swing, be alone*)

Distancing question: How long do you think feelings stay with us?

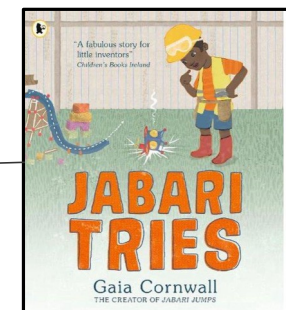
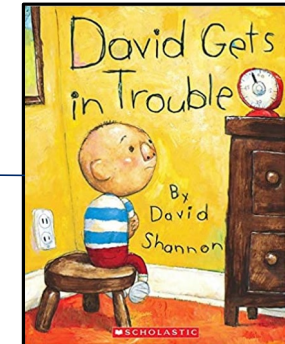
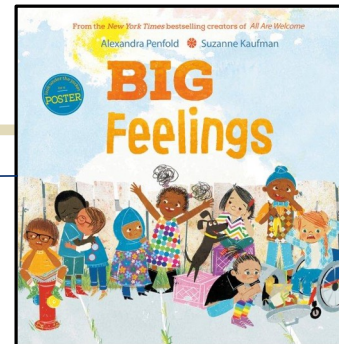
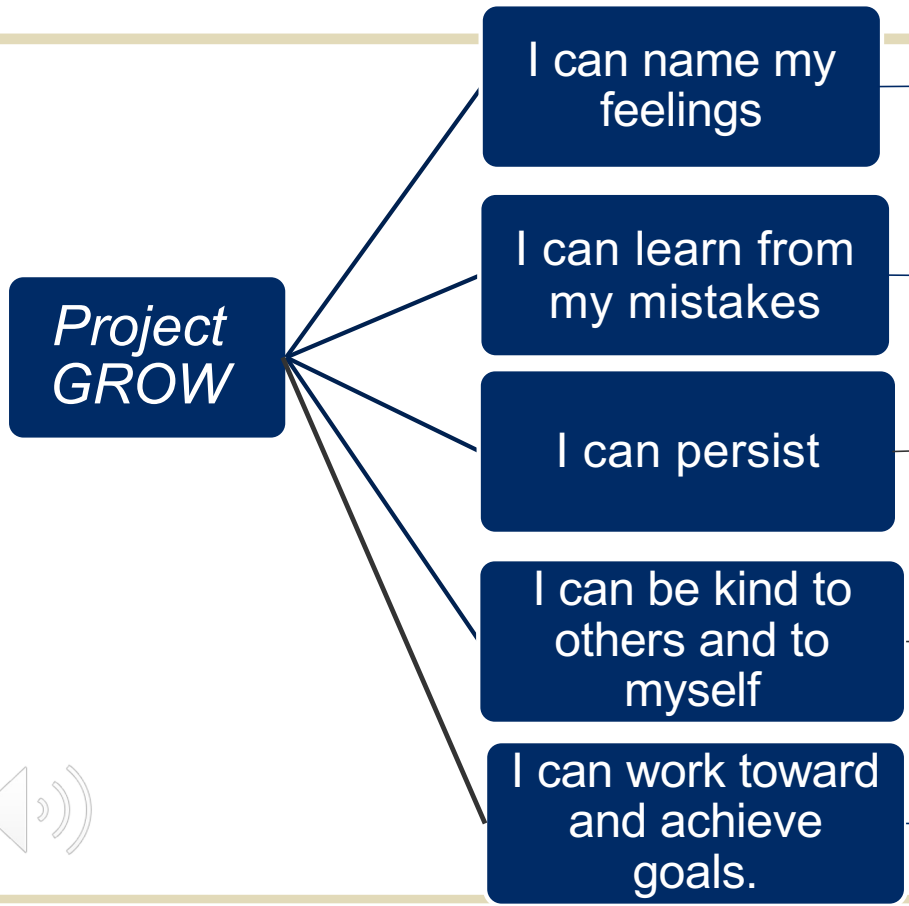
Home Question: At home, if your brother or sister is feeling sad, what can you say?

School Question: We feel emotions at school too. Who can tell me about a time they felt happy this week?

CROWD-HS	
C: completion prompts	
R: recall prompts	
O: open-ended prompts	
W: wh-prompts	
D: distancing prompt	
H: home prompt	
S: school prompt	

Whitehurst et al., 1988;
Al Otaiba et al., 2012

Design Project: Project GROW



Design Project: Project GROW

Week-at-a-Glance

In My Heart by Jo Witek			
WEEK AT A GLANCE			
	Day 1	Day 2	Day 3
Objective	I can name my feelings.		
Vocabulary	<ul style="list-style-type: none"> Emotions Happy Shy 	<ul style="list-style-type: none"> Brave Afraid 	<ul style="list-style-type: none"> Emotions Happy Shy Brave Afraid
Review words	<i>Words that students have acquired: big vs. small, yell, quiet.</i>		
Dialogic Questions	Mainly level I questions	Levels I and II	Level II and III
Closing	<i>Review of vocabulary words (definitions or vocabulary cards)</i>		
Activity	Pair and share	Setting a goal	Drawing

Lesson Plans

BOOK READING WITH DIALOGIC (CROWD-HS, and extensions) QUESTIONS (10 min)

LEVEL 1

Completion questions	Page	Question
	1	"My heart is full of _____" (feelings; <i>what's another word we learned that means feelings; emotions</i>)
3	"Sometimes my heart feels like a big yellow _____" (star; <i>How is she feeling? [options sad or happy]</i>)	

Recall questions	Page	Question
	1-2	The main character is who the story is about. Who is the main character? (<i>girl</i>)
11	How did the girl feel? (<i>sad; sad is the opposite of [antonym for] _____; happy</i>)	

Vocabulary Cards



Design Project: Project GROW (Spanish)

Week-at-a-Glance

En Mi Corazón Por: Jo Witek			
UN VISTAZO A LA SEMANA			
	Día 1	Día 2	Día 3
Objetivo	Podre reconocer/nombrar sentimientos.		
Vocabulario	<ul style="list-style-type: none"> Emociones Feliz Tímido 	<ul style="list-style-type: none"> Valiente Temeroso 	<ul style="list-style-type: none"> Emociones Feliz Tímido Valiente Temeroso
Repasar Palabras	<i>Palabras que los estudiantes han aprendido: grande vs. pequeño, gritar, callar.</i>		
Preguntas Dialógicas	Principalmente preguntas de nivel I	Niveles I y II	Nivel II y III
Cierre	<i>Repaso de palabras de vocabulario (definiciones o tarjetas de vocabulario)</i>		
Actividad	Compartir en parejas	Establecer una meta	Dibujar

Lesson Plans

LECTURA DE LIBROS PREGUNTAS DIALÓGICAS (TROPA-HE, y extensiones) (10 min)		
NIVEL 1		
Preguntas de <u>Terminación</u>	Página	Pregunta
	1	"Mi corazón está lleno de _____" (sentimientos; <i>¿Cuál es otra palabra que aprendimos que significa sentimientos? Emociones.</i>)
	3	"A veces mi corazón se siente como una gran _____ amarilla." (estrella; <i>¿Cómo se siente? [Opciones: triste o feliz]</i>)
Preguntas para <u>Recordar</u>	Página	Pregunta
	1-2	El personaje principal es de quien trata la historia. ¿Quién es el personaje principal de esta historia? (Niña)
	11	¿Cómo se sintió la niña? (triste; <i>Triste es lo opuesto a [antónimo de] _____; feliz</i>)

Vocabulary Cards

feliz

sentimiento de hacer algo o estar con alguien que te agrada



asustado

Sentir miedo



Purpose of Presentation

- The primary purpose of this presentation is to describe the effective interventions for reading outcomes within RTI and MTSS and to describe school systems supports for effective implementation.
 - First, I'll imagine your role in this and provide a brief rationale for why what you do makes a difference!
 - Second, I'll contrast what has and has not worked in schools to support effective MTSS implementation
 - Third, I'll describe features of evidence-informed interventions and highlight some promising studies that combine intervention with a motivational or social and emotional learning (SEL) component
 - Fourth, I'll describe an ongoing design project for kindergarten classroom instruction that is based on the evidence-based practice Dialogic Reading and SEL themes
 - **Finally, I will provide resources to use and share that are consistent with the science of reading to Response to Intervention and Multi-tiered Systems of Support in the elementary grades.**

Pause and Reflect



- Next, I'll describe some helpful resources
- Keep those questions coming



Sharing Resources: You Make a Big Difference!

- These are a sample of resources you can use to support your learning, supporting others in taking up the good work, and advocating for intensive interventions.
- Some roles I can imagine you can do:
 - Support Parents
 - Plan to observe or select a Tier 1 core program
 - Examine research for adoption of a program; support implementation
 - Plan to lead a PLC team
 - Selecting a book for book study
 - Plan to share resources with teachers or administrators
 - Seek professional development (CEUs)



Catts and Petscher

173

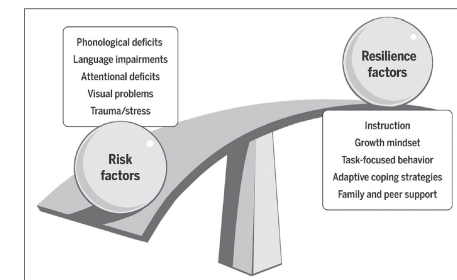


Figure 1. Cumulative risk and resilience model of dyslexia.

Parent Involvement to Support Student Reading Motivation & Growth Mindset

Raffaele Mendez et al., 2016 (small scale pilot study)

Parents instructed via phone to provide brief nightly support of oral reading and one worksheet

- Error correction within 2 secs
- Refrain from working on decoding, only provide encouragement and praise
- Record errors on a form sent in daily

All but one student with highly engaged parents realized at least a 7-point increase in 3 of 5 reading outcome measures.

-Andersen and Nielsen, 2016 (large scale RCT)

- Parents received a booklet and online video to support a growth theory of abilities, explain construct mastery-oriented interactions with the child, and encouragement to praise the child's efforts rather than results.

Students realized gains in language comprehension, decoding, and reading comprehension.

Gains were as strong for immigrant children and students with mothers with less education.

Share Information about Tier 1

<https://iris.peabody.vanderbilt.edu/module/rti03/cresource/q2/p03/>

- A core reading program incorporates the science of reading.
- It supports explicit and systematic instruction in phonological awareness, phonics, fluency, vocabulary, and comprehension.
- Ideally, it will also support instruction in handwriting, spelling, and written expression.
- In the beginning stages of reading, a strong core is comprehensive and focuses on learning to read.
- In later stages of reading, the content emphasis may shift to more focus on reading to learn.
- Explore and share this Vanderbilt University Iris Center resource**!
- Teachers can get CEUs!



A screenshot of the IRIS Center website. The page is titled "Page 3: High-Quality Instruction: Comprehensive Core Reading Program". The main content area discusses the importance of a comprehensive core reading program and lists several key components: organizing the scope and sequence of lessons, creating consistency across classrooms, providing research-validated materials, building curricula and instructional practices, and reflecting state standards. The page includes a navigation menu at the top with options like "MODULE", "CHALLENGE", "INITIAL THOUGHTS", "PERSPECTIVES & RESOURCES", "WRAP UP", and "ASSESSMENT". There is also a sidebar with a table of contents and a footer with a "Back" and "Next" button.

What if you recognize a need for a Universal or Class-wide Reading Program?



- One in-expensive evidence-based explicit and systematic program in Peer Assisted Learning Strategies, or PALS
- It is available In English for KG and Grade 1 to support phonemic awareness, phonics, and fluency.
- A slightly different type of PALS for older grades is available in English and Spanish and it also involves a partner-reading activity to support comprehension (e.g., strategies of prediction, paraphrasing, summarizing).
- The teacher directs the lesson, then students practice with a partner.
- So it increases opportunities to respond and students learn to correct one another.
- Recognized as a “best-practice” by Office of Education
- Typically used year-long but a recent Maki et al., 2021 used PALS partner reading with children in Grade 3 who scored below ORF benchmarks and across 10 sessions had a positive effect on ORF relative to control condition.
- https://frg.vkcsites.org/what-is-pals/pals_reading_manuals/ There is also a brief video.



How might you learn more about the evidence for PALS to decide if it is a good fit for your school and students?

IES : WWC What Works Clearinghouse

WWC SUMMARY OF EVIDENCE FOR THIS INTERVENTION

Peer-Assisted Learning Strategies

Peer-Assisted Learning Strategies is a peer-tutoring program for grades K-6 that aims to improve student proficiency in several disciplines. During the 30-35 minute peer-tutoring sessions, students take turns acting at the tutor, coaching and correcting one another as they work through problems. The designation of tutoring pairs and skill assignment is based on teacher judgement of student needs and abilities, and teachers reassign tutoring pairs regularly.

Reviewed Research

Beginning Reading | Adolescent Literacy | English Language Learners | Elementary School Mathematics | **Students with a Specific Learning Disability**

June 2012

EVIDENCE SNAPSHOT | INTERVENTION REPORT (689 KB) | REVIEW PROTOCOL

Outcome domain	Effectiveness rating	Studies meeting standards	Grades examined	Students	Improvement index
Comprehension	++	2 studies meet standards	2-6	60	27
General Mathematics Achievement	0	1 study meets standards	2-4	40	--
		Fuchs, L. S., Fuchs, D., Phillips, N. B., Hamlett, C. L., & Karns, K. (1995)	2-4	40	--
Reading fluency	++	2 studies meet standards	2-6	60	14

IES : WWC What Works Clearinghouse

WWC SUMMARY OF EVIDENCE FOR THIS INTERVENTION

Peer-Assisted Learning Strategies

Peer-Assisted Learning Strategies is a peer-tutoring program for grades K-6 that aims to improve student proficiency in several disciplines. During the 30-35 minute peer-tutoring sessions, students take turns acting at the tutor, coaching and correcting one another as they work through problems. The designation of tutoring pairs and skill assignment is based on teacher judgement of student needs and abilities, and teachers reassign tutoring pairs regularly.

Reviewed Research

Beginning Reading | Adolescent Literacy | **English Language Learners** | Elementary School Mathematics | Students with a Specific Learning Disability

September 2010

EVIDENCE SNAPSHOT | INTERVENTION REPORT (534 KB) | REVIEW PROTOCOL

Outcome domain	Effectiveness rating	Studies meeting standards	Grades examined	Students	Improvement index
Reading achievement	++	1 study meets standards	3-6	99	12
		Sáenz, L. M., Fuchs, L. S., & Fuchs, D. (2005)	3-6	99	12

Institute for Education Science reviews interventions; you can access the studies; Project Iris also provides information about PALS

Example programs with evidence that might map onto a continuum of school resources

- For Tier 1 class-wide peer tutoring:
 - Peer Assisted Learning Strategies (PALS; Fuchs et al., 2011, 2016)
 - Dialogic Reading (Whitehurst et al.)
- For volunteers and para pros:
 - Sound Partners (Vadasy, Sanders, & Peyton, 2006)
- For small group teacher/specialist intervention (daily, 30-45 mins):
 - Early Interventions in Reading (Mathes et al., 2005)
 - Early Reading Intervention (Simmons et al., 2003)
 - Road to the Code (Blachman, 2000)
 - Empower (PHAST Lovett et al., <https://www.sickkids.ca/en/learning/empower-reading/>)
 - ECRI (Fien et al., 2020)
 - Wilson (<https://www.wilsonlanguage.com/programs/wilson-reading-system/>)

- Plan, select, evaluate, and support intensive reading interventions



How can you support classroom management for Tier1/2 to enable small group interventions?




Al Otaiba et al.,
2011; Connor et
al., 2007

	Teacher Managed	Child Managed
Code Focused	Alphabet activities Letter Sight-Sound Phonological Awareness Onset-rime, blending and segmenting Word Segmentation	Alphabet activities Spelling Phonics worksheets Phonological awareness Other code-focused center activities
Meaning Focused	Vocabulary Teacher Read Aloud Student Read Aloud, Choral Group Writing, Writing Instruction, Model Writing Listening Comprehension Discussion	Student Read Aloud, Individual Sustained Silent Reading Reading Comprehension Worksheets Student Individual Writing Other meaning-focused center activities

Florida Center for Research on Reading K-5 Center activities

Child-managed
code-focused



Phonological Awareness

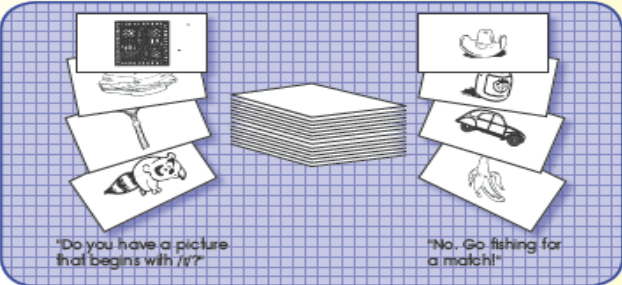
PA.042 **Phoneme Matching**
Phoneme Go Fish

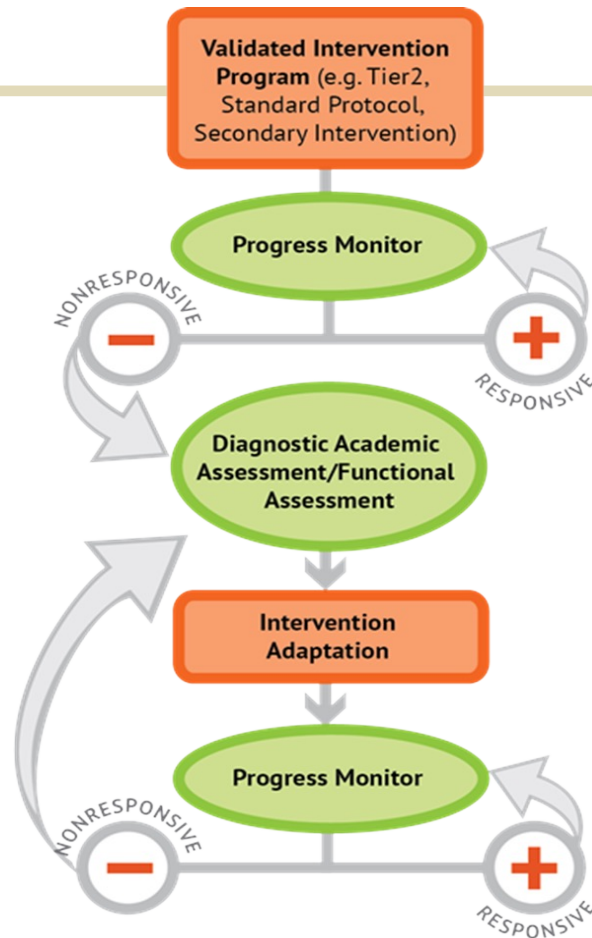
Objective
The student will match initial sounds in words.

Materials
▶ Sound picture cards (Activity Master PA.042.AM1a - PA.042.AM1f).

Activity
Students play an initial sound Go Fish picture card game.

1. Divide the set of picture cards into three separate and equal stacks. Each student gets one stack and the remaining stack is the "pond."
2. Working in pairs, students check their cards, pair by initial sound, and put aside the matching sets.
3. Student one asks for a picture card that begins with a certain letter-sound. For example, "Do you have a picture that begins with /t/?"
4. If yes, student two gives it to his partner. If no, says, "Go fishing for a match!"
5. Student one then selects a card from the "pond."
6. If a match is made, student one gets another turn. If a match is not made, student two takes a turn.
7. The game continues until all cards are matched.
8. Peer evaluation





See this resource** for more detail. There is also a module you can watch or share with colleagues <https://intensiveintervention.org/resource/getting-ready-implement-intensive-intervention-infrastructure-data-based-individualization>

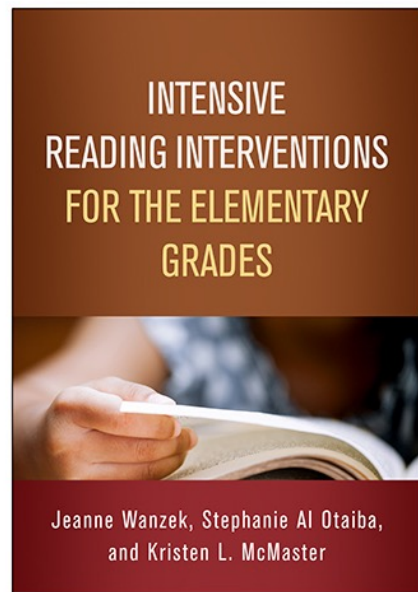


Data-Based Individualization (DBI): Tier 2 and Tier 3

Data-Based Individualization (DBI) is a **systematic process** (e.g., Lemons, Kearns, & Davidson, 2014) for using data to determine *when and how* to provide more intensive intervention in addition to Tier 1 core reading programs:

- Origins of DBI are in school psychology models for supporting teaching first developed at the University of Minnesota (Deno & Mirkin, 1977) and expanded upon by others (Fuchs, Deno, & Mirkin, 1984; Fuchs, Fuchs, & Hamlett, 1989b; Capizzi & Fuchs, 2005).
- DBI is a process, not a single intervention program or strategy. Fuchs and colleagues have described the strategy or process as following a taxonomy for change (Fuchs, Fuchs, & Malone, 2016).
- DBI is an ongoing process comprising intervention and assessment adjusted over time.
- I'll reference a process that is suggested by the National Center for Intensive Intervention.

Book Study Example



- Includes Chapters on Intensive Interventions for:
 - Phonological Awareness and Phonemic Awareness
 - Phonics and Word Recognition
 - Fluency
 - Oral Language
 - Language and Reading Comprehension
 - Writing to Read
 - Multi-component Reading Interventions

<https://www.guilford.com/books/Intensive-Reading-Interventions-for-the-Elementary-Grades/Wanzek-Otaiba-McMaster/9781462541119/contents>

This Text Provides Case Studies to Demonstrate Intensification Strategies

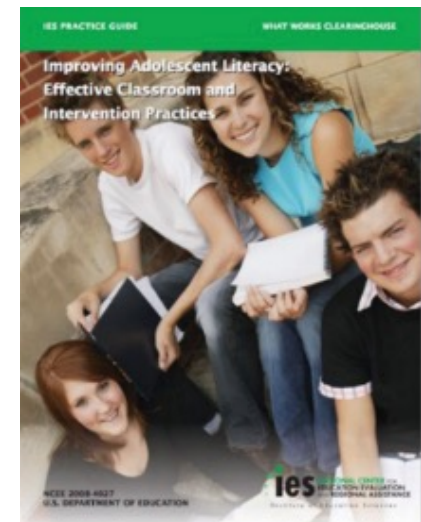
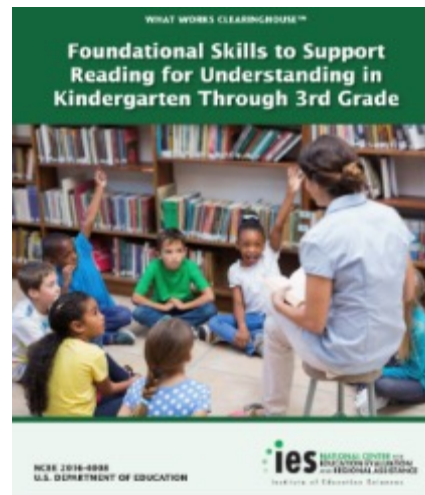
- Provide more time and provide smaller group intervention.
- Provide more explicit intervention.
- Provide more systematic intervention.
- Provide more frequent opportunities to respond.
- Provide more specific and corrective feedback.
- Provide cognitive strategies (memory, attention, attribution, motivation, goal setting).
- Provide direct instruction to support transfer to new contexts (e.g., read/write).
- Provide frequent progress monitoring to guide further intensification as needed.

Share Resources for Evidence about Intensive Interventions

Resource	Author or Original Funding Agency	Key Features	Website
Intensive Intervention Practice Guides	National Center on Intensive Intervention	<ul style="list-style-type: none"> Provides users with information about RTI and MTSS (tools for assessment). 	<ul style="list-style-type: none"> http://nclii.org/intensive-intervention-practice-guides/
IRIS Center	IRIS Center Peabody College funded by the Office of Special Education Programs	Provides free online resources about evidence-based instructional practices particularly for struggling learners and those with disabilities	https://iris.peabody.vanderbilt.edu
WWC Practice Guides and Intervention Reports Evidence for ESSA	Institute of Education Sciences through the Department of Education	<ul style="list-style-type: none"> Provides intervention reports and reviews of effectiveness for individual reading programs. 	<ul style="list-style-type: none"> https://ies.ed.gov/ncee/wwc/PracticeGuides https://ies.ed.gov/ncee/wwc/ https://www.evidenceforessa.org/
Center for Research and Reform in Education (CREE) at John Hopkins University School of Education	Center for Research and Reform in Education (CREE) at John Hopkins University School of Education	<ul style="list-style-type: none"> Provides evidence of a variety of programs in reading and math approved by the Every Student Succeeds Act (ESSA). 	
International Dyslexia Association (IDA)	International Dyslexia Association	<ul style="list-style-type: none"> Provides information about identifying interventions for individuals with dyslexia. Provides a set of Knowledge and Practice Standards (KPS) for teachers. 	https://dyslexiaida.org/
Reading Rockets	U.S. Department of Education	<ul style="list-style-type: none"> Provides instructional modules to support preparation for the IDA KPS and Exam. 	<ul style="list-style-type: none"> http://www.readingrockets.org http://www.readingrockets.org/teaching/reading101-course/modules/course-modules

Share Information from IES What Works Clearinghouse Practice Guides

- Produced by the What Works Clearinghouse of the Institute of Education Sciences (IES), U.S. Department of Education
- Provides specific and coherent evidence-based recommendations specific to various topics
- Intended for use by educators, particularly district-level administrators
- Addresses a multifaceted challenge that lacks developed or evaluated packaged approaches (i.e., specific curriculum programs or materials)



<https://ies.ed.gov/ncee/wwc/>

From rti4success.org





PROFESSIONAL LEARNING COMMUNITIES FACILITATOR'S GUIDE

For the What Works Clearinghouse Practice Guide

***Foundational Skills to Support Reading for Understanding
in Kindergarten Through 3rd Grade***

<https://ies.ed.gov/ncee/edlabs/projects/project.asp?projectID=4541>

Facilitating Professional Learning Communities That Support Struggling Readers Who Are English Learners in the Southwest



Purpose

The *Professional Learning Communities (PLC) Facilitator's Guide* assists PLCs in applying evidence-based strategies to support struggling readers who are English learners.

Research Base

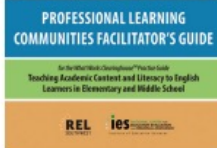
The *PLC Facilitator's Guide* aligns with the *Teaching Academic Content and Literacy to English Learners in Elementary and Middle School* educator's practice guide, produced by the What Works Clearinghouse, Institute of Education Sciences.

The practice guide presents four evidence-based recommendations:

1. **Academic vocabulary:** Teach a set of academic vocabulary words intensively across several days using a variety of instructional activities
2. **Content-area instruction:** Integrate oral and written English language instruction into content-area teaching
3. **Structured writing instruction:** Provide regular, structured opportunities to develop written language skills
4. **Small-group intervention:** Provide small-group instructional intervention to students struggling in areas of literacy and English language development



- ★ Activities and content for 8 PLC sessions
- ★ 31 handouts
- ★ 23 videos



Benefits for Educators

- ▶ Evidence-based strategies to help K–8 English learners acquire academic language and literacy skills
- ▶ Collaborative professional learning experience for reading, discussing, sharing, and applying the practice guide's key ideas and strategies
- ▶ Activities and content for eight 75-minute PLC sessions
- ▶ Systematic five-step cycle that encourages PLCs to debrief, define, explore, experiment, and reflect and plan



Testimonials From PLC Facilitators:

- ★ "Resources are invaluable . . . videos are super"
- ★ "The recommendations, the videos, and the graphic organizers . . . refocused my thinking and clarified the best methods for helping ELLs"
- ★ "Excellent resources for creative, effective PLCs"
- ★ "The resources and research base was most effective"
- ★ "The presentation of research evidence, including the degree of evidence for each of the focus recommendations" [about what was most helpful]

Video Series

- ▶ **4 introductory videos** cover the practice guide recommendations
- ▶ **19 classroom videos** show actual instruction at three grade levels: 2–3 (combination), 4, and 6–8 (newcomers)
 - ▶ Pre-Teaching Vocabulary*
 - ▶ Activities to Promote Word Learning
 - ▶ Providing Review
 - ▶ Word Parts and Cognates
 - ▶ Using Videos to Anchor Instruction
 - ▶ Completing a Graphic Organizer
 - ▶ Using Graphic Organizers in Writing*
 - * Most popular topics

Success

- ★ Series titles account for the top 5 most watched videos on the Institute of Education Sciences's YouTube channel.

Conclusion/Scholarly Significance

The *PLC Facilitator's Guide*, along with the companion educator's practice guide, is intended to foster a deeper understanding of how scientifically based research on educating English learners may be applied to classroom practice. The research on effective instruction for English learners provides the basis for the guide's content, while the PLC format provides teachers with a structure for shared learning and improvement as they apply evidence-based concepts to classroom practice.

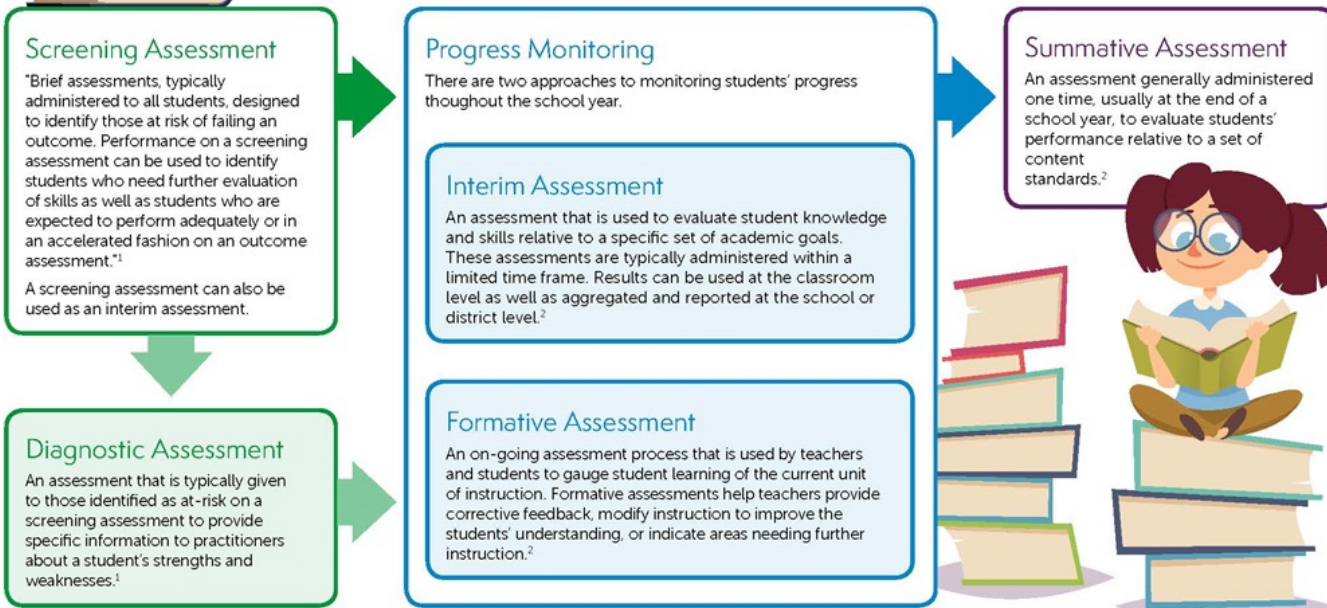
This PLC model is a key component of coherent and high-quality professional development (Desimone, Porter, Garet, Yoon, & Birman, 2002). Through this evidence-based and collaborative approach, the *PLC Facilitator's Guide* helps educators align the needs and learning goals of English learners with school curriculum and school- and districtwide change efforts.

<https://ies.ed.gov/ncee/edlabs/regions/southwest/about-relsww.aspx>



Assessment Terms Used in Reading

There are multiple terms used to describe reading assessments. This infographic is intended to clarify these terms.



1. Foorman, B.R., Kershaw, S., & Petscher, Y. (2013). *Evaluating the screening accuracy of the Florida Assessments for Instruction in Reading (FAIR)*. (REL 2013-008). Washington, DC: U.S. Department of Education, Institute of Education Sciences.

2. Perie, M., Marion, S., Gong, B., & Wertz, J. (2007). *The role of interim assessments in a comprehensive assessment system*. The Aspen Institute.

Information in this infographic is supported by IES/NCEE's Regional Educational Laboratory Southeast at Florida State University (Contract ED-IES-17-C-0011) as resources and examples for the viewer's convenience. Their inclusion is not intended as an endorsement by the Regional Educational Laboratory Southeast or its funding source, the Institute of Education Sciences.

In addition, the instructional practices shown in this infographic are not intended to mandate, direct, or control a State's, local educational agency's, or school's specific instructional content, academic achievement system and assessments, curriculum, or program of instruction. State and local programs may use any instructional content, achievement system and assessments, curriculum, or program of instruction they wish.



Acknowledgements and Gratitude!

- Thanks to our funders
 - The research reported here was supported by the Institute of Education Sciences, U.S. Department of Education, through Grant R305A200397 and by the Eunice Kennedy Shriver National Institute of Child Health & Human Development of the National Institutes of Health under Award Number R01HD091232
 - The opinions expressed are those of the authors and do not represent views of the Institute or the U.S. Department of Education or the National Institutes of Health.
- Thanks to our team of staff and consultants
 - Special shout out to thought partners in the lab including doctoral students Dayna Russell Freudenthal Mai W. Zaru
 - and my Co-PI on Project GROW Dr. Brenna Rivas and post-doctoral student Dr. Jennifer Stewart

**Most of all, thank you for teaching and supporting
teachers and students learning to read!**

Thank you to MTSU!



salotaiba@smu.edu