

The Early Writing Project

DATA BASED INSTRUCTION: TOOLS, LEARNING, AND COACHING

RTI in Action: A Framework for Intensifying Instruction

Erica Lembke, Ph.D. – University of Missouri
 Kim Moore – University of Missouri
 Lizzie McCollom – University of Missouri
 Lizzie Tipton – University of Missouri

Presentation Objectives

During this session, you will:

- 1) Gain skills in implementing targeted interventions in writing
- 2) Gain skills in intensifying instruction for interventions in writing
- 3) Learn about key dimensions of intensification that should be considered when an intervention change is needed.
- 4) Gain skills in how to utilize a decision-making rubric and intensification guide.

Acknowledgements



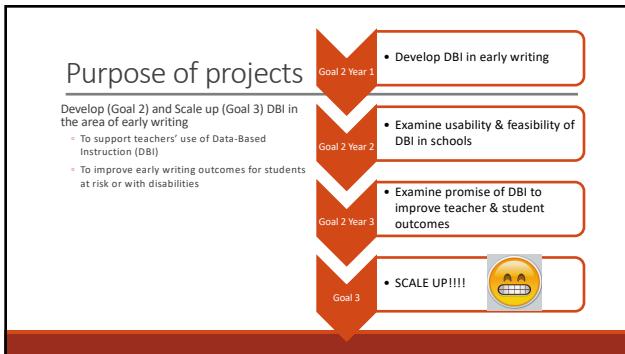
University of Missouri

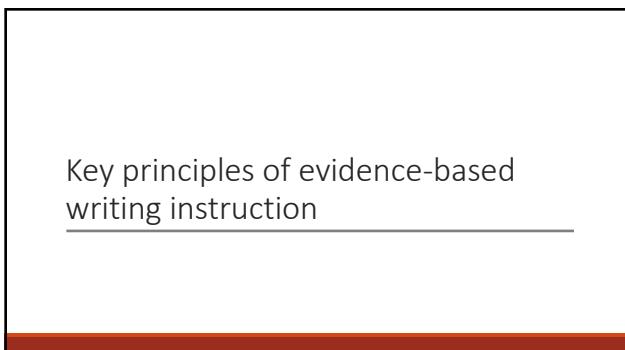
Erica Lembke, Carol Garman, Kim Moore, Jessica Simpson, Laura Browning, Lizzie Tipton, & Lizzie McCollom

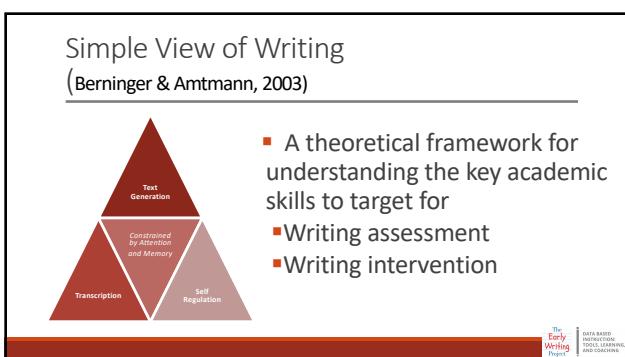


University of Minnesota

Kristen McMaster, Elizabeth Lam, Ahmed Alghamdi, Seyma Birinci, Stacey Brandjord, Jenna Hitt, & Nicole McKeveit







Best evidence synthesis

- Best evidence synthesis conducted using the Simple View of Writing as a framework
- Applied criteria to indicate evidence of effects and high study quality
- Identified studies in the areas of:
 - Transcription
 - Text generation
 - Self regulation

McMaster, K. L., Kunkel, A., Shin, J., Jung, P., & Lemble, L. (2017). Early writing intervention: A best-evidence synthesis. *Journal of Learning Disabilities*.



Best evidence synthesis

- Studies that included *explicit instruction* in handwriting and spelling
 - Improved student performance on handwriting and spelling
 - Improved students' written composition in quality and quantity
- Only one study focused solely on text generation
- Other studies combined text generation with self-regulation strategies
 - Average effect sizes were *strong* both for quantity and quality of writing



Explicit Instruction

- A common thread throughout all research-based interventions in writing
- Includes:
 - Segmenting complex skills
 - Modeling and think alouds
 - Systematic fading of supports and prompts
 - Opportunities to respond and receive feedback
 - Purposeful, repeated practice

Hughes, C. A., Morris, J. R., Therrien, W. J. and Benson, S. K. (2017). Explicit Instruction: Historical and Contemporary Contexts. *Learning Disabilities Research & Practice*, 32: 140–148. doi:10.1111/ladr.12142



Explicit Instruction: Additional Components

- Select critical content
 - Logically sequence skills
 - Ensure prerequisite skills and knowledge
 - Provide clear statements of lesson goals and objectives
 - Provide a wide range of examples and non-examples
 - Have a brisk pacing throughout the lesson (but not too fast!)
 - Encourage active participation of the participants in the lesson

Hughes, C. A., Morris, J. R., Therrien, W. J. and Benson, S. K. (2017). Explicit Instruction: Historical and Contemporary Contexts. *Learning Disabilities Research & Practice*, 32: 140–148. doi:10.1111/lrdp.12142



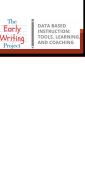
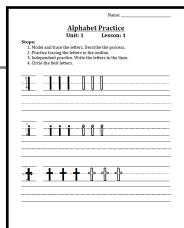
Writing Lessons: Overview

- **Transcription**
 - TR1: Phonics Warm-Up
 - TR2: Alphabet Practice
 - TR3: Word Building
 - TR4: Word Study
 - TR5: Alphabet Rockets
 - TR6: Word Sort
 - TR7: Sentence Completion
 - **Text Generation**
 - TG1.1-1.4: Sentence Construction
 - TG2: Sentence Combining
 - TG3: Repeated Writing
 - TG4: Writing Goals
 - TG5: Writing



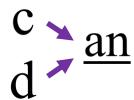
Alphabet Practice

- Explicit instruction in handwriting – student learns to correctly write the letters of the alphabet
 - Student copies tutor’s model to form a letter
 - Student compares different letters, and identifies the *best* written letter
 - Student gets *repeated practice* in handwriting
 - Start with frequently used letters (i.e., l, i, t) and end with less frequently used letters (i.e., j & q)



Word Building

- Improve spelling skills with basic word stems
- Students build words by adding alphabet letter cards in front of rimes
- Student makes and writes as many words as they can in 1 minute
- If time permits, the student works through the cards again to beat the score



The Early Writing Program

DATA-BASED
INSTRUCTION,
ASSESSMENT,
AND COACHING

Word Study

- Designed to improve basic spelling skills
- Student studies and practices writing words to mastery
- Identify words that the student misses on a word spelling list, CBM word dictation, classroom curricula, high frequency words, etc.
- When a student spells a word correctly 3 times on 2 consecutive days, remove it from the list of target words



The Early Writing Program

DATA-BASED
INSTRUCTION,
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AND COACHING

Word Sort

- Practice in identifying and discriminating between pairs of word sounds or endings
- Students sort words according to beginning, middle, or final sounds
- Can find word lists in Words Their Way
- Provide a model of how to sort the words
- Have students engage in a student-directed sort
- Students independently sort the words (time how long this takes)
- If enough time, have student repeat the sort to beat their score
- Students can also practice writing the words in the various sorts



The Early Writing Program

DATA-BASED
INSTRUCTION,
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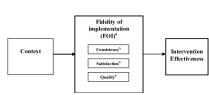
Repeated Writing

- Designed to motivate students to increase their handwriting automaticity – rate of accuracy in handwriting
- Also designed to help students identify and correct errors in mechanics
- Need three copies of same CBM-W form (Picture Word, Story Prompt) – level most appropriate based on the student's age and skill level
- Administer the CBM-W for 3rd, provide student with their score & performance feedback
- Repeat the same CBM-W, encouraging the student to improve their score – provide a goal for the student (e.g., Let's try to get 15 words this time!)
- Score student's 2nd probe – provide student with their score & feedback
- Repeat the same CBM-W for the final time, graph their three scores

The Early Writing Project

DATAS-BASED
INSTRUCTION
FOR BEGINNING
WRITERS

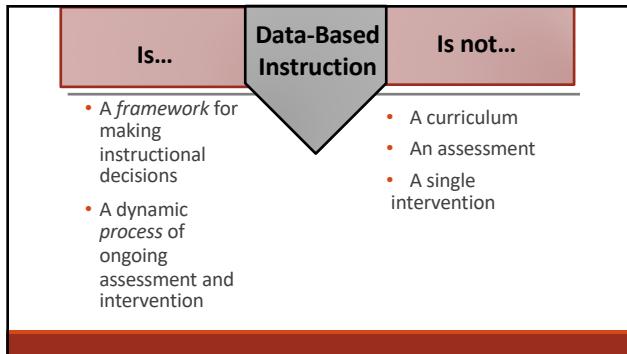
Monitoring Fidelity

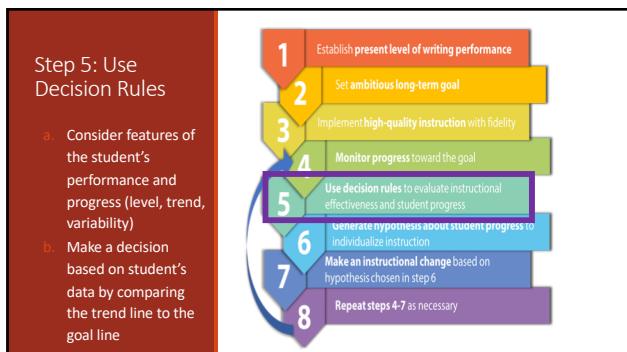


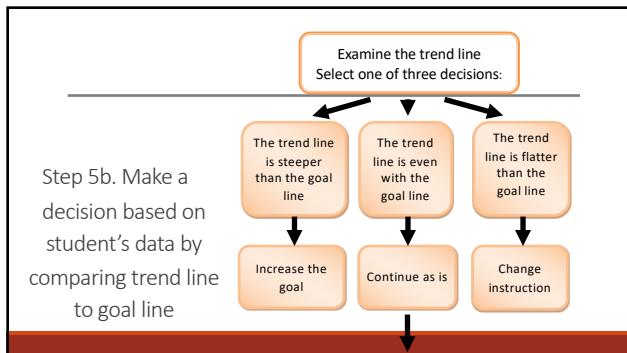
- **Fidelity:** the extent to which an intervention is delivered fully and as designed
- A critical component when implementing the core features of research-based lessons
- Critical for knowing if the intervention is working
- If we don't implement the plan that we created, we can't know if it's working for the student

What is Data-Based Instruction?

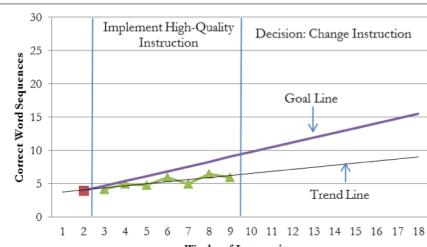
Data-Based Instruction (DBI) is a systematic, data-based approach for teachers to individualize instruction for beginning writers.







Trend Line Below the Goal Line



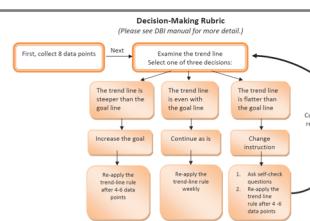
Step 6: Generate Hypotheses

- a. Why is the student not making sufficient progress?
- b. What instructional change(s) need(s) to be made?





Generate a Hypothesis



 Generate a Hypothesis

If an instructional change is needed:

- Use self-check questions

Self-check questions
Were the early writing lessons delivered as intended?

1. Has the student participated in all planned writing lessons for each full session?
2. Have I implemented the intervention with fidelity (refer to mini-lesson fidelity checks)?

 Generate a Hypothesis

If an instructional change is needed:

Self-check questions
Were the early writing lessons delivered as intended?

1. Has the student participated in all planned writing lessons for each full session?
2. Have I implemented the intervention with fidelity (refer to mini-lesson fidelity checks)?

If answer to 1 OR 2 is NO

Refer to Fidelity Diagnostic Tool below for guiding questions to help make adjustments.

Fidelity Diagnostic Tool

Fidelity Diagnostic Tool
Consider the three options below. Choose the one that best fits your current situation.

1. I need to improve my fidelity of implementation.	
Do I need to practice the intervention more to become fluent with it?	Try watching the videos and practicing with one mini-lesson at a time until fluent.
Do my students struggle with transitions and routines within the intervention?	Use class time to practice transitions and reoccurring routines.
Do I have enough time to deliver the intervention as intended?	Consider reorganizing WIP or delivering at different times across the day.
Is the intervention too complicated or does it have too many parts?	Simplify. For instance, reduce the number of mini lessons until you and students are fluent and then add in one new component a week.

Fidelity Diagnostic Tool

2. The student did not take part in the intervention as often as I planned.	
The student misses instruction often due to behavior.	Refer to the Behavioral Support section in the Intensification Guide . If the student misses your instruction due to behavior in other classes/outside of your class, try a behavioral contract.
The student frequently misses school/class for non-behavior reasons.	Try to add minutes onto instruction on the days when the student is in school.
The student's special education time is used to support my students with their general education assignments	Consider how you block your time. What percentage will you devote to supporting general education assignments/work? What does the IEP state? For example, if you can provide 15 minutes of general education support 3 times a week, communicate this with the teachers and determine what support will be. The rest of the time is part of your student's IEP minutes. Schedule this time into your planning. Can you restructure your WIP to better align with grade level content and still meet your student's needs (see examples of grade level transfer options in mini lessons)?

Fidelity Diagnostic Tool

3. The student did not participate to the full extent due to external factors.	
Are there interruptions from other students/classes?	Protect intervention time by closing the door; not taking calls or interruptions.
Is intervention often cut short due to early dismissal or preparing to go back to class?	Preserve intervention time by having students bring their backpacks with them to intervention.



Generate Hypotheses

If an instructional change is needed:

→ Use self-check questions

Self-check questions

Were the early writing lessons delivered as intended?

1. Has the student participated in all planned writing lessons for each full session?
2. Have I implemented the intervention with fidelity (refer to mini-lesson fidelity checks?)

If answers to 1 AND 2 are yes

If answer to 1 OR 2 is NO

Diagnostic questions
Does the student need changes to the content of the intervention?
• Use [Instructional Alignment Tool](#) and [Intensification Guide](#) to determine if content is addressing student needs

Refer to [Fidelity Diagnostic Tool](#) below for guiding questions to help make adjustments

If content area IS appropriate then refer to [Intensification Guide](#) page

If content area IS NOT appropriate, use [Instructional Alignment Tool](#) to align intervention

 Generate Hypotheses

Does the student need changes to **Content**?

➤ Maybe the content I chose was not appropriate?
 ➤ Maybe I should have started with different or easier lessons?

 Diagnostic Checklist

Transcription

Process <i>Observe your student during the writing process</i>	Product <i>Evaluate your student's writing samples from CRM or other assignments</i>	Matched Interventions <i>Select interventions that align with your student's writing needs</i>
Handwriting <i>Does the student...:</i> <ul style="list-style-type: none"> <input type="checkbox"/> write fluidly or pen comfortably? <input type="checkbox"/> write fluidly without excessive erasing or scribbling? <input type="checkbox"/> print independently without referring to an alphabet strip? <input type="checkbox"/> produce letters and words fluently without pausing? <input type="checkbox"/> sustain writing for an extended time without struggle? 	Handwriting <i>Does the student write all letters...:</i> <ul style="list-style-type: none"> <input type="checkbox"/> clearly and legibly? <input type="checkbox"/> in the correct direction? <input type="checkbox"/> using smooth strokes? <input type="checkbox"/> in a regular size (not too large, not too small)? <input type="checkbox"/> with proper slant? <input type="checkbox"/> with correct spacing between letters and words? <input type="checkbox"/> evenly on lines? 	Handwriting <ul style="list-style-type: none"> <input type="checkbox"/> Mini-lesson TR2: Alphabet Practice <input type="checkbox"/> Mini-lesson TR3: Alphabet Rocks
Spelling <i>Does the student...:</i> <ul style="list-style-type: none"> <input type="checkbox"/> spell words without stopping frequently to ask for help or to look up word spelling? 	Spelling <i>Simple consonants and vowels. Does the student...:</i> <ul style="list-style-type: none"> <input type="checkbox"/> consistently use the appropriate consonant at the beginning and end of words? <input type="checkbox"/> consistently recognize and write short vowel sounds? <input type="checkbox"/> write vowels followed by the letter r, for example, "farm" rather than "fim," "her" rather than "he?" 	Spelling <ul style="list-style-type: none"> <input type="checkbox"/> Mini-lesson TR1: Phonics Warm-up <input type="checkbox"/> Mini-lesson TR4: Word Study <input type="checkbox"/> Mini-lesson TR5: Alphabet Rocks <input type="checkbox"/> Mini-lesson TR7: Sentence Completion (using word sort words)

 Generate Hypotheses

I determined that the **content** of the intervention is fine, but my student needs some type of change.
 ➤ Refer to the *Intensification Guide* to find ways to intensify instruction

Transfer	Complexity	Dosage	Behavioral Supports
Does transfer of the intervention need to be more explicitly addressed?	Is the intervention sufficiently explicit?	Can the intervention be adapted for a dosage increase or change?	Is it easy or possible to integrate appropriate behavioral supports with this intervention?

 **Make an Instructional Change**

Once you have identified a hypothesis about the student's needs, select a change using the Decision-Making Rubric.

Instruction Guide			
Refer to the following potential elements, ask the listed questions, and if the element applies to your intervention, choose one or more to make changes.			
Transfer: Does each of the intervention need to be most effective?	Complexity: Is the intervention sufficiently explicit?	Design: Can the intervention be adapted for a design that is more effective?	Behavioral support: Is it wise to provide to integrate with the intervention?
<ul style="list-style-type: none"> Help students transfer the skills they learn from one situation to other related or broader contexts such as word reading or comprehension. Encourage words commonly used by the student to be used in monthly writing. Use the word in context in a sentence check spelling once complete. 	<ul style="list-style-type: none"> Provide more direct, explicit instruction through smaller steps and more repetition. Provide more practice opportunities for the student to generate responses. Provide systematic cumulative review of previously learned material instead of five minutes of review at the end of five days of instruction. Send a second word check after the first word check. Then send a third word check in a row without checking. 	<ul style="list-style-type: none"> Increase variation or complexity by adding new components (e.g., letter-sound correspondence) to the intervention. If the student can quickly produce the correct response, consider adding the same mini intervention again. Add an additional 2-3 words to the intervention to cover two more words than the original intervention, such as previously learned words or words for practice in general. Consider whether the student has too many absences, and if so, how to increase motivation if the student does not attend. Consider who delivers the intervention. 	<ul style="list-style-type: none"> Increase attention, motivation, or self regulation components (e.g., goal setting, self monitoring, self reinforcement). Provide incentives to increase motivation (e.g., distracting or reinforcing behavior such as proximity to a peer or positive, specific praise, or preferred behavior). Provide attention strategies. Provide motivational strategy such as "What's the point? What have I done? How hard? How good?" Do direct and behavioral explanations for intervention transitions?

*Adapted from Fuchs, L.S., Fuchs, D., & Malone, A. (2017). The Taxonomy of Intervention Intensity.

 **Intensification Dimensions**

Transfer: The extent to which an intervention systematically helps students transfer the skills they learn to other formats and contexts. It also refers to the extent to which students realize connections between mastered and related skills.

Ask yourself: Have I sufficiently scaffolded my lesson content to help my student reach the end goal?

 **Intensification Dimensions**

Complexity: the explicitness of the instruction.

- Providing explanations in simple, direct language
- Modeling efficient strategies
- Ensuring students have the necessary background knowledge and skills
- Gradually fading support
- Providing sufficient practice opportunities
- Incorporating systematic cumulative review



Intensification Dimensions

Dosage: the student's opportunity to interact with the intervention.

- Increasing dosage is a matter of increasing exposure and opportunities to interact with lesson content.
- Increasing dosage can be done by increasing session duration or increasing the number of sessions in a week.



Intensification Dimensions

Behavioral Support: the extent to which your intervention incorporate behavioral principles to minimize nonproductive behavior.

Interventions that incorporate behavioral support (e.g., self-regulation, executive function, motivation) are more intensive than programs that do not include these components.

Ask yourself: Do I need to consider adding behavioral supports to improve student motivation and on-task behavior?

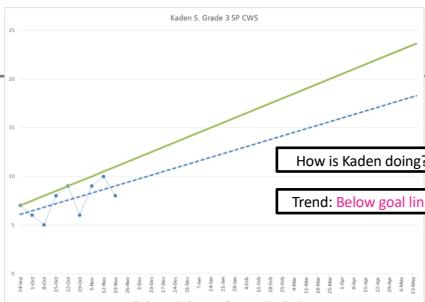
Step 7: Make an Instructional Change

- a. Determine a change using the Decision-Making Rubric
- b. Document change on your Decision Log
- c. Draw in next intervention phase line



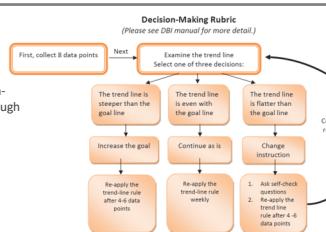
Step 8: Repeat Steps 4-7





What should Mr. Petersen do next? (Step 6)

Mr. Petersen consults his Decision-Making Rubric to help him think through the next steps.





What should Mr. Petersen do next? (Step 6)

Self-check questions

Were the early writing lessons delivered as intended?

1. Has the student participated in all planned writing lessons for each full session?
2. Have I implemented the intervention with fidelity (refer to mini-lesson fidelity checks)?

- He determines that he has implemented the WIP with fidelity.
- Kaden has not been absent.



Mr. Petersen answers the diagnostic questions and decides ...

Diagnostic questions

Does the student need changes to the content of the intervention?

- Use [Instructional Alignment Tool](#) and [Diagnostic Checklist](#) to assure that content is addressing student needs

If content area IS appropriate then refer to [Intensification Guide](#) on next page.

If content area IS NOT appropriate, use [Instructional Alignment Tool](#) to align instruction.

➤ Kaden does not need any changes to the content of the intervention because it meets his current needs.



Mr. Petersen's Hypothesis (Steps 6 & 7)

- Kaden is not making expected progress.
- Mr. Petersen has implemented all lessons with fidelity and Kaden has not missed instruction.
- Content is still appropriate.
- Mr. Petersen reviews Intensification Guide.



Mr. Petersen's Hypothesis (Steps 6 & 7)

Refer to the following potential elements, ask the listed question, and if this element applies to your intervention, choose one or develop your own and share with your coach.

Transfer: Does transfer of the intervention need to be more explicitly addressed?	Complexity: Is the intervention sufficiently explicit?	Dosage: Can the intervention be adapted for a dosage increase or change?	Behavioral Support: Is it easy or possible to integrate appropriate behavioral supports with this intervention?
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- Mr. Peterson's hypothesis is that Kaden needs more practice.
- Mr. Peterson decides to increase Kaden's instruction from 3 days per week to 5 days per week.



Mr. Petersen . . . (Steps 7 & 8)

- Documents that he plans to add instructional days on the Decision Log
- Reflects his change of instruction on Kaden's graph by putting subsequent weekly CBM data into new column.

Mr. Peterson continues . . .

- To implement WIP instruction 5 days per week
- Weekly progress monitoring
- Graphing of data



Let's Practice Together

Jackson's teacher has been implementing a research-based intervention with fidelity - small group of 5 students who struggle with spelling.

Currently focusing on CVC and CVCe words.

The intervention includes a motivational component (goal setting with incentive) that typically works well with Jackson.

However, Jackson frequently complains that the words are "too easy" and "boring."

His teacher notices that he typically does spell the target words more quickly and accurately than the other group members, but she can't change his group because this is the only time that works in her schedule and Jackson's class schedule.



What Would You Do?

Think – Pair – Share

- Distribute scenarios.
- Read the scenario independently.
- Develop a hypothesis.
- Share your hypothesis with the person who received the same scenario. Discuss possible instructional changes.
- Share out with the larger group.

Questions?

<https://earlywritingproject.org>

<https://education.missouri.edu/special-education/research/dbitlc/>
