

# Assessing, Preventing, and Overcoming Reading Difficulties

*A professional learning series presented by David A. Kilpatrick, Ph.D.*

## Module 11 Session 4

*Sponsored by the Exceptional Student Services Unit (ESSU) and created in collaboration with Specific Learning Disability Specialists Jill Marshall and Veronica Fiedler*



**COLORADO**  
Department of Education

## **Module 11: Effective Interventions for Reading Difficulties**

*Session 4: Highly Effective Interventions for Reading Difficulties*

# Assessing, Preventing, and Overcoming Reading Difficulties

## Objective:

Through engagement in this series of 13 on-demand webinars, participants will understand the current research, implications, and the essential elements necessary for assessing, preventing, and overcoming reading difficulties.



**ASSESS**



**PREVENT**



**OVERCOME**

# Assessing, Preventing, and Overcoming Reading Difficulties

## Webinar Series Modules

**Module 1:** Reading Research and the Research to Practice Gap

**Module 2:** Current Approaches to Reading Instruction: Why Many Learners Still Struggle

**Module 3:** The Simple View of Reading

**Module 4:** Word-Level Reading

**Module 5:** Reading Comprehension

**Module 6:** Introduction to Reading Assessment; Assessing Phonological Skills

**Module 7:** Assessing Phonics Skills

**Module 8:** Assessing Word Identification and Reading Fluency

**Module 9:** Assessing Reading Comprehension and Related Skills

**Module 10:** Effective Approaches for Preventing Reading Difficulties

**MODULE 11: Effective Interventions for Reading Difficulties**

**Module 12:** Case Examples of Reading Disabilities

**Module 13:** Specific Learning Disability Identification

# Module 11 Overview

## **Module 11: Effective Interventions for Reading Difficulties**

11.1 How Do We Determine What is Effective?

11.2 Popular Interventions With Minimal to Modest Results

11.3 The Phonological Proficiency Intervention Continuum

**11.4 Highly Effective Interventions for Reading Difficulties**

# Learning Intentions



## **Module 11 Session 4: Highly Effective Intervention for Reading Difficulties**

Participants will be able to:

- ✓ **Describe the three key elements found in the most highly successful word-level reading intervention studies**
- ✓ **Explain why these key elements promote maximum success**

# Reviewing Intervention Outcomes

- In the research, there appears to be three outcome levels based on standard score gains on normed word identification tests
  - **Minimal:** 0 to 6 standard score points (usually 3-4)
  - **Moderate:** 6 to 9 standard score points (usually 6-7)
  - **Highly successful:** 12 to 25 standard score points (usually 14-17)
- In the previous session, the degree of phonemic training was suggested to be responsible for these differences in outcomes

# Possible Reasons for Differing Outcomes

- Many reviews of research have shown, contrary to our intuitions, that the following factors display little or no consistent impact on intervention outcomes in word-reading intervention studies
  - Socioeconomic status (SES) (small but consistent impact)
  - Age of students (small but consistent impact)
  - Length of intervention (no consistent impact)
  - Severity of the problem (no consistent impact)
  - Small group size (i.e., 1:1 vs. 1:3 or 1:4) (no consistent impact)



# Considering the Differing Outcomes

- This is all good news because we cannot change the SES of our students, their beginning severity or age. And 1:1 instruction and very lengthy interventions are expensive.
- What appears to account for the outcome differences?
- **Instruction!**
- That is something we can control

# Minimal Outcome Interventions

- Mostly 2-4 standard score point gains
- Gains often lost at follow up
- Studies fall into two groups: those using phonics instruction and those that do not
- None of these studies did formalized intervention for phonemic awareness
- All did some form of reading practice

# Moderate Outcome Interventions

- **Mostly 6-7 standard score point gains**
- **Gains often weaker at follow up**
- **All of these studies used systematic phonics instruction**
- **All did some form of reading practice**
- **All trained the basic phonemic awareness skills of segmenting and/or blending**
  - This represents skills that match the development of typical readers at the end of first grade

# Highly Successful Outcome Interventions

- **Mostly 14-17 standard score point gains**
- **Gains maintained or even stronger at follow up**
  - The study that prompted Tier 3 of RTI showed further gains at follow up
- **All of these studies used systematic phonics instruction**
- **All did some form of reading practice**
  - Ranged from 5% to 50% of instructional time
- **All trained phonemic skills via phonemic manipulation activities**
  - Six “programs” used in the literature
  - Three commercially available, three experimenter designed
  - All six had equivalent results

# Highly Successful Intervention and Phonemic Proficiency

- **None of these studies was directly based on orthographic learning research (Ehri's or Share's theories)**
- **None attempted to directly address phonemic proficiency**
- **Yet we can infer that they trained phonemic proficiency**
  - Reading improvement
  - Direct experience with that type of training
- **We need research to strengthen this inference**
  - At minimum, we should do “monkey see, monkey do”
- **It appears the outcome continuum in the intervention research is consistent with the word learning theories of Ehri & Share**

# The “Formula” for Effective Word-Reading Intervention

**The three key elements in the studies with the most highly successful outcomes are:**

- 1) Train phonemic skills to the point of automaticity using phoneme manipulation activities
- 2) Teach letter-sound relationships and basic phonic patterns explicitly and systematically
  - All studies with moderate and highly effective outcomes did this
- 3) Provide opportunities for reading real text (paragraph reading)
  - This is the only way for students to get exposed to new words and orthographically map them once they have acquired the skills to do so

# Why This “Formula” is Effective

- **We need further research to tie together the word learning findings (how we remember the words we read – Ehri, Share) and the word reading intervention findings**
- **Tentatively, we can infer that these effective interventions supplied students with the cognitive/linguistic tools they needed to sound out and remember the words they read**
  - Phonemic proficiency, letter-sound proficiency, and exposure to new words
- **This “formula” currently represents best practice in intervention for word-level reading difficulties**
  - Remove one element and we should expect lesser results

# Summary: Module 11 Session 4

- ✓ The studies with the most highly effective results yield about a standard deviation of improvement (14-17 standard score point gains) in word identification
- ✓ These gains are maintained over time
- ✓ The studies with the most highly successful outcomes had three key elements: intensive training of phoneme manipulation, phonics instruction, and reading practice
- ✓ These three key elements all dovetail with the word learning theories of Ehri and Share
- ✓ They currently represent “best practice”





A woman with long brown hair and black-rimmed glasses is shown from the chest up, looking upwards and to the right with a thoughtful expression. Her right hand is raised to her chin, with her index finger pointing up. The background is a light grey wall with several large, dark, hand-drawn question marks scattered across it. On the left side, a large black thought bubble with a white border contains white text.

## **Reflect and Connect:**

Identify the three key elements that lead to the most highly successful outcomes and explain why they are effective.

# Wrap Up

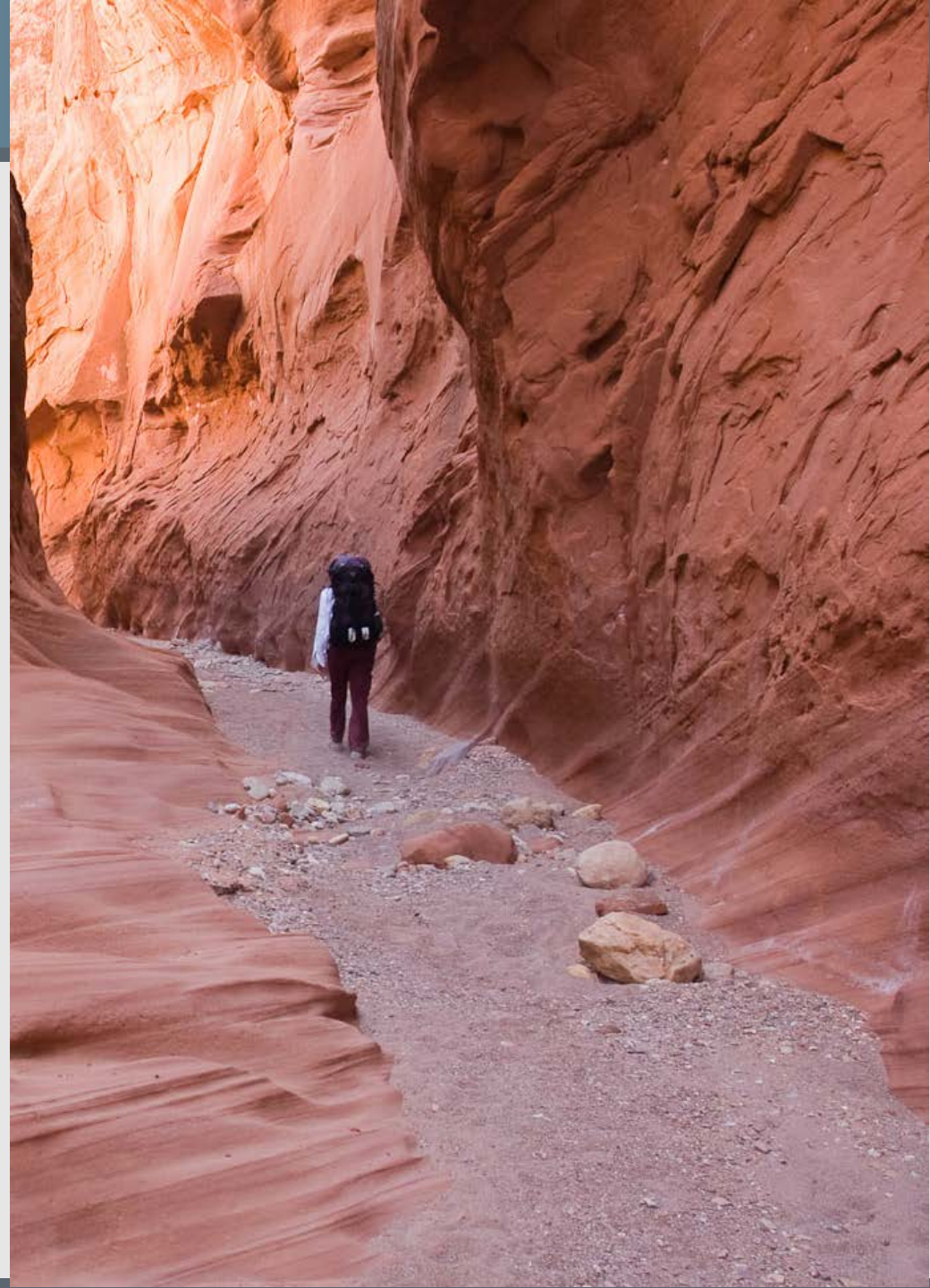


**What was your biggest takeaway?**

**What questions do you still have?**

# Up Next

## Module 12.1 Case Examples of Reading Difficulties





*Thank You*

Please visit the CDE Specific Learning Disability Website  
for more information:

<https://www.cde.state.co.us/cdesped/SD-SLD>