

# Preparing Teachers to Support Children with Dyslexia in Classroom Contexts

Presented for the Higher Education Literacy Partnership of Minnesota

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*thank you!*



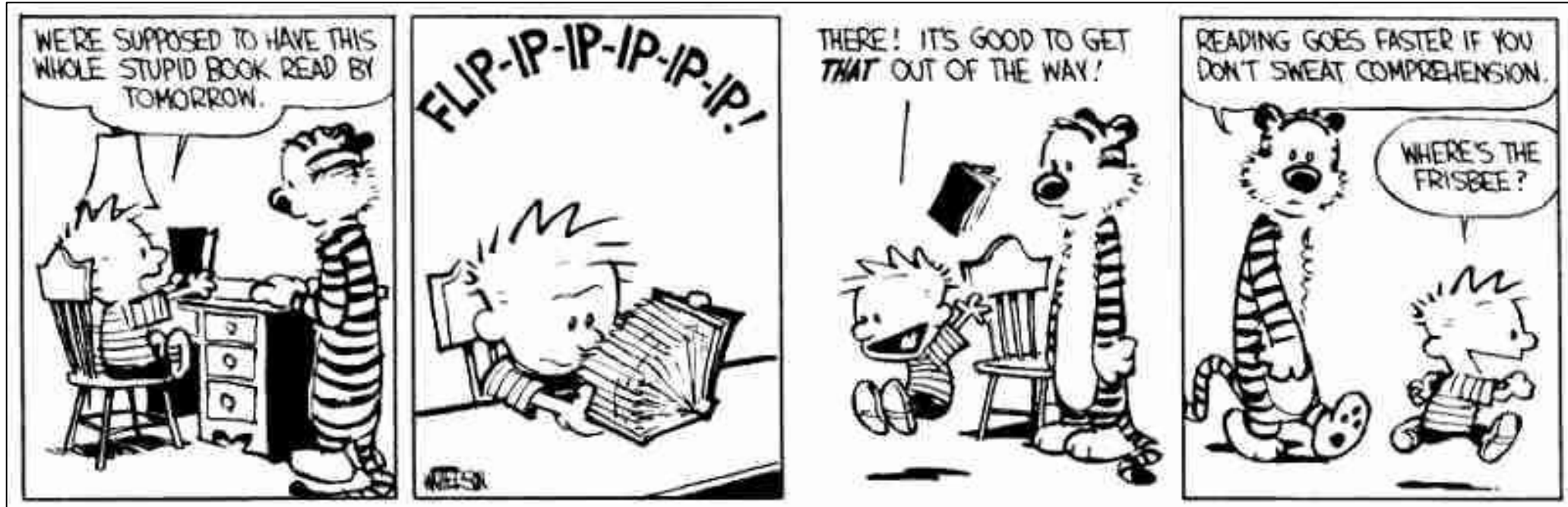
# Today's objectives

- Describe the “Simple View of Reading” and how it relates to dyslexia and literacy instruction.
- Review key features of structured literacy instruction.
- Discuss how these skills can be used within whole-class core contexts, as well as in supplemental interventions.
- Apply a data-based decision-making framework for collaboration with multidisciplinary teams of experts.

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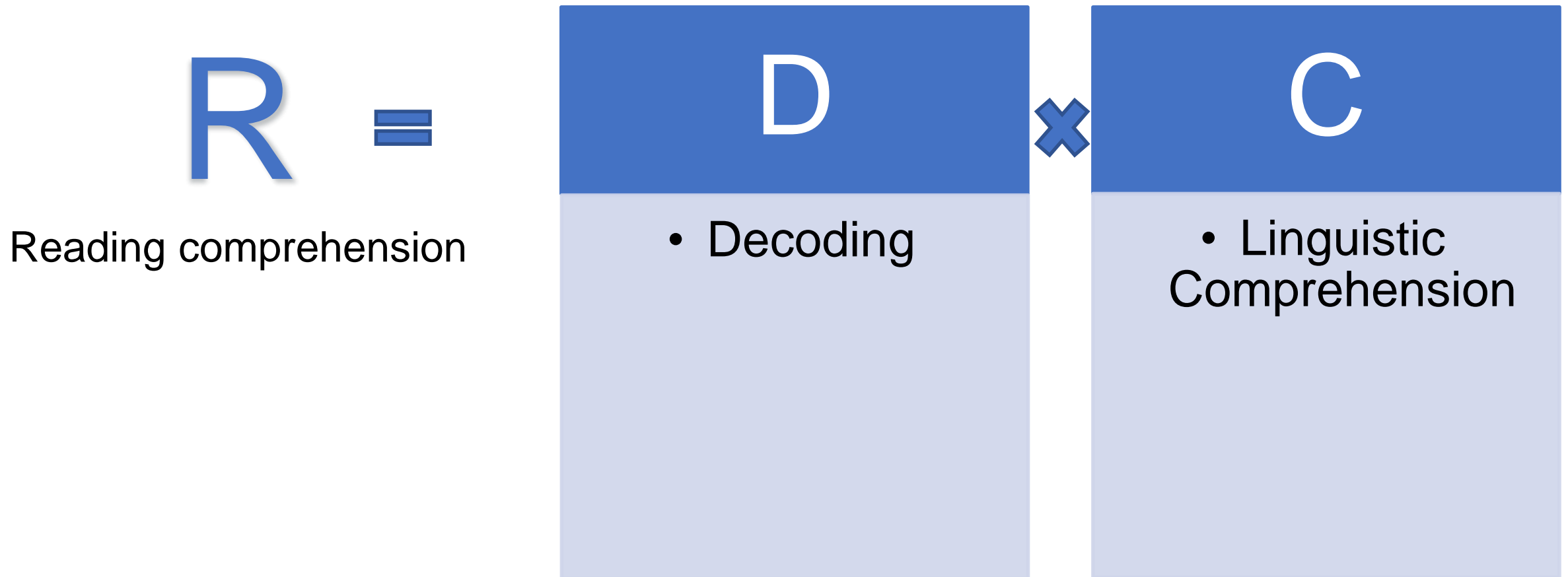
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# Reading for meaning: The ultimate goal



# Simple View of Reading (SVR)

Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and special education*, 7(1), 6-10.



*If either D or C = 0, then R = 0.*

# Shift in Development over Time

- Decoding and Comprehension develop in tandem
- D contributes more to Reading in younger children
- C contributes more to Reading over time
- *Both* are important to emphasize in reading instruction

Kendeou, P., McMaster, K. L., & Christ, T. J. (2016). Reading Comprehension: Core Components and Processes. *Policy Insights from the Behavioral and Brain Sciences*. doi:10.1177/2372732215624707

Kendeou, P., Van den Broek, P., White, M. J., & Lynch, J. S. (2009). Predicting reading comprehension in early elementary school: The independent contributions of oral language and decoding skills. *Journal of Educational Psychology*, 101(4), 765.

# Simple View of Reading

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- Four “types” of readers:

Poor decoding, good linguistic comprehension ("dyslexic")	Good decoding, good linguistic comprehension ("good reader")
Poor decoding, poor linguistic comprehension ("poor reader")	Good decoding, poor linguistic comprehension ("poor comprehender")



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# Five Big Ideas of Reading (National Reading Panel Report)

## Phonemic Awareness

- The awareness that spoken words are made up of smaller parts (sounds)
- The ability to hear and manipulate the smaller parts of spoken words

## Alphabetic Principle

- The understanding that words are made up of letters that have sounds
- The ability to use knowledge of letter-sound relations to read and spell words

## Fluency with text

- “Effortless reading”
- Reading with accuracy, speed, and prosody (expression)

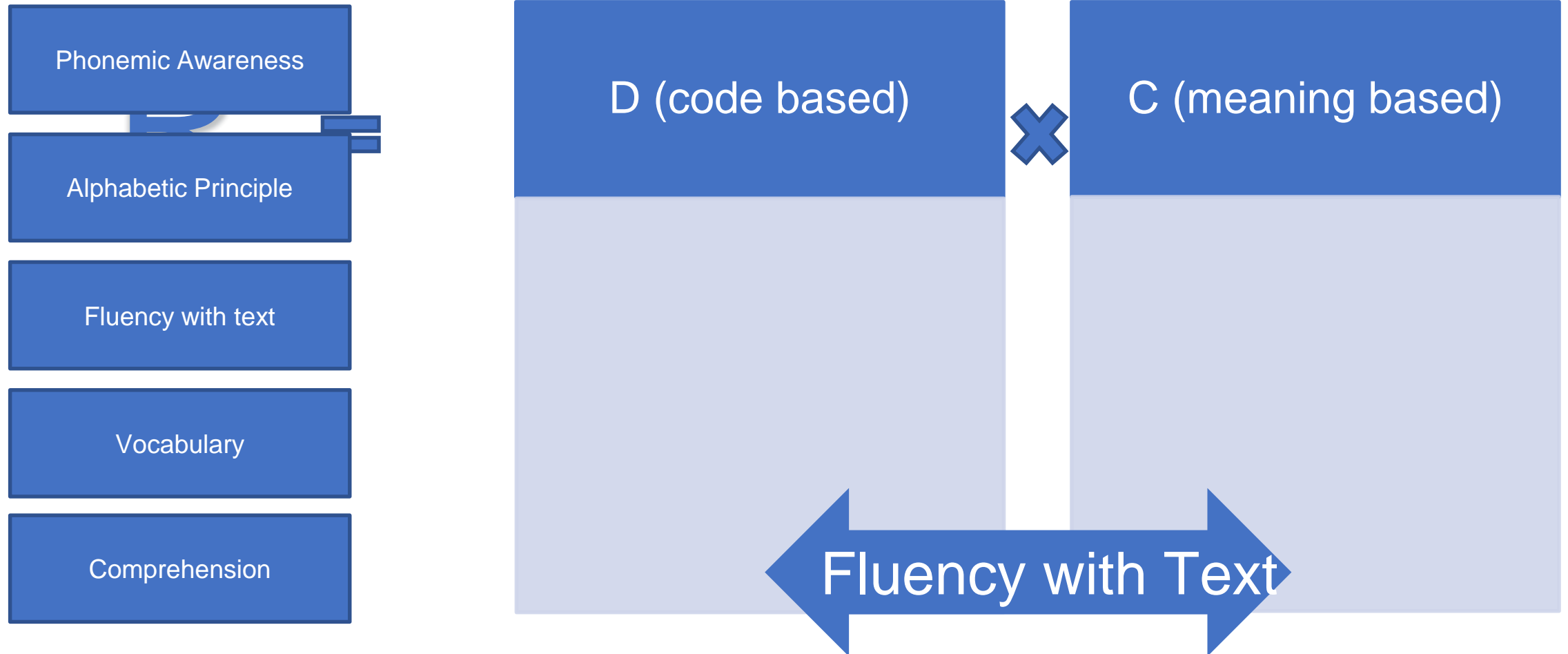
## Vocabulary

- Access to and knowledge of the meaning of words

## Comprehension

- The construction of a coherent mental representation of text

# How do the “Big Five” map onto the SVR?



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# Structured Literacy Instruction: Principles

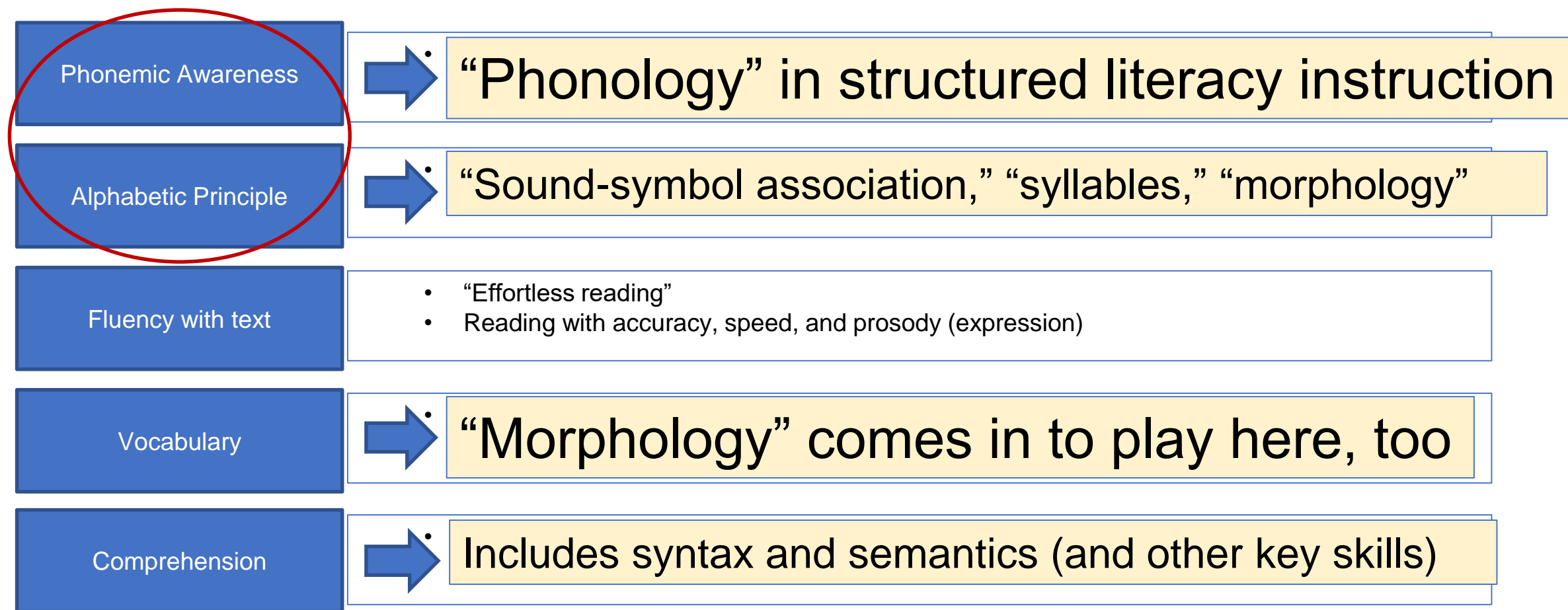
- Systematic and cumulative
  - Follows a logical sequence
  - Builds upon previously-learned skills or concepts
- Explicit
  - Modeling
  - Guided practice with scaffolding and immediate feedback
  - Independent practice
  - Cumulative review
- Diagnostic
  - Includes tracking mastered and un-mastered content



# Structured Literacy Instruction: Content

- Phonology – study of sound structure of words
- Sound-symbol relationships – using letter-sound knowledge to decode words
- Syllables – using syllable division rules to decode words
- Morphology – study of meaning structure of words
- Syntax – using knowledge of grammar, sentence structure, mechanics to comprehend text
- Semantics – using meaning to comprehend text

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Alphabetic Principle

Fluency with text

Vocabulary

Comprehension

# Phonemic Awareness: Key Skills

• **Sound and word discrimination:** *What doesn't belong: cat, mat, bat, ran?*

• **Rhyming:** *What rhymes with man, cat or can?*

• **Blending:** */c/ /a/ /t/. What word?*

• **Segmenting:** *Say the sounds in "dog."*

• **Deletion:** *Say "cat" without the /c/.*

• **Manipulation:** *What word do you get if you change the /t/ in cat to /n/?*

# Phonemic Awareness: Instructional Features

- Explicit & systematic
- Teach 1 or 2 types at a time
- Manipulate letters with sounds
- Should not be the *whole* reading program



a t c

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# Alphabetic Principle: Key Skills

- 
- Letter-sound identification (*a*)

- 
- Beginning decoding skills: reading regular words (*cat*)

- 
- Advanced decoding skills: *phonic analysis, structural analysis, irregular words*

# Alphabetic Principle: Instructional Features

- Explicit & systematic
- Teach visually and auditorially similar letters and letter patterns *separately*
- Keep the end in mind (reading from text)
- Differentiate: some children will need more than others





# Alphabetic Principle: Beginning Decoding

Sounds, "Sight Words," & Decodable  
Words

From Kindergarten PALS (Fuchs et al.,  
2001)

Lesson 29	
<p>g p o r a h ★ r i t p c ★ n i p f h ★ a p h o p i r s ★</p>	<p>What sound?</p> <p>☺ ☺ ☺ ☺</p>
<p>is and was the and on the and</p>	<p>What word?</p> <p>☺ ☺ ☺ ☺</p>
<p>rat hat sat pan can man The rat sat.</p>	<p>Read it slowly.</p> <p>🎵 Sing it and read it.</p> <p>☺ ☺ ☺ ☺</p>

# Alphabetic Principle: Advanced Decoding

- Phonic analysis
  - Teach how combinations of letters represent words
- Structural analysis
  - Teach students to read multi-syllabic words
- Irregular words
  - Teach students strategies for figuring out words that can't be read by phonic or structural analysis alone

# Phonic Analysis: Teach Letter Combinations

- What are they?
  - Example: *ch, th, ai, ee, oa, sh*
  - Non-example: *bl, gr, sm*
- When should you teach them?
  - Students has mastered most common sounds
  - Letter combinations appear frequently in words the student encounters
- How do you determine a sequence?
  - Number of words containing the sequence
  - Similarity of letter combinations
    - e.g., *sh* and *ch*

# Phonic Analysis: Introduce New Sound

ed

# Phonic Analysis: Isolated Sounds Format

ea oo ai ea

th sh ea oo

# Phonic Analysis: Word List Format

boot    round    loud    beat

beam    trout    stain    proud

mean    pound

# Structural Analysis: Teach the Rules

<i>Word Type</i>	<i>Example</i>	<i>Instructional Tips</i>
Suffix added to a base word ending in a consonant	bat + er = batter farm + ing = farming sun + y = sunny	Teach students about doubling the consonant.
<i>ed</i> added to a word ending in a consonant	stop + ed = <u>stopped</u> hum + ed = <u>hummed</u> hand + ed = <u>handed</u>	<i>ed</i> can sound like /t/, /d/, or an extra syllable. Teach students when to double the consonant.
VCe derivatives	care + less = careless hope + ing = hoping	If the ending starts with a vowel, the e is dropped from the base word.
Y derivatives	cry + ed = cried happy + ness = happiness stay + ed = stayed	If there's a consonant before the y, it changes to i.
Affix added to multisyllable word	invent + ion = <u>invention</u> pay + ment = <u>payment</u>	Teach pronunciation of the affix, then read lists of words containing the same affix.

# Irregular Words

- Contain letter combinations that will not be taught *due to lack of frequency or inconsistency*
- Contain common letters or combinations *not representing their most common sounds* (e.g., *break*)



# Irregular Words: Examples

ghost

agile

pour

fuel

zero

anchor

weight

chew

earth

# Irregular Words: Strategies

- Use phonic and structural cues
- Use context

*Example:*

I love *bacon* and eggs.

They stayed in a nice *hotel*.

# Irregular Words: Phonic and Structural Cues

- “Minor sounds” -- C and G
  - Teach generalizable strategies
    - *i* or *e* after *c*
    - Word families

<b><i>ace</i></b>	<b><i>ice</i></b>	<b><i>age</i></b>	<b><i>dge</i></b>
face	mice	page	badge
lace	dice	cage	bridge
race	spice	rage	fudge

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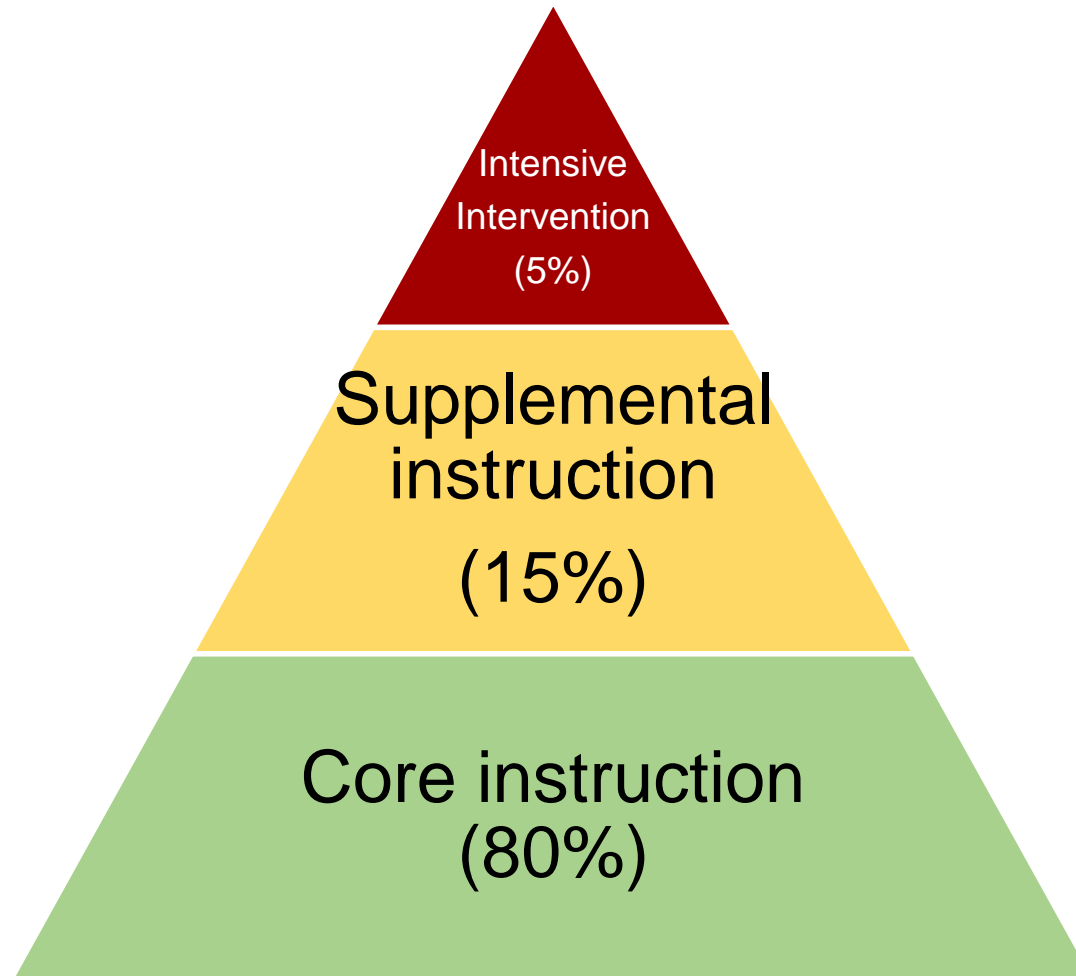
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# Multi-tiered systems of support



Principle	Core instruction	Supplemental intervention
Systematic & cumulative		
Explicit		
Diagnostic		

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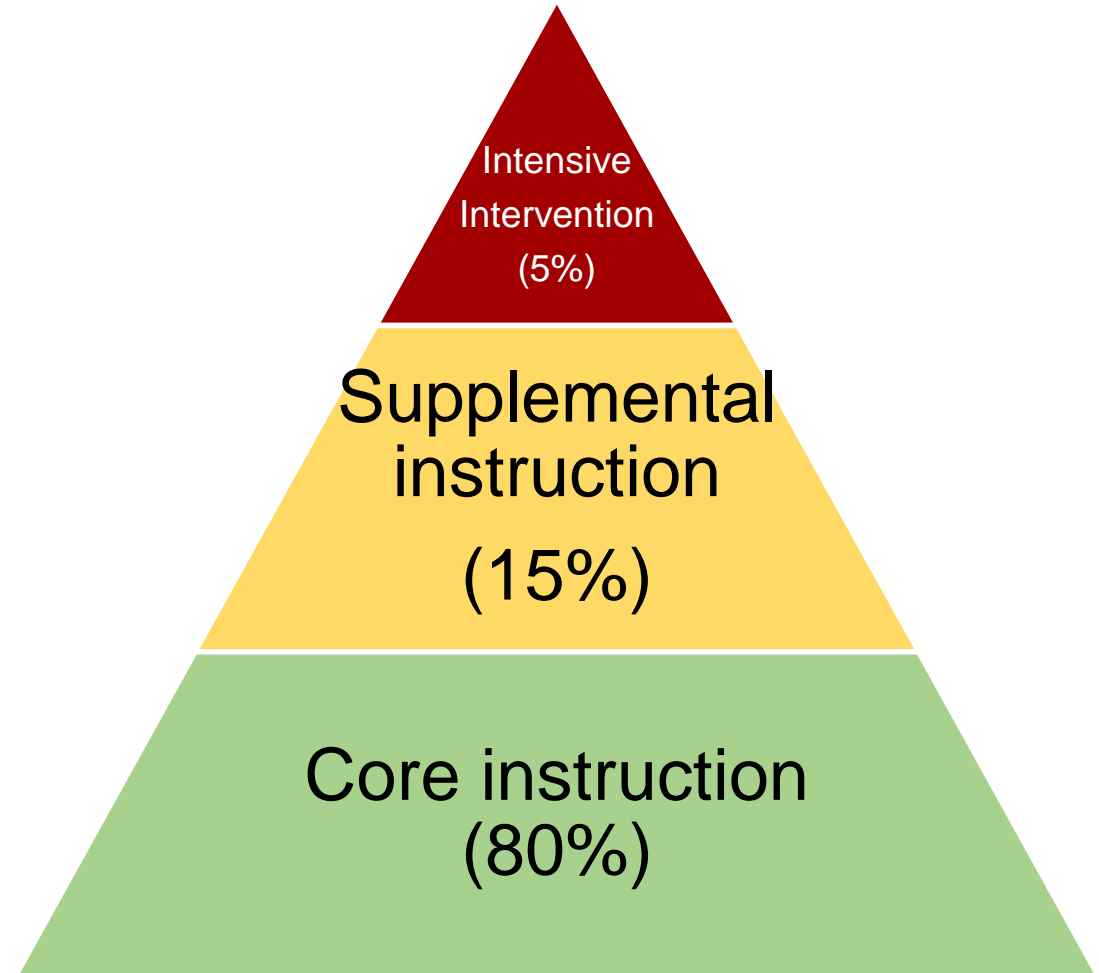
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Diagnostic	<ul style="list-style-type: none"> <li>• Regular (e.g., weekly) checks for mastery, especially for children identified as experiencing difficulty</li> </ul>	<ul style="list-style-type: none"> <li>• Daily checks for mastery; can repeat a lesson until a skill is mastered</li> </ul>

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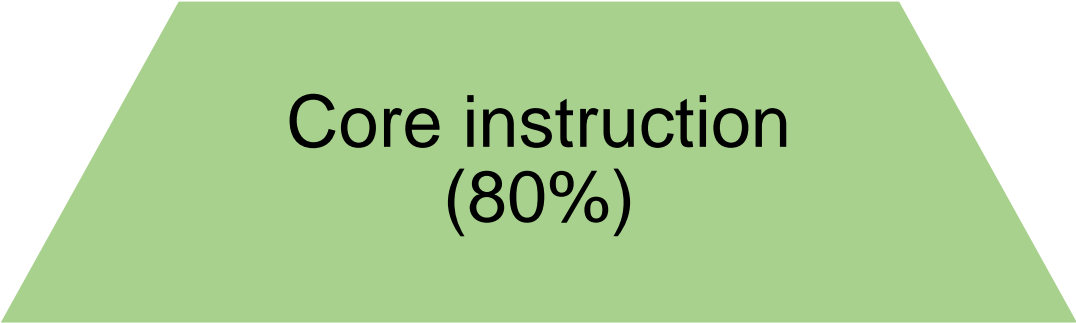
# Multi-tiered systems of support

- To be successful:
  - Multi-disciplinary teamwork
    - Classroom teachers
    - Literacy specialists
    - Interventionists
    - Special education teachers
    - Speech-language pathologists
    - English learner specialists
    - School psychologists
    - Parents
    - Administrators
  - Data-based decision-making
  - Professional development



# Core instruction

- Universal screening
- Well-sequenced core curriculum supported by
  - Professional development
  - High fidelity of implementation
- Progress monitoring of students “at risk” using validated general outcome measures

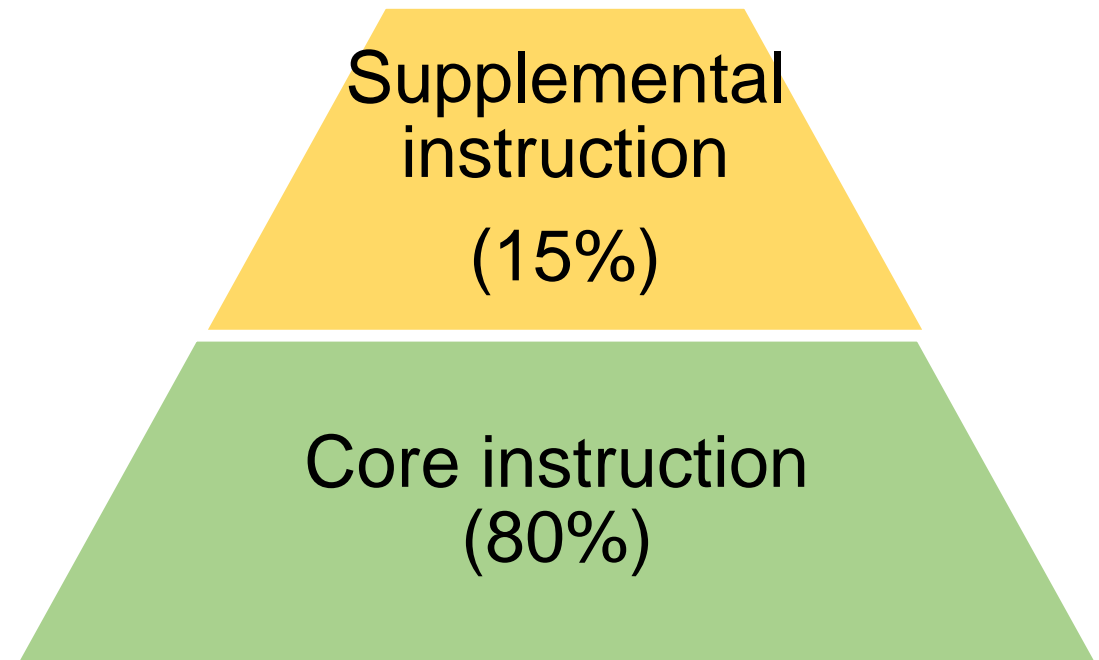


Core instruction  
(80%)



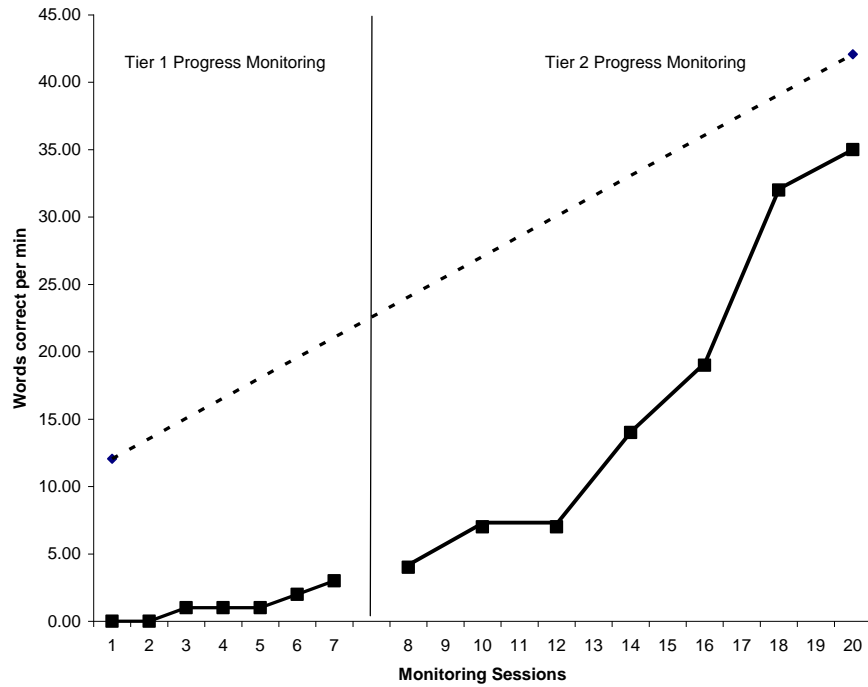
# Supplemental instruction

- Occurs within general education
- *Small-group* instruction (homogeneous)
- Delivered by qualified adult
- Systematic, explicit, diagnostic
- Grouping is *flexible*
- Progress monitoring is key

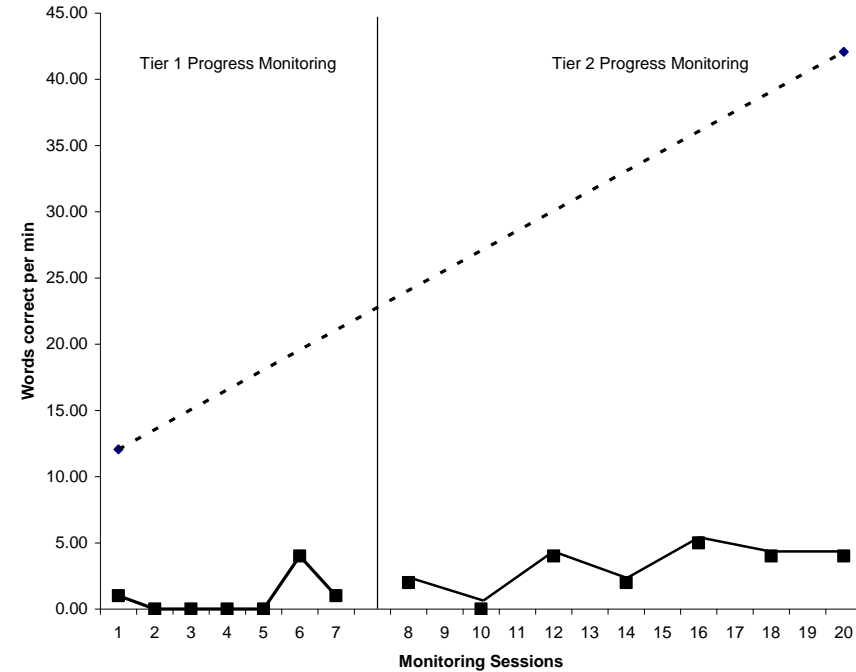


# Progress monitoring examples

Maurice

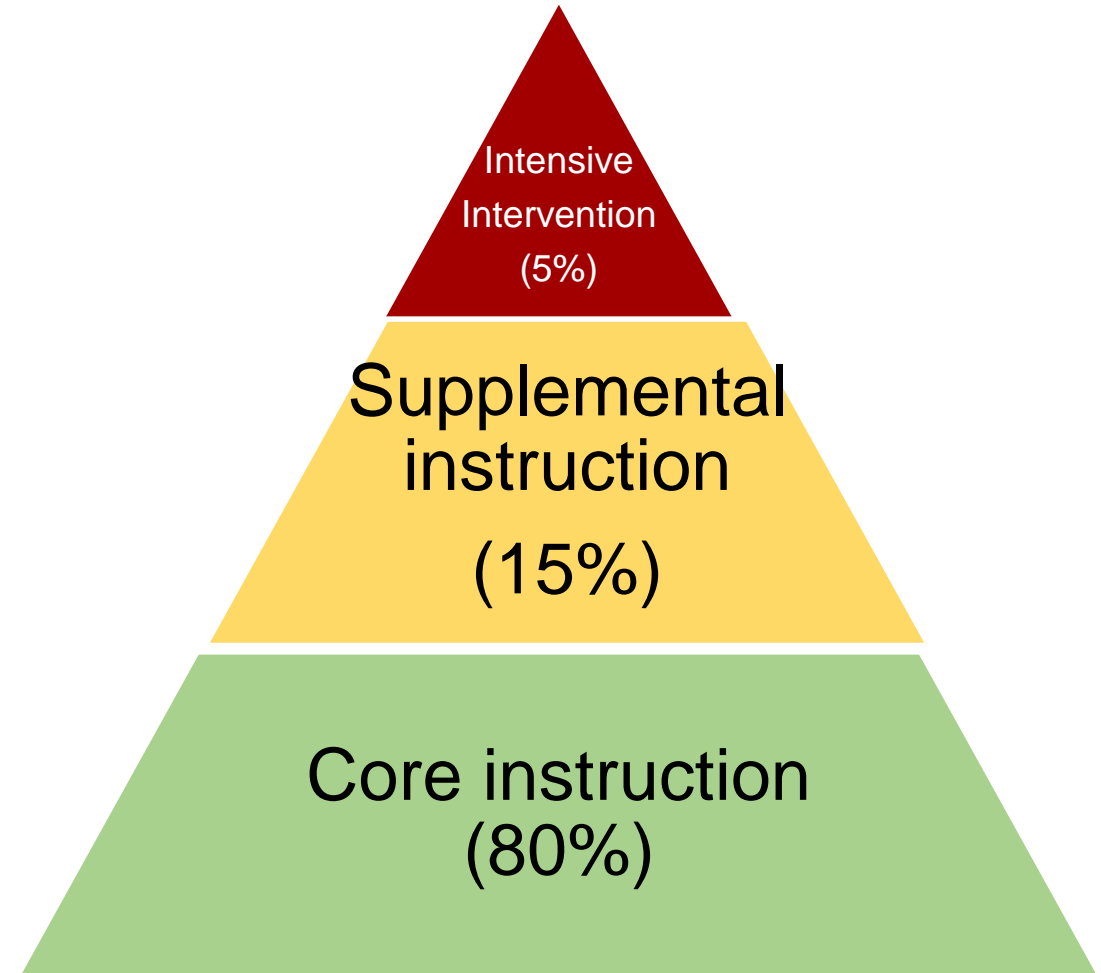


Gabriella



# Intensive intervention

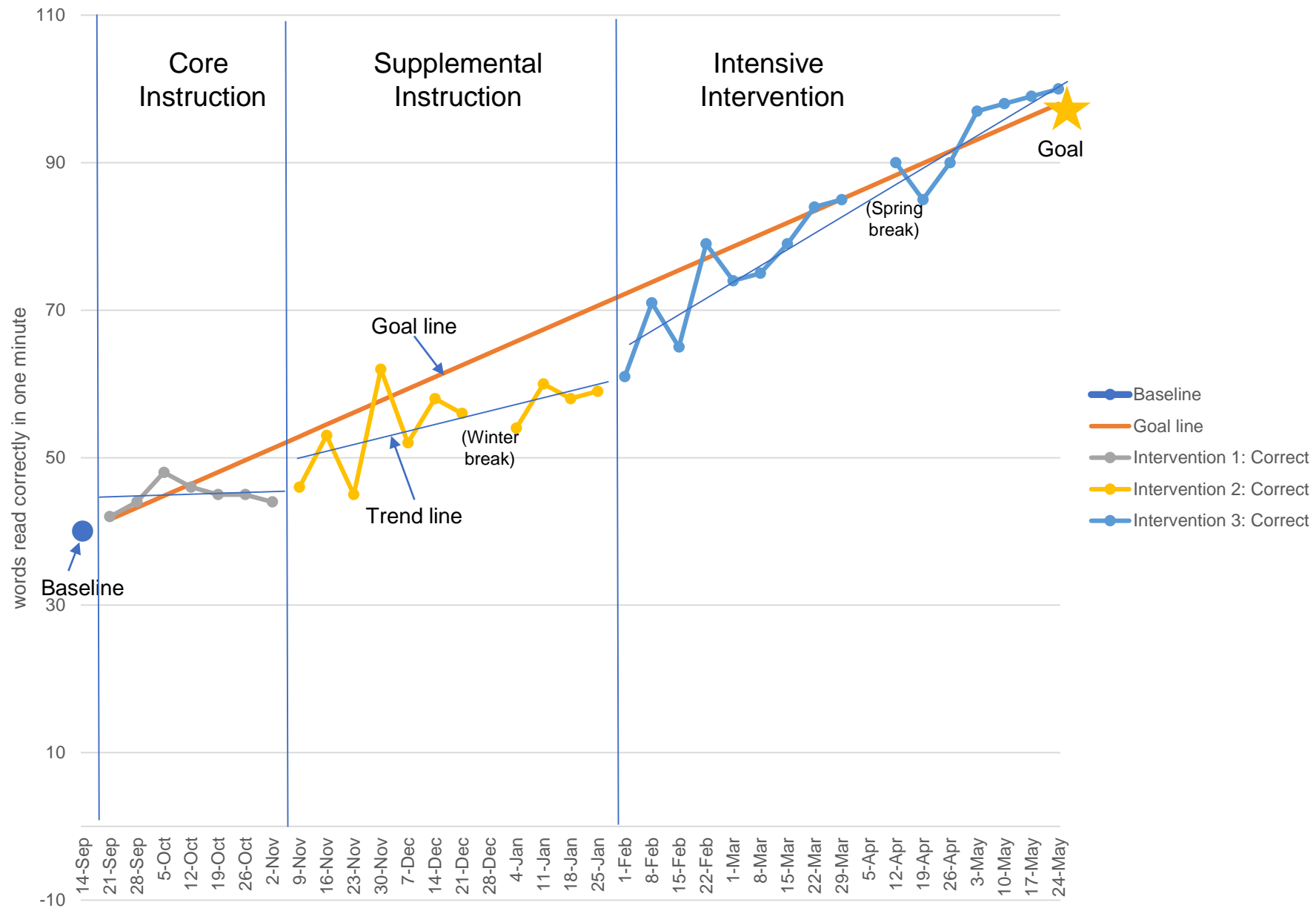
- Most *individualized*
- Delivered by specialist
- Emphasis on targeted skills
- Progress monitoring is key
- Could be delivered in the context of special education



# Case example

Calvin

Calvin's Graph



# Summary

- The “Simple View of Reading” provides a helpful framework for understanding dyslexia and literacy instruction.
- Teachers of children with dyslexia (and other reading difficulties) should know the principles of structured literacy instruction.
- These principles can be applied within whole-class core contexts, as well as in supplemental interventions.
- Children experiencing reading difficulties can be supported through collaborative data-based decision-making.

# Resources

Carnine, D. W., Silbert, J., Kame'enui, E. J., & Tarver, S. G. (2010). *Direct Instruction Reading*. (6<sup>th</sup> Ed.). Upper Saddle River, NJ: Pearson Education, Inc.

Florida Center for Reading Research (<https://www.fcrr.org/>)

**Fuchs Research Group: What is PALS?** (<https://frg.vkcsites.org/what-is-pals/>)

Hosp, M. K, Hosp, J. L., & Howell, K. W. (2016). *The ABCs of CBM: A practical guide to curriculum based measurement (2<sup>nd</sup> Ed.)*. New York: Guilford Press.

International Dyslexia Association (<https://dyslexiaida.org/>)

**IRIS Modules** (<https://iris.peabody.vanderbilt.edu/>)

Foorman, B., Beyer, N., Borradaile, K., Coyne, M., Denton, C. A., Dimino, J...., & Wissel, S. (2016). *Foundational skills to support reading for understanding in kindergarten through 3rd grade* (NCEE 2016-4008). Washington, D.C.: National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education (<http://whatworks.ed.gov>)

Meadows Center (<https://www.meadowscenter.org>)

Moats, L. C. (2000). *Speech to print: Language essentials for teachers*. Baltimore, MD: Brookes.

**National Center on Intensive Intervention** ([www.intensiveintervention.org](http://www.intensiveintervention.org))

Wanzek, J., Al Otaiba, S., & McMaster, K. L. (2019). *Intensive reading interventions for the elementary grades*. New York, NY: Guilford.

Wanzek, J., Harbor, A., & Vaughn, S. (2010). *Word recognition and fluency: Effective upper elementary interventions for students with reading difficulties*. Dallas: Meadows Foundation (<https://www.meadowscenter.org/library/resource/word-recognition-and-fluency-effective-upper-elementary-interventions-for-s>)

*thank you!*



Department of  
Educational Psychology

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