Preparing Teachers to Support Children with Dyslexia in Classroom Contexts

Presented for the Higher Education Literacy Partnership of Minnesota

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Driven to Discover®

College of Education and Human Development

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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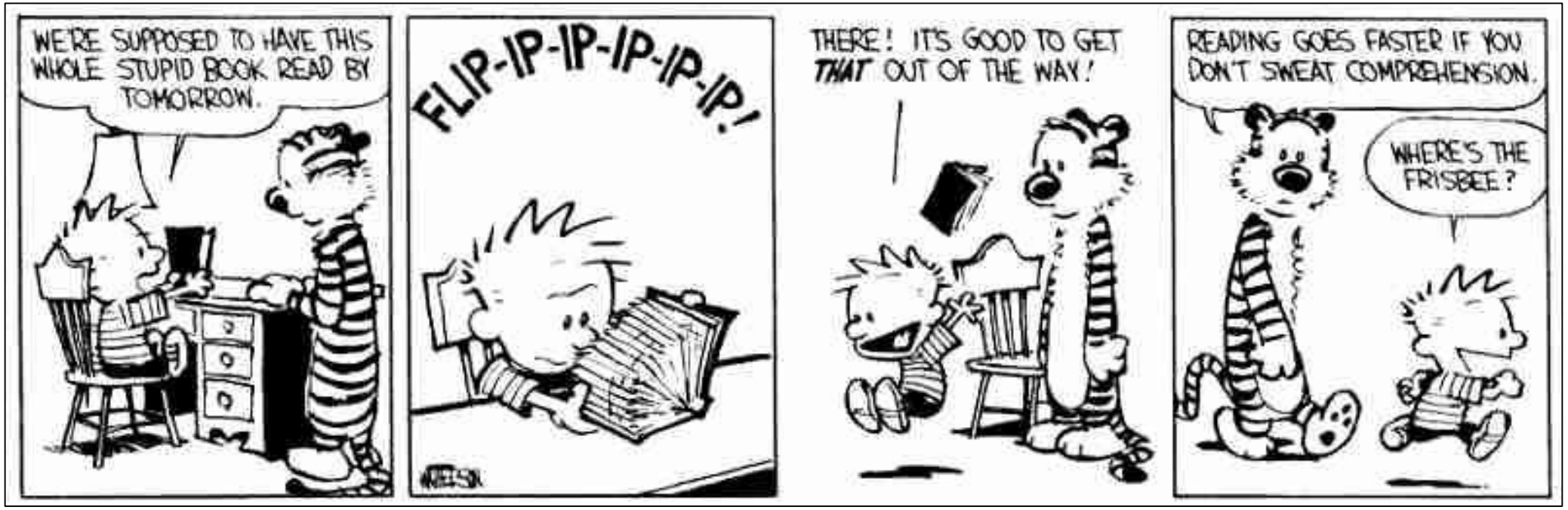
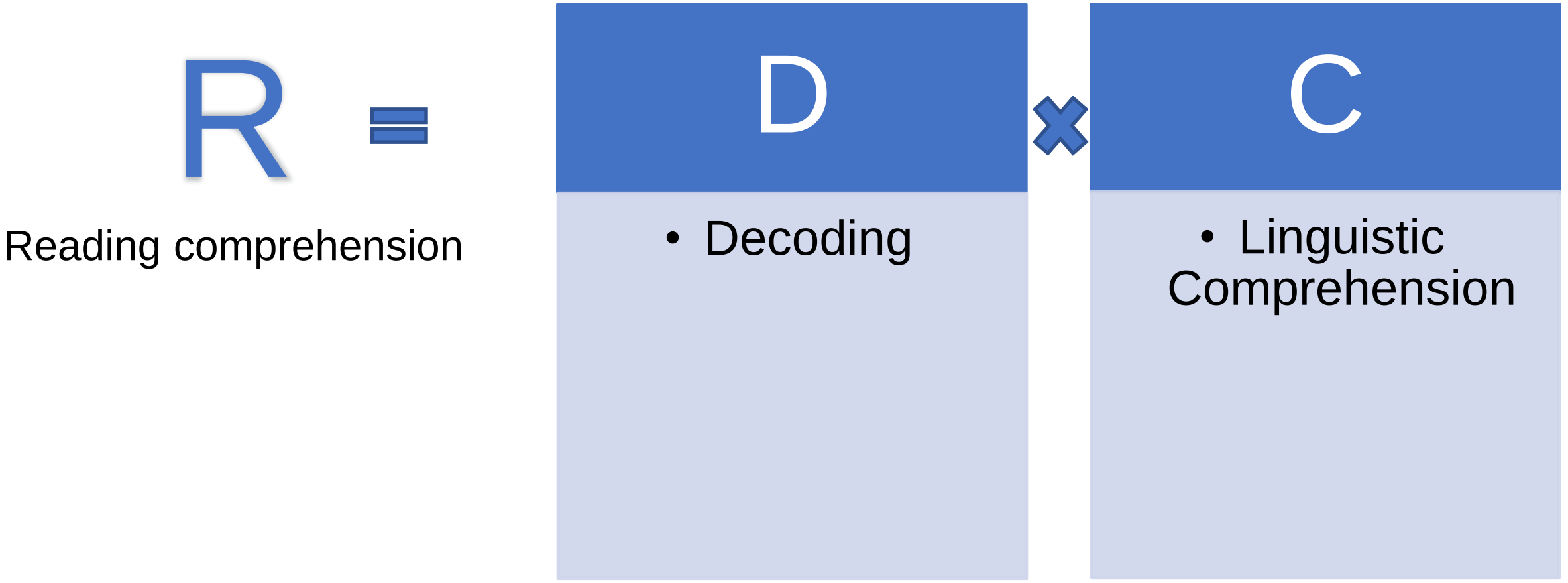
Reading for meaning: The ultimate goal



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.

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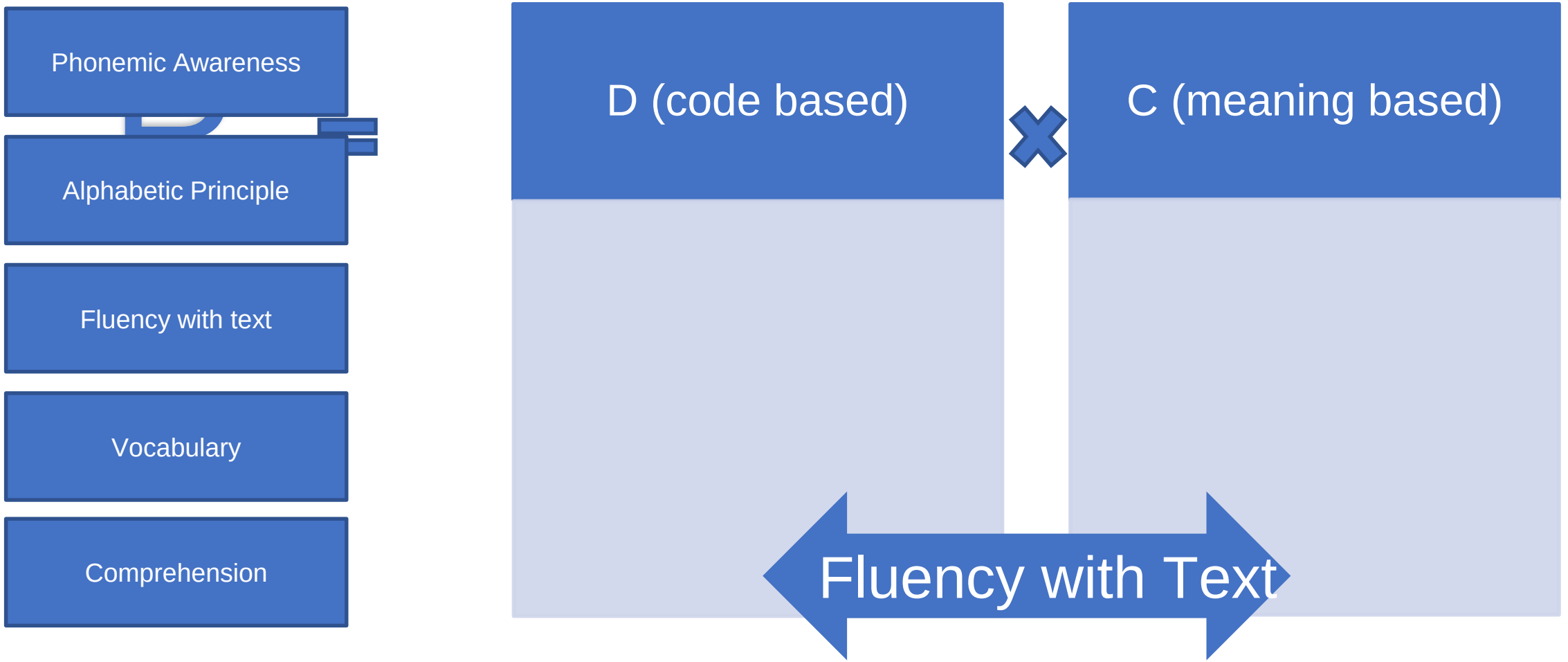
How do the “Big Five” map onto the SVR?



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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

Source: https://dyslexiaida.org/what-is-structured-literacy/

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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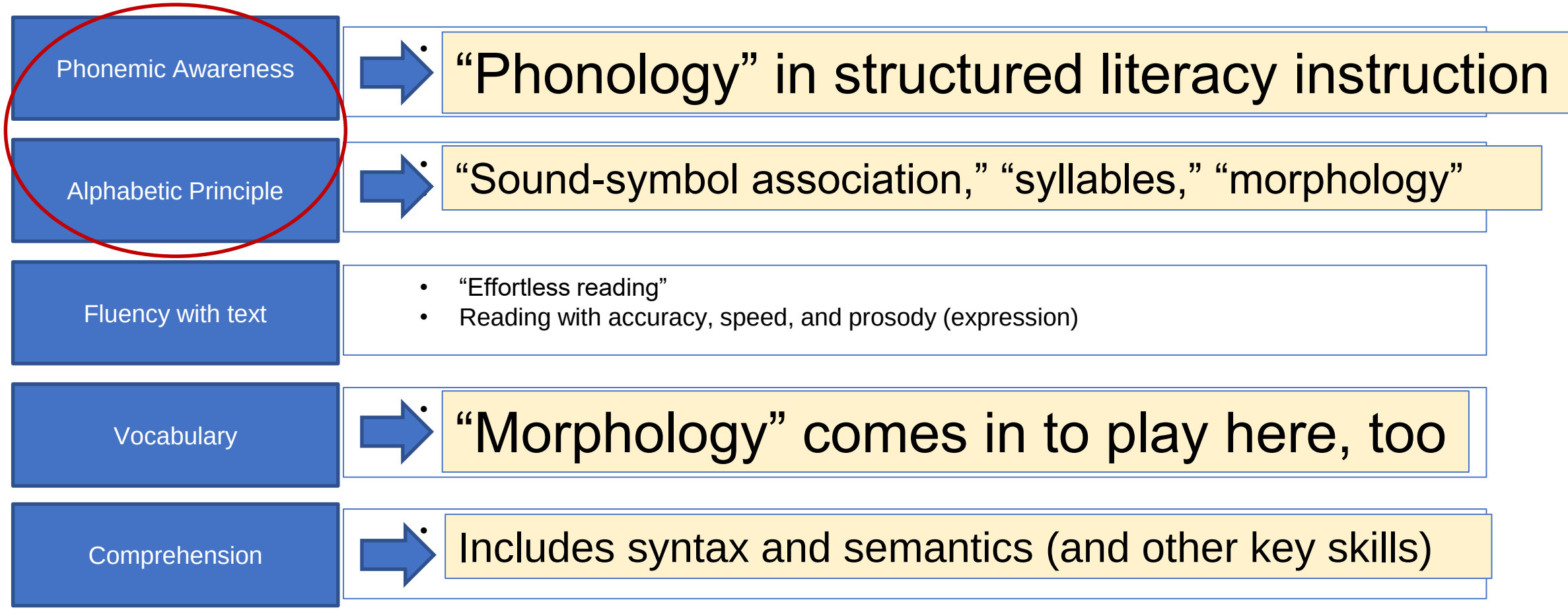

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Alphabetic Principle

Fluency with text

Vocabulary

Comprehension

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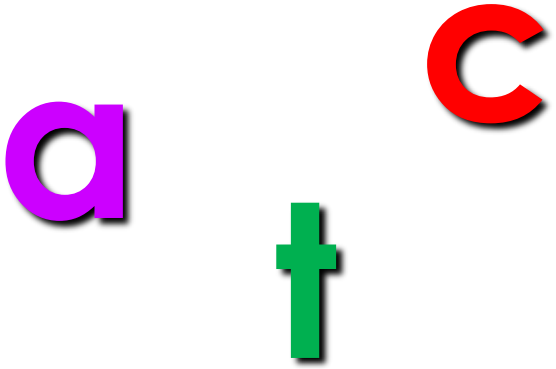
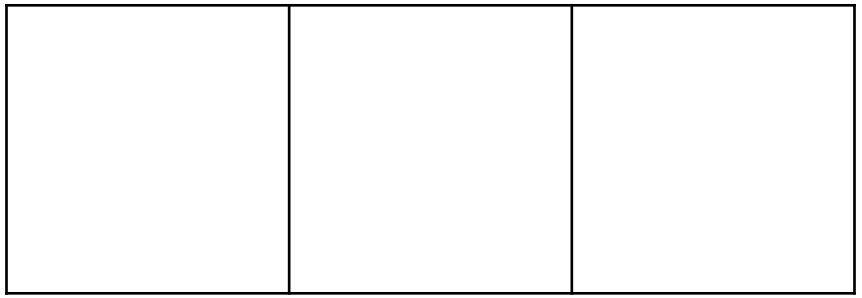
Phonemic Awareness: Key Skills

- **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





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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*

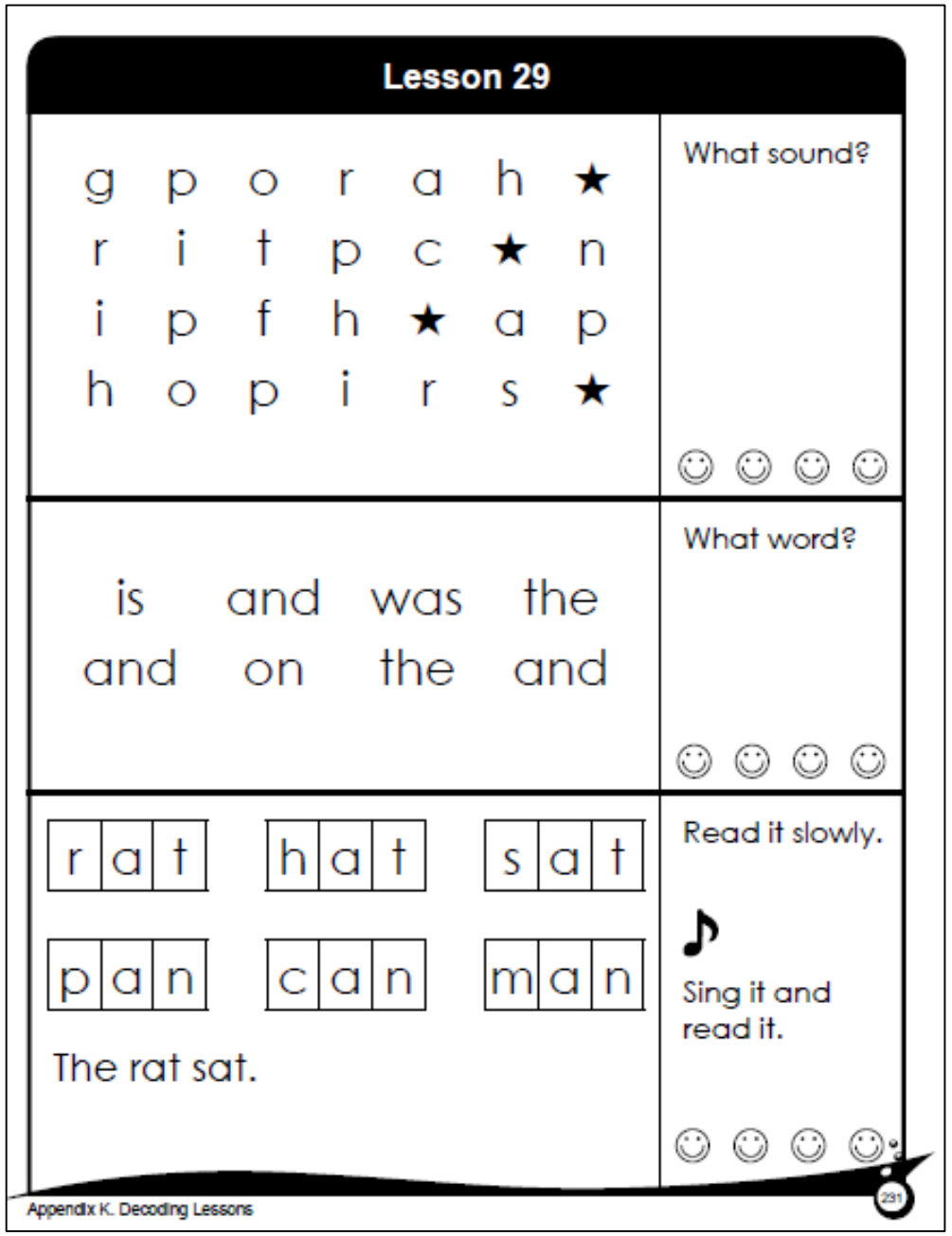
Alphabetic Principle: Instructional Features

- 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)



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

ea

Phonic Analysis: Isolated Sounds Format

ea oo ai ea

th sh ea oo

Phonic Analysis: Word List Format

b<u>oo</u>t r<u>ou</u>nd l<u>ou</u>d b<u>ea</u>t

b<u>ea</u>m tr<u>ou</u>t st<u>a</u>in pr<u>ou</u>d

m<u>ea</u>n p<u>ou</u>nd

Structural Analysis: Teach the Rules

Word Type	*Example*	*Instructional Tips*
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.
ed added to a word ending in a consonant	stop + ed = stopped hum + ed = hummed hand + ed = handed	*ed* 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 = invention pay + ment = payment	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

pour

zero

weight

earth

agile

fuel

anchor

chew

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

ace	***ice***	***age***	***dge***
face	mice	page	badge
lace	dice	cage	bridge
race	spice	rage	fudge

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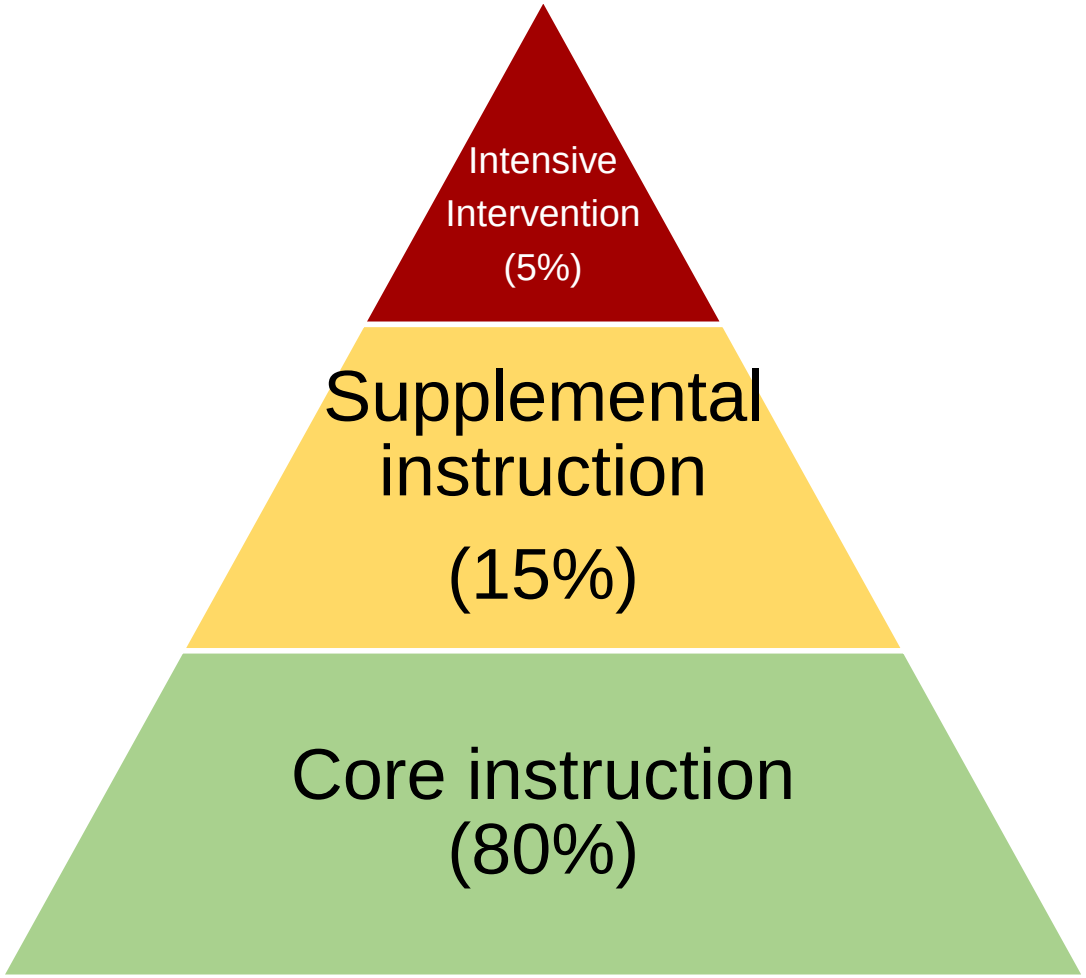
Multi-tiered systems of support



Principle	Core instruction	Supplemental intervention
Systematic & cumulative		
Explicit		
Diagnostic		

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Diagnostic	• Regular (e.g., weekly) checks for mastery, especially for children identified as experiencing difficulty	• Daily checks for mastery; can repeat a lesson until a skill is mastered

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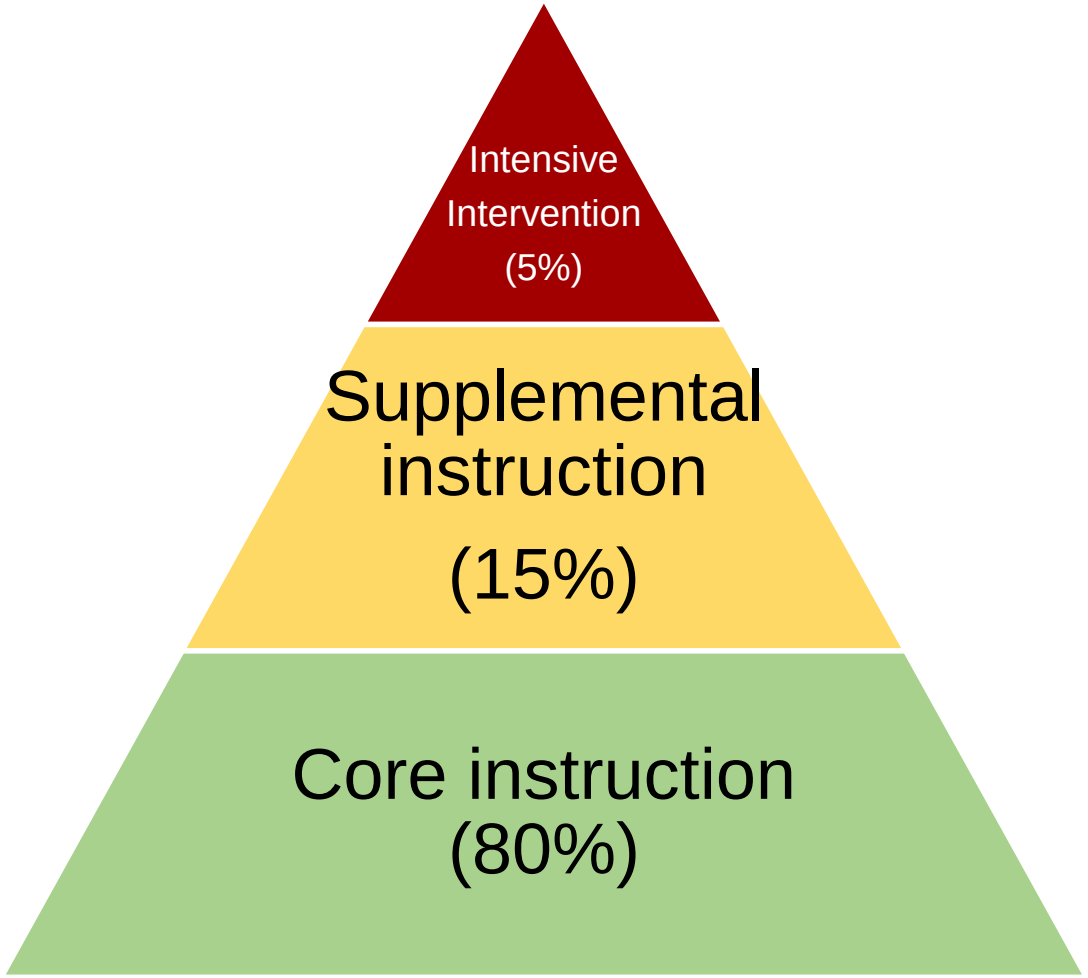
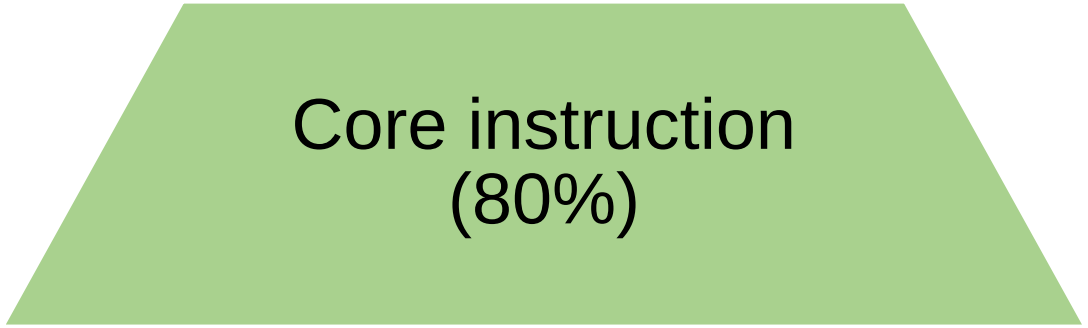
Multi-tiered systems of support

- 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



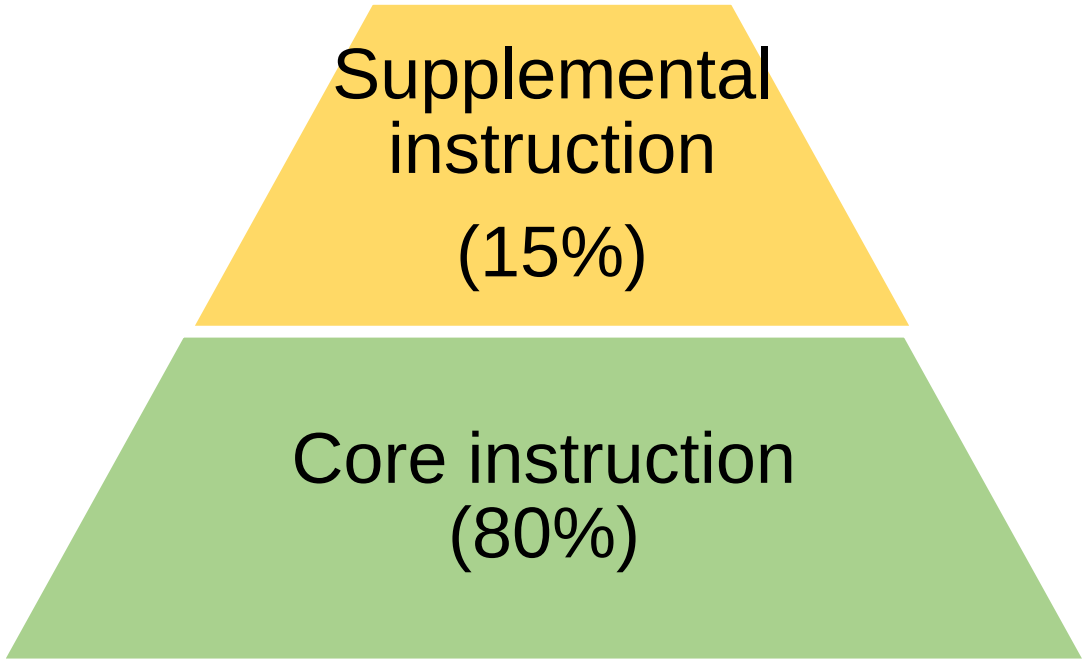
Core instruction

- 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

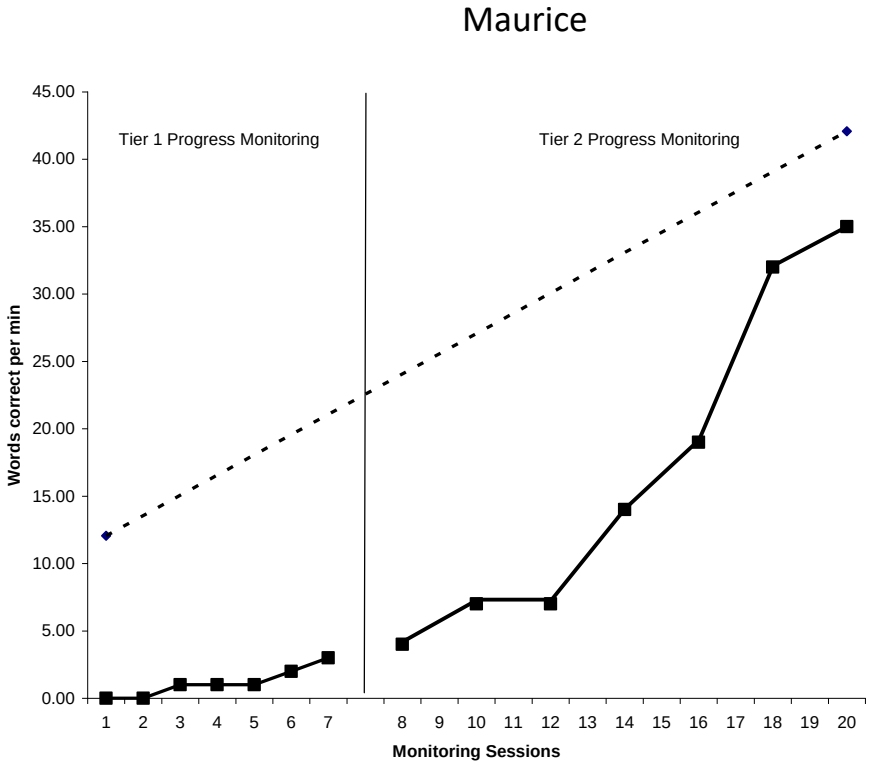


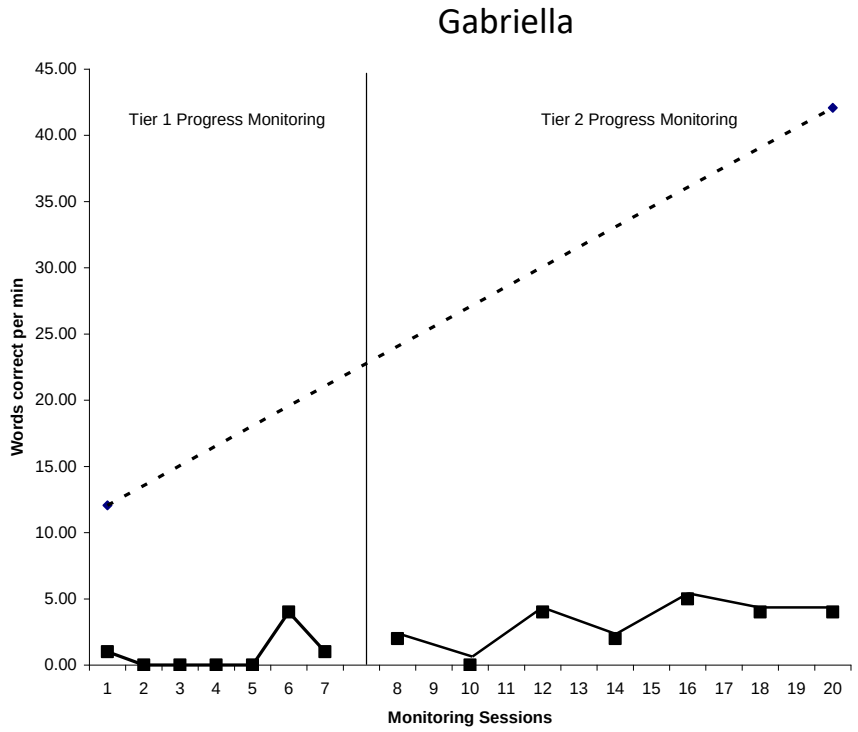
Supplemental instruction

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



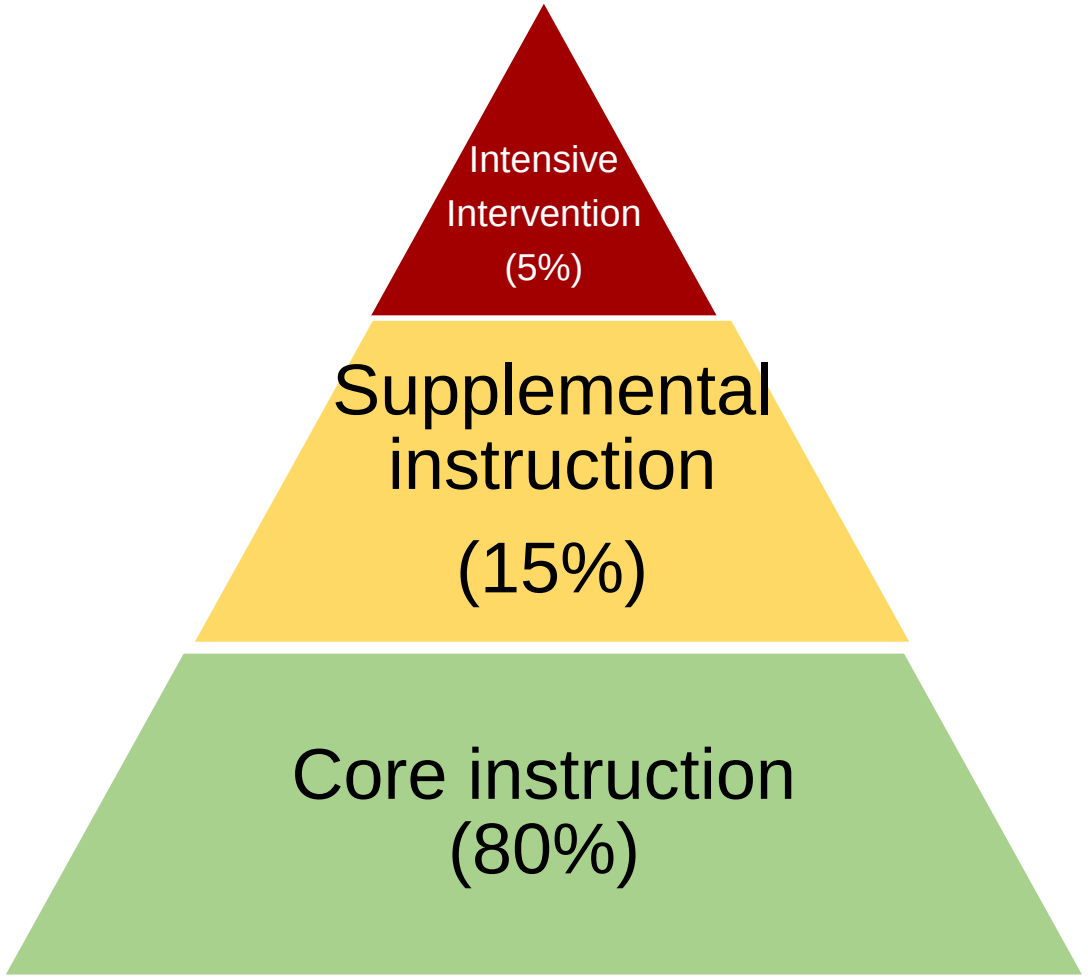
Progress monitoring examples





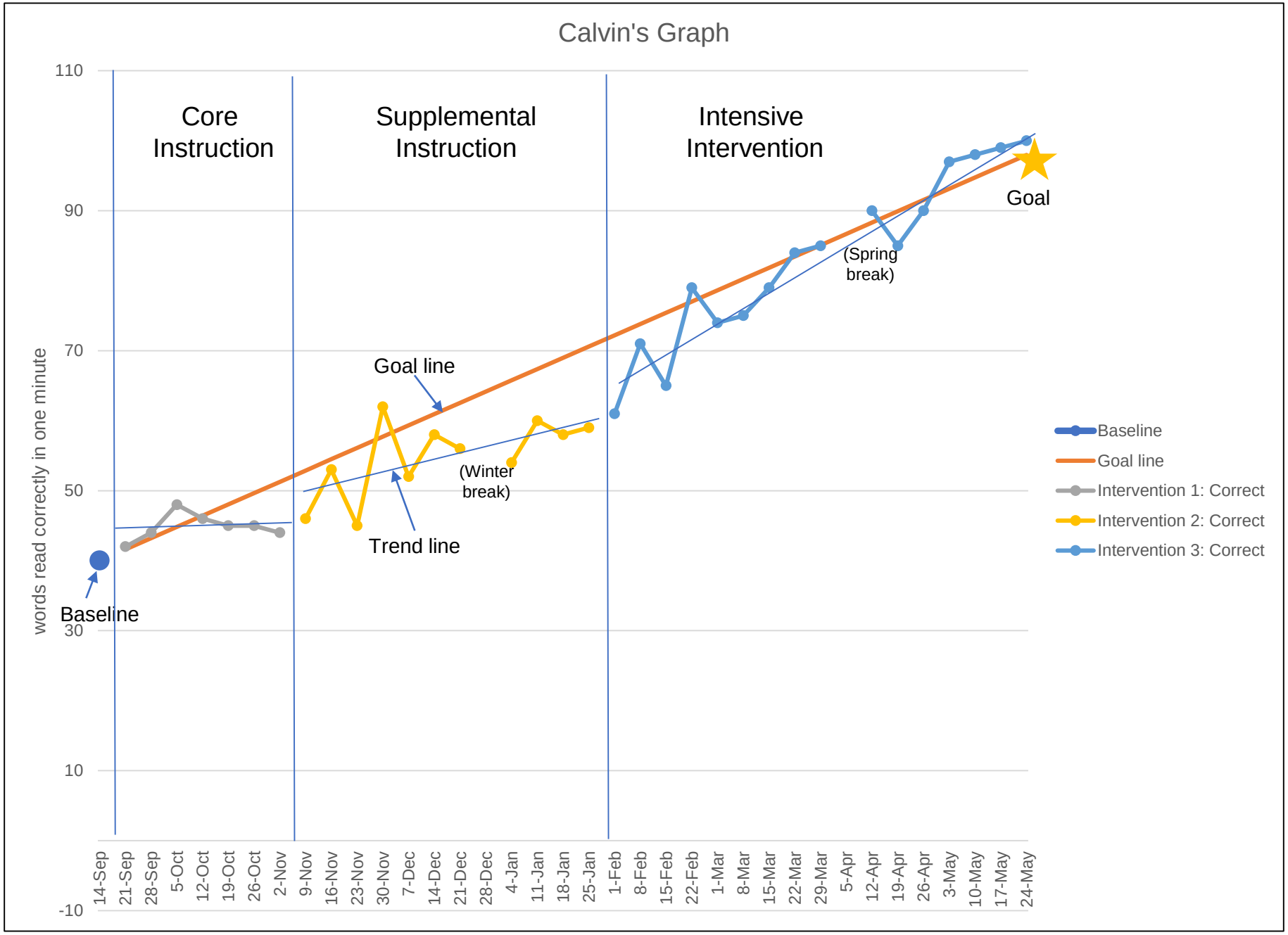
Intensive intervention

- 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
Core Instruction
Supplemental Instruction
Intensive Intervention
Goal
(Spring break)
Goal line
(Winter break)
Trend line
Baseline
words read correctly in one minute
110
90
70
50
30
10
-10
14-Sep
21-Sep
28-Sep
5-Oct
12-Oct
19-Oct
26-Oct
2-Nov
9-Nov
16-Nov
23-Nov
30-Nov
7-Dec
14-Dec
21-Dec
28-Dec
4-Jan
11-Jan
18-Jan
25-Jan
1-Feb
8-Feb
15-Feb
22-Feb
1-Mar
8-Mar
15-Mar
22-Mar
29-Mar
5-Apr
12-Apr
19-Apr
26-Apr
3-May
10-May
17-May
24-May
Baseline
Goal line
Intervention 1: Correct
Intervention 2: Correct
Intervention 3: Correct

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.* (6th 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 (2nd Ed.).* New York: Guilford Press.

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

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

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thank you!

Department of
Educational Psychology

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