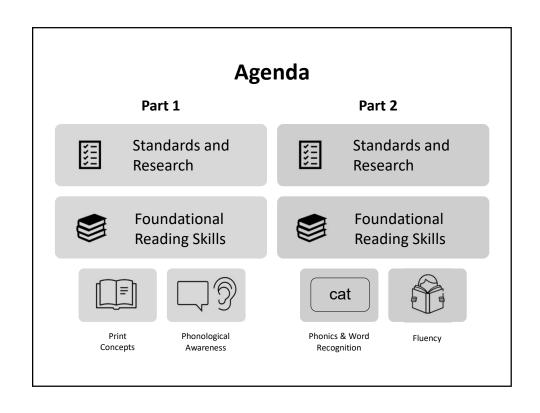
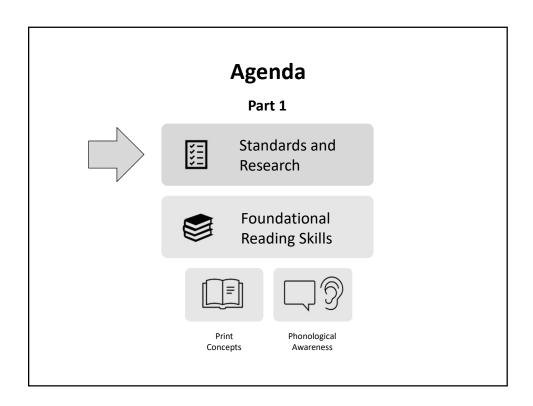
Foundational Reading Skills: Standards Tell Us What Research Tells Us How Part 1









Standards Tell Us What

Teachers are ... free to provide students with whatever tools and knowledge their professional judgment and experience identify as most helpful for meeting the goals set out in the standards.

Common Core State Standards





Research Tells Us How

Science of Reading









Comprehensive body of research encompassing decades of scientific knowledge Empirically supported research providing the information we need to gain a deeper understanding of how we learn to read

Empirically supported research providing what skills are involved, how they work together, and which parts of the brain are responsible for reading development From this research, we can identify an evidence-based best practice approach for teaching foundational literacy skills

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Why is the science important?



- 20% of elementary school students struggle. (Moats, 2020)
- An additional 20% are considered at-risk.
 (Moats, 2020)
- Only 33% of 4th graders performed at or above proficient level.

(National Center for Education Statistics, 2022)

95% of students benefit from highly effective instruction.

(Kilpatrick, 2015; Moats, 2020)

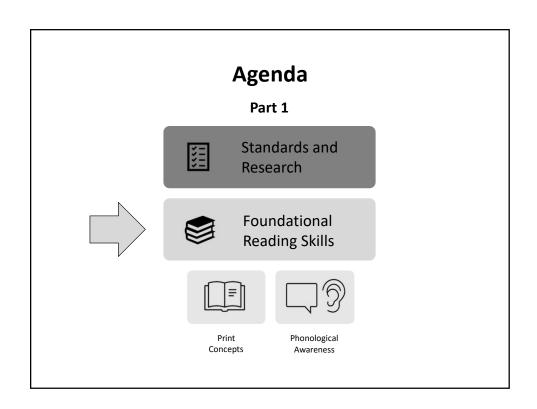
Research Tells Us How

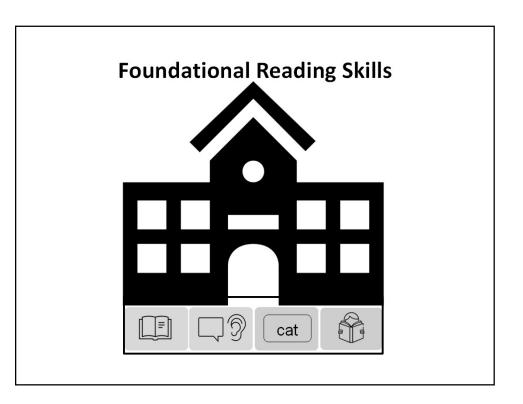
Structured Literacy

- Explicit
- Sequential
- Systematic
- Prescriptive
- Diagnostic
- Cumulative



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Why is it important to develop the foundational skills quickly?

Students who develop foundational skills quickly:

- Are able to decode and recognize words with automaticity and accuracy.
- Find reading rewarding.
- Enjoy reading-related activities.
- Are able to focus more on comprehension.
- Are exposed to much more text.

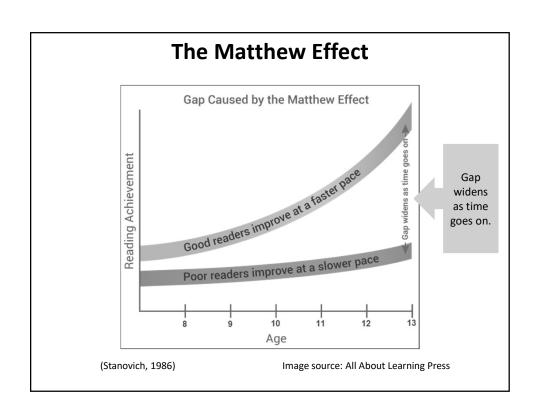


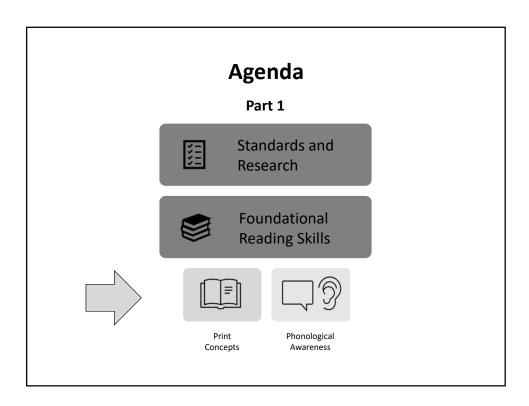
What happens when students develop the foundational skills slowly?

Students who develop foundational skills slowly:

- Are asked to read materials that are too difficult.
- Find reading unrewarding.
- May try to avoid reading-related activities.
- Struggle to decode or recognize words.
- Struggle with comprehension.
- Are exposed to much less text.







Print Concepts What is it?







Letter Knowledge

What do we know about book/print awareness?

Standards tell us:

Kindergarten and first grade students must demonstrate understanding of the organization and basic features of print.

Research tells us:

A child's understanding of print concepts successfully predicts future reading success (Pullen and Justice, 2003).





PRINT AND B	OOK AWARENESS SKILLS CHECKLIST	V	1	1	/	1
Functions of Print	Print carries meaning.	Г			Г	
	Print can be used for different purposes.					
	Print corresponds to speech word for word.					
Conventions of Print	Print is print, no matter in what form it appears.				Г	
	Printed words are made up of letters (concept of word).					
	Printed words are separated by spaces (word boundaries).					
	Sentences in print are made up of separate words.					
	Sentences start with capital letters and end with punctuation marks.					
	Text is read from left to right with a return sweep to the next line.					
	Lines of text are read from top to bottom of the page.					
	When one page of text is read, the story continues on the following page.					
Book Conventions	A book has a front cover and a back cover.					
	A book has a spine.					
	A book is held right side up.					
	A book has a title and a title page.					
	A book has an author; some books have pictures created by an illustrator.					
	A book has pages. The left page of a book is read before the right page.					
	Pages are turned one at a time in a sequence from front to back,					

What do we know about book/print awareness?

Research tells us:

- Print referencing is an effective way to teach print concepts.
 (Justice and Ezell, 2004)
- Use just three to five print references during the reading of a storybook.

(Justice and Ezell, 2004)



Print Concepts

What do we know about letter knowledge?

Standards tell us:

Kindergarten students must recognize and name all upperand lowercase letters of the alphabet.

Research tells us:

- Letter naming is one of the best predictors of reading success.
- Students must be able to identify letters of the alphabet in and out of sequence and with automaticity.

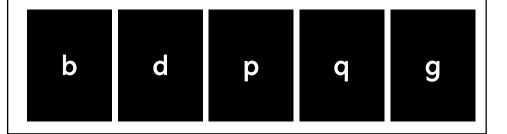
(Adams, 1990, Treiman, Kessler, & Pollo, 2006).



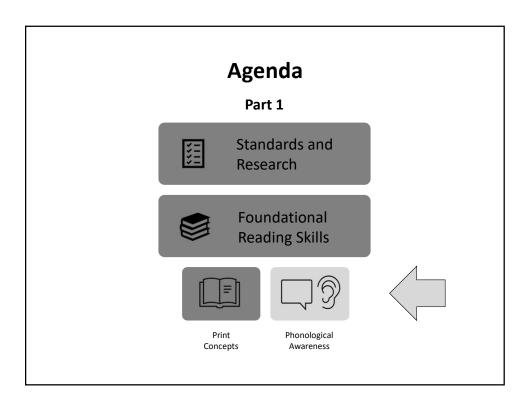
What do we know about teaching letter knowledge?

Research tells us:

- Capital letters are typically learned first.
- A lowercase letter that matches its capital is easier to learn. (Treiman & Kessler, 2003)
- Lowercase letters with similar shapes cause confusion. (Treiman, Kessler, & Pollo, 2006)



	Printed words are separated by spaces (word boundaries).	_		
	Sentences in print are made up of separa	ate words.	\vdash		\vdash
	Sentences start with capital letters and e	and with punctuation marks.	\Box		
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	A book has pages. The left page of a bopage.	ok is read before the right			
	Pages are turned one at a time in a sequence from front to back.				
VISUALLY SIM	ILAR LETTERS				
Letter Case	A letter pair whose forms are almost identical in upper- and lowercase. Letters whose overall form is identical or similar to target letter's form when rotated. floped. or reversed.		Ww, Xx	, Zz	
Letter Shape					, k-x,



Phonological Awareness What is it?



The understanding that speech is composed of subparts:

- Sentences are made up of words.
- Words are made up of syllables.
- Syllables are made up of onsets and rimes.
- Syllables can be broken down into phonemes.



Phonological Awareness

What do we know about phonological awareness?

Standards tell us:

Kindergarten and first grade students must demonstrate an understanding of spoken words, syllables, and sounds (phonemes).

Research tells us:

- There is a high correlation between phonemic awareness and its effect on learning to read. (National Reading Panel, 2000)
- Phonological awareness is one of the few factors that teachers are able to influence significantly through instruction.



(Lane and Pullen, 2004)

Phonological Awareness

What do we know about phonological awareness?

Pre-K student goals:

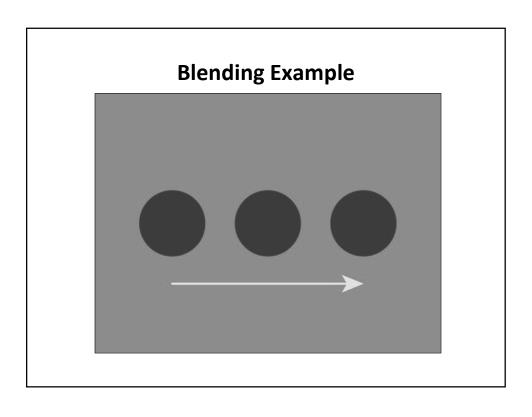
 awareness of larger speech sounds in spoken words: rhymes, onsets, syllables

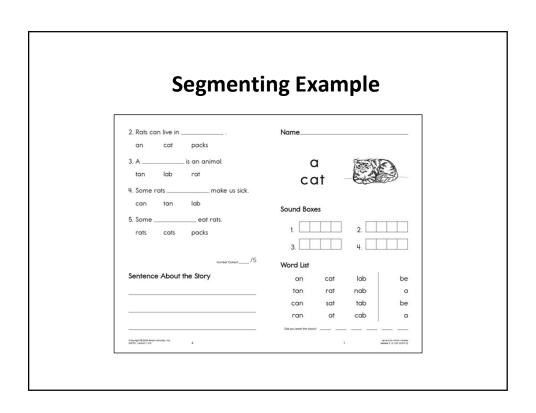
Kindergarten student goals:

- awareness of initial, final, medial phonemes in spoken words
- alphabetic principle: printed letters represent phonemes in spoken words

1st and 2nd grade student goals:

 awareness of individual phonemes in spoken words in more complex words (Brady & Kurto, 2020)





Segmenting Example

Sound Boxes

1.

2.

3.

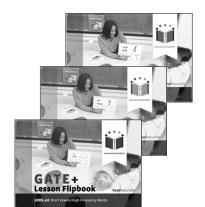
4.

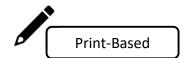
Read Naturally® GATE+

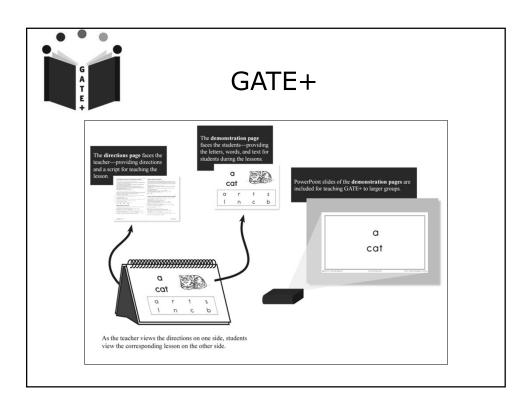
Reading Instruction for Whole Group and Intervention

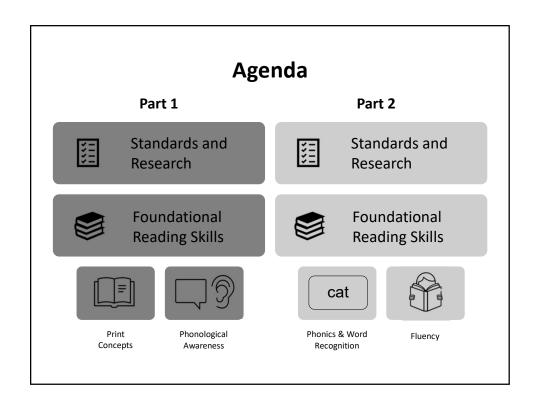


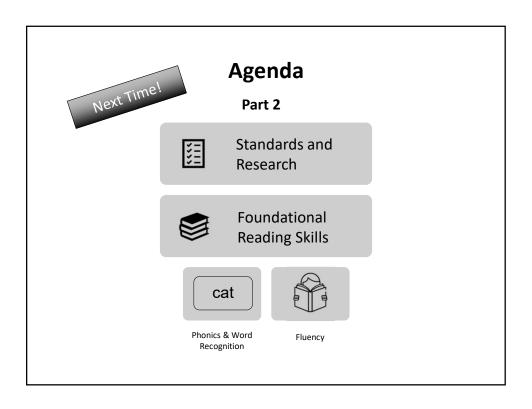


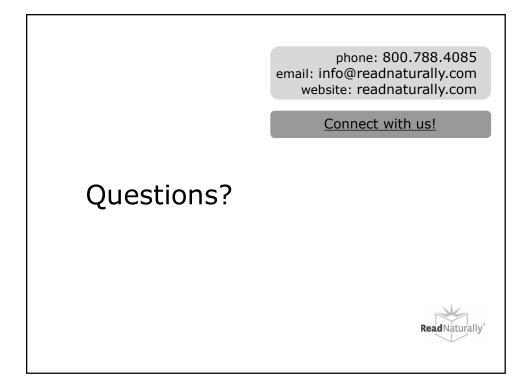












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VISUALLY SIMILAR LETTERS

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Letter Shape	Letters whose overall form is identical or similar to target letter's form when rotated, flipped, or reversed.	b-d, b-p, b-q, d-g, d-q, e-a, g-q, g-y, i-j, i-l, k-x, m-n, n-c, n-h, p-q, u-v, u-w, u-y, w-m, y-v