Improving the "Text-Diet" for Early and Struggling Readers: Selecting and Adapting Text

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Jill Allor, Devin Kearns, Stephanie Al Otaiba, Carlin Conner, Miriam Ortiz

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CALARACTERIAL





CHANGING WIINDS

IES Funded Project Intensity: Our Team

Principal Investigators

- Jill Allor, PI
- Stephanie Al Otaiba, Co-Pl
- Paul Yovanoff, Co-PI

Curriculum Authors

- Jill Allor
- Stephanie Al Otaiba
- Jennifer Cheatham

Purpose of the Grant

- create a new curriculum for students with Intellectual and Developmental Disabilities
- for more information:
 - FriendsOnTheBlock.com
- Jill Allor and Stephanie Al Otaiba acknowledge a financial interest in the books and curriculum.

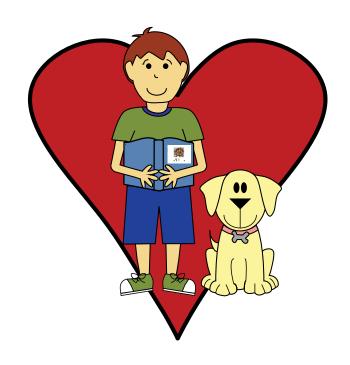
Why did we decide to create a new curriculum? Just a few reasons...

- need for more books
 - especially ones that we be more meaningful to students with ID
 - needed more practice more books and more practice of high-frequency words (decodable and irregular) within books
- challenge of transfer of skills developed lessons that match books more directly
- wanted books that practiced a cluster of skills (level) so you could practice at one level for a while and rotate books, rather than repeating individual lessons or books
- NOTE: The curriculum follows evidence-based reading research and "Structured Literacy" as described by International Dyslexia Association



The books are the heart of the curriculum.

 Focus today is on the books and the target word list we created



Purpose

- Briefly present a review of the literature on the importance of multiple early reading text characteristics
- Show how we have addressed these characteristics in a set of early readers (Allor, Cheatham, & Al Otaiba, 2016), including descriptive data
- Discuss practical methods for selecting and adapting text for struggling readers, including those with learning disabilities, and intellectual and developmental disabilities

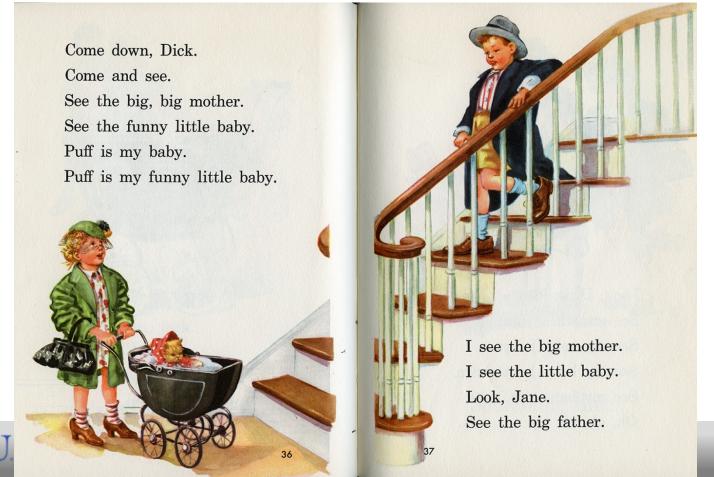
Rationale and Literature Review

 Relatively little research has been conducted on what constitutes a healthy early reading text diet.

 Currently, texts designed for early and struggling readers tend to rely primarily on one type of scaffold, such as:

High-Frequency Words

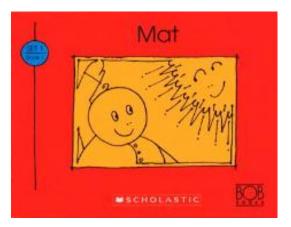
 Some books focus on high-frequency, or common, words (Dick and Jane books)

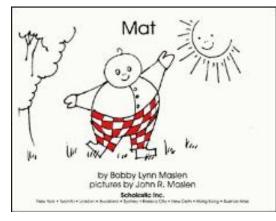


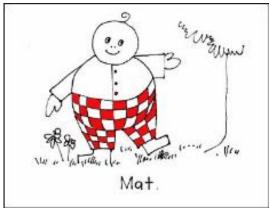
come down see funny little is big

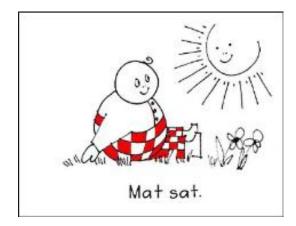
Decodability

• Some books focus on decodable words



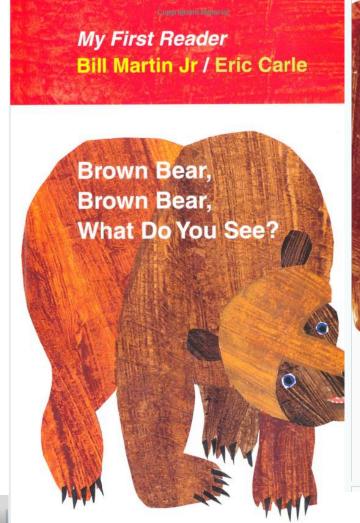




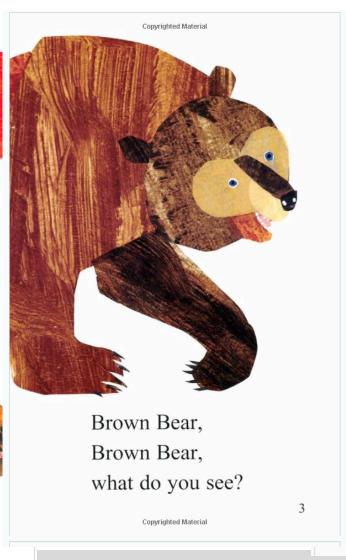


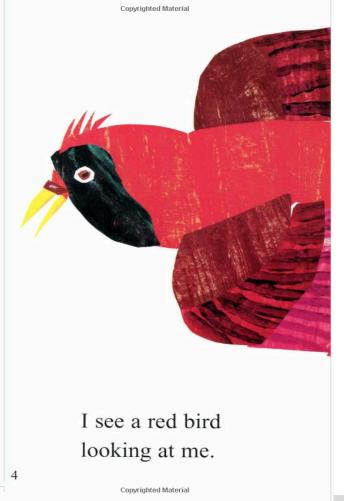
Predictability

Some books focus on predictability and meaning



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Sometimes address both decodability and frequency

I am at bat.

But I have to hit the ball. I hit the ball.

I run and run. We win!

- √/a/ /i/ /u/
- √ (high-frequency, sight words) I have, to, the, ball, we

Textproject.com



I run and run. We win!

 Word level factors include: frequency, imageability, regularity (decodability) and word meaning

• Text level factors include: cohesion, genre, and text length

(Mesmer, Cunningham, & Hiebert, 2012)

- Opportunities to apply word recognition skills, specifically phonics skills, in text (i.e., decodability; Hiebert, 1999; Mesmer et al., 2012; Cheatham & Allor, 2012)
- The opportunity to read and reread beneath-frustration level
- Familiarity, as determined by the frequency of words written in text
 - When students learn the 100 or so most frequent words combined with 64 of the most common letter-sound mappings, they are able to read 90% of the words in texts they typically encounter (Solity & Vousden, 2009)

 Familiarity of word meaning improves word recognition (Adams, 1990; Ricketts, et al., 2016; Kearns, et al., 2016)

- Repetition of individual words is important
 - 46% of the words in decodable texts not repeated (Foorman, Francis, Davidson, Harm, & Griffin, 2004)
 - students with disabilities require extensive practice to build automaticity

Therefore, multiple criteria should be considered when designing early reading text!

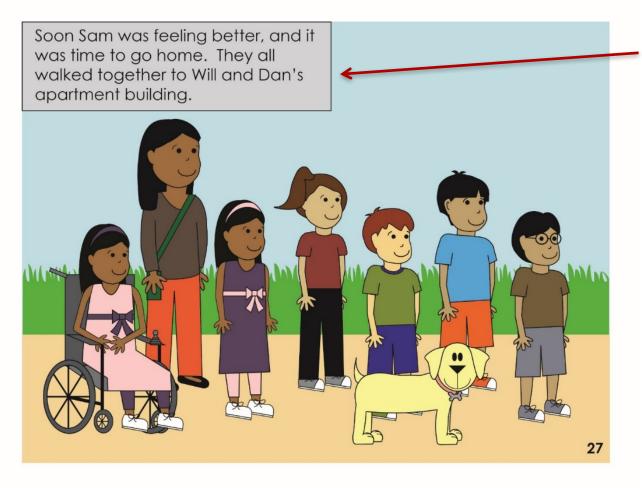
(Cheatham & Allor, 2012; Hiebert, 1999; Mesmer, Cunningham, & Hiebert, 2012).



How have we addressed these characteristics?

- in a new set of early readers (Allor, Cheatham, & Al Otaiba, 2016)
- Friends on the Block (FriendsOnTheBlock.com)

How are Friends on Block books different? ... based on multiple criteria



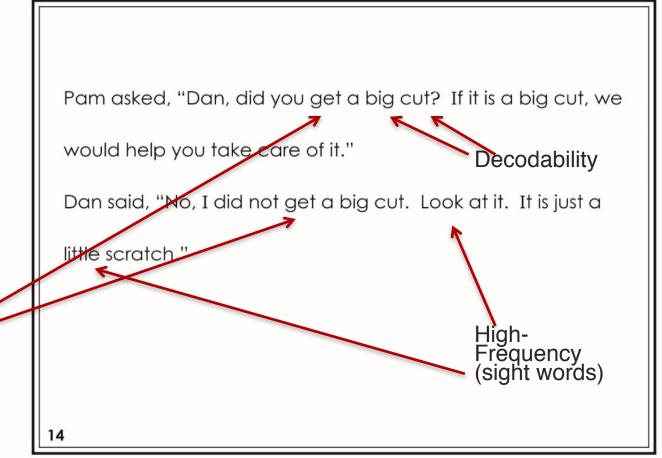
Meaningful Helper Text (read by a teacher or a tutor)

Books... based on multiple criteria

Varied Sentence Structure (less predictable)

Language similar to spoken language

Repetition



Systematic Introduction of Skills: New Sequence

Focus on words that are high frequency

 Both irregular/temporarily irregular (e.g., do, like) and decodable (e.g., and) Friends on the Block Letter Sounds and Target Word List

"Sight" Words
(high-frequency irregular or temporarily irregular)

Decodable Words

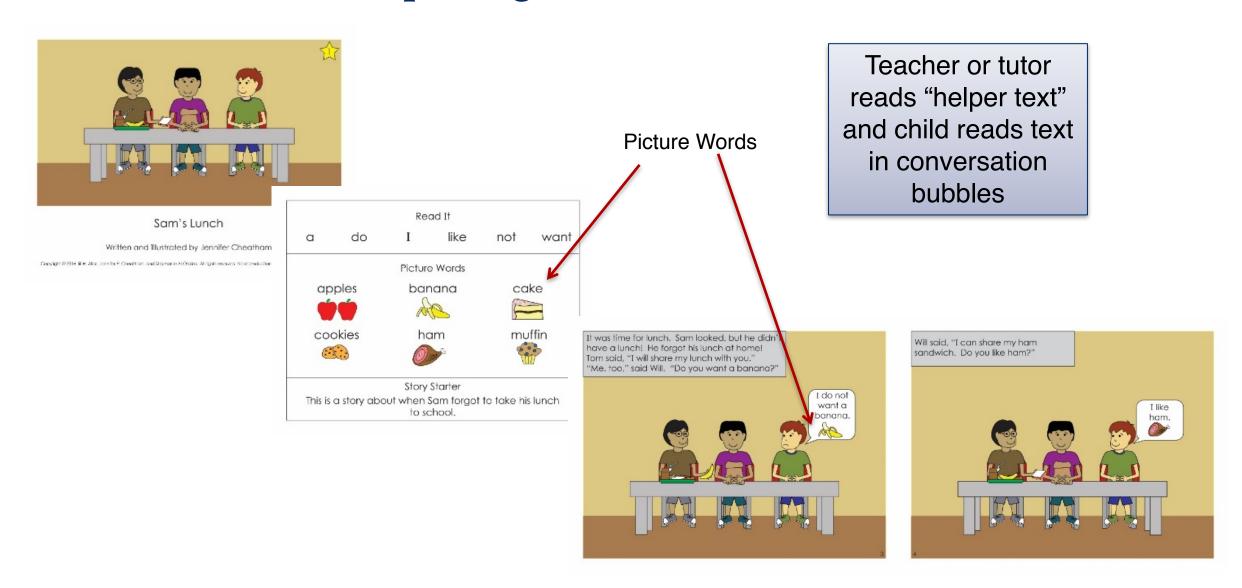
(high-frequency; made up of taught letter patterns)

See handout and FriendsOnTheBlock.com

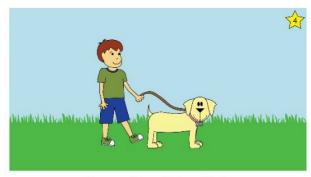
		Sight Words		Sight & Short a Words		Sight Words, Short Vowels & Review			Sight Words, Vowel Patterns & Review				
1		Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10	Level 11	Level 12
	Letter	c, f, p,	d, j, n	b, g, h,	ck, k, a	u	ch, th, w,	i, o,	е	a-e, i-e, o-	ai, ay, ol	al, ea, ee	ar, igh, er
	Sounds	m, s, t	u, j, 11	l, r	CK, K, a	u	x, y, z	sh, qu, v	C	е	ai, ay, oi	ai, ea, ee	ai, igii, ei
		а	dad	are	good	big	be	because	again	about	any	another	almost
		do	here	at	help	have	friend	care	away	animal	ball	answer	book
		I	is	happy	play	little	give	come	came	been	both	kind	bought
-		like	look	in	there	my	go	could	clothes	day	done	know	break
	ds.	not	Mom	no	to	please	he	feel	cold	does	boy	our	buy
	Voi	want	see	she	was	very	her	first	eat	down	family	question	easy
	r F		the	yes		what	it	of	food	every	girl	really	four
	Target Sight Words		where	you			me	how	for	many	more	right	learn
	et						on	next	from	one	most	second	money
	arg						SO .	said	need	or	once	soon	new
	-						thank	should	oh	other	room	sure	probably
							we	take	out	push	saw	thought	review
							who	too	put	snow	their	word	these
							with	why	ready	they	warm	work	two
ŀ		1 1 4	112	1 1 2	1 1 4	1 1 5	your	would	some	were	young	wrong	watch
ŀ		Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10	Level 11	Level 12
					am '	am	am	big	bed	came	cold	all	after
					and	and	and	did	best	fine	day	call	better
					at	at	at	got	end	five	hold	clean	chapter
	ords				can	can	can	him if	get	gave	may old	each	different hard
	×	No decodable target words in			dad mad	dad mad	dad fun	in	help let	home	plain	eat feel	high
	Target Decodable Words	Levels 1-3 (early decoding skills			sad	sad	had	it	next	hope like	plani	green	light
	da		ticed in acti	•	Sau	Sau	hat	mom	red	made	rain	neat	might
	o e co	prepare students for later					mad	not	step	make	roll	need	never
	ţο	decoding)			A few decodable words		ran	on	tell	nine	say	read	night
	rge	20000/			are introduced and		run	sit	them	same	stay	see	number
	– Ta				practiced in Levels 4-5		sad	stop	then	side	tail	seem	part
J		Friends on Block					sun	this	went	smile	told	small	right
J		TITENOS the BISC			Κ '		up	will	when	time	wait	tall	start
ı							us	with	yes	white	way	wall	together
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Sample Pages from Level 1 Book



Sample Pages from Level 4 Book



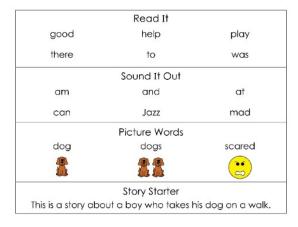
Sam and Jazz Take a Walk

Written by Jill Allor, Francesca Jones, and Ashley Sandoval Illustrated by Jennifer Cheatham

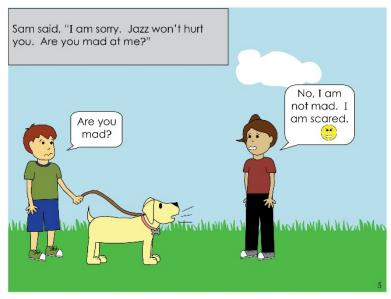
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8 Page Books

Teacher/tutor/parent reads "helper text" in gray boxes and student reads text in white bubbles/boxes



Includes Some Decodable Words





Sample Pages from Level 7B

Meaningful Helper Text (read by a teacher or a tutor)

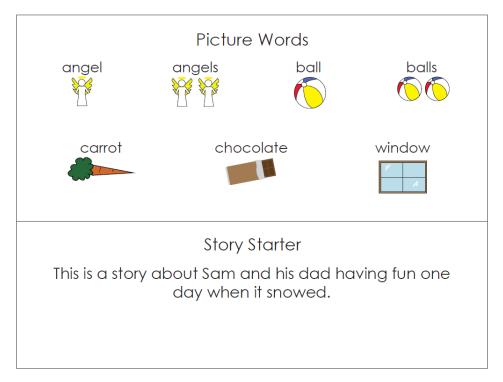


Pam asked, "Dan, did you get a big cut? If it is a big cut, we would help you take care of it." Dan said, "No, I did not get a big cut. Look at it. It is just a little scratch. Decodability High-Frequency (sight words)

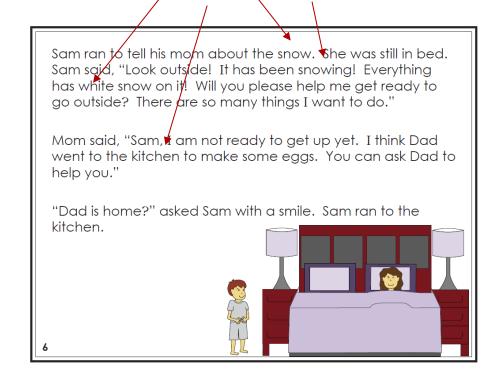
Repetition

Sample Pages from Level 9 Book

Picture support for key content words



Sound-spelling patterns & common word parts



Don't just take our word for it...

Research Questions

 What are the characteristics of the target words included in the books specifically age of acquisition, frequencies, and concreteness (Table 1)

 What are the characteristics of the texts themselves, specifically their word counts, type-token ratios, sentence counts, unique sight words, unique decodable words, and content (i.e., picture-supported) words? (Table 2)

Results: RQ#1 (characteristics of the target words)

- The mean age of acquisition for the target words was low ranging from 3.56 to 5.19.
- Frequency was measured using Sight-word Frequency Index (SFI) as well as comparing the target words to common high-frequency word lists (i.e., Carnine et al., 2004; Dolch, 1948).
 - target words are of high utility
 - meanings of the words are likely to be understood.
- Concreteness varied across the target word levels and was relatively low with a mean of 3.06 (SD = 1.08) on a 7-point scale, where 4 would be within a normal range for imageability.
 - We think this is unsurprising as many words on our target list are functional, high-frequency words that are not very concrete, such as was and are.

Table 1. Characteristics of Target Words

	Acqu	je of iisition years	Stand Frequend		Concreteness		
Level	Mean	SD	Mean	SD	Mean	SD	
1 Sight	3.65	0.47	74.74	5.94	2.19	0.37	
2 Sight	3.60	0.94	70.63	9.96	3.03	1.12	
3 Sight	3.56	0.94	73.47	7.73	2.26	0.42	
4 Sight	4.27	0.74	73.43	7 45	2.82	0.77	
4 Decodable	3.92	0.86	66.87	11.58	3.33	1.08	
5 Sight	3.64	0.73	69.81	5.69	2.52	1.08	
5 Decodable	3.92	0.86	66.87	11.58	3.33	1.08	
6 Signt	4.31	0.62	71.92	6.88	2.55	0.73	
6 Decodable	3.84	0.69	66.46	8.89	3.50	1.16	
7 Sight	4.80	1.20	70.53	4.92	2.02	0.69	
7 Decodable	3.99	1.27	71.81	19.27	3.37	1.06	

8 Sight	4.11	0.93	68.34	5.32	2.99	1.22
8 Decodable	4.04	1.01	67.31	4.17	2.94	1.18
9 Sight	4.33	0.76	70.43	5.98	3.20	1.29
9 Decodable	4.60	1.04	66.70	4.66	2.96	1.00
10 Sight	4.36	0.87	67.34	3.78	3.84	1.15
10 Decodable	4.42	1.04	64.13	4.87	3.25	0.95
11 Sight	5.03	0.66	66.36	2.91	2.51	0.83
11 Decodable	4.29	1.04	64.99	5.23	3.23	0.98
12 Sight	5.17	1.28	64.92	5.40	3.24	1.18
12 Decodable	4.93	0.84	66.76	2.22	3.05	0.88
13 Sight	4.85	1.22	65.77	4.92	3.29	1.21
13 Decodable	4.75	1.11	64.21	4.96	3.35	0.90
14 Sight	5.19	0.90	65.36	4.07	2.87	0.81
14 Decodable	4.55	1.27	60.05	5.97	3.99	3.99

Results: RQ#2 (characteristics of texts)

- The basic text characteristics (see Table 2) showed that the total number of words per book, as well as the number of both sight words (i.e., irregular) and decodable words gradually increased across the levels of the book series.
- The type-token ratio across all levels (see Figure 4) showed that the number of unique words grew
 more slowly than the total number of words, meaning that the words within each text were repetitive,
 providing students with many opportunities to practice the words in the text.
 - Early texts had the highest type-token ratios primarily because they were very short and included some picture-supported words which did not repeat frequently (e.g., ingredients on a pizza)

Table 2. Characteristics of Texts

Level	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1 (28	4.97	7.25	.96	6	0	0	0	6.5	0.58
2	42	9.93	11.25	2.87	11	2.16	7.00	0.82	4.75	3.20
3	72.5	17.75	i8	4.69	17.75	2.22	8.25	0.50	4.75	2.50
4	116.75	28.39	26.25	6.02	22.75	2 22	15.25	2.75	2.5	1.29
5	122.75	19.5	23.75	6.7	28.25	1.26	15.50	2.08	5.75	2.87
64	269.75	67.71	48.75	6.70	28.75	5.12	22.25	3.20	2.25	1.89
6B	324.5	21.3	50.75	3.5	40.75	2.99	26.75	4.35	6	2.71
7 A	384.75	90.44	61	14.12	36.25	6.70	28.25	5.68	2	2.45
7B	628	106.57	87.5	16.98	58.50	2.38	39.25	1.71	5.5	2.88
A8	540.25	45.92	77.5	15.61	51.75	4.35	40.50	3.70	1	0.82
8B	738	145.53	107.75	24.16	68.50	4.36	51.75	3.40	4.5	1.29
9	1000.75	219.52	134.25	36.51	75.25	7.14	57.25	4.50	7	0.82
10	1232.25	158	160.75	33.68	85.75	3.77	68.00	2.31	4.50	2.52
11	1369.5	4.95	134.5	20.51	91.50	0.71	67.50	0.71	4.50	0.71
12	1658.5	0.71	180	15.56	96.50	14.85	75.00	4.24	1.50	0.71
13	1652	0	154	0	100.00	0	84.00	0	1	0
14	1626	0	132	0	102.00	0	69.00	0	1	0

of Sentences

Per Book

of Words Per

Book (Tokens)

of Unique

Sight Words Per

Book (Types)

of Decodable

Words (Types)

of Picture

Words

(Types)

Note. Levels 13 and 14 only contain 1 book resulting in the low standard deviations



So what does this mean?

Discussion

- The results showed that the books addressed multiple criteria that are theoretically and empirically important in early reading text
- The data supported that we met our goals of providing students:
 - many opportunities to practice high-frequency words,
 - including those that were decodable,
 - in text that was likely to be meaningful and facilitate comprehension.
- To our knowledge, our reading series is the first of its type

Practical Instructional Implications

Instructional Implications

- Teachers and authors of early reading books should consider multiple criteria when selecting and writing early reading books,
- particularly for students who require intensive literacy intervention
- keep in mind the benefits and limitations of various types of books.

Selecting Books

- Do they include opportunities to practice phonics skills and high-frequency words that students are learning?
- Do the stories contain familiar settings and vocabulary?
 Are the stories relevant and engaging?
- Do the stories provide opportunities to increase vocabulary or general knowledge?

Recommended Early Readers



Textproject.com



Flyleafpublishing.com

Addresses decodability and frequency...

I am at bat.

But I have to hit the ball. I hit the ball.

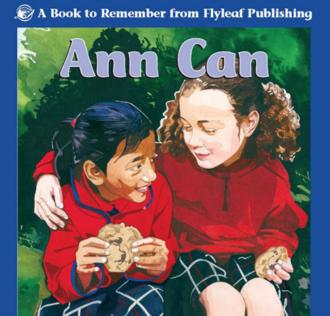
I run and run. We win!

- √/a/ /i/ /u/
- ✓ (sight words) I have, to, the, ball, we

Textproject.com



I run and run. We win!



Address decodability and frequency

Flyleafpublishing.com



Previously Introduced Letter-Sound Correspondences:

Consonant /s/ sound spelled **s, ss**Consonant /m/ sound spelled **m**Short /a/ sound spelled **a**Consonant /k/ sound spelled **c**

Prerequisite Skills are foundational phonics skills that have been previously introduced.

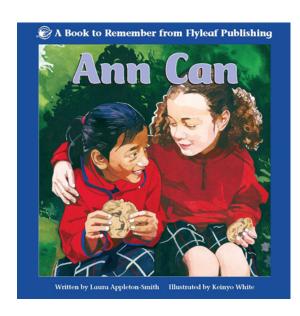
Target Letter-Sound Correspondence is the lettersound correspondence introduced in the story.

High-Frequency Puzzle Words are high-frequency irregular words.

Decodable Words are words that can be decoded solely on the basis of the letter-sound correspondences or phonetic elements that have been introduced.

Target Letter-Sound Correspondence

Consonant /n/ sound spelled **n**



High-Frequency Puzzle Words

like yes you

Bold indicates new high-frequency word.

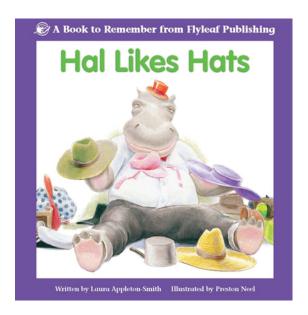
Decodable	Words
-----------	-------

am	Mack
Ann	man
can	Nan
I	Sam

Bold indicates high-frequency word.

Hal has go hats. Hal has stop hats.





The top hat tips. Hal slips.



Previously Introduced Letter-Sound Correspondences:

Consonant /s/ sound spelled s, ss
Consonant /m/ sound spelled m
Short /a/ sound spelled a
Consonant /k/ sound spelled c
Consonant /n/ sound spelled n, nn
Consonant /k/ sound spelled k, ck
Consonant /t/ sound spelled t, tt
Consonant /z/ sound spelled s
Consonant /p/ sound spelled p
Short /o/ sound spelled o
Consonant /g/ sound spelled g, gg
Consonant /d/ sound spelled d
Short /i/ sound spelled i
Consonant /r/ sound spelled r
Consonant /r/ sound spelled l, ll

Prerequisite Skills are foundational phonics skills that have been previously introduced.

Target Letter-Sound Correspondence is the letter-sound correspondence introduced in the story.

High-Frequency Puzzle Words are high-frequency irregular words.

Decodable Words are words that can be decoded solely on the basis of the letter-sound correspondences or phonetic elements that have been introduced.

rget Letter-Sound Correspondence

onsonant /h/ sound spelled **h**

High-Frequency Puzzle Words		
of		
oh		
that		
the		
yes		

Bold indicates new high-frequency word.

Decodable Words			
а	hat	pan	tick
and	hats	pink	tin
clock	I	plop	tips
dot	lot	pot	tock
Hal	lots	slips	top
Hal's	not	stop	
has	on	tan	

Bold indicates high-frequency word.



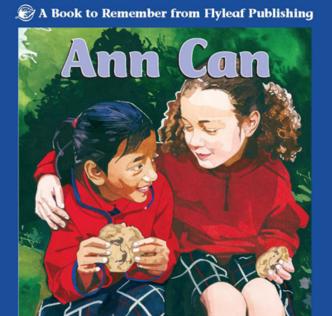
Adapting Books: Write your own "student text"

- Choose a favorite read-aloud book. That book becomes your "helper text."
- Write sentences for the student to read made up of words the student is working on. This text becomes your "student text."
- Example
 - Words working on: a, do, I, like, not, want
 - Read-Aloud: Green Eggs and Ham
 - Write the following sentence on a large post-it:
 I do not like eggs.



Adapting Books: Write your own "story starter" and "helper text"

- Choose a book that is good word-level practice.
- Write your own "story starter" and "helper text" to increase comprehension and engagement.



Add your own "story starter" and "helper text"

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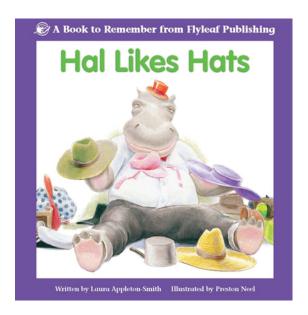






Hal has go hats. Hal has stop hats.





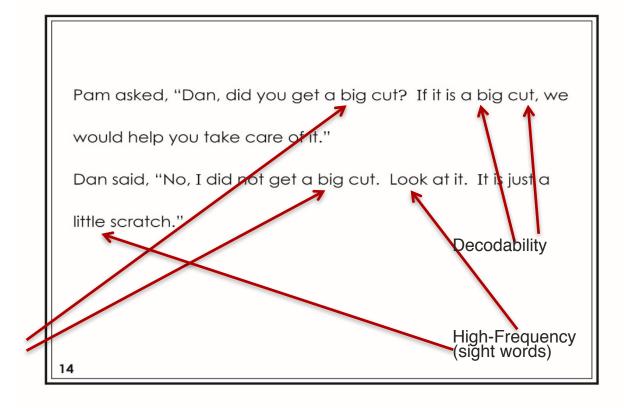
The top hat tips. Hal slips.

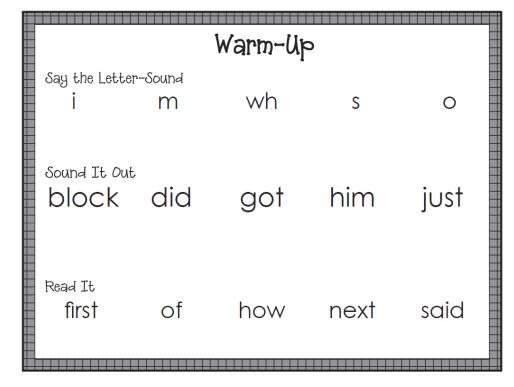


Aligned Instruction: Teach transfer by focusing on target words

- Provide additional "mini-lessons" (to match words in books)
 - phonics instruction/decodable words
 - high-frequency words, and with immediate corrective feedback.
- Focus on high-frequency words, both irregular/temporarily irregular and decodable words (use our list or other lists)
- Create games (Bingo, Memory, etc.)

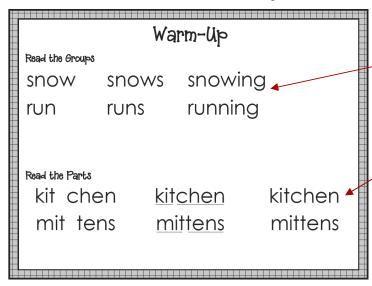
Sample Pages from Level 7B Book & Warm-Up





Sample Pages from Level 9 Book & Warm-Up

Sound-spelling patterns & common word parts



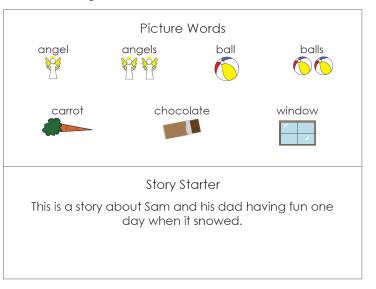
Lesson practice directly linked to books

Sam ran to tell his morn about the snow. She was still in bed. Sam said, "Look outside! It has been snowing! Everything has white snow on it Will you please help me get ready to go outside? There are so many things I want to do."

Mom said, "Sam, I am not ready to get up yet. I think Dad went to the kitchen to make some eggs. You can ask Dad to help you."

"Dad is home?" asked Sam with a smile. Sam ran to the kitchen.

Picture support for key content words



Effective Instructional Techniques

- Explicit Instruction (e.g., model blending by stretching and connecting with words like "sit")
- Provide immediate corrective feedback
- Use errorless learning, as needed

Aligned Instruction: Use books as opportunity to develop oral language

Developing Children's Oral Language Skills Through Dialogic Reading

Guidelines for Implementation

Kylie S. Flynn

 engaging students in discussion about the stories and topics, relating those to their lives

TEACHING Exceptional Children, Vol. 44, No. 2, pp. 8-16. Copyright 2011 CEC.

Book Reading Options: Echo Reading

- For students with minimal skills or with a new level
- Typically used for students just beginning to read
- Highly scaffolded, so use only as long as needed

Reminder: Only the teacher (or tutor/helper) reads the Helper Text in the gray boxes.

- 1. Teacher reads a sentence, pointing to each word
- 2. Student "echoes" by reading the same sentence, pointing to each word

Error Correction:

I: Listen. (The teacher repeats the sentence, pointing to each word.)

We: Say it with me. (Teacher and students practice together.)

You: Your turn. (The students practice independently.)

Repeat the sentence.



Book Reading Options (cont.)

1:1 or Taking Turns

- Works well with very small groups; disadvantage is wait time
- Increases independence

Choral reading (unison)

Highly scaffolded, so be careful not to overuse

Whisper reading

- Students read very quietly to themselves
- Teacher listens, rotating among students as needed
- Provides more practice; works well as students skills progress



Book Reading Options: Error Correction

If student(s) miss a word (say wrong word or take than 2-4 seconds to say a word):

I: Listen. That word is ______.
We: Say it with me. (Teacher and student(s) say word.)
You: Your turn. What word? (Student(s) repeat the word.)

Reminder: Only the teacher (or tutor/helper) reads the Helper Text in the gray boxes.

Read the sentence again. (The student(s) reads from the beginning of the sentence.)

Notes:

- If students become frustrated, use echo reading for a while.
- May want to skip "we" step or shorten directions to:
 - That word is _____.
 - What word? (Student(s) repeats word.)
 - Read the sentence again. (Student(s) reads from beginning of the sentence)



Book Reading Options: Paired Reading Details

- Increases practice time and independence; strong research support
- Students need to be taught procedures
- Teacher role is the same (monitor closely; provide feedback)

Procedures

- Students take turns reading text with a partner
- When student is not reading, he/she is the "coach"
- Encourage students to use same correction procedure as teacher

That word is _____.

What word? (Student repeats word.)

Read the sentence again. (Student reads from the beginning of the sentence.)





Finally...

- Contact us with questions and comments!
- See our website for more information, including this powerpoint, and free sample e-books
- Fill out the "For More Information" form and note that you were at CEC and we'll give you a coupon code for one free level of electronic materials (use the free placement test to decide which level you would like)
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- DevinKearns.org
- devin.kearns@uconn.edu