



11:00 AM Fri, Oct 25

IPP15-24: AI in the Classroom: Transforming  
Reading with Neuroscience & Tech Innovations  
Room - Cumberland EF

# AI IN THE CLASSROOM: TRANSFORMING READING WITH NEUROSCIENCE & TECH INNOVATIONS

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VERTICAL TAKE-OFF READING

[HTTPS://WWW.VTOREADING.COM/](https://www.vtoreading.com/)

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OCTOBER 24-26, 2024

DALLAS, TX

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# Abstract

The article, *The Impact of Perfect Practice Using Decodable Readers on Student Achievement*, will be published in *The Reading Paradigm* in November 2024. This article explores the impact of using decodable readers in the context of perfect practice to enhance student achievement in reading. It emphasizes the importance of systematic and explicit instruction in phonics, which is crucial for students struggling with decoding skills. By leveraging technology, such as artificial intelligence, educators can provide personalized and adaptive learning experiences that cater to individual student needs. The article discusses various phases of reading development and the role of decodable texts in fostering automaticity, fluency, and comprehension. Furthermore, it highlights the necessity for ongoing support and appropriate resources in the classroom to help students transition from beginning readers to fluent readers. Ultimately, the findings advocate for integrating decodable readers into structured literacy frameworks as a means of improving literacy outcomes for all students.





# INTRODUCTION



- Perfect practice makes adept readers. Ineffective practice make ineffective readers.
- Listening to students read in a diagnostic manner and adjusting instruction prescriptively is a core premise of dyslexia therapy.
- There is not enough time in the world to listen to every child read every day, and yet, we know that our more disabled readers need even more practice.
- Artificial Intelligence has the potential to provide perfect practice at scale.

Teachers of beginning readers will find value in individualized practice to accelerate the acquisition of accurate and fluent reading in students.





# DECODABLE? DEFINED



According to the indubitable Pam Kastner, decodable texts are tightly controlled so that each text contains ONLY words with phonics elements and high frequency words that have been taught previously. They are for practicing accurate reading to build effortless and automatic decoding.

In dyslexia therapy, core materials are built around this concept. Yet, exposure alone is insufficient for mastery, and mastery in controlled texts is insufficient for comprehension.





# SCOPE AND SEQUENCE

Is there a “right” order?



## ALPHABETIC PHONICS

Key Words	
• Igloo (itchy)	• mitten
• table	• rabbit
• pig	• book
• nest	• bat
• sock	• mother
• apple	• thimble
• nose	• elephant (echo)
• leaf	• yarn
• dog	• jam
• fish	• umbrella
• house	
• goat	• feet
• swing	• three
• hang	• bubble
• strong	• candle
• lung	• ruffle
• octopus	• ankle
• kite	• pickle
• pink	• angle
• bank	
• honk	
• trunk	
• cup	
• truck	



## HMH DECODING POWER

1.1 a, m, s, t, c

Mac Cat, Sam Cat

1.2 n, d, p, f

Be a Fan!

1.3 i, m, s, t, c, n, d, p, f

What Can Fit?



## LETRS

Consistent Phoneme-Grapheme Correspondences		
Grapheme Type	For Reading	For Spelling
Predictable consonants: <i>m, s, t, l; p, f, c (/k/), n; b, r, j, k; v, g (/g/), w, d; h, y, z, x</i>	K	K
Predictable short vowels: <i>/ă/, /ĭ/, /ō/, /ŭ/, /ē/</i> spelled with <i>a, i, o, u, e</i>	K	K-1
Long vowel sounds associated with single letters <i>a, e, i, o, u</i> ; open syllables in one-syllable words	K	K-1
Consonant digraphs: <i>sh, ch, wh, th, ng</i>	K-1	1
Two-consonant blends: <i>qu, st, sm, sn, -st, -ft, -lp; sk, sl, cr, cl, tr, dr, etc.</i>	1	1-2
Three-consonant blends and blends with digraphs: <i>squ, str, scr, thr, shr</i>	2	2-3



## READING UNIVERSE

### List of Free Decodables

#### Short Vowels

- Short 'a': [Mac the Cat](#), [Val and the Rat](#)
- Short 'i': [A Wig in the Pit](#), [A Rip in the Bag](#)
- Short 'o': [The Big Job](#), [The Hot Pot](#)
- Short 'u': [The Fun Gig](#), [A Box of Hats](#)
- Short 'e': [The Red Hen](#), [The Pen](#)
- All short vowels: [Pals on the Bus](#), [Zed the Cat](#)



# EVALUATE TEXTS



You have in your table packet some examples of beginning reader texts.

Please evaluate whether these texts are decodable or predictable.

Would these texts fit the needs of your students?

While we understand that the value in decodable texts is the accuracy and fluency of words, we must be cautious in assuming something is appropriate because of a label.

There are many free decodable texts now available, and many more for purchase.



# TOO OLD FOR DECODABLES?



- There is no comprehension strategy strong enough to compensate for the inability to read the word. - Anita Archer
- Teach students a routine for decoding multisyllabic words, including syllable types, division rules, and syllabication routines.
- Embed spelling practice with decoding practice.
- Teach students to pull deeper meaning out of text using thinking strategies.
- Stop and help the child find base words when they come to an unfamiliar word.
- Use Interactive Games like "Phonics Bingo" or "Word Ladder" to make learning fun.





# WHO BENEFITS, HOW LONG, and what kind of practice

Students develop at different rates.

When students are behind, every practice matters.

There is not enough time to listen to every child every day. We also need time to focus on vocabulary, background knowledge, and semantics. How do we arrange class time to make sure we fit it all in?

Instruction driven by real time data is possible with AI

Teachers assign practice based on phoneme -grapheme associations taught. Students will use the VTO platform to read words, phrases, and sentences with only those phoneme -grapheme associations, adding to an individualized bank of known words.





# WHAT ABOUT COMPREHENSION



While the decodable reader portion of a structured literacy lesson is but a small component, it is not separate from the lesson entirely. Even within a controlled text, questions about syntax “the who and the do” begins the process of comprehension. Likewise, some words may be decodable but require new vocabulary, like “tam” or “fond”. These are opportunities to connect synonyms and create mental models even when using decodable text.

The strategies of the late William VanCleave apply here as we learn that grammar, syntax, and semantics instruction happens simultaneously within well constructed lessons.

*Writing  
Matters*

*Developing Sentence Skills  
Students of All Ages*

Teacher's Edition

William Van Cleave



# OPTIONS



Even within the ed tech space, several companies are vying for your ever elusive educational dollar.



## VERTICAL TAKE-OFF READING

Dyslexia therapists, school interventionists, teachers, parents:

When providing reading instruction to struggling readers, providing adequate practice is critical, yet difficult. Multiply your time with independent reading, and know what your students can actually read. For pennies per session, VTO gives you all the data you need to accelerate instruction.



## PROJECT READ. AI

Individualized Decodables and Tutoring

We create decodables based on a student's exact reading level and previous errors. Our AI tutor then gives live feedback and encouragement to each student as they read out loud. This combination gives you the superpower to teach reading to each child in your class one on one.





# PRINT RESOURCES



- Reading Universe - Free Decodable Texts for Each Phonics Skill
- Free Reading - passages to practice advanced phonics skills, fluency, and comprehension
- Decodable Fluency - Wilson Central School District
- Reading Fluency Passages - Columbus City Schools
- Super Teacher Worksheets - Reading Comprehension
- CORE Reading - The Science of Reading: a Phonics Lesson template
- <https://www.free-phonics-worksheets.com>
- Readworks
- Common Lit
- K5 Learning
- Easy Teacher Worksheets
- From Phonics to Fluency - Timothy Rasinski
- Dyslexia Logic - Printable Phonics Resources





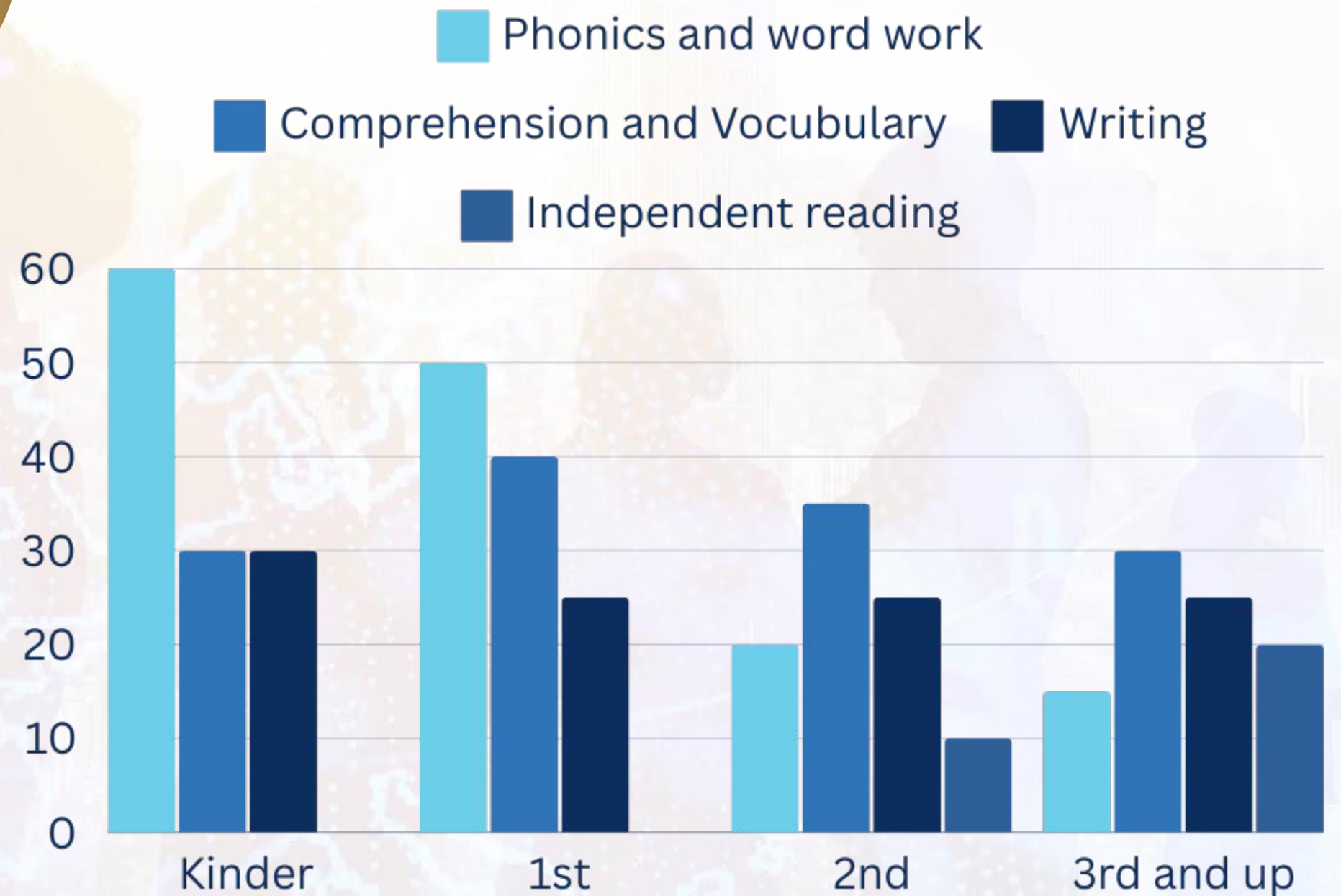
# BALANCED INSTRUCTION



“Decodable” means “able to” + “decode”, or read. The more words grow up to be sight words, the more words can be “decodable.” We neither want to stay in decodable texts forever, nor limit the usage of them for those who need them.

Individualizing instruction is not a free for all. It means providing the exact right practice for every phase of reading development.

“Balanced Literacy” is a “bad word” but the truth is that all parts of Scarborough’s Reading Rope are essential. The question is how much time do we need for each at what stage. Direct instruction is science, but how you teach it is art.





# LET'S PRACTICE



- Despite the controversy around phonological awareness versus phonemic awareness, the practice of both is essential.
- <https://www.reallygreatreading.com/lettertiles/>
- Now using the letter tiles in your bag, generate a word chain, making sure to change only one PHONEME at a time, instructing for changed spellings as needed.
- How would using unlettered tiles be useful? What cautions do you have to take when using letters? How could you intensify this practice? How does this affect reading AND spelling?
- Now imagine that your 5 minute instruction could be followed up with perfect practice!





# METHODOLOGY



When assigning phoneme-grapheme pairs (PGA), the most common to the most rare spellings are listed. There is a database of 160,000 English words, but teachers can choose a smaller segment. Fry's first 1,000 words have been used (100 per list) and broken down by phoneme. Many are decodable when the PGAs have been taught.

- A. Short Vowels
- B. Long Vowels
- C. Other Vowels
- D. R-Controlled Vowels
- E. Consonants - Stops
- G. Consonants- Fricatives and Affr
- H. Consonants: Glides and Liquids
- I. Advanced Phonemes

Other Vowels

oi  
 oy

**/oi/** like  
oy in boy

oo  
 u

**/u/** like  
oo in book

o  
 o-e

**/o/** like

au  
 o  
 a  
 aw  
 al  
 augh  
 ough  
 oa  
 ou

**/a/** like  
au in august

**/au/**  
like ou in out

## Students

Add Student

Username	Latest Lesson Date	Latest Lesson Status	Latest Lesson Words
lily24	Oct. 15, 2024, 6:51 p.m.	READY	<a href="#">View Words</a>

[Lessons](#)

[Create New Lesson](#)

[Manage Password](#)

[Export Words](#)

Lesson Words

Word	Status	Audio	Total Attempts	Percentage
that	Correct	0:05 / 0:05	3	66%
do	Correct	0:01 / 0:01	3	66%
not	Correct	0:01 / 0:01	2	
but	Incorrect	0:02 / 0:02	2	
big	Correct	0:03 / 0:03	2	
		0:00 / 0:04	2	



# Schedule I Alphabetic Phonics

flat		till	
sad	and	span	stand
pads	ads	has	pill
fit	hills	hints	fans
tip	sand	hat	plans
lift	an	lands	inn
spin	sap	fist	fan
pants	dad	if	in
dis	and	stands	land
dan	slip	dans	adds
fat	at	ann	hill
tin	sans	it	inns
nat	tips	stats	fast
diff	add	san	sit
pad	pat	is	lit
pin	pass	hits	lips
still	tap	ad	hip
pills	lip	pal	as
lists	plants	his	hands
past	had	hats	asp
plan	did	pins	plant
ill	list	fits	tan
split		sat	pit
snap		flip	
hit			

add schwa

Word
instant
nasa
atlanta
data
assistant
infants
anna
dallas
salad
assist
atlas
latin
finland
santa
satin
linda
infant

Same 10 PGAs:  
i, t, p, n, s, a, s, d,  
f, l, h







**THANK YOU  
FOR ATTENTION  
QUESTIONS?**

