



POPEY 

Provincial Outreach Program
for the Early Years

www.popey.ca

The Science of Reading
Meets the Art of Teaching:
Comprehensive K–3 Literacy Instruction

Tuesday, October 4th

8:45–3:00

* Workshop handout & resources available at padlet.com/POPEY

Presenters:

Lisa Thomas & Jen Kelly

Shape of the Day - Tuesday, October 4th



- 8:45am – Refreshments, Getting Settled to Get Started
- 9:00–10:30am
 - ✓ Welcome, acknowledgement, introductions, connections
 - ✓ Overview – plan for the day and year ahead
 - ✓ The Reading Brain – how we learn to read
 - ✓ Phonological & Phonemic Awareness
 - ✓ focus on the sounds in words
- 10:45–12:00pm – Phonics
 - ✓ involves print – focus on the letters that the sounds represent
- 12:45–2:30pm – Visible Learning through Inquiry
 - ✓ Reflect & synthesize – Putting it all together, goal setting, planning

Housekeeping



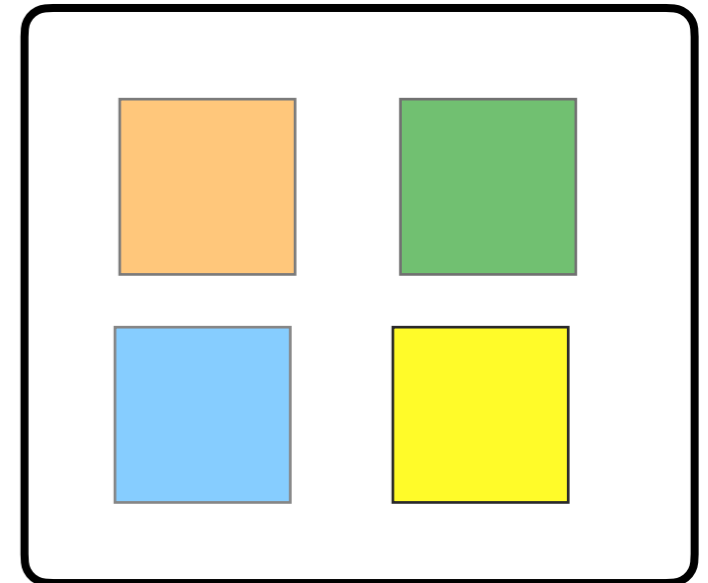
padlet.com/POPEY

- POPEY's Padlet contains links to what we're sharing today:
 - ★ Handouts (two versions: print & electronic)
 - ★ Articles
 - ★ Resources
 - ★ Videos

Ice Breaker & Opening Reflection

How do you see yourself?

- * Who are you?
- * What's your name? What does it mean?
- * How would you describe yourself to someone who didn't know you?



Choose one question to answer.

Take ONE minute to reflect privately, jot some notes, and **share** something with us on the chart paper using the sticky note on your table.

How did you learn to...



ride a bike?



swim?



drive a car?

Please choose ONE activity and take ONE minute to reflect individually - take some notes on how you learned to do it.

Please share your thoughts with your table group...

Learning to buckle yourself in...



How do we learn?



- * observation of someone skilled modelling/demonstrating
- * direct instruction
- * gradual release of responsibility
- * practice / repetition
- * time / opportunity
- * encouragement / feedback
- * safety to take risks and try new things
- * relationships, motivation, engagement...

Learning is:

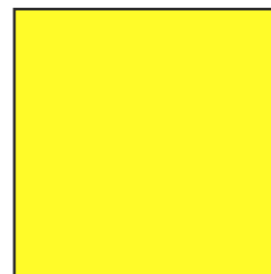
- * social
- * constructive
- * experiential
- * inquiry-based

With this in mind, how can we create the learning experiences our students need to build their foundational literacy skills?

Community Agreements

1. What do you value as a learner?
2. What might be supportive as we work together?

★ sticky notes & chart paper



Word Solving



“The goal of word work is to help children become **active word solvers** who can **recognize** words, take them **apart** or put them **together**, **know** what they **mean** and **connect** them to **other words.**”

What is a word?

We need to build a new system
in our brains in order to read.

Pronunciation

Meaning

Spelling

*Stored in different parts of the brain –
we need to connect them.*

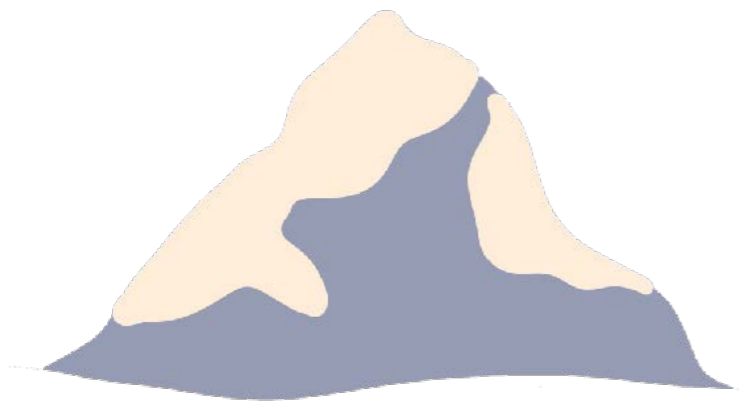
Visual Metaphor

Processes
Sounds

Sound City

Memories

Meaning Mountain



Recognizes objects
& faces

Visual Village



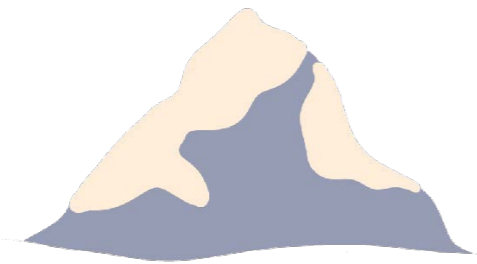
Visual Metaphor



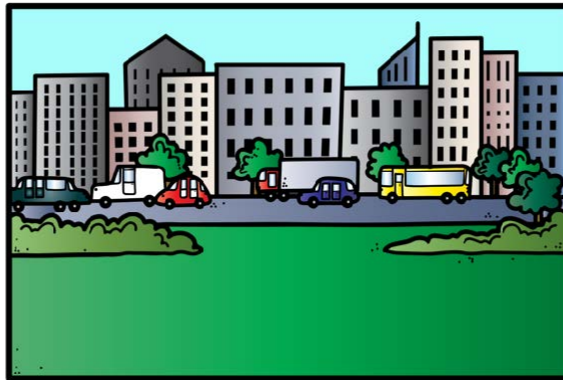
Visual Metaphor - development over time

Make meaning

*Meaning
Mountain*



Sound City



Recognizes words

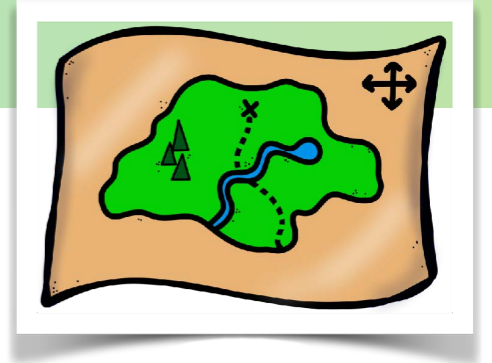
*Visual
Village*



REFLECT & SHARE at your table:

Knowing this, how can you create opportunities to intentionally focus on building the connections between these parts of the brain?

The Building Blocks of Literacy Learning



The goal is for students to...

- be enthusiastic explorers of words:
 - ★ puzzle out letter–sound relationships
 - ★ see patterns
 - ★ take words apart
 - ★ investigate meanings
- connect to words in an active way
- expand their reading and writing powers

Students learn **HOW TO LEARN** aspects of words, and develop efficient and powerful word–solving strategies

Key Definitions

Phonological Awareness

–the awareness of words, rhyming words, onsets and rimes, syllables, and individual sounds (phonemes)



Phonemic Awareness

–the understanding that spoken words are made up of individual sounds called PHONEMES

Phonics

–letter/sound relationships in reading and writing

Emergence of Phonological Awareness



- * Rhyme
- * Alliteration
- * Sentence Segmentation
- * Syllables
- * Onset and Rime

- * Phoneme Matching
- * Phoneme Isolating
- * Phoneme Segmenting
- * Phoneme Segmenting and Blending
- * Phoneme Manipulating



Word Work / Word Study must be transferred

The goal of word work instruction is to support kids' progress as readers and writers.



- * instruction in Word Work matters because it **enables** reading & writing
- * the pace & content of your Word Work needs to **align** with the work the kids are doing as **readers & writers**
- * the sequence of your high-frequency words/word wall words should **align** with reading & writing instruction
- * your activities should **connect**...

A Two-Pronged Approach to Teaching Word Solving Skills

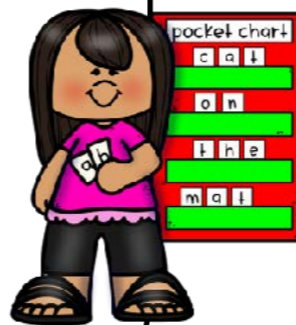
Explicit instruction is needed to help students make meaning.

Making Meaning OUT OF Texts

Making Meaning IN Texts

Word Study

Early Literacy Concepts
Phonological Awareness
Letter Knowledge
Letter-Sound Relationships
Spelling Patterns
High-Frequency Words
Word Meaning/Vocabulary
Word Structure
Word Solving Actions



Reading

Active Read Aloud
Reading Mini-Lessons
Shared Reading
Guided/Small-Group Reading
Independent Reading

Writing

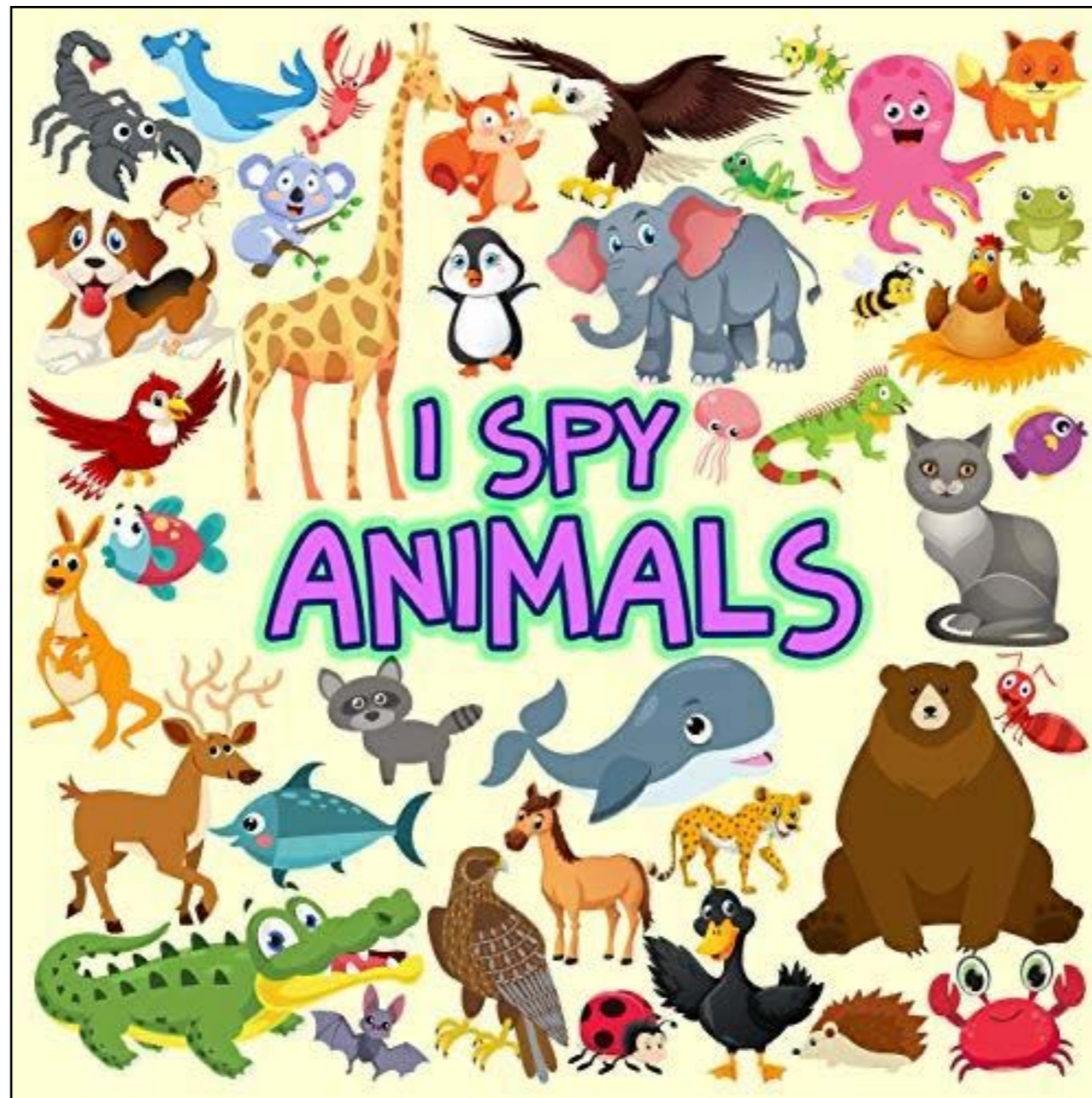
Modelled Writing
Writing Mini-Lessons
Shared/Interactive Writing
Guided/Small-Group Writing
Independent Writing



Oral Language

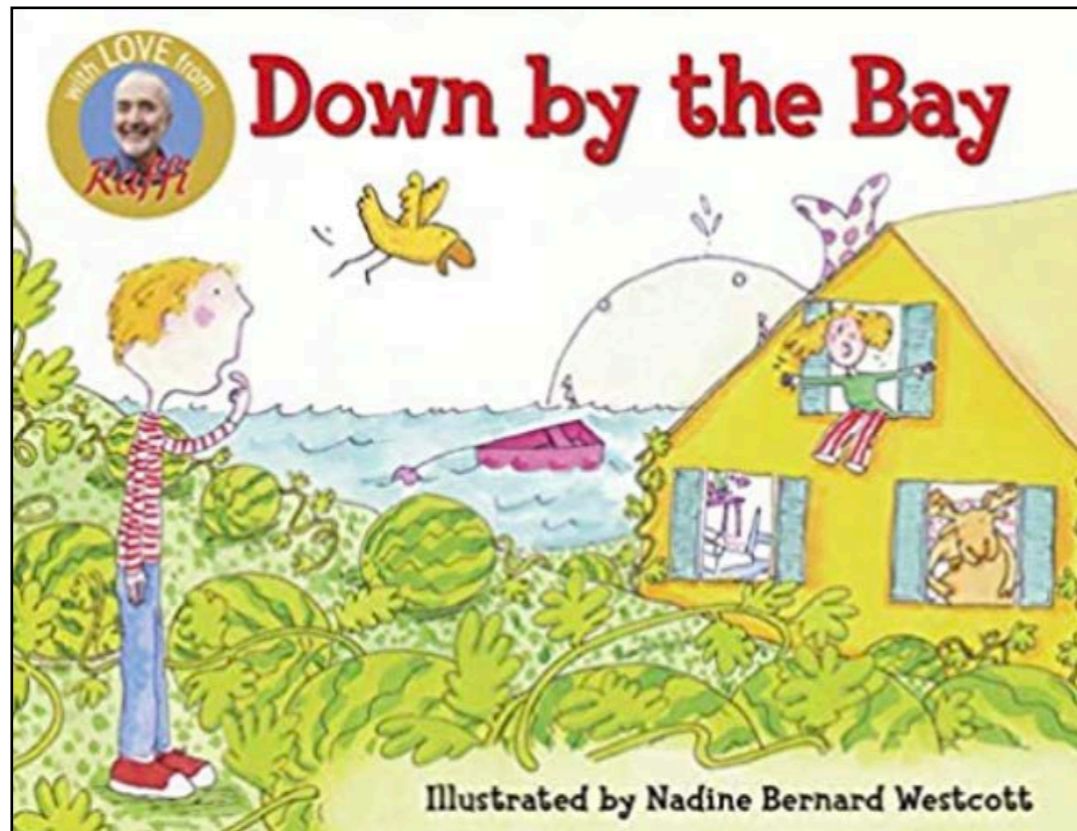
I spy with my little eye something that rhymes with ...

- mat
- tail
- hear
- grab



- log
- wish
- chair
- wheel

Read Aloud Rhyming Activity - Making Meaning IN Text

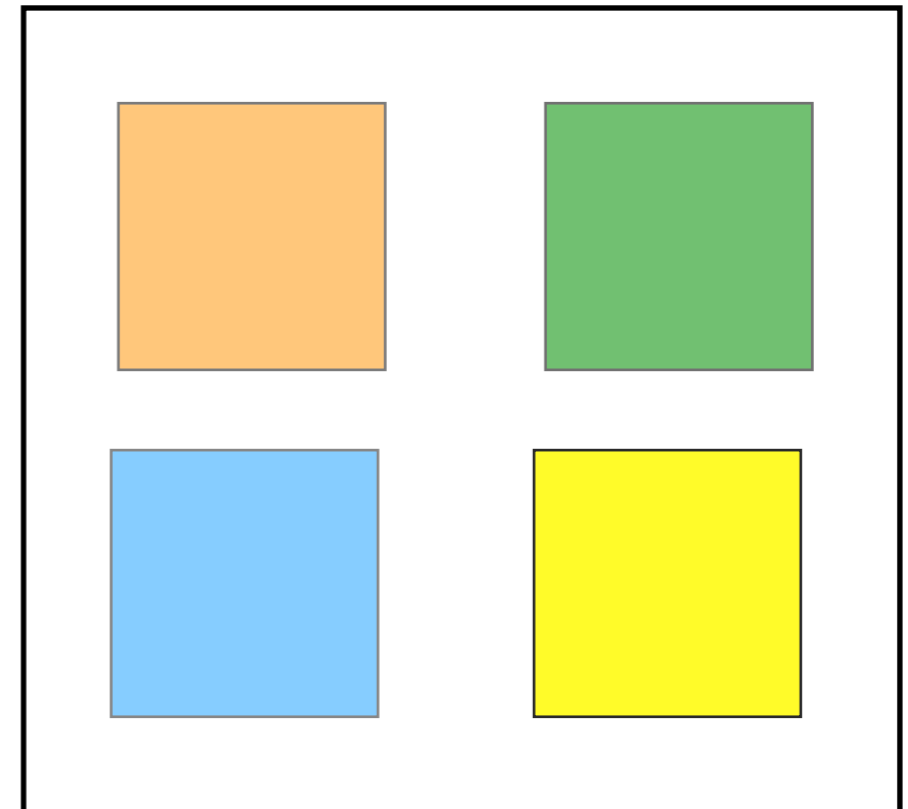


Did you ever see a frog...

Did you ever see a fox...

Did you ever see a dragon...

—or choose your own animal and rhyme—

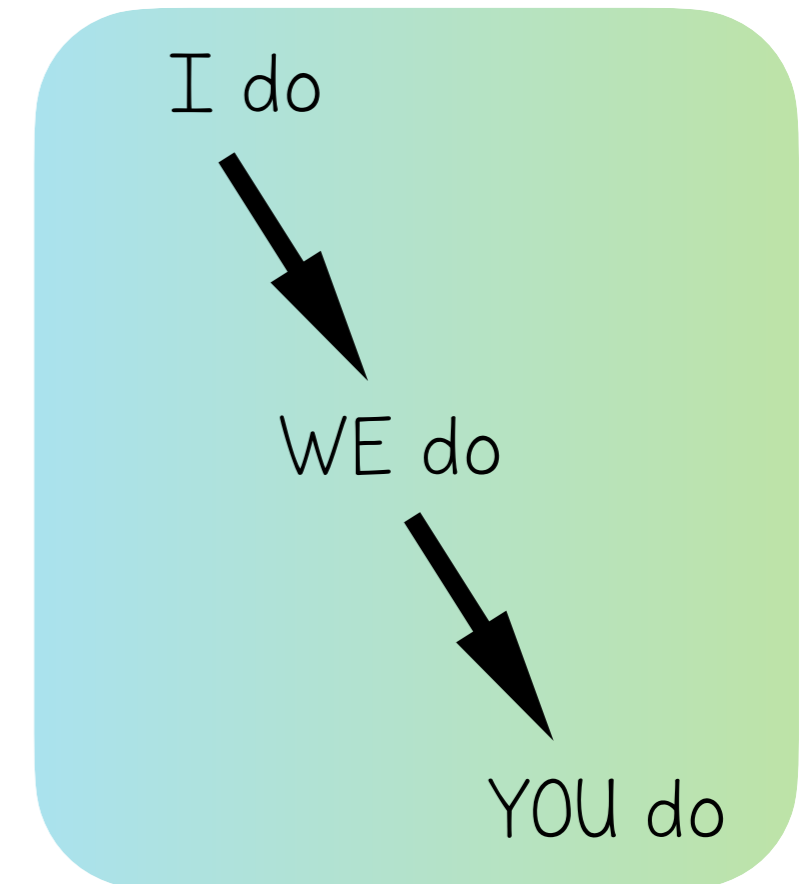


The Art of the Mini-Lesson

- * mini, not maxi
- * strategy-focused
- * model, model, model
- * direct and explicit instruction
- * guided practice in a safe, supportive setting
- * transfer to independence



Mini-Lesson Structure



Modelling a Mini-Lesson on Alliteration

- * mini, not maxi
- * strategy-focused
- * model, model, model
- * direct and explicit instruction

Peter Piper picked a peck of pickled peppers

- * guided practice in a safe, supportive setting

Jumping Jane...

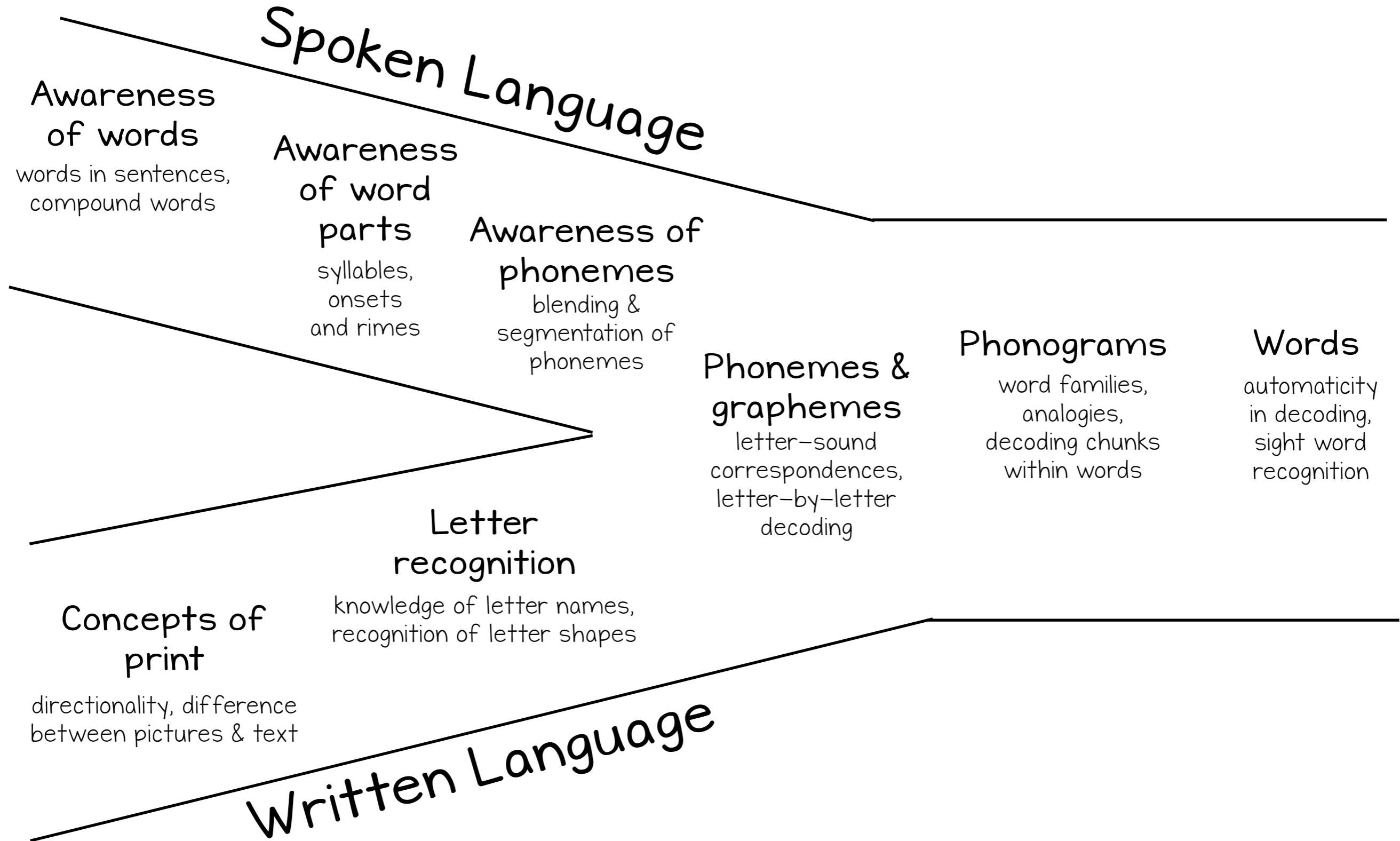
Logan loves...

Diana's dog...

- * transfer to independence

make up your own phrase using alliteration

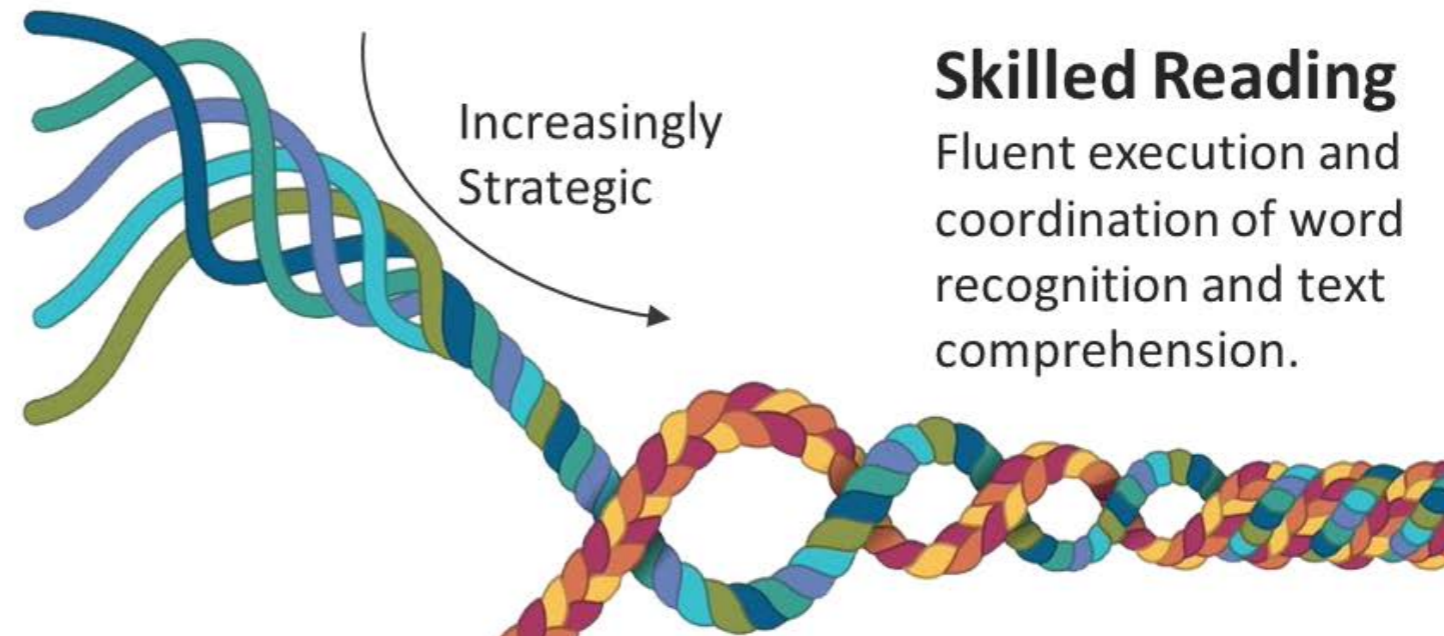
The Road to Reading Words



Scarborough's Reading Rope

Language Comprehension

- Background Knowledge
- Vocabulary Knowledge
- Language Structures
- Verbal Reasoning
- Literacy Knowledge



Skilled Reading

Fluent execution and coordination of word recognition and text comprehension.

Word Recognition

- Phonological Awareness
- Decoding (and Spelling)
- Sight Recognition

Scarborough, H. 2001. Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice. Pp. 97-110 in S. B. Neuman & D. K. Dickinson (Eds.) *Handbook of Early Literacy*. NY: Guilford Press.

Reading Rope



“Being strong on the lower strands affords more opportunities to acquire knowledge of the upper strands and being strong on the upper strands has been shown to enable faster and more accurate decoding of unfamiliar words.

Therefore, if any of the strands gets frayed, it can hold back development of the other strands and by extension can eventually weaken the entire rope.”

The Importance of Foundational Skills

Phonemic awareness which may be important

- * if it is on the way to...

Phonics which may be important

- * if it is on the way to...

Fluency which may be important

- * if it is on the way to...

Vocabulary which may be important

- * if it is on the way to...

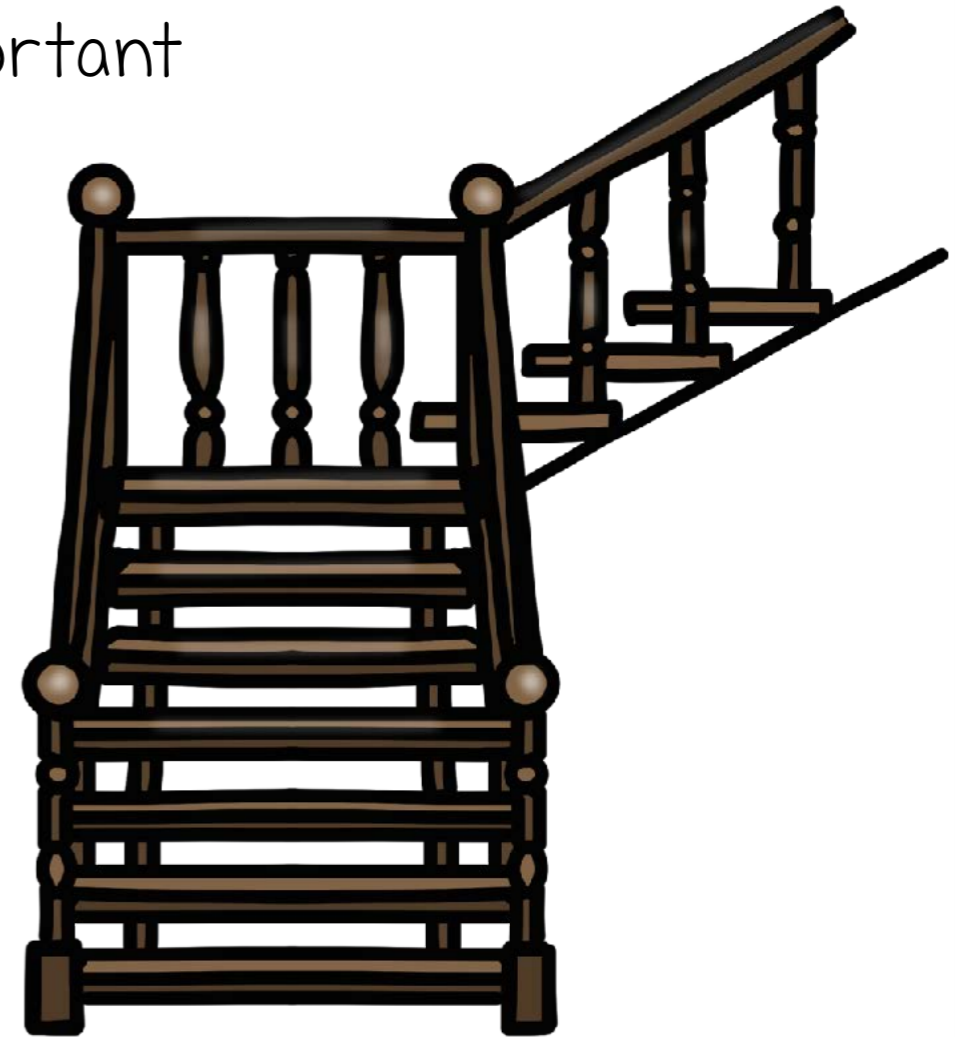
Comprehension which may be important

- * if it is on the way to...

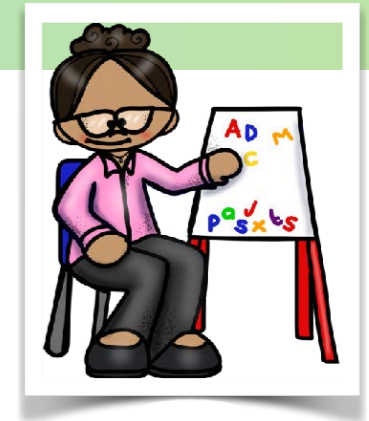
Critical reasoning and problem solving which may be important

- * if it is on the way to...

...action in the world, changing something that matters.



Phonemic Awareness & Phonics



These work in concert to **explicitly** and **systematically** support our students as they navigate the unpredictable, complex alphabetic structure of language & print.

Phonemic Awareness

- main focus is on **sounds**
- deals with **spoken language**
- lessons are **auditory**
- students work with **manipulating sounds in words**

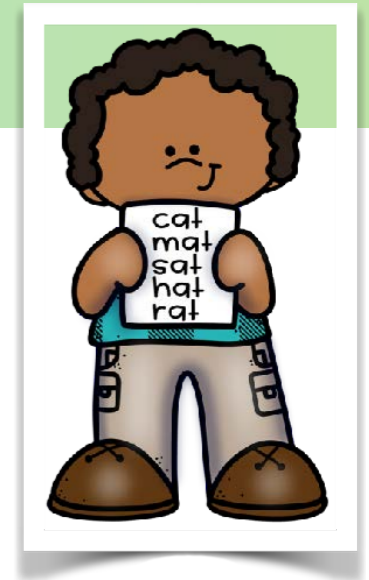
Phonics

- main focus is on **letters** and their **sounds**
- deals with **written language and print**
- lessons are both **visual** and **auditory**
- students work with **reading and writing letters**
according to their sounds, spelling patterns, and phonological structure

*Phonemic awareness activities and systematic phonics instruction are **aligned***



What Phonemic Awareness Enables



The understanding that spoken words are made up of individual sounds called PHONEMES

Students who are phonemically aware are able to...

1. isolate
2. manipulate
3. blend & segment

PHONEMES
(SOUNDS)



into spoken and
written words



Scope and Sequence of Phonemic Awareness

Taught and learned in the order of easiest to most difficult...

Eight Phonemic Awareness Skills

1. rhyming
2. onset fluency
3. blending
4. isolating final or middle phonemes
5. segmenting
6. adding phonemes
7. deleting phonemes
8. substituting phonemes



Two Early Literacy Skills

1. letter naming
2. language awareness

Rhyme Recognition & Repetition

One minute direct instruction lesson

Rhyme Repetition

T says word pair,
Students repeat:

hop/mop ran/fan
wet/jet mad/dad

Examples:

go/no
yes/me
sad/mad
out/pig
run/fun
in/lap
rip/bag

Role of the Educator

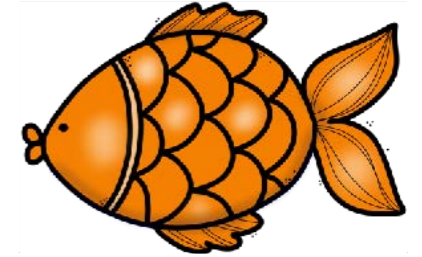
- ▶ educator says the word pairs

Role of the Students

- ▶ Students repeat the word pairs and show thumbs up if the words rhyme, thumbs down if the words don't rhyme.

Using Elkonin Boxes to Develop Phonemic Awareness

Phoneme placement within words makes working with them easier or harder



Which sound do you think is easiest for students to identify?
Which is the hardest? Put them in order with your table group.

hat
fish
stand

beginning
phoneme

final
phoneme

medial vowel
phoneme

internal consonants in
blends and clusters

Segmenting CVC Words Using Toy Cars/Elkonin Boxes

Park Those Sounds!



Practicing Phonemic Awareness throughout the day

Make use of transition times and existing routines...

- ▶ During morning meeting – have students segment phonemes in each other's names
- ▶ During interactive writing – use elkonin boxes
- ▶ During transition times – play a few rounds of “Guess my Secret Word” by saying segmented words and students can blend sounds together



Nell Duke & Heidi Anne Mesmer

Phonics Faux Pas

Avoiding Instructional Missteps in Teaching Letter-Sound Relationships

By Nell K. Duke, Heidi Anne E. Mesmer



The Name Game

Our name is the first word we loved. We can study our names as an entry point for learning letters and writing other things.



Write down your name on some paper.

See how many words you can make, using the letters in your name, in **one minute**.

Stefanie

You could also sort them like this:

- ▶ high frequency words – at, as, is, if, in
- ▶ cvc words – fan, tin, tan, set, net, sat
- ▶ cvce words – safe, sane
- ▶ blends or digraphs – nest, fast
- ▶ vowel teams/pairs – feast

What's in a name?

Using the names of the people at your table, How could you group some of your names together?

-syllables, beginning sounds, vowel teams, etc.

Olivia

Heather

Kathy

Roberta

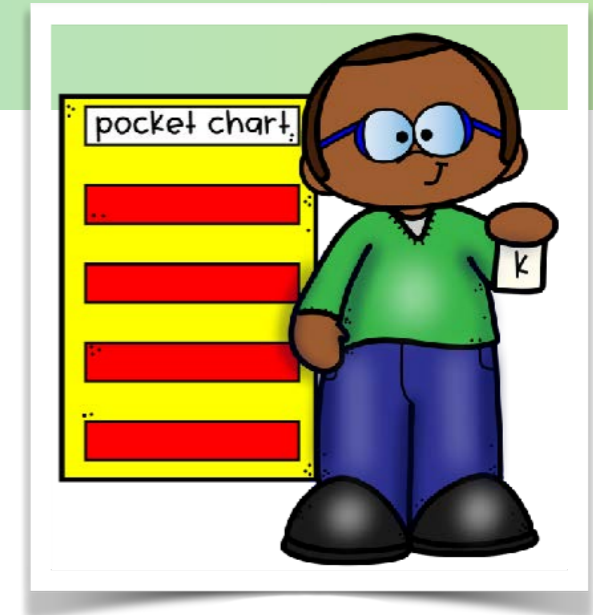
Lisa

Jen

Ella

Darcy

More Ways to Use Name Charts



- * Clap your name when we come to it
- * Count the letters in your name
- * Use riddles: "I'm thinking of someone whose name starts/ ends with _____"
- * Clap the syllables in your name
- * Match name cards to photos
- * Find a name that has a letter like your name
- * Ask students, "What do you notice about our names?"

What is phonics?

“We use phonics to refer to letter–sound relationships in reading and writing, not to describe a particular method of teaching or approach to reading instruction. Phonics and spelling are interrelated processes; both involve reading and writers using, analyzing, and solving words.”

Spelling - Ehri's phases of reading development

Reciprocity – reading and spelling

Phase 1:
pre-
alphabetic

(not using
alphabetic
principles)

Phase 2:
partial

(write with
consonants-
initial & final
sounds)

Phase 3:
full
alphabet

(All the
sounds are
present, not
necessary
spelled
correctly)

Phase 4:
consolidated
alphabetic

(Writing
multi-syllabic
words)

Possible Phonics Scope and Sequence

① Short-vowel vowel-consonant (VC) and CVC words at, sat

② Short-vowel words with blends and digraphs:
contrast fat and flat, hat and chat flat, chat

③ Long-vowel CVCe words:
contrast bit and bite, hat and hate bite, hate

④ Long-vowel words representing
multiple spellings: maid coat
contrast mad and maid stay grow
cot, cat, and coat

Possible Phonics Scope and Sequence

5

Words with r-controlled vowels, complex vowels, and diphthongs:

- contrast pat and part, spill and spoil, moth and mouth, bid and bird

part spoil
mouth bird

6

Simple multisyllabic words containing common prefixes and suffixes:

- contrast read and reread, trust and trusted

reread
trusted

7

More complex multisyllabic words using common syllable types:

- contrast can and candle, nap and napkin

candle,
napkin

WHY a Scope and Sequence?

Scope and sequence are created so that many words can be formed as early as possible.

How many words can you potentially read and write with the following letters?

* s, m, t, d, l

* s, m, a, t, d



Quick generation of useful words is not only more efficient, but highly motivating!

Framework for Word Study Lessons

Teach

- whole class lesson
- introduce the day's word study principle
- often includes an **inquiry** element – to encourage kids to **discover** something about language

Apply

- kids apply principle through **hands-on practice** (*often kinesthetic*)
- **opportunity** for them to **construct** their own knowledge
- can be whole-class, small-group, partner, or independent work
- teacher is working with small groups (*guided reading or other*)

Share

- kids **share discoveries** they made in whole-class meeting
- sharing provides teachers with **feedback** on the effectiveness of the lesson & how the kids did in **application** of the **principle**

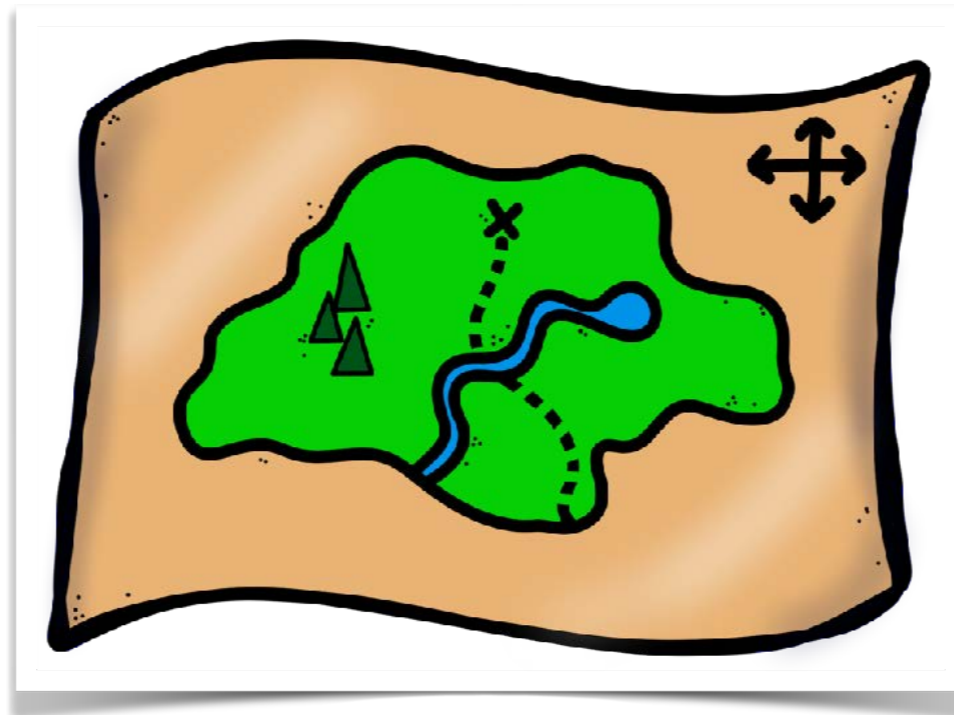
Connect

- **connections** are made to **reading & writing** – so kids know **how** to use what they've learned
- suggestions for various reading & writing experiences
- suggestions to extend learning & to make **home-school connections**

Systematic Plan

“When a new skill is introduced, it should be systematically and purposefully reviewed for the next four to six weeks.”

– Wiley Blevins



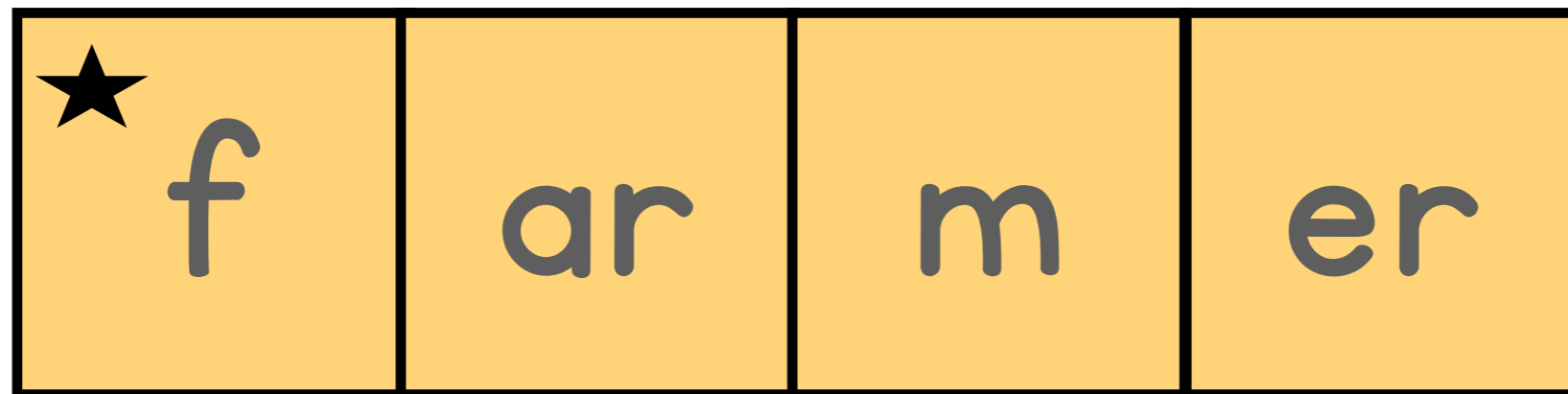
Using Elkonin boxes to Teach Orthographic Mapping

Why use Elkonin boxes?

- *it helps build students' phonemic awareness & phonics
- *it helps connect letters to sounds
- *it helps students hear and record all sounds in a word
- *it helps solidify left to right directionality

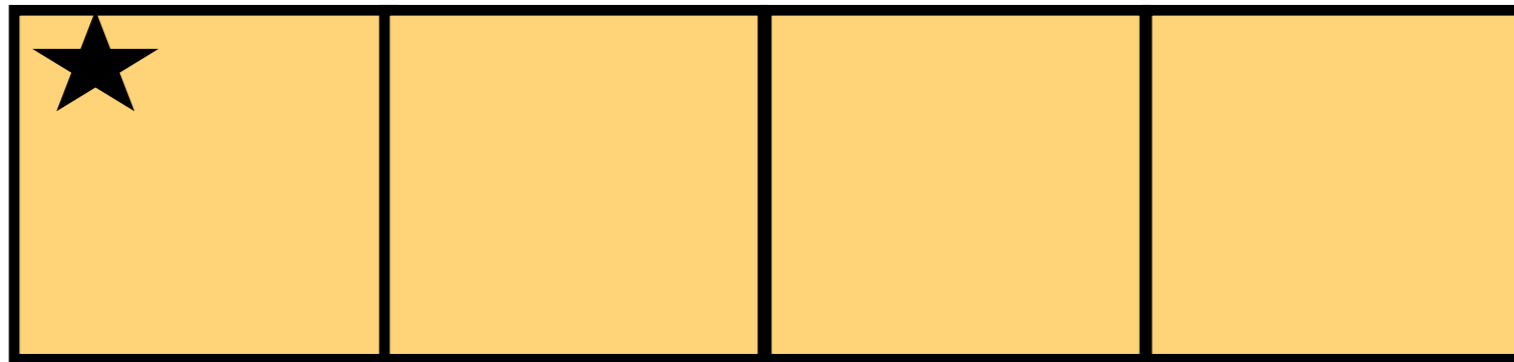
Once students are proficient with phonemic awareness:

- *You can transition to teaching **letter** boxes (this helps with spelling)
- *Students gain independence with this problem-solving strategy



The process of using Elkonin boxes during Writing

- * Give the student a 'practice page' or white board
 - * When the student is writing and they come to a word they need to problem solve, model the use of Elkonin boxes on the practice page
- * Model the task for the student
 - * Say the word slowly and touch the boxes (or push objects into the boxes) as you say the word
- * Have the student try it themselves
 - * You may do the task together until the student can take over



Orthographic Mapping

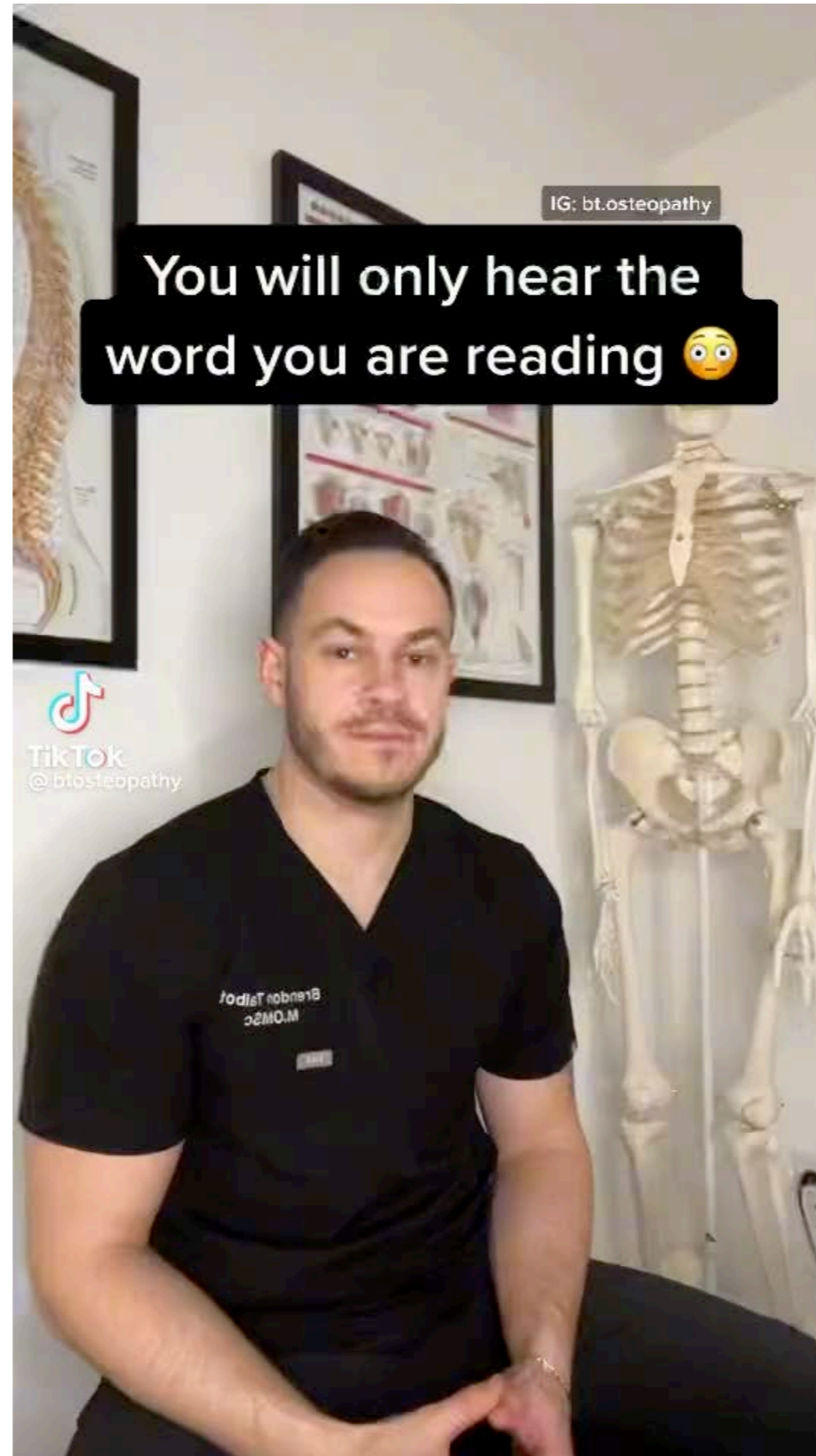
Orthographic mapping proposes that we use the pronunciations of words that are already stored in long-term memory as the anchoring points for the orthographic sequences (letters) used to represent those pronunciations.

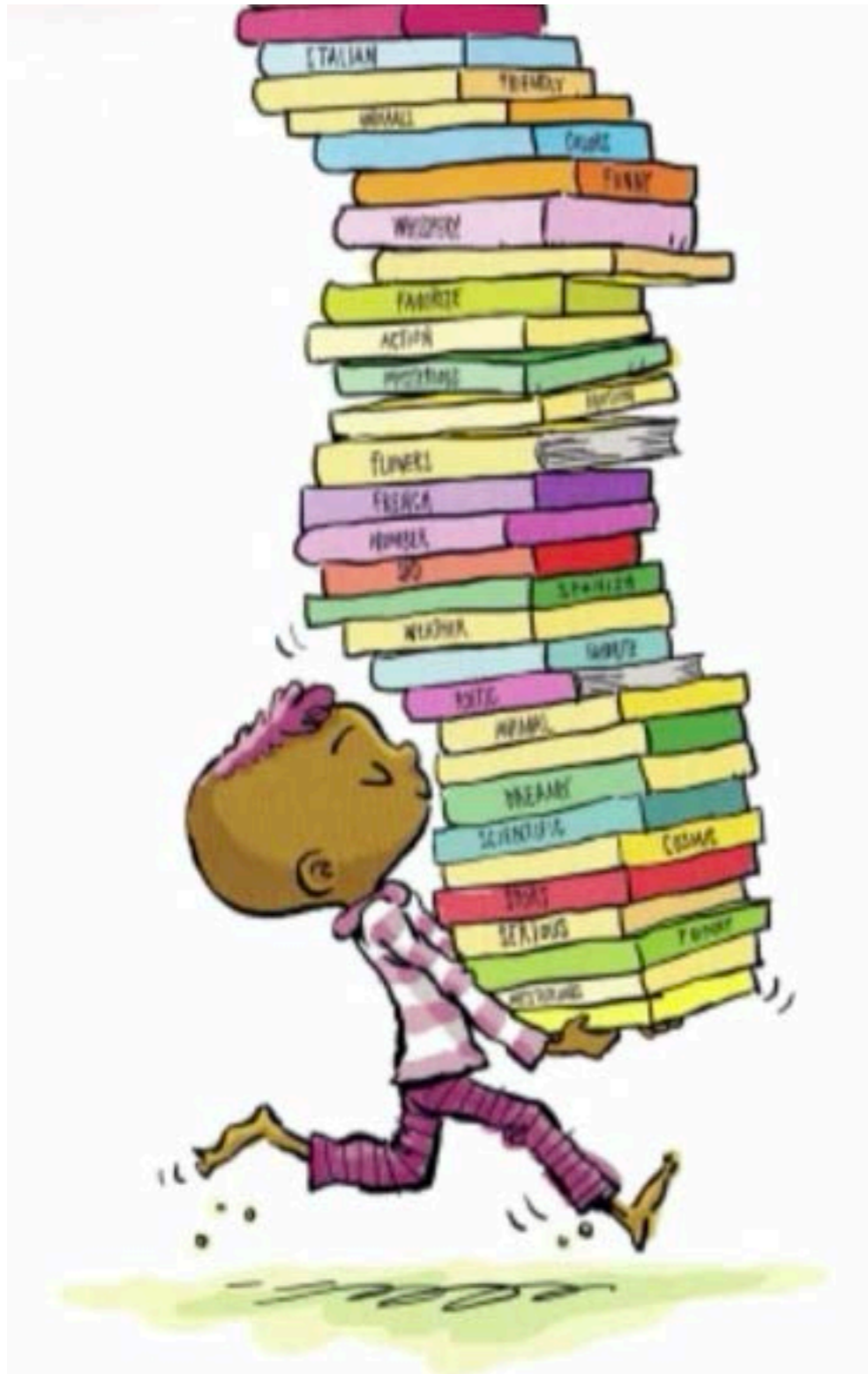
Let's Explore an Orthographic Mapping Routine for the word

does



Tik Tok to Explain Orthographic Mapping





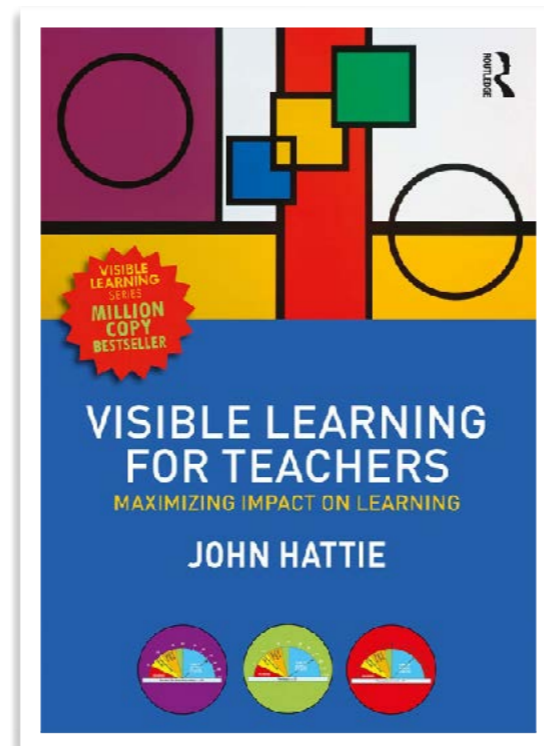
Engagement deepens further as children actually deploy their developing phonics and spelling abilities to read and write texts to inform, persuade, entertain, and innovate.

—Nell Duke

Visible Learning - Overview

John Hattie

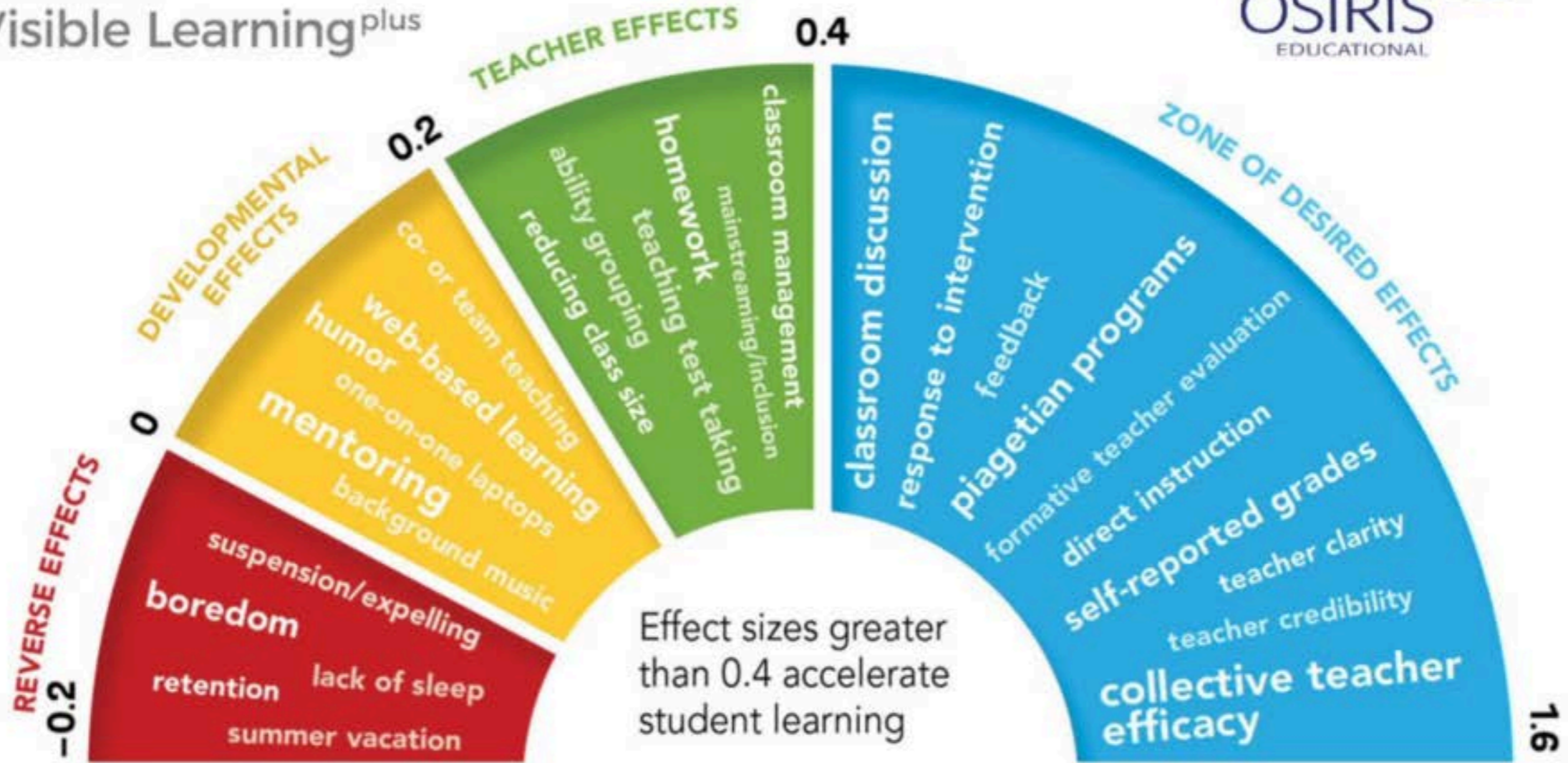
- * Meta-analysis of 50,000 research articles
- * 'Visible' aspect refers to first making student learning visible to teacher, and second, making teaching visible to students
- * 'Learning' aspect refers to how we go about knowing and understanding



Visible Learning - Overview

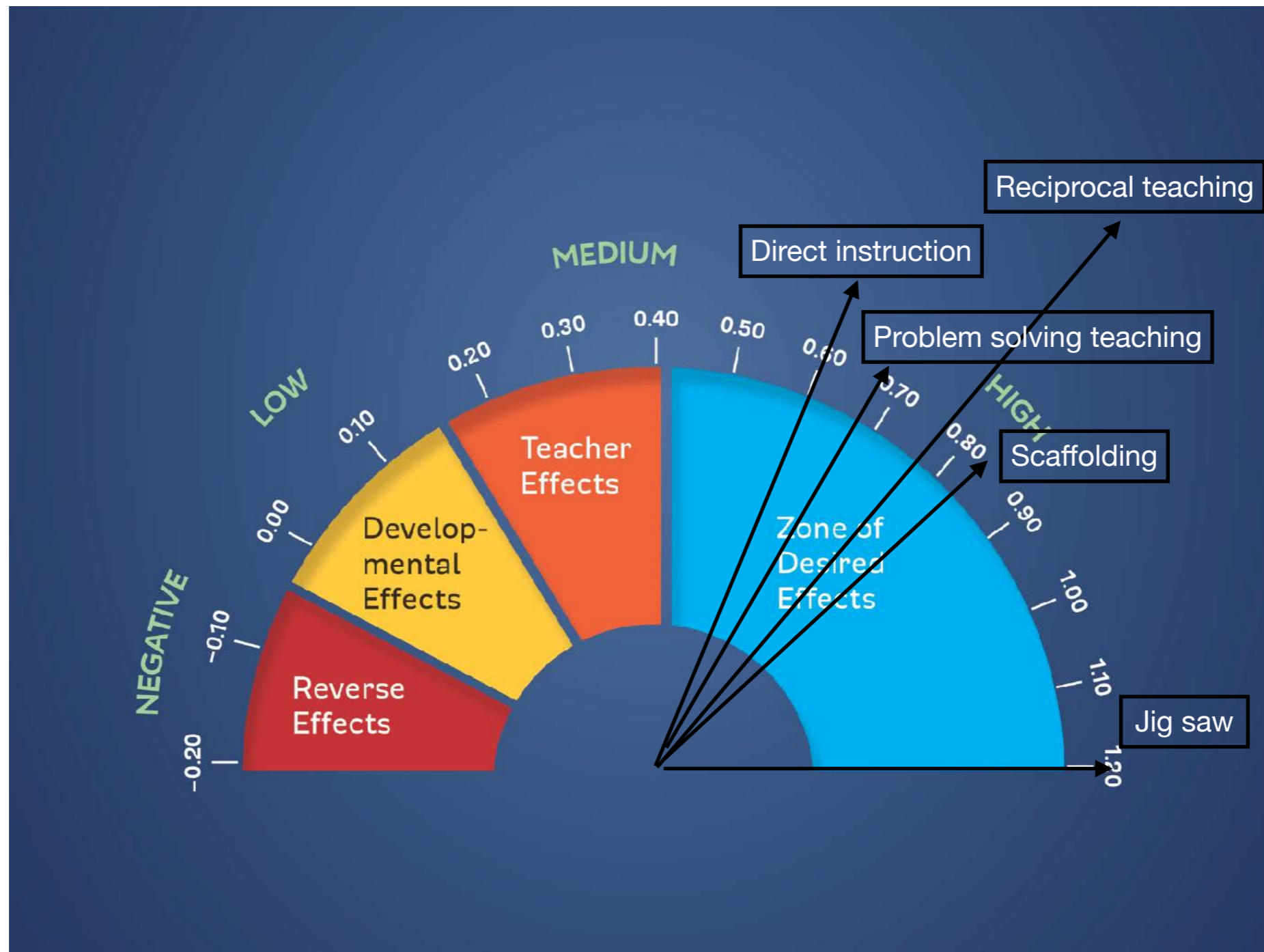
CORWIN

Visible Learning^{plus}



Inquiry Framework using Visible Learning

Focus on teaching strategies



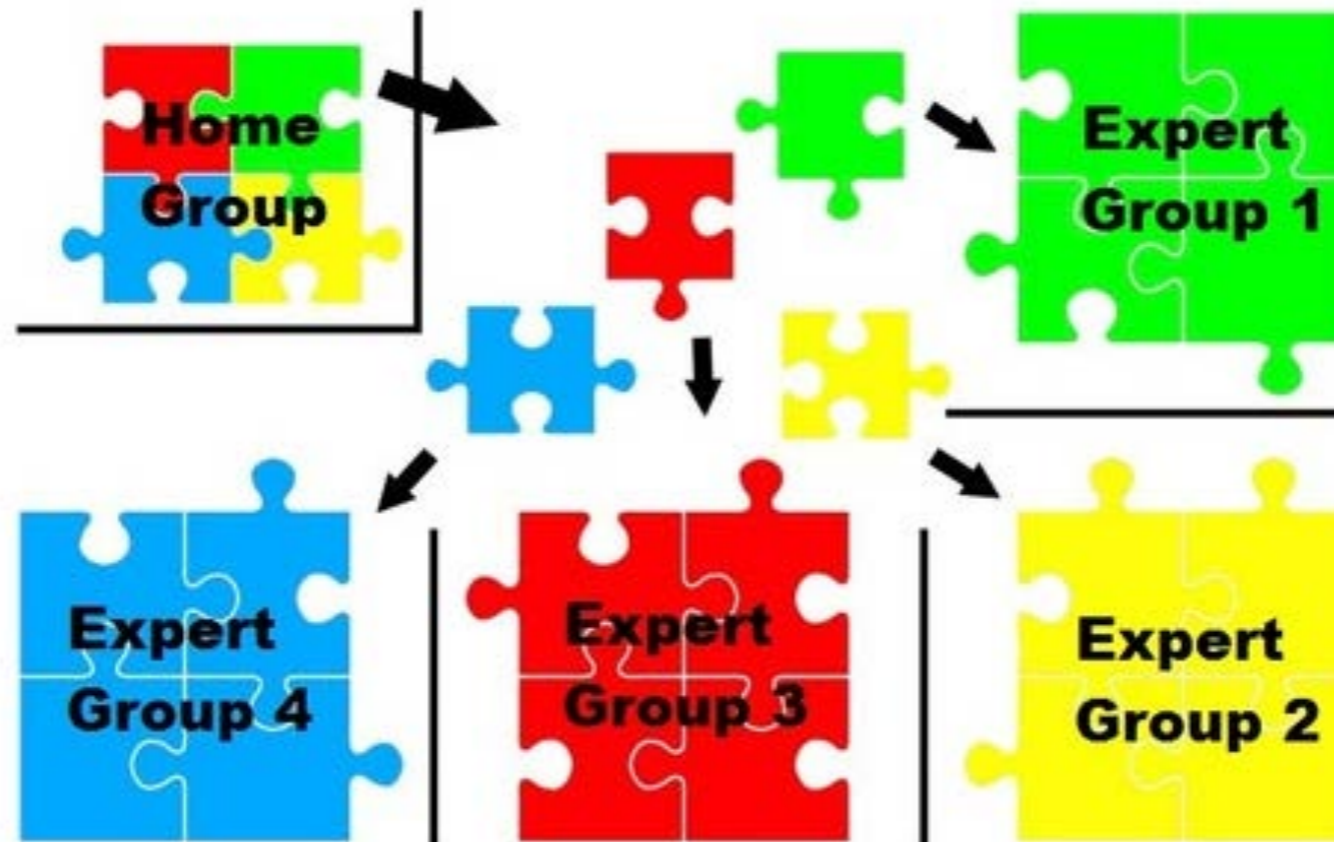
Direct Instruction

Effect size: 0.60



Jig Saw

Effect size: 1.20



The **jigsaw technique** is a method of organizing classroom activity that makes students dependent on each other to succeed. It breaks classes into groups and breaks assignments into pieces that the group assembles to complete the (**jigsaw**) puzzle.

Scaffolding

Effect size: 0.82



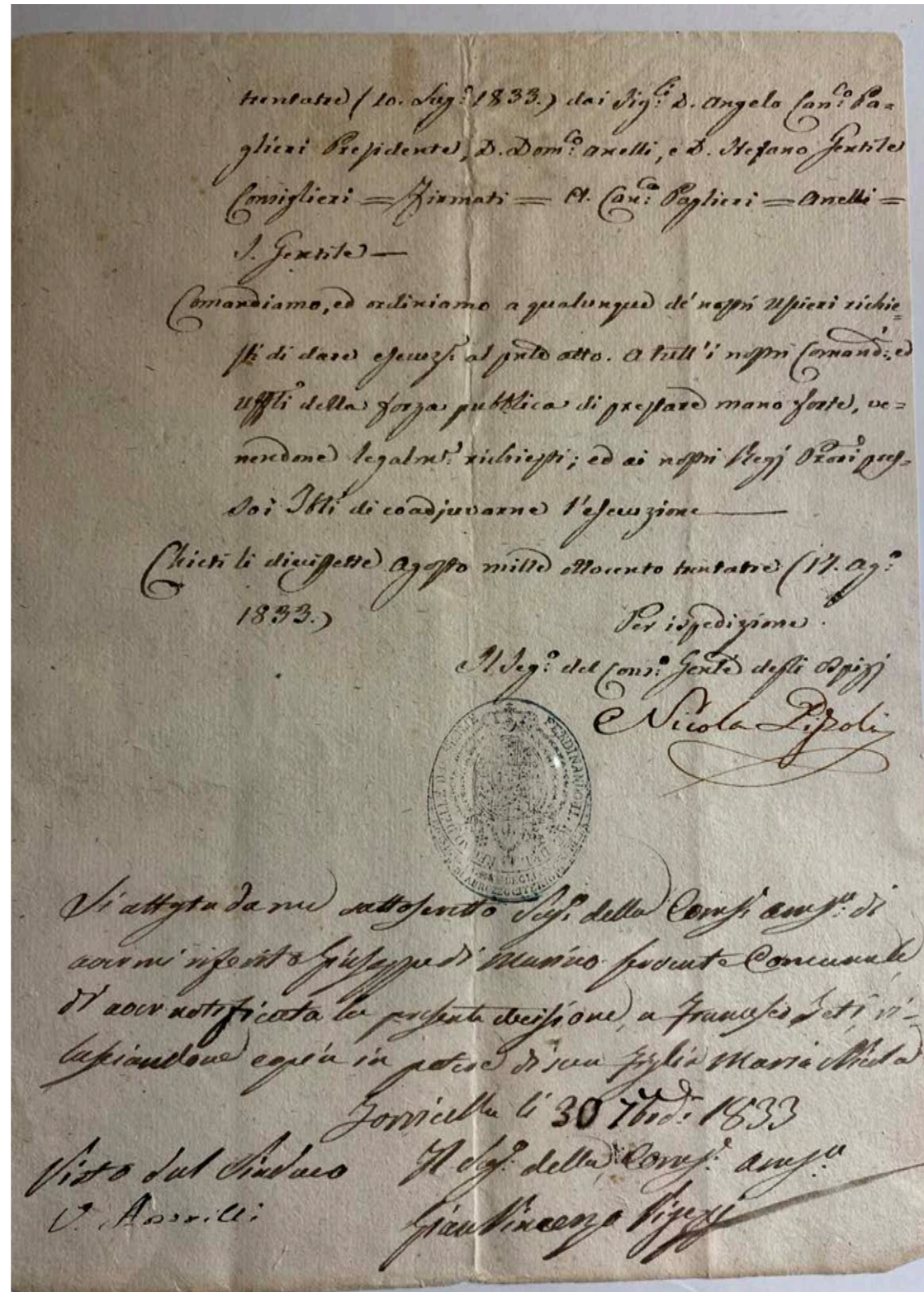
Reciprocal teaching 0.74

Effect size: 0.74



Problem solving teaching 0.68

Effect size: 0.68



A formative assessment model for inquiry

Inquisitive

- ✓ wondering and questioning
- ✓ exploring and investigating
- ✓ challenging assumptions

Persistent

- ✓ sticking with difficulty
- ✓ daring to be different
- ✓ tolerating uncertainty

Imaginative

- ✓ playing with possibilities
- ✓ making connections
- ✓ using intuition

Collaborative

- ✓ sharing the product
- ✓ giving & receiving feedback
- ✓ cooperating appropriately

Disciplined

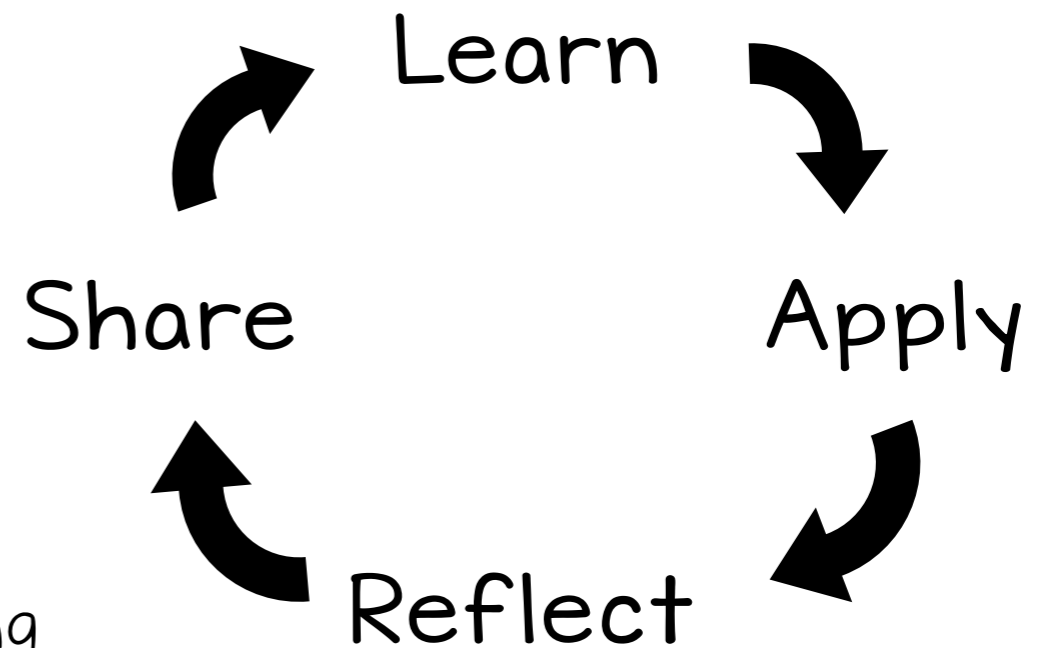
- ✓ developing techniques
- ✓ reflecting critically
- ✓ crafting & improving

Reflection, Collaboration, & Planning time

Direct Instruction
Jig Saw Method
Scaffolding
Reciprocal Teaching
Problem Solving Teaching

Please take this time to...

- ✓ Explore different teaching strategies
- ✓ Discuss ideas with colleagues
- ✓ Plan instruction with your students' needs in mind



Sources

Resource Books

A Fresh Look at Phonics, Grade K-2 – Blevins

Literacy Lessons Part Two – Clay

Phonics From A-Z – Blevins

Shifting the Balance – Burkins & Yates

Heggerty Phonemic Awareness Curriculum

Phonics Activities & Games Kit – Blevins & Sadler School

Lesley University Institute: Word Study: Teaching Phonics, Vocabulary, and Spelling in Grades K-3

The Fountas & Pinnell Phonics, Spelling, and Word Study System – Fountas & Pinnell

When Readers Struggle: Teaching That Works – Fountas & Pinnell

Conceptualizing reading: What have we learned from scientifically based reading research? Presentation by Lane

Comprehension Skill, Will & Thrill of Reading – Fisher & Frey

Word Matters: Teaching Phonics and Spelling in the Reading/Writing Classroom – Fountas & Pinnell

Connecting early language and literacy to later reading (dis)abilities – Scarborough

Write from the Start: Writing Workshop in K-3 – POPEY Presentation by Lori Jamison

Visible Learning for Teachers – Hattie

Comprehensive Literacy Resource – Trehearne

Phonics From A-Z – Blevins

Shifting the Balance – Burkins & Yates

Spirals of Inquiry – Halbert & Kaser

Units of Study in Phonics – Calkins

Sources

Blogposts & Presentations

[Movement into Reading – Ehri](#)

[The Big Five: Phonics–Orthographic Mapping – Wooldrige](#)

[Hattie’s Barometer of influence](#)

[Phonics Faux Pas – Duke & Mesmer](#)

[Jigsaw Method](#)

Videos

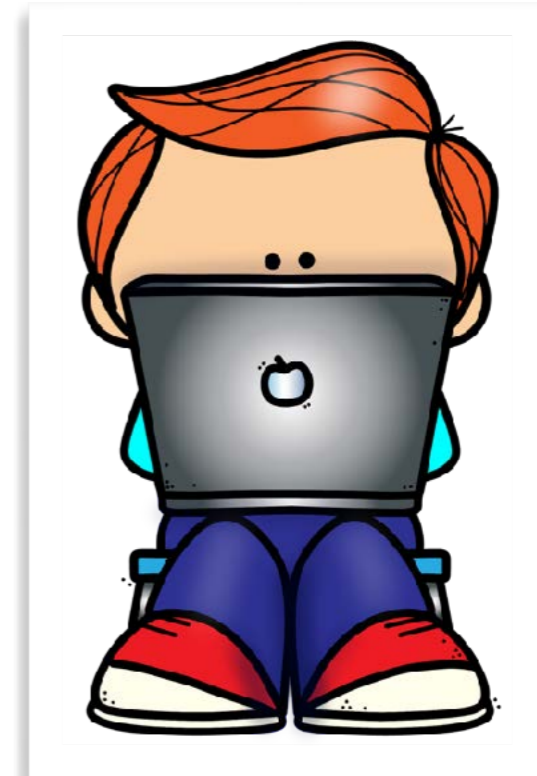
[Tik Tok Word Reading](#)

[Balanced Literacy Diet – Park Those Sounds](#)

[Mr. Rogers’ Speech – Lifetime Achievement Award](#)

[Direct Instruction](#)

[Worry About Yourself](#)





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See you *virtually* in November...

Tuesday, November 28th



POPEY 

Provincial Outreach Program for the Early Years

www.popey.ca