Provincial Outreach
Program for the Early Years

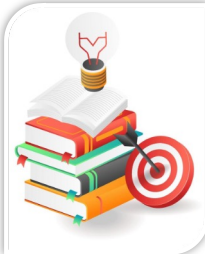# Building Strong Literacy Foundations

Bringing together the reading brain and foundational literacy skills

Presenter:
Jen Kelly

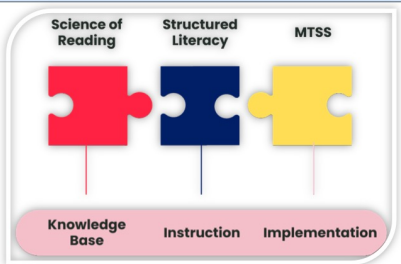www.popey.ca   @popeybc   @POPEYBC   POPEY

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Learning Objectives

- Understand how the brain learns to read
- Explore foundational skills: phonemic awareness, phonics, vocabulary, fluency, and comprehension.
- Gain practical tools to enhance literacy instruction

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Let's Clarify Some Terms

Science of Reading — Knowledge Base
Structured Literacy — Instruction
MTSS — Implementation

Introduction to MTSS – ONLit, 2024

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De-mystifying the Science of Reading

The Science of Reading Is NOT:

- An ideology or philosophy
- A fad, trend new idea or pendulum swing
- A political agenda
- A one-size-fits-all approach
- A program of instruction
- A single, specific component of instruction such as phonics

Science of Reading Defining Guide   www.popey.ca   @popeybc   @POPEYBC   POPEY

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Science of LEARNING

The Science of Reading

IS:

- A vast, interdisciplinary body of scientifically-based research about reading and issues related to reading and writing.
- Based on research that has been conducted over the last five decades across the world, and it is derived from thousands of studies in multiple languages.

- An abundance of evidence to inform:
  - how proficient reading and writing develop;
  - why some have difficulty; and
  - how we can most effectively assess and teach ...

therefore, how to improve student outcomes through prevention of and intervention for reading difficulties.

Science of Reading Defining Guide   www.popey.ca   @popeybc   @POPEYBC   POPEY

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Structured Literacy: Meeting the Needs of All Learners

Structured literacy:

- an evidence-based instructional approach
- comprehensive – addressing listening, speaking, reading, and writing
- characterized by <u>what</u> content is taught and <u>how</u> content is taught

A comprehensive approach that meets the needs of all learners

International Dyslexia Association Ontario   www.popey.ca   @popeybc   @POPEYBC   POPEY

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Slide 7

Structured Literacy: an approach that meets the needs to all learners

WHAT is taught: • Both foundational skills & Higher-level literacy skills

HOW it is taught:

- I Do
- We Do
- You Do It Alone

• Systematic and Cumulative: simple to complex/follows a scope and sequence
• Explicit
  - Direct instruction
    • "Today we are learning to…"
• Continuous student-teacher interaction
• Not assuming all students can infer concepts
• Careful and considered practice
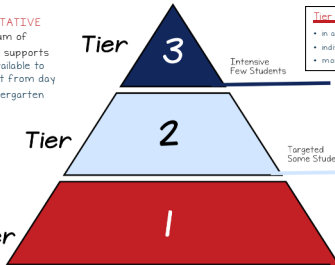• Prompt and specific feedback (corrective if needed)

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Slide 8

MTSS - Multi-Tiered System of Supports

A PREVENTATIVE continuum of instructional supports that are available to every student from day one of Kindergarten

Tier 3
Intensive Few Students
Tier 3
• in addition to Tiers 1 and 2
• individualized intervention
• more time, smaller groups

Tier 2
Targeted Some Students
Tier 2
• extra doses of support for a small body of students
• in addition to Tier 1
• delivered in small groups

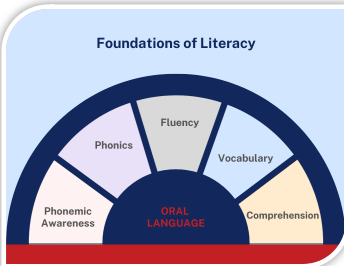**Tier 1**
Universal All Students
Tier 1
• comprehensive, universal instruction for all students
• primary prevention of reading failure

Stephanie Stollar Reading Science Academy – 2021.   www.popey.ca   @popeybc   @POPEYBC   POPEY

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Slide 9

Foundational Skills for Reading

Foundations of Literacy
- Fluency
- Phonics
- Vocabulary
- Phonemic Awareness
- ORAL LANGUAGE
- Comprehension

Proficiency in these foundational skills is necessary to all students to be reflective, critical and independent readers

National Reading Panel, 2000   www.popey.ca   @popeybc   @POPEYBC   POPEY

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Phoneme Awareness

Is the awareness that words are made up of individual sounds

Phonological Awareness Skills

| Word Awareness | Rhyming and Alliteration | Syllables | Onset-Rime | Phonemic Awareness |

phonological sensitivity skills

Essential to learning to read

• Can be taught without students first mastering phonological sensitivity skills (rhyme, segmenting syllables) •

Reach all Readers – Geiger, 2024   www.popey.ca   @popeybc   @POPEYBC   POPEY

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Reminder

"Phonemic awareness is the most potent predictor of success in learning to read"

It is more highly related to reading than tests of general intelligence, reading readiness, and listening comprehension."
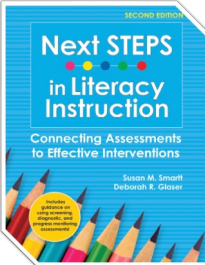
Stanovich, 1986, 1994   www.popey.ca   @popeybc   @POPEYBC   POPEY

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"Teaching phonemes along with letter names and letter formation supports students' development of phoneme awareness.

This **combined instruction is more effective** than teaching awareness solely through segmenting and blending auditorily." (p. 55)
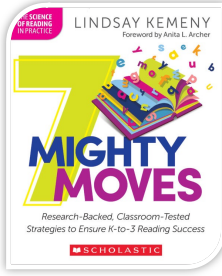
SECOND EDITION
Next STEPS
in Literacy Instruction
Connecting Assessments to Effective Interventions
Susan M. Smartt
Deborah R. Glaser
Includes guidance on using screening, diagnostic, and progress monitoring assessments

Smartt & Glaser, 2023   www.popey.ca   @popeybc   @POPEYBC   POPEY

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❁ Guiding Principles - How?

- Explicit, systematic, nothing to chance/discover
- Multiple opportunities throughout day – sprinkling
- Model & support
- Abundance of practice
- Brief (max 20 hours per year, or less than 30 minutes/week) (Tied to PHONICS)

LINDSAY KEMENY
Foreword by Anita L. Archer
SCIENCE OF READING IN PRACTICE

7 MIGHTY MOVES

Research-Backed, Classroom-Tested
Strategies to Ensure K-to-3 Reading Success

SCHOLASTIC

7 Mighty Moves – Kemeny, 2023   www.popey.ca   @popeybc   @POPEYBC   POPEY❁

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❁ Ideas for Instructional Strategies:

Use manipulatives to keep it playful
- Elkonin boxes + bingo chips
- Pop It fidget toys
- Race cars + tracks
- Unifix cubes

Encourage gestures
- Hand choppers
- Tap down arm
- Finger/thumb tap

Word Chains – build phonemic awareness and phonics skills at the same time

Phonological Awareness Playdough
Using Hand Signals to Teach Short Vowel Sounds   www.popey.ca   @popeybc   @POPEYBC   POPEY❁

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❁ Reminder…

Erhi et al. suggest that "phonemic awareness is not taught for its own sake but rather for its value in helping children understand and use the alphabetic system to read and write".

Further, that it ought not to be taught "blindly in isolation ad nauseam without any connection to reading and writing" (2001).

Erhi et al., 2021   www.popey.ca   @popeybc   @POPEYBC   POPEY❁

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Sources of Insight

- Screening:

Phoneme Segmentation Fluency (PSF) –
Kindergarten to early 1st grade
➢ Measures a student's ability to break a spoken
word into its individual phonemes.

First Sound Fluency (FSF) – Beginning of
Kindergarten
➢ Measures a student's ability to isolate and
pronounce the first sound in a spoken word.

- Spelling samples also provide insight into how
well students are segmenting phonemes in words

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Making Sense of Screening

Look at Comprehension
(subtests: MAZE Reading Comprehension, etc.)
Weak — Proficient
Continue to provide evidence-based, curriculum-aligned instruction

Look at Text-Level Rate
(subtests: ORF-Words Correct)
Weak — Proficient
Teach vocabulary, syntax, knowledge, & comprehension strategies

Look at Text-Level Accuracy
(subtests: ORF-Accuracy)
Weak — Proficient
Consider fluency instruction (repeated reading, etc) with lots of oral practice

Look at Decoding
(subtests: Nonsense Word Fluency, etc.)
Weak — Proficient
Teach multisyllabic decoding, providing lots of text-level reading

Look at Phonemic Awareness
(subtests: Letter Name Fluency, Phoneme Segmentation Fluency, etc.)
Weak — Proficient
Provide explicit, systematic instruction in phonics, decoding, and spelling

Teach phonemic awareness and phonics

A weakness in the area
of phoneme awareness
may exist for older
struggling readers, and
needs to be addressed.

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Readiness Skills

The two best predictors of early reading success are phonemic
awareness and a student's understanding of the alphabetic principle.

Alphabetic Principle

The understanding that there are systematic and
predictable relationships between sounds and letters.
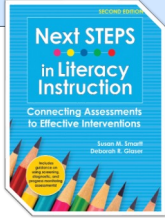
"these skills open the gate for reading." – Wiley Blevins

Reading Rockets: What is the Alphabetic Principle? www.popey.ca @popeybc @POPEYBC POPEY

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Phonics

"Phonics is the linchpin, embracing elements of print to represent oral language within a highly dependable, systematic structure."

— Smartt & Glaser, 2023, p. 83

Phonics refers to knowledge of letter sounds and the ability to apply that knowledge in decoding unfamiliar printed words.
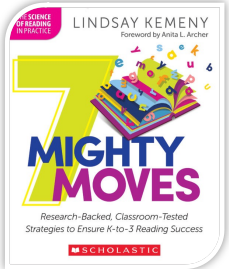
Smartt & Glaser, 2023   www.popey.ca   @popeybc   @POPEYBC   POPEY

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Phonics: Instruction

Keep in mind:
- Systematic: Move from simple to complex
  *** Following a scope and sequence
- Explicit: "Today I want to teach you..."
- Keep students engaged by:
  ➢ Inviting student responses
  ➢ Have students come to the board to find a word, highlight a phonics skill in a word

7 Mighty Moves – Kemeny, 2023   www.popey.ca   @popeybc   @POPEYBC   POPEY

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Phonics Instruction

HEAR IT
- phonemic awareness

TEACH IT
- name and teach new skill/sound

DECODE IT
- decode words with target skill

ENCODE IT
- spell words with target skill

READ IT
- read words, sentences and decodable passages

The last two steps should be approximately 50% of your lesson time. Blevins states "students progress at a much faster rate in phonics when the bulk of instructional time is spent on applying the skill to authentic reading and writing. experiences" (2017).

A Fresh Look at Phonics – Blevins, 2016   www.popey.ca   @popeybc   @POPEYBC   POPEY

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Ideas for Instructional Strategies:

- Understand "the code" yourself
- Consider using a Systematic and Explicit phonics program
- White boards will be your best friend!
- Keep lessons lively (Perky Pace), and stick to suggested times
- Don't forget to unpack word meaning
- Try multi sensory methods
- Use Elkonin (sound) boxes to support encoding

Elkonin Box Demonstration   www.popey.ca   @popeybc   @POPEYBC   POPEY

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A Phonics Centre Activity - Spin It

Wiley Blevins – Adding Encoding to Phonics Lessons, 2023   www.popey.ca   @popeybc   @POPEYBC   POPEY

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Living Words - Make a Word

"With the help from some awesome volunteers, we now have a set of "letter vests" in our classroom! The students wear these vests to make sight words (words that go on the word wall). They really enjoy "scrambling up" and asking another child to "unscramble" them to make the sight word correct again." (Mrs. Haxhiaj)

Kindergarten Corner   www.popey.ca   @popeybc   @POPEYBC   POPEY

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Word Chains

Teacher Language | Skill

(Begin with mat.) Change mat to sat. — encoding

Change the S to an F.
Now tell me what word you have? — decoding

Change fat to fit. — encoding

Change the F to an S. What word is that? — decoding

What letter do you need to change sit to lit? — encoding

Now add an S to the beginning of lit.
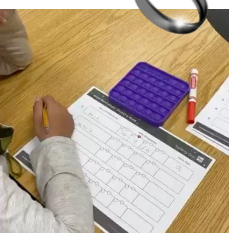What word do you get? — decoding

UFLI Foundations Manual   www.popey.ca   @popeybc   @POPEYBC   POPEY

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Sources of Insight

• **Screening:**
Letter Naming Fluency (LNF) – Kindergarten & 1st Grade
➢ Though not a direct phonics skill, it is a strong predictor of early reading success.

Nonsense Word Fluency (NWF) – Mid-K to 2nd Grade
➢ Assesses knowledge of letter–sound correspondences and blending skills.
Two scoring types:
    Correct Letter Sounds (CLS) and Whole Words Read (WWR)

Word Reading Fluency (WRF) – 1st to 3rd Grade
➢ Measures a student's ability to read real words accurately and fluently within one minute.
➢ Assesses automaticity in recognizing common phonics patterns.

• **Word mapping** reveals a child's phonics skills by assessing their ability to segment sounds, match them to letters, blend them into words, and spell accurately.

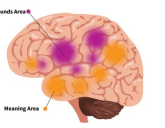www.popey.ca   @popeybc   @POPEYBC   POPEY

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How the Brain Learns Spoken Language

The Sounds Area
As babies hear a language, their brains track sound patterns and store the most common ones on the left side (Kuhl, 2011, 2015).

The Meaning Area
After coding sounds, babies start learning words. Their meanings are stored on the left side of the brain, near the sound area.

Listening
As we hear language, the left side of the brain processes sounds and meaning.

Evidence For a New Era of Reading Instruction   www.popey.ca   @popeybc   @POPEYBC   POPEY
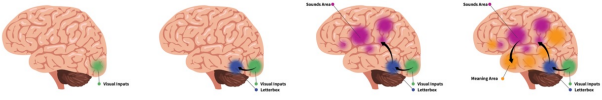
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Skilled Reading

Skilled readers use the same left-brain areas as listening does.

(Dehaene, 2013b)

Evidence For a New Era of Reading Instruction · www.popey.ca · @popeybc · @POPEYBC · POPEY

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The Reading Brain

Visual Input	Letterbox	Sounds Area	Meaning Area
Reading begins as a visual input.	When the brain sees a letter that represents a sound, the letter box is activated.	Next, the "sounds area" of the brain is activated.	Students then use their auditory mental dictionaries (lexicons) to recognize the meaning of the word, and the "meaning area" of the brain is activated.
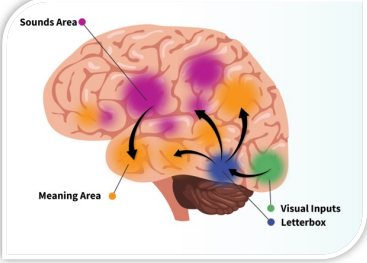
Evidence For a New Era of Reading Instruction · Dehaene, 2010, 2013a, 2013b · www.popey.ca · @popeybc · @POPEYBC · POPEY

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Fluent Reading: A Second Pathway Is Formed

With practice sounding out words, the brain develops a second pathway directly from the letterbox to the meaning area.

Fluent readers process sounds and meaning in parallel.

Evidence For a New Era of Reading Instruction · Dehaene, 2010, 2013a, 2013b, 2013c · www.popey.ca · @popeybc · @POPEYBC · POPEY

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The role of Orthographic Mapping - "Sight Words"

The process of storing a word permanently in memory for instant retrieval is called orthographic mapping.

Creating a sight word involves forming permanent connections between a word's letters, its pronunciation, and its meaning in memory.

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Word Mapping: Supporting the Cognitive Progress

Word mapping is a physical way to represent the relationship between the phonemes and graphemes.

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Decodable Text: A teaching tool to support Phonics Instruction

"Without aligned texts, readers are at risk of formulating the misguided hypothesis that reading is simply using pictures, and maybe a few letters, to infer the words. Worse yet, readers can begin to think that reading is just memorizing the text."

Shifting the Balance 6 Ways to Bring the Science of Reading into the Balanced Literacy Classroom- Page 141

Image Credit: Six Shifts Facebook Page

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Patterned, Leveled Text: Whole Word

Puppies get **into** lots of silly spots.
2 puppies are in the boots.

Puppies get **into** lots of silly spots.
3 puppies are in the flowers.

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Decodable Text: letter sound

Is the cap on a mat?
No! It is not on the mat.

Is Zac's cap on a can?
No! It is not on the can.

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Decodable Text

Grades 3 and up	LEVELED BOOKS* AND TOPIC LIBRARIES	
Grade 2		TRADE BOOK READ-ALOUDS
Grade 1	ACCOUNTABLE DECODABLE TEXT	
Grade K		

Important to remember that students need access to
a variety of texts for different instructional purposes

Choosing and Using Decodable Texts: Practical Tips and Strategies For
Enhancing Phonics Instruction – Blevins – 2021 www.popey.ca @popeybc @POPEYBC POPEY

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Why Teach Vocabulary?

- A rich vocabulary supports learning about the world, new ideas, and enjoying the beauty of language
- A rich vocabulary enhances what an individual wants to say and write

Vocabulary knowledge is strongly related to reading proficiency and tightly related to reading comprehension: primary, intermediate, high school and adults.

Bringing Words to Life – Beck, McKeown, Kucan   www.popey.ca   @popeybc   @POPEYBC   POPEY

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Active Processing Looks and Sounds Like…

Children are more likely to learn when they can actively engage with a word and its meaning, rather than passively receiving information from the teacher

- Discussing images related to a new word
- Discussing and exploring objects ie. a thermometer
- Using movement – demonstrating migration by walking from one side of the room to the other
- Thinking of real-life examples – a time when you felt exuberant
- Discussing multiple meanings of a word – season (your food), season (winter, spring)
- Thinking about/noticing meaningful parts of words (morphology) – tricycle, triangle, tripod
- Using new vocabulary in writing

A Teacher's Guide to Vocabulary Development Across the Day- Wright, 2021   www.popey.ca   @popeybc   @POPEYBC   POPEY

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How do we Learn New Words?

When we engage in conversation

What can this look like in the classroom?

- Regularly and intentionally using sophisticated language throughout the day for students of all ages
- The more interesting words we use around students the more words they will pick up and use themselves

A Teacher's Guide to Vocabulary Development Across the Day- Wright, 2021   www.popey.ca   @popeybc   @POPEYBC   POPEY
Sesame Street- Word on the Street – Amplify

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What it Means to Really Know a Word...

- I can share an informal explanation
- I can use a synonym or antonym
- I can give categorical information
- I can recognize nuances between similar words
- I can recognize word parts (morphological understanding)
- I can connect to personal experience
- I can recognize multiple meanings – bark/bark

A Teacher's Guide to Vocabulary Development Across the Day Wright, 2021   www.popey.ca   @popeybc   @POPEYBC   POPEY

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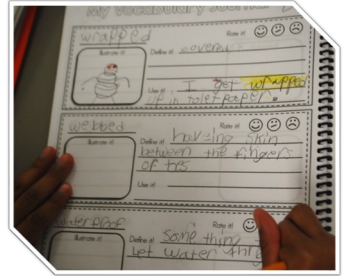
Effective Strategies: Frayer Model

What does it feel like:	The word in a sentence:
1. ice cube 2. snow 3. winter day	Brrr! It is getting cold.

c	o	l	d

Write three synonyms	Draw a picture of the word
1. freezing 2. chilly 3. icy	

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Practical Tips and Activities

- Word of the Day.
- Vocabulary Journals.
- Interactive games (e.g., vocabulary bingo, word associations).

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Creating a Word Rich Environment

- Labeling items in the classroom.

- Integrating new vocabulary into daily conversations.

- Encouraging curiosity about words.

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Read Aloud

There are more rare words found in children's picture books than in the average conversation between two college educated adults.

Hays and Ahrens (1988)

Hays and Ahrens (1988)   www.popey.ca   @popeybc   @POPEYBC   POPEY

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Into the Classroom...

To inspire
WORD STUDY

Engage with the Page   www.popey.ca   @popeybc   @POPEYBC   POPEY

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Into the classroom...

ReadWorks Article-A-Day™
Build knowledge, vocabulary, and stamina with a routine that students love.

Save of 6 to 8 articles that are related by topic

Nonfiction topics to build knowledge

For grades Kindergarten to 8th

Research-based classroom routine with writing & oral sharing

All you need is 10 minutes each day for the routine. Students will gain the most by reading **4 or more articles** from an Article-A-Day set each week and doing the routine for **15 or more weeks** in the school year. Article-A-Day can be done digitally, printed, or projected!

Plan an entire year with our K-8 Scope & Sequence: https://www.readworks.org/scope-and-sequence

Step 1: Set the purpose for the routine
- "Words are where humans store knowledge. So we will build our knowledge by reading these articles. We will also increase our vocabulary, improve our reading stamina, and enjoy reading every day."

Step 2: Students read or listen to an article
- If students cannot read independently, they can listen to the audio, or you can read the article aloud.

Step 3: The "Book of Knowledge"
- Students write or type two or three things that they learned from the article and would like to remember in their Books of Knowledge.
- If students cannot write yet, they can draw their responses.

Step 4: Share Knowledge!
- Ask a few students to share with the class what they learned from reading.
- Create a "Class Book of Knowledge where you record this information. You can do this in Assignments & Progress or on chart paper.

To inspire
CONTENT AREA
READING

Build Background
Knowledge
&
Vocabulary

ReadWorks Article-A-Day   www.popey.ca   @popeybc   @POPEYBC   POPEY

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Fluency

Fluency refers to the development of three components: accuracy, automaticity and prosody and provides the bridge between word recognition and comprehension
(Duke & Cartwright, 2021)

1. Accuracy refers to identifying or reading letter names/sounds and words correctly.

2. Automaticity can be considered in two levels:
   - word level (ability to read words quickly and effortlessly)

   - text level (ability to read connected text including sentences, passages and books quickly and effortlessly)

3. Prosody refers to a readers natural voice and expression

Accuracy · Fluency · Prosody · Automaticity

(Duke & Cartwright, 2021)   www.popey.ca   @popeybc   @POPEYBC   POPEY

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Building Fluency

Accuracy: we can build accuracy through decoding as part of explicit and systematic phonics instruction.

Automaticity: reading words with automaticity is a result of orthographic mapping (Ehri, 2014).

We can build word level automaticity through blending drills and Beat the Clock and other word reading activities including word mapping.

Text level automaticity is achieved through reading practice of connected text. Such practice can include repeated reading, choral reading and echo reading.

Prosody is built through teacher modeling of fluent reading during read alouds and can also develop through repeated reading and activities like readers theatre

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Ideas for instructional Strategies:

- Remember…fluency is not an isolated skill
  - subskills: phonemic awareness, sound–symbol knowledge, automaticity at letter or word level
- Small Group instruction affords specific, immediate feedback
- Model, model, model!!!
- Whole Group Reading including:
  - Read aloud, cloze reading, choral reading, echo reading
- Partner Reading
- Reader's Theatre
- Beat the Clock Timed Reading
- Repeated Reading – Fluency Triangles

Fluency   www.popey.ca   @popeybc   @POPEYBC   POPEY

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Sources of Insight

All Universal Screeners include fluency measures!

- **Bridges Decoding & Comprehension** – Frees mental energy for understanding.
- **Signals Foundational Skill Gaps** – Reveals phonics or vocabulary weaknesses.
- **Predicts Future Reading Success** – Strong fluency links to academic growth.
- **Quick & Reliable** – One–minute tests provide fast, accurate data.
- **Guides Instruction** – Helps target accuracy, speed, and expression.

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Skilled Comprehenders use these Strategies

The 6 Most Important Comprehension Strategies

- 01 Switch on What You Know
- 02 Map the Text
- 03 Keep a Close Eye on Comprehension
- 04 Dig Below the Surface
- 05 Fill in the Missing Pieces
- 06 Sum Up What You Know

TheSixShifts.com

We can explicitly model these comprehension skills and engage students in conversations that allow them to practice comprehension.

Six Shifts: Are You Teaching the Key Comprehension Strategies Students Really Need?   www.popey.ca   @popeybc   @POPEYBC   POPEY

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Reading Comprehension

"There is no comprehension strategy powerful enough to compensate for the fact that you can't read the words" (Archer, 2001)
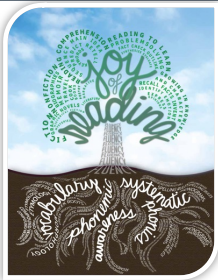
- Reading comprehension is complex and is not a single "skill" or set of strategies

- Instead, we can think of it as an *outcome*

Archer, 2001   www.popey.ca   @popeybc   @POPEYBC   POPEY

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THE Reading Tree

"We envision learning to read is like growing a tree.
The decoding skills of phonemic awareness and systematic phonics are akin to the roots supporting the part of the tree we see, comprehension and the joy of reading."

Logic of English, 2005   www.popey.ca   @popeybc   @POPEYBC   POPEY

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Sources

Books & Articles

- A Fresh Look at Phonics – Blevins, 2016
- 7 Mighty Moves – Kemeny, 2023
- A Teacher's Guide to Vocabulary Development Across the Day- Wright, 2021
- Bringing Words to Life – Beck, McKeown, Kucan
- Reach All Readers – Geiger, 2024
- Next Steps in Literacy Instruction – Smart & Glaser, 2024

Digital Resources

- The Six Shifts
- Engage with the Page
- Read Works: Article A Day
- Science of Reading Defining Guide
- Six Shifts: Are You Teaching the Key Comprehension Strategies Students Really Need

Digital Resources: cont'd

Stephanie Stollar Reading Science Academy
Maryanne Wolf
Reading Rockets: The Active View of Reading
Reading Rockets: Models of Reading
Beyond the Simple View of Reading
International Dyslexia Association Ontario
Shanahan on Literacy
How We Learn To Read – Harvard Medical School
Evidence For a New Era of Reading Instruction
Logic of English
Word of the Day
Thinking Routine: Word Sentence Phrase

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