Research on Reading in the 21st Century

- ***Research on Disciplinary Reading in a Digital World***, Donna E Alvermann, University of Georgia
- ***The Research We Need: Decodable Texts*****,** Elfrieda (Freddy) Hiebert, TextProject
- ***Research on Reading Comprehension*****,** P David Pearson, UC Berkeley
- ***Pragmatic Research on Reading Vocabulary Instruction*****,** James F Baumann, University of Missouri
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- ***Literacy Teacher Preparation: In Crisis or In Transformation?*** James V Hoffman, U. of Texas at Austin

Research on Disciplinary Reading
In a Digital World

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The Era of Content Area Reading (1925 – 2006)

Gray (1925), noted educator and advocate of reading, called for "every teacher to be a teacher of reading."

Herber (1970) modified that call somewhat by emphasizing the need for secondary content area teachers and teacher educators to use a research-based curricular model for teaching reading processes (skills and strategies) simultaneously with subject matter content.

Fast forward to the beginnings of Disciplinary Literacy (Moje, 2007) and Shanahan & Shanahan (2008) with its focus on how subject matter is structured differently in the core disciplines.

Disciplinary Literacy Research Lags Classroom Demand

"Not surprisingly, since disciplinary literacy is a relatively new thing for schools, there is a flood of questions about it. And, because the research is lagging classroom demand, there is **only a trickle** of research-based answers to provide." (Shanahan, 2017)

One of those few research-based answers is found in Gao and her colleagues' (2023) study of elementary PSTs understanding of the role of science-specific literacy strategies in supporting science teaching and learning.

Key Finding: Using a DL framework, elementary PSTs were able to show their students' engagement in scientific practices and learning that involved disciplinary core ideas.

Researching the Reading of Disciplinary Texts in a Time of Generative AI Tools (GAI)

A few researchers have asked questions about the impact of GAI tools (e.g., ChatGPT) on issues of authority and in matters of identity formation (e.g., see Anti-Defamation League surveys).

Other researchers (e.g., Nichols, LeBlanc & Garcia 2023) question the validity and usefulness of the phrase *digital literacy* for dealing with deepfakes and other forms of textual & visual disinformation.

Still other researchers (e.g., Currie & Kelly, 2022) have studied students reading texts that contain mis/disinformation originating in social practices enabled by control over the production and dissemination of media messaging.

Remixing of Synthetic Texts:
Implications for Researching Disciplinary Reading

Our research question: To what degree, if any, might digital remixing evoke feelings of connection with and through the creator (human) and the created (nonhuman remix)? (Beach, Alvermann, Loomis, Wright, & Price, 2023).

- **Readers of digitally remixed texts that travel/mingle with synthetic texts are at greater risk of encountering deepfakes in all core disciplines.**

- **Reseachers would do well to immerse themselves in theories of critical consciousness and postdigital humanizing.**

A Shift in What Disciplinary Reading Requires is Here

To Brad Robinson (2023), research on disciplinary reading in digital times. . .

- ***"seems to represent an important shift in what it means to read, one that raises key questions for reading education.***

- ***How, if at all, should reading education respond to a world where increasing amounts of web content that people consume consists of synthetic text?***

- ***How do we think about reading and intentionality in such a world? As well as reading as a communicative act?"***

  (personal communication 11/10/2023)

Selected References

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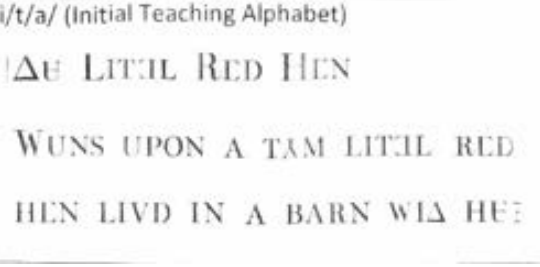
Elfrieda H. Hiebert

TextProject

The Research We Need: Decodable Texts

Approach	# of Programs	Prototype
Phonetic Approaches	64	Writing to Read  Action Phonics 
Linguistics-structured phonics approaches	12	Sullivan Reading 
Coded Symbol-sound	13	i/t/a/ (Initial Teaching Alphabet) 

Aukerman (1984) *Approaches to Beginning Reading*

Phonics Texts in the 1960s to 1980s

Juel and Roper/Schneider (1985) used 3 categories of word regularity (Venezky & Massaro, 1979)

(a) predictable, easy (e.g., words where all letters followed their major sound patterns such as CVC, VCe, CVVC, CV);
(b) predictable but hard (e.g., words with diphthongs such as "cow"; consonant digraphs *(th, sh)*;
(c) irregular, unpredictable (e.g., words that clearly violated generalizations

Texts from: Harris, T. et al. (1975). *Keys to Reading.* Economy.

Pug

I see Pug.
Mother, see Pug.
See Pug.
Pug! Pug!
See Pug run.
I see Pug.
Oh, oh, Pug!
Run, Pug.
Mother, see Pug run.
Run, Pug, run.
Oh, Pug!

Get Pug!

Ted, look!
See Pug.
Look at Pug.
Get Pug, Ted.
Come and let Pug ride.
Jan, see Pug.
I let Pug ride.
Jan, see Pug ride.
Look at Pug ride.
Come and ride, Pug.
I let you ride.
Ride, Pug, ride.
Jan, see Pug run!
Go and get Pug.
Jan, go and get Pug.

You can hop

I see you, Kim.
See me?
Kim, look at me hop.
You can hop.
I see you hop.
Father, I did not see you.
Come see me hop, Father.
And you come and hop.
Pug, let Gail hop.
I can hop.
You can not hop.
See me hop, Pug.
Look at Gail.
You did let Gail hop.
Oh, Pug!
I see you.
You can hop.

Lesson-to-Text-Match (LTTM) Model for Decodable Texts
(Texas Education Agency, 1997; California State Board of Education, 2000)

Lesson-to-Text Match (LTTM Stein et al., 1999). Unit of decodability is the letter-sound correspondence (LSC). If a lesson in teacher's guide has been provided on all LSCs within a word, it is decodable. [Words can also be taught as sight words and included in the "decodable" metric.]

Texts from: Wolf, M. (2011). RAVE-O. Cambium.

a, t, g, p, h, m, s, j, b

the, his, and, in, is, a, sees, cap, happy

Tag the ham

Pam has 3 hams.

Pam has 3 tags.

Pam tags the hams.

Sam sees his tag and his ham.

Sam jams his ham in a bag.

Sam taps his cap.
Sam is happy.

+i, f, c

+this, in, on, do, not

The bat

This is a bat. This is a fat bat.

See the fat bat in the cap?

See the tag on the cap?

This is Sam.

Do not pat a bat, Sam!

+z

+she, Matt

At bat

Bat it, Pam!

Pam bats it.

She tags the bag.

Tap it, Sam!

Sam taps it.

Matt tags Sam.

Zap it, Pat!

Pat taps his cap.

Pat zaps it!

Efficacy of Decodable Texts: Cheatham and Allor (2012)

A review of decodable text efficacy identified 2 studies of substantial duration in which texts with varying degrees of decodability were compared and curriculum & instruction were the same.

Juel & Roper/Schneider (1985)

- Phonics & Basal texts
- Decodability on 3-point scale

	Period 1	Period 2	Period 3
Phonics	1.2	2.0	2.0
Basal	1.8	1.8	2.0

- Students differed in word recognition strategies but not in reading performance on a standardized reading assessment.

Jenkins et al. (2004)

- More and less decodable texts based on LTTM

	Period 1	Period 2	Period 3
More decodable	86	72	80
Less decodable	11	40	69

- Both groups performed significantly better than controls on reading outcomes, including decoding and comprehension, but no significant effects were found between more or less decodable text groups.

Cheatham & Allor's conclusion: "Collectively, the results indicate that decodability is a critical characteristic of early reading text as it increases the likelihood that students will use a decoding strategy and results in immediate benefits, particularly with regard to accuracy. The studies point to the need for multiple-criteria text with decodability being one key characteristic in ensuring that students develop the alphabetic principle that is necessary for successful reading, rather than text developed based on the single criterion of decodability." (p. 2273)

Efficacy of decodable texts and non-decodable texts: Pugh, Kearns, & Hiebert (2023)

Study used effect size data from three recently published meta-analyses of the effects of reading interventions on reading achievement of students with reading difficulty in kindergarten through third grade.

- Effect sizes for interventions with:
  - Decodable texts: .50
  - Non-decodable texts: .49
  - No text: .41
  - Decodable & non-decodable texts: .66

The Research We Need: Decodable Texts

- *Looking for answers from the science of reading: 12 Questions* (https//textproject.org/twelve-questions/

Illustrations of Pressing Questions:

1. What evidence is there for the "if taught, then learned"? Specifically, how does the pace of introducing LSCs correspond to the learning trajectories of the children who learn to read in school?

2. LTTM model is based on LSCs within words and connection to lessons as the basis for decodability. Neither the number of different words in which LSCs appear nor repetition of words is a consideration in calculation of decodability. What evidence validates low levels of repetition of words?

Text Feature	Economy's Keys to Reading (1972)	Open Court (2000)
Unique Words per 100 (#)	4	15
Single-appearing words (%)	8	34

(Hiebert, 2023)

3. In initial texts, students see little variation in LSC patterns. Number of letters in words in RAVE-O example: X = 3.1; SD = .88. Does a steady treatment of little variation in word length and in LSCs (e.g., only words with short a) serve as a support or hindrance to word recognition?

Revisiting Reading Comprehension: The Importance of Definitions

P David Pearson

UC Berkeley, Emeritus

Recent experiences have conspired to alter my views of reading comprehension…

- Reviewing the portfolio of the Reading for Understanding Initiative
- Revisiting pieces with Nell Duke for a new version: *The Science of Reading Comprehension*
- Revising and reflecting on the *NAEP Reading Framework*
- Developing two new pieces with Gina Cervetti in 2023:
  - *Reading comprehension in troubled times*
  - *Disciplinary reading, action, and social change*
- Rekindling my work with Rob Tierney:
  - *Waves of literacy book*
  - *Fact-checking the Science of Reading*
    - *Coming to terms with sociocultural and critical perspectives*
- Living in 21st Century America over the last 20, especially the last 7, years

Link to source materials

Link to Rob/David Webinar at Rutgers

Advice I wish I had had the insight to give myself when I was beginning my career

- Definitions, whether explicit or implicit, matter, they shape
  - What we examine and what we omit
  - How we think about pedagogy, assessment, and policy
- Be wary of hierarchies, sequences, and well-structured protocols
  - First things First
    - Wishing won't make it so.
  - Who knows: More ambitious tasks might entail and bring along less ambitious ones.
  - Scaffolding may be our ace in the hole
- Purpose and Setting are much more important than I had ever imagined.
- There are many real worlds that need saving.
- Everyone must be able to see themselves in world and a society worth living in.

Settled Claim from scientists whose work has shaped SoR: Reading is identifying and understanding printed words in one's spoken language:

From Rayner, Foorman, Perfetti, Pesetsky, & Seidenberg, 2000: How psychological science informs the teaching of reading. In *Psychological Science in the Public Interest*

In focusing on reading's distinguishing features, we define learning to read as the acquisition of knowledge that results in the child being able **to identify and understand printed words** that he or she knows on the basis of spoken language.

Put in other terms, learning to read is learning how to use the conventional forms of printed language ***to obtain meaning from WORDS***.

From Pat Alexander's 2020 RRQ Piece

The reality is that reading does not begin or end with phonics or whole-word instruction (Seidenberg, 2013). **It is far broader and more complex.** Reading, broadly conceived, is any **interaction** between a **person**—be it a child, adolescent, or adult—and written language (Pearson & Cervetti, 2013). That interaction can involve written language at many levels, from **words** and sentences, to paragraphs, to entire volumes (Shanahan, 2019). Also, **reading can be performed for many reasons, from purely personal to largely academic, and in many contexts, both in and out of school, as well as online or in print** (Ito et al., 2013; Singer & Alexander, 2017).

2026 NAEP Definition of Reading

Adopted by the Governing Board

Reading comprehension is **making meaning** with **text**, a complex process shaped by many factors, including readers' abilities to:

- Engage with **text in print** and **multimodal forms**;
- Employ **personal resources** that include **foundational reading skills**, **language**, **knowledge**, and **motivations**; and
- **Extract**, **construct, integrate, critique, and apply** meaning in **activities across a range of social and cultural contexts**

Where are elements like language, knowledge, motivation and context in the Rayner et al definition?

To see the value of the narrower definition, it is useful to make a distinction between literacy and reading**. Literacy dispositions toward learning includes a variety of educational outcomes— interests in reading and writing, and knowledge of subject-matter domains—that go beyond reading**. These dimensions of literacy entail the achievement of a broad range of skills embedded in **cultural and technological contexts**. An extended functional definition is useful in helping to make clear the wide range of literacy tasks a society might present to its members.

…

However, the starting point for literacy is **reading skill**.

…

Our focus is on this **necessary foundation**.

So what's the point?

- You can define sentence and text comprehension, motivation, most of language and knowledge out of reading,
- BUT you still have to incorporate them into your educational programs somewhere
  - They account for the quality, robustness, relevance, and engagingness of a reading program.
  - They are the soul of reading
  - Why would we want to cede them to other disciplines?

A Definition I love even more than the one adopted by the NAEP Governing Board

- **A more evidence-based version of the claim*:**
- Reading is making meaning with text, a complex cognitive process shaped by the many **social and cultural** influences inherent in reading. To comprehend what they read, readers:
  - **Engage** with **text** in print and multimodal forms
  - **Employ personal resources** that include foundational reading skills, language, knowledge, motivations, and cognitive processes; and
  - **Extract, construct, integrate, critique, and apply** meaning in order to **achieve** various **purposes** in a **range of contexts**

*From a Draft of the 2026 NAEP Framework

Change in Point of View

- What I used to believe
  - Enabling skills, like decoding accuracy and fluency, are only a means to an end
  - They deserve our time, energy, and respect only to the degree that they enable the real goal of reading: reading for understanding (i.e., comprehension)
- What I now believe
  - Comprehension, like phonics, is only an enabling practice
  - It deserves our time, energy, and respect only to the degree that it enables the real goal of reading:
    - some consequential action in pursuit of a more equitable and just world.
  - The job of comprehension isn't done until we have understood, critiqued, and changed the world

So what does all this mean? Activities to promote comprehension must be purposive and situated?

- Purposive
  - Solve a problem
  - Complete a project
  - Right a wrong
    - Within the text
    - Within the world
- Situated
  - In the “real” world
  - In the “real” world of the school
  - In simulated “real” worlds
  - In a real synthetic world (after reading Donna’s slides).

Selecting Pragmatic, Question-Guided Methodologies for Conducting Research on Reading Vocabulary

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Presentation in the "Research on Reading in the 21st Century" Session at the Literacy Research Association Conference, December 2023, Atlanta

Good research is a matter not of finding the one best method but of carefully framing that question most important to the investigator and the field and then identifying a disciplined way in which to inquire into it that will enlighten both the scholar and his or her community. (Shulman, 1997, p. 4)

PURPOSE & RATIONALE

- To present an array of methodologically diverse approaches for engaging in research on vocabulary (or other reading abilities)
- Grounded in pragmatism
- Guided by the underlying research questions

Pragmatism

- American philosophical tradition inspired by James, Pierce, Dewey
- “Refers to the usefulness, workability, and practicality of ideas, policies, and proposals as criteria of their merit” (Thayer, 2006)
- “Pragmatism is not a paradigm adapted from those that are currently popular; rather, it is a revolutionary break in our thinking and practice relating to inquiry” (Dillon, O’Brien, Heilman, 2013).
- As applied to research methodologies, pragmatism begs for the selection of approaches that align with an investigator’s purpose, goal, and guiding question, rather than methodologies that align rigidly with a specific research tradition, political or social stance, or a researcher’s preference or level of comfort.

Questions Methodology

- "We must avoid becoming educational researchers slavishly committed to a particular method." (Shulman, 1997)
- "We must first understand our problem and decide what questions we are asking, and then we must select the mode of disciplined inquiry most appropriate to those questions." (Shulman, 1997)
- When researchers allow their curiosity, their hunches, their hypotheses—that is, their research questions—to determine their methodologically choices, all methodological choices become pragmatic manifestations.

Employing a Pragmatic, Question-Initiated Approach for Selecting Methodologies

- **Broad Research Focus**: Three-field methodology continuum: Descriptive-Interpretive Comparative Efficacy (Ragan & Amaroso, 2011)
- **Research Question**: Researcher's hunches, musings, and ultimately, specific questions about about vocabulary
- **Methodology** : Question-aligned methodological type or family
- **Study Example**: Published studies that reflect the broad focus and research questions, and which exemplify the specific methodology
- **Methodology Resource:** Chapter/book focusing on the specific methodology

BROAD FOCUS	RESEARCH QUESTION	METHODOLOGY	STUDY EXAMPLE	METHODOLOGY RESOURCE
Descriptive ↑				
Comparative ↓				
Efficacy				

DESCRIPTIVE	Historiography, Literature Review, Phenomenology, Qualitative Case Study, Ethnography, Narrative Inquiry, Grounded Theory, Discourse Analysis, Verbal Protocol Analysis, Content Analysis, Teacher Research
COMPARATIVE	Correlational Designs, Formative/Design Studies, Mixed-Methodology, Survey Study, Comparative Case Study, Comparative Content Analysis, Cross Cultural/National Studies,
EFFICACY	Single-Subject Study, Single-Case Intervention, Mixed-Methodology, Formative/Design Experiments, Quasi-Experimental Designs, True Experimental Designs, Randomized Trials, Regression Discontinuity, Meta-Analysis

EFFICACY STUDY ILLUSTRATION

RESEARCH QUESTION	METHODOLOGY	STUDY EXAMPLE
What are the effects of instruction in teaching linguistic word cues (morphemic and contextual analysis) on readers' vocabulary learning and text comprehension?	Quasi-Experiment	Baumann, Carr, Font, Tereshinski, Kame'enui, & Olejnik. (2002). Teaching morphemic and contextual analysis to fifth-grade students. *Reading Research Quarterly*.

- Four intact classes of fifth-graders were assigned randomly to a morphemic-only (MO), context-only (CO), or combined morphemic-context (MC) experimental group, or to a comparable instructed control (IC) group.
- All groups were provided twelve 50-minute lessons. Students in the three experimental groups were taught morphemic and/or contextual analysis strategies; students in the instructed control read and responded to a children's trade book.
- Student as the unit of analysis; pretests as covariates.
- Intervention group students outperformed ICs on morphemic and contextual analysis on lesson words and transfer words; no evidence of enhanced comprehension.
- Complementary descriptive data from student interviews supported the quantitative findings.

A PROGRESSION OF QUESTIONS AND METHODOLOGIES

RESEARCH QUESTION	METHODOLOGY	STUDY EXAMPLE
Effects of instruction word-learning strategies (WLS)?	Quasi-Experiment	Baumann Carr, Font, Tereshinski, Kame'enui, & Olejnik. (2002), *Reading Research Quarterly*
Effects of instruction in WLS in social studies curriculum?	Mixed-Methodology, (quantitative/ qualitative)	Baumann, Edwards, Boland, Olejnik, & Kame'enui. (2003). Vocabulary tricks. *American Educational Research Journal.*
Impact of a year-long, four-component vocabulary program on 5th grade students reading and writing?	Formative Experiment	Baumann, Ware, & Edwards. (2007). A formative experiment on vocabulary instruction. *The Reading Teacher*
Nature of the multi-faceted, comprehensive vocabulary instruction program (MCVIP) on 4th/5th graders' vocabulary learning and their teachers' ability to	Design Experiment	Baumann, Blachowicz, Bates, Cieply, Manyak, Peterson, Davis, Arner, J., Graves (2013). The development of a comprehensive vocabulary instruction program for nine- to eleven-year-old children using a design

OTHER EXAMPLES: VOCABULARY RESEARCH QUESTIONS METHODOLOGY

RESEARCH QUESTION	METHOD	STUDY
Does vocabulary instruction enhance reading comprehension?	Meta-analysis	Stahl & Fairbanks. (1986). The effects of vocabulary instruction: *Review of Educational Research.*
Nature of vocabulary instruction upper-elementary classrooms?	Observational inquiry	Scott, Jamieson-Noel, & Asselin. (2003). Vocabulary instruction throughout the day in 23 Canadian upper-elementary classrooms. *Elementary School Journal.*
What do reading teachers say about vocabulary Instruction?	Survey	Berne & Blachowicz. (2008). What Reading Teachers Say About Vocabulary Instruction: Voices From the Classroom. *The Reading Teacher*
To what extent does educational media for preschoolers focus on vocabulary development?	Content analysis	Danielson, Wong, & Neuman. (2019). Vocabulary in Educational Media for Preschoolers: A Content Analysis. *Journal of Children and Media*
What types of instruction support vocabulary growth in young adolescent?	Literature review	Ford-Connors & Paratore. (2015). Vocabulary Instruction in Fifth Grade and Beyond: *Review of Educational Research*.
What is the relationship between early reading and later reading	Correlational analysis	Cunningham & Stanovich. (1997). Early reading acquisition and its relation to reading experience and

Teaching Readers (Not Reading): Examining the Sciences of Reading

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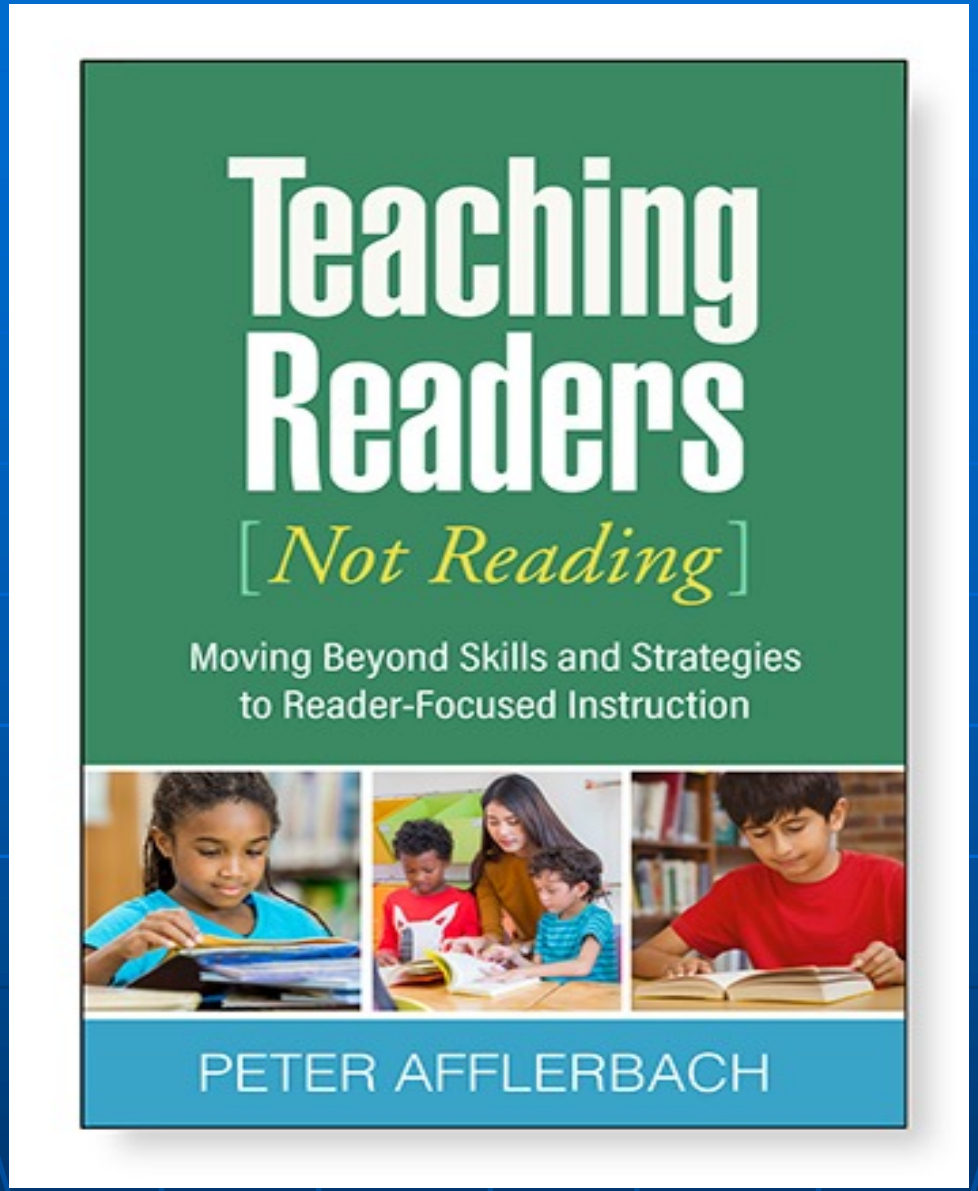
December 1, 2023



Guilford Press, 2022

Teaching *Reading*

Focus: Cognitive strategies and skills

Evidentiary base: National Reading Panel Report, The "Big 5" of NCLB, Research on the "science of reading"

Learning outcomes: Strategy and skill development; Understanding text

Teaching *Readers*

Focus: Cognitive strategies and skills, metacognition, motivation and engagement, and self-efficacy

Evidentiary base: Research on the "sciences of reading"

Learning outcomes: Strategic and skillful readers; Independent readers, Motivated readers, Readers with strong belief in self, Understanding text, Learning with text

Related notes and questions

The Report of the National Reading Panel (2000) focused on research that is now at least a quarter-century old.

The NRP did not investigate or address metacognition. The NRP did not include research on motivation and engagement or self-efficacy.

Isn't a vibrant science a science that is continually evolving and providing new understandings?

What have we learned about students' reading development and reading achievement in the last 25 years?

The Sciences of Reading

Metacognition: The Research

Metacognition has positive influence on reading comprehension (Paris, 1986)

"...is knowledge about cognition, awareness of one's own thinking processes, comprehension of requirements for learning, control of learning processes, and regulation of cognitive procedures"
(Borkowski & Turner, 1990)

Metacognitive students understand the relationship between their effort and reading outcomes, and this contributes to increased motivation and engagement
(Guthrie & Wigfield, 2020)

Motivation and Engagement: The Research

Reading engagement is the joint functioning
of motivational processes and cognitive strategies
during reading (Guthrie, 2020)

To master reading skills and strategies children
must commit time and effort to learn them; thus, students
must be motivated to learn and then utilize them fully
(Wigfield, 2000)

The negative effects of socioeconomic disadvantage
can be “pushed back” in schools and classrooms
where students have access to a rich print environment
and become actively engaged with literacy
(Cummins, 2015)

Self-efficacy: The Research

Students with high self-efficacy exhibit:

Increased motivation to read
(Wigfield, et al., 2019)

Enhanced self-regulation for reading
(Pajares, 1996)

Understanding of the benefits of reading (Bandura, 1993)

Students with low self-efficacy operate
in the opposite direction.

Self-efficacy

Among the mechanisms of human agency, none is more central or pervasive than belief of personal efficacy. *Unless people believe they can produce desired effects by their actions, they have little incentive to act, or to persevere in the face of difficulties.* Whatever other factors serve as guides and motivators, they are rooted in the core belief that one has the power to effect changes by one's actions (Bandura, 2006).

To recap...

Research demonstrates that metacognition, motivation and engagement and self-efficacy exert powerful influences on students' reading development and reading achievement.

This research represents the sciences of reading, sciences that have important implications for how we conceptualize reading, students and teaching.

These influences are interactive and interdependent.

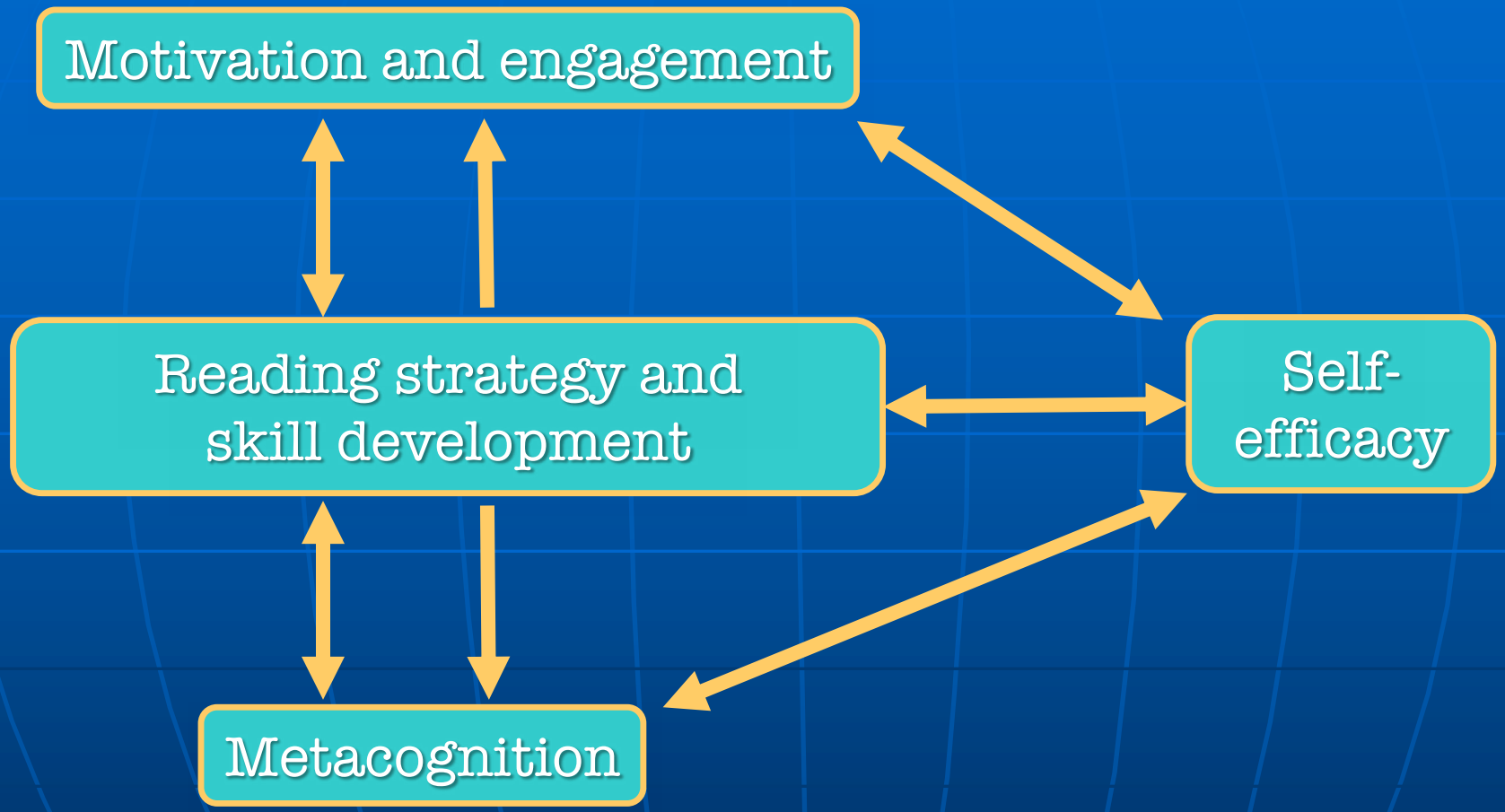
Borrowing the Matthew effect

Stanovich found a reciprocal relationship between vocabulary knowledge and reading comprehension that resulted in the exponential growth of some students' reading achievement.

Might we substitute motivation and engagement, self-efficacy, and metacognition in the above statement to determine influences, and reciprocal relationships?

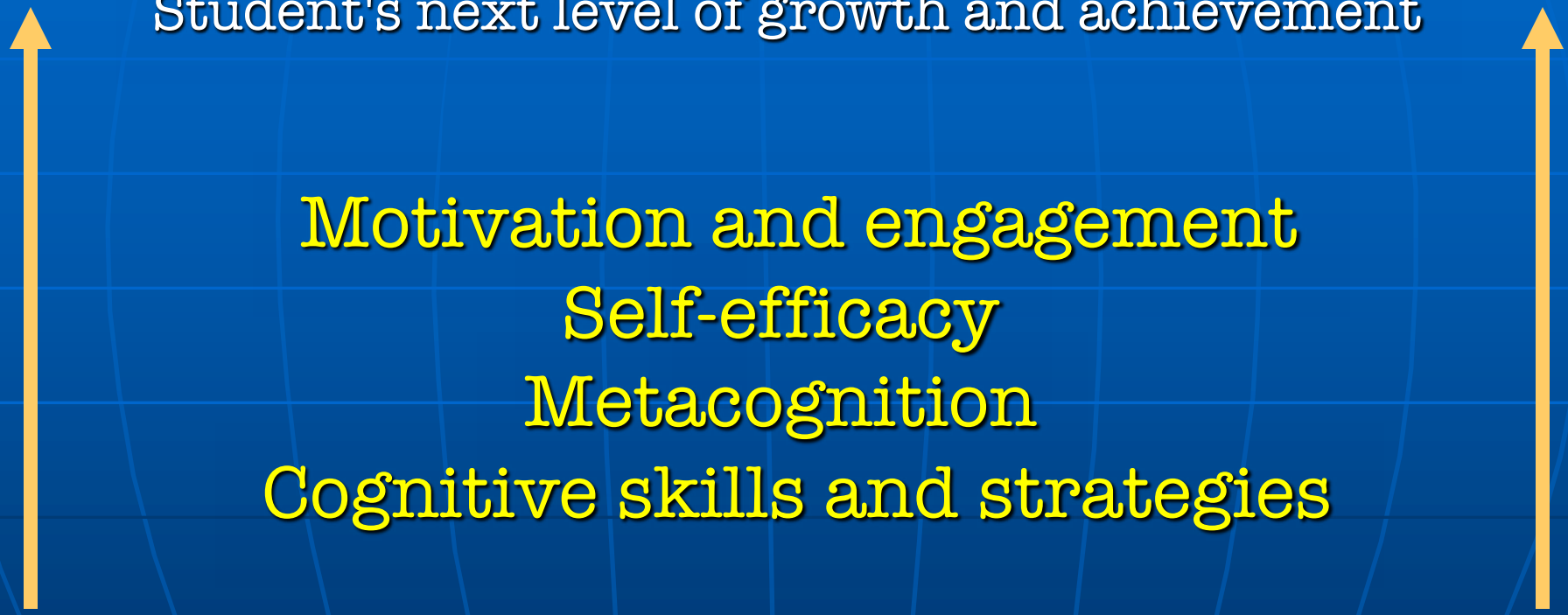
The Matthew effect as an appropriate metaphor used to examine student development in addition to--and in relation to--cognitive skill and strategy.

Students' Reading Development and the Matthew effect: Interactions of Critical Factors



Sciences of reading, zones of proximal development, and effective instruction

Student's next level of growth and achievement



Motivation and engagement
Self-efficacy
Metacognition
Cognitive skills and strategies

Student's current level of growth and achievement

Does instruction reflect a balance of the diverse factors involved in learning to read and being a successful student reader?

Sciences of Reading	Science of Reading
Motivation and engagement	Phonemic awareness
Self-efficacy	Phonics
Metacognition	Fluency
Strategies and skills	Vocabulary
	Comprehension

Next steps:

Research

Instruction

Outcomes/Assessments

Conclusions

While cognitive skill and strategy are required for reading development and success, they do not account for all that must be "working" for students to succeed.

Teaching readers allows us to draw from the broad sciences of reading, moving beyond strategy and skill instruction to focus also on the influential factors of metacognition, motivation and engagement, and self-efficacy.

Thank you!

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Caregivers Reading with Children in the Digital Age

Dr. Patricia Edwards
University Distinguished Professor
Michigan State University

Benefits of Printed Books

- Significant relationship between early book reading interactions and later oral language and literacy outcomes (e.g., Dickinson & Smith, 1994)
- Read alouds of printed books increases children's print awareness, supports phonological awareness, and helps build vocabulary (e.g., Dickinson & Tabors, 2001)
- Printed books can teach children about the world (i.e., background knowledge), which in turn, supports reading comprehension (e.g., Gonzalez et al., 2010)

Benefits of Printed Books

- "Early readers" (children who start school knowing how to read) almost always have caregivers and/or older siblings who read to them frequently (e.g., Teale, 1978)
- Children who learn to read early in school also tend to have caregivers and/or older siblings who read to them at home (e.g., Durkin, 1978)
- Children who learn to read early tend to develop larger vocabularies and are more likely to succeed in school (e.g., Perfetti & Stafura, 2014)

Digital Book Reading

- Parent-child book reading is still recommended as the single most important thing adults can do to promote young children's early literacy development
- Yet interactive read-alouds in young children's homes is evolving (Rideout & Robb, 2020):
  - 60% of families with children ages 0-8 engage in read-alouds on a digital device at least once per day
  - 98% of families own either a smartphone or tablet

Digital Book Characteristics

- Digital books contain multimodal information such as text, illustrations, automatic animations, and “hotspots” that are activated by touching the screen
- Many interactive features are designed for entertainment, but certain features, like a dictionary with word definitions, can provide useful support while reading
- Digital books are not the same as e-books, which are typically printed books translated into a digital format, without any interactivity or design elements

Digital Book Reading: Current Research

- Digital stories might better engage children's interest as compared to printed books (e.g., Richter & Courage, 2017; Kucirkova et al., 2022)
- Children initiate more story-related questions and comments while reading digital stories (e.g., Korat & Shneor, 2019; Munzer, 2019)
- Interactive features aligned with the narrative might help support caregivers to talk about more story-related content (e.g., Bruner, 2022; Troseth, 2020)

Digital Book Reading: Current Research

- Digital stories contain a similar number of new vocabulary words as printed books (e.g., Bruner, 2022)
- Digital stories with interactive features that help explain word meanings support children's vocabulary development (e.g., Bus et al., 2021; Christ et al., 2019)
- Digital stories with interactive features aligned with the narrative help support children's reading comprehension (e.g., Bus et al., 2021; Christ et al., 2019)

Digital Book Reading: Future Directions

More research is needed on the following topics:

- whether and how digital stories might support print awareness, phonological awareness, and children's fluency development
- whether and how children's ages might affect their engagement with digital stories (e.g., preschool vs. elementary)
- whether and how children's ages might affect what they learn from digital stories (e.g., reading comprehension)

Digital Book Reading: Future Directions

More research is needed on the following topics:

- the types of digital enhancements that best support children's reading comprehension and vocabulary outcomes
- whether and how informational digital stories (non-fiction texts) might support children's content area learning
- whether and how different types of digital enhancements influence caregivers' conversations with children during read alouds

Politics and Policies of Reading

Patrick W. Shannon
Penn State University, Emeritus

Pat is unable to be present today due to a medical situation. He sends his regrets and best wishes to all in attendance.

LITERACY TEACHER PREPARATION: IN CRISIS? OR IN TRANSFORMATION?

JAMES V. HOFFMAN

UNIVERSITY OF NORTH TEXAS

UNIVERSITY OF TEXAS AT AUSTIN

THOSE WHO CAN . . .

ACCORDING TO NCTQ LITERACY TEACHER EDUCATORS AND LITERACY TEACHER PREPARATION PROGRAMS ARE FAILING

- Only 28% of programs adequately address all five core components of reading instruction.
- Another 22% of programs do not adequately address any of the five components sufficiently.

ACCORDING TO NCTQ LITERACY TEACHER EDUCATORS ARE LITERACY TEACHER PREPARATION PROGRAMS ARE FAILING

- Nearly 40% of programs are still teaching multiple practices contrary to the research that can impede student learning.

POINTS OFF FOR ATTENTION TO OR EVEN MENTION OF:

- Cueing systems
- Embedded/implicit phonics
- Running records
- Miscue analysis
- Reader's Workshop
- Balanced Literacy
- Informal Reading Inventories (DRA, QRI, etc)
- Leveled Texts
- Books or articles by the Goodmans, Marie Clay, Lucy Calkins, Pinnell and Fountas, and more: . . . . .
- . . . And for sure no CRT or any children's literature that engages with topics of diversity, inclusion, and equity.

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WHO CARES WHAT NCTQ REPORTS?

- Our University Department Chairs
- Our University Provosts
- Our University Presidents
- Our University Boards of Regents
- Our Legislators

“BAD SCIENCE” (BEN GOLDACRE)

- “You cannot reason people out of position that they didn’t reason themselves into.”

HERB SIMON "SCIENCES OF THE ARTIFICIAL"

- What is vs. What "could be"

WE HAVE CHOICES

"We can become Shapeshifters or Changemakers"