



FLORIDA CENTER *for*
READING RESEARCH

Writing Into Literacy: Leveraging Writing in the Early Years to Promote Reading

Sonia Q. Cabell, PhD

Associate Professor

Florida Center for Reading Research

Florida State University

AIM Institute for Learning & Research Symposium

March 11, 2024



Acknowledgements

- Tricia Zucker
- Stephanie Copp
- Hope Gerde
- Laura Justice
- Shayne Piasta
- Ryan Bowles
- Lori Skibbe
- Clariebelle Gabas
- Jenny Passalacqua
- Debbie Slik
- CJ Espittia
- Jenny Root
- Laura Tortorelli
- HyeJin Hwang

My research discussed in this presentation was supported in part by funding from
Institute of Education Sciences and Florida State University



Take-Away

Engaging young children in early writing activities can provide an opportunity to support early skills that relate to both word recognition and language comprehension. This can happen through scaffolded teacher-child conversational interactions.



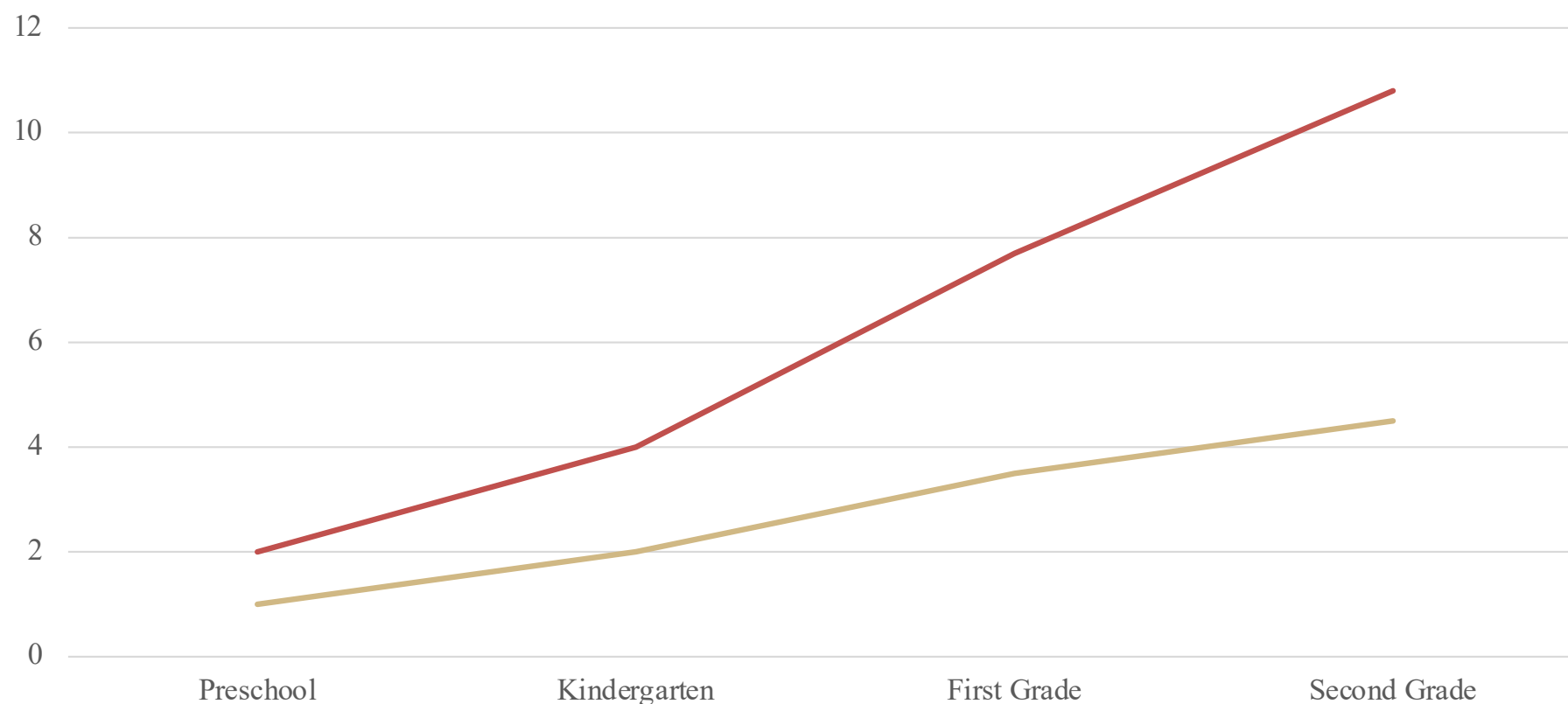
Key Point #1

Early language and literacy skills developed during the birth-5 period are vital for laying a foundation for later reading ability.

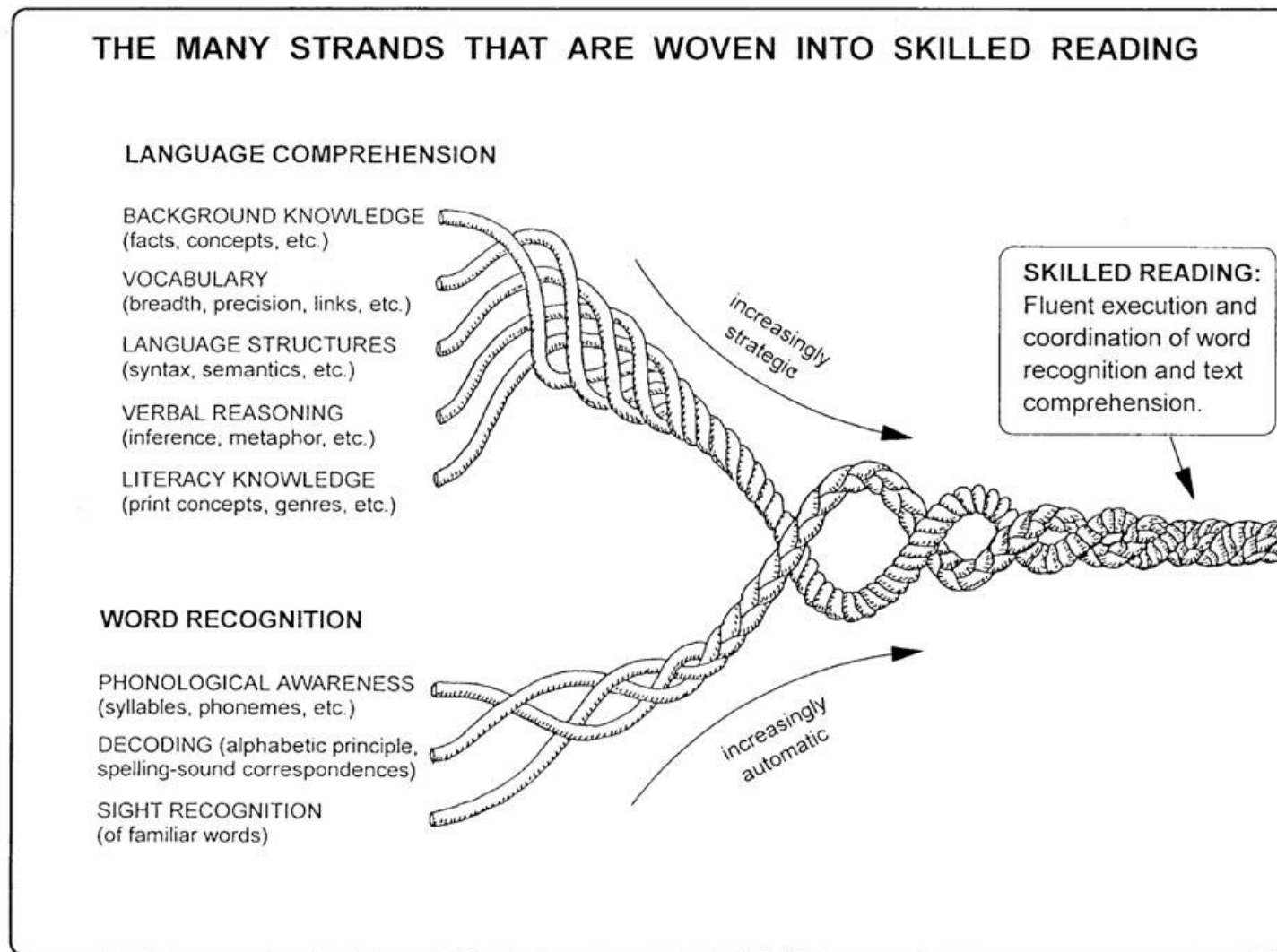




Early Literacy and the Prevention of Later Reading Difficulties



Stanovich (1986)



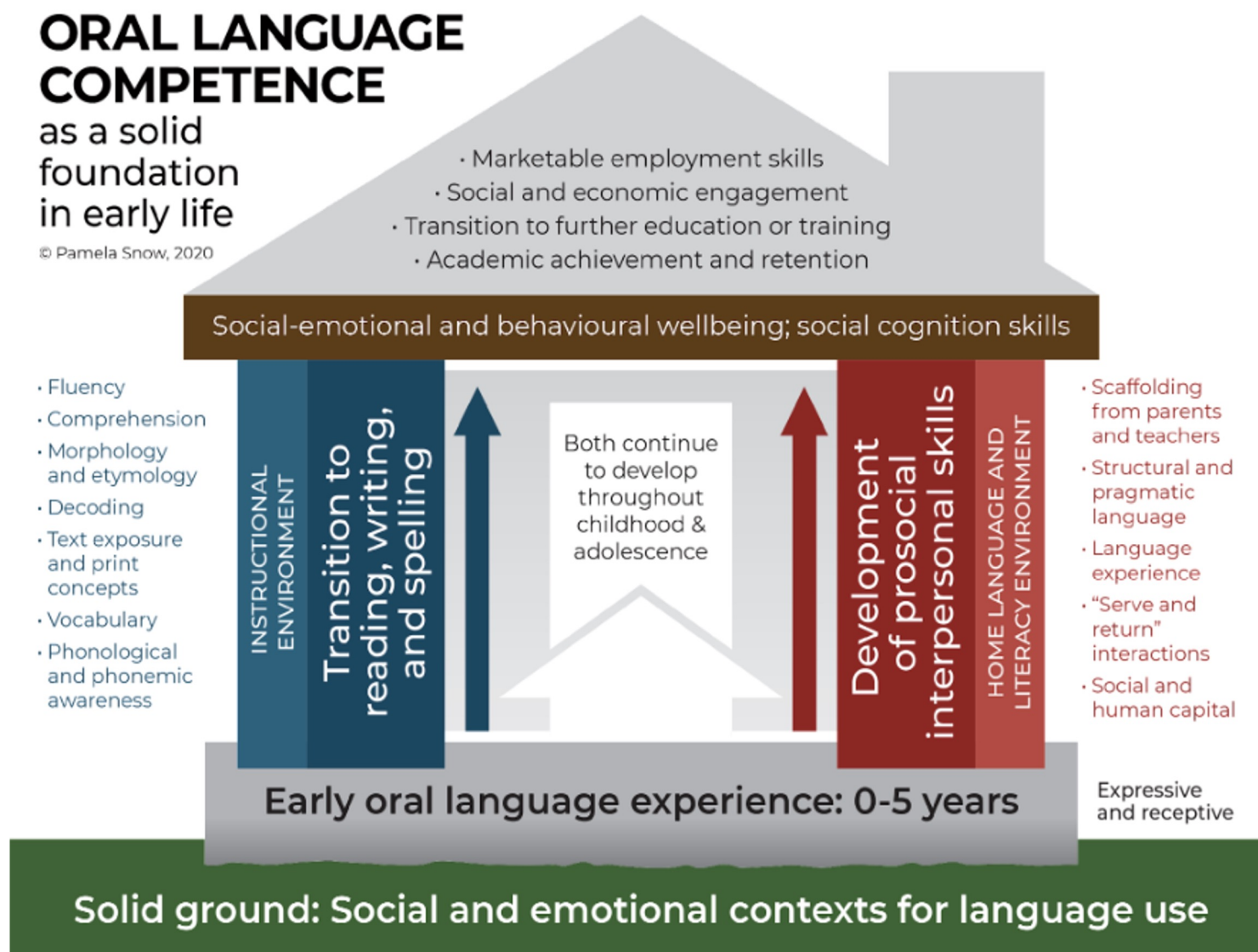
Scarborough, H.S. (2001). Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice. In S.B. Neuman & D.K. Dickinson (Eds.), *Handbook of Early Literacy Research* (pp. 97-110). New York: Guilford Press.



ORAL LANGUAGE COMPETENCE

as a solid foundation in early life

© Pamela Snow, 2020



Snow, P. (2020). *Updating the language (and literacy) house*. The Snow Report.
<https://pamelasnow.blogspot.com/2020/01/updating-language-and-literacy-house.html>

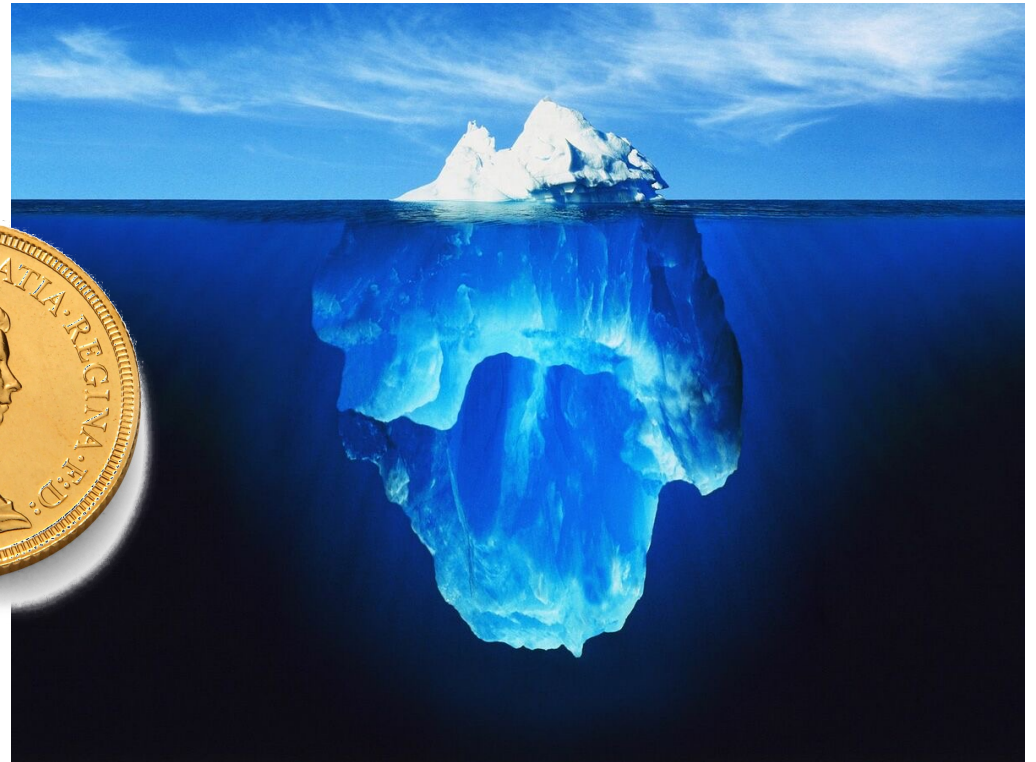


Key Point #2

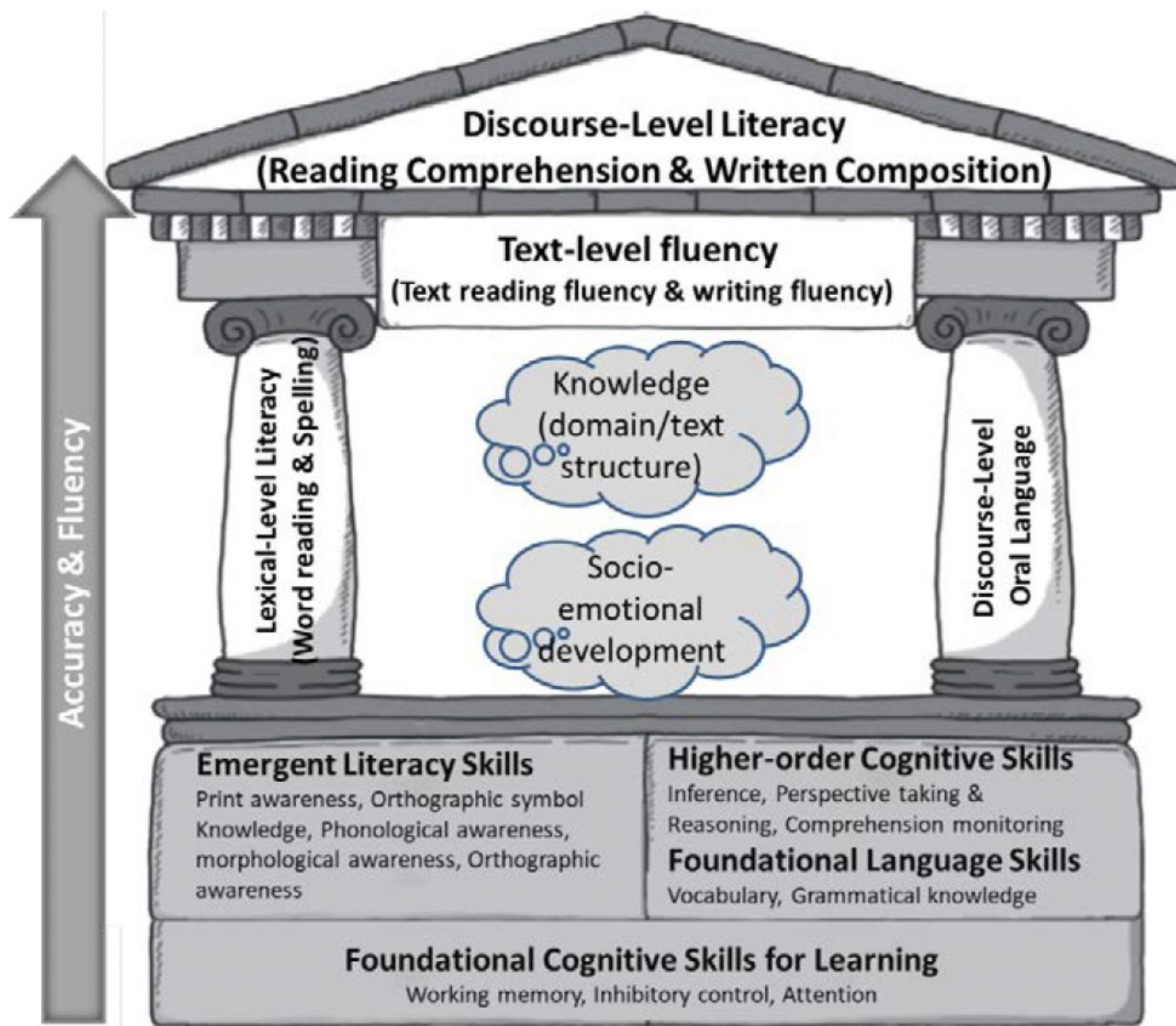
The early language and literacy skills that predict reading also predict early writing.



Reading-Writing Connection



Ehri (2000); Kim (2020); Shanahan (2016)



Kim, Y.-S. G. (2020). Interactive dynamic literacy model: An integrative theoretical framework for reading-writing relations. In R. Alves, T. Limpo, & M. Joshi (Eds.), *Reading-writing connections: Toward integrative literacy science*, pp. 11-34.



Simple View of Writing

Spelling

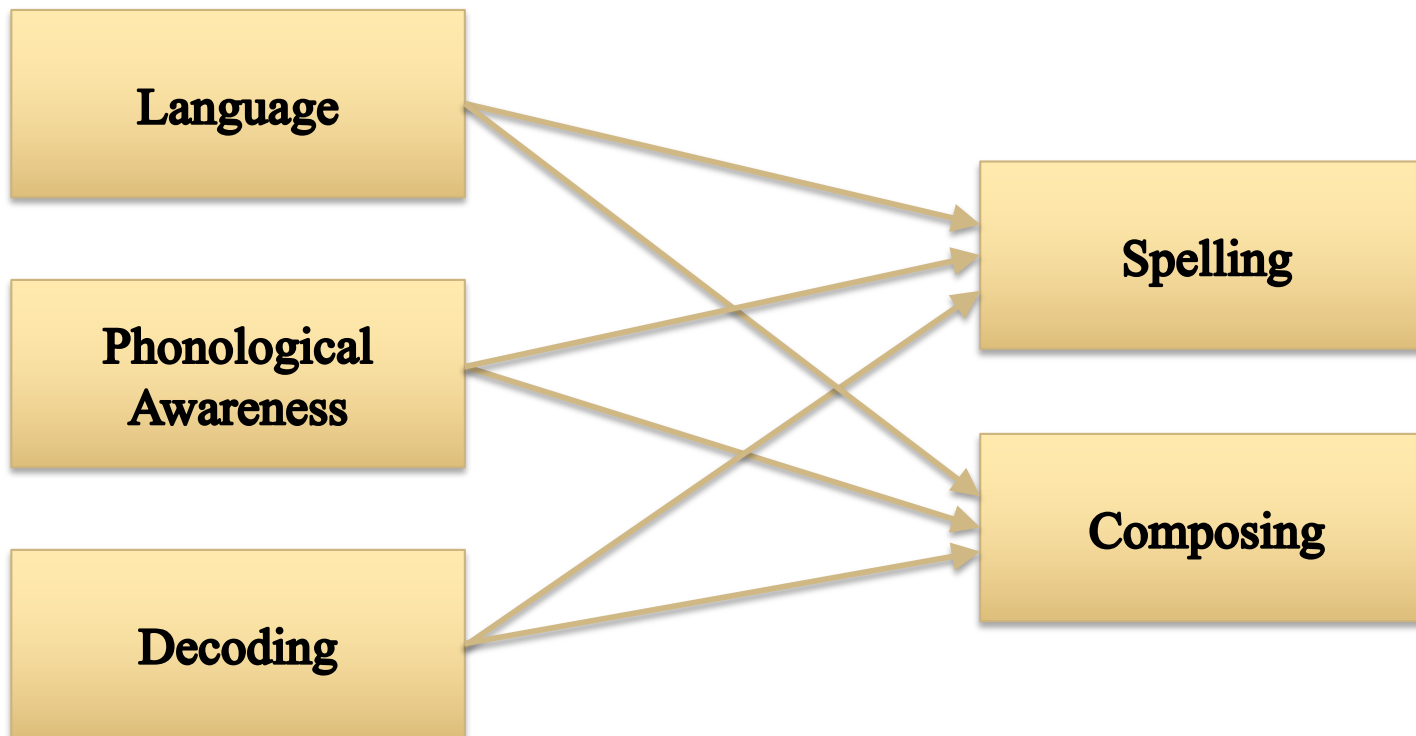
- showcases growing knowledge of the alphabetic system and how written language represents spoken language

Composing

- Idea and text generation
- The ultimate goal of writing



Predictors of Writing



Abbott & Berninger, 1993; Graham et al., 2018; Kent, Wanzek, Petscher, Al Otaiba, & Kim, 2014; Kim et al., 2011; National Early Literacy Panel, 2008; Puranik & Al Otaiba, 2012



Key Point #3

Evidence shows that growth in precursory skills during the early years matter.



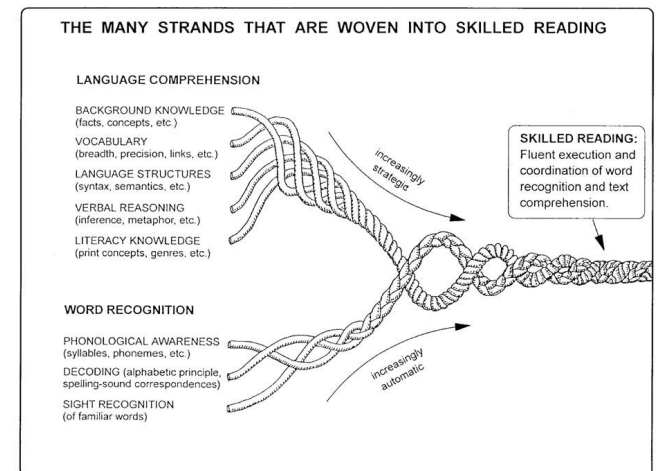
Growth Trajectories

- Prediction from a single time point is only a snapshot.
- Growth trajectories can help us understand how the rate of development of component skills might contribute to subsequent writing achievement.





The earlier that children develop component language and literacy skills, the earlier they can take advantage of other learning opportunities afforded to them.



Scarborough (2001)



Study Purpose

Examined the extent to which children's **initial skill level** and **growth** in children's language and literacy skills during the preschool period predicted subsequent writing ability a year and a half later, when students were in the primary grades (K/1).



Participants

- 313 children
- Lived in Midwest
- Part of a larger non-intervention study of language development
- Enrolled in preschool, spoke English fluently
- 58% Caucasian, 18% African American
- Range of SES
- Age at start of study: 4.23 years ($SD = 0.61$)
- Age at end of study: 5.96 years ($SD = 0.63$)



Procedures and Measures

- Individually tested 4 times, 6 months apart
- **Language**
 - Sentence Structure, Word Structure, Expressive Vocabulary(CELF: P2)
- **Early Literacy**
 - Phonological Awareness (CELF: P2)
 - Decoding (WJ III ACH Letter-Word ID)
- **Writing** (at 4th time point only)



Writing Measures

- Spelling: Word writing
 - Five CVC words
 - Developmental scoring
 - Included linearity, directionality, case
- Written Composition: Story Writing
 - Total number of words written (productivity)



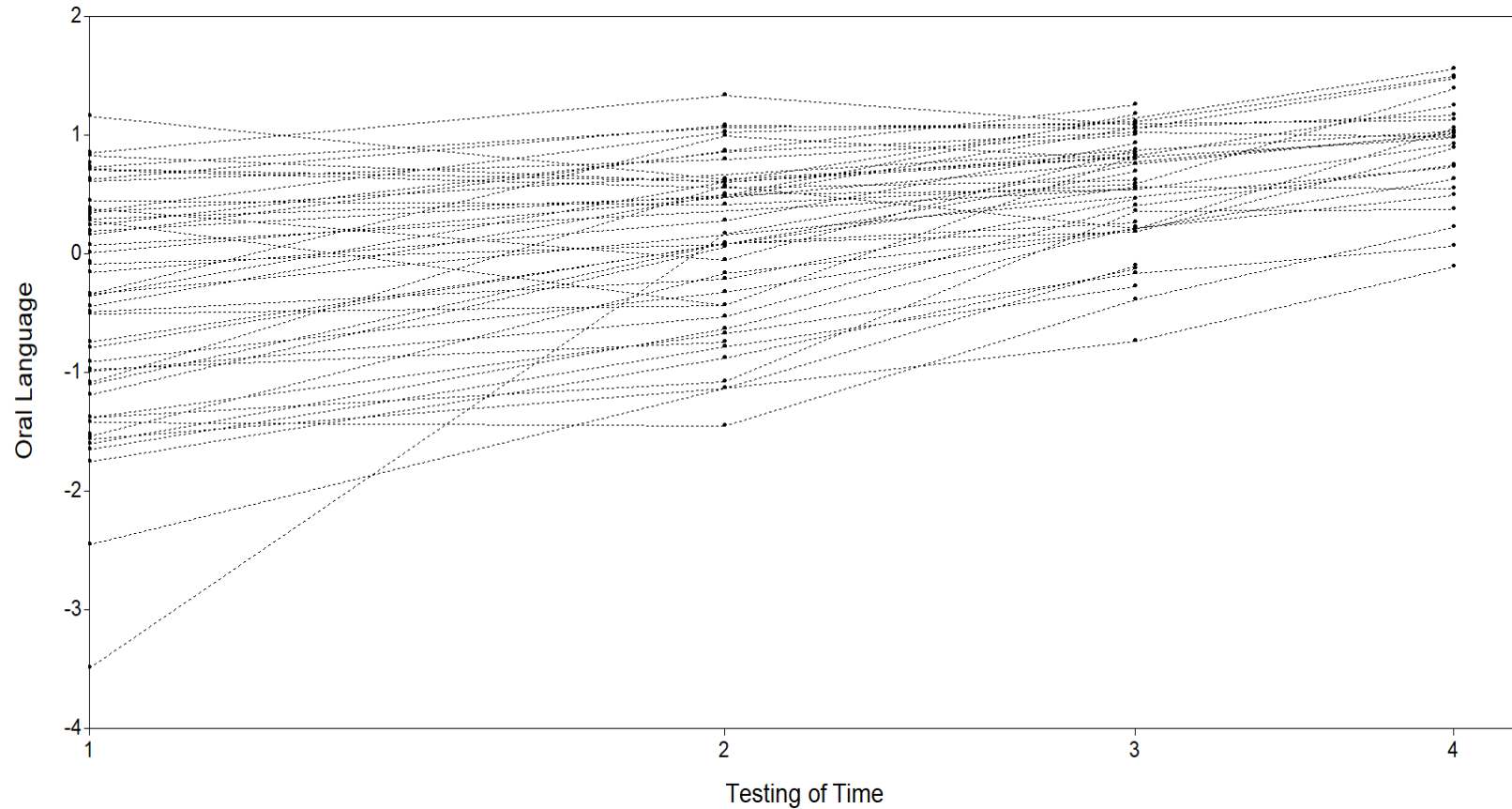


Data Analysis

- Latent growth curve modeling (LGC)
- Considered linear and non-linear models
- To account for missing data, full-information maximum likelihood estimation with robust standard errors

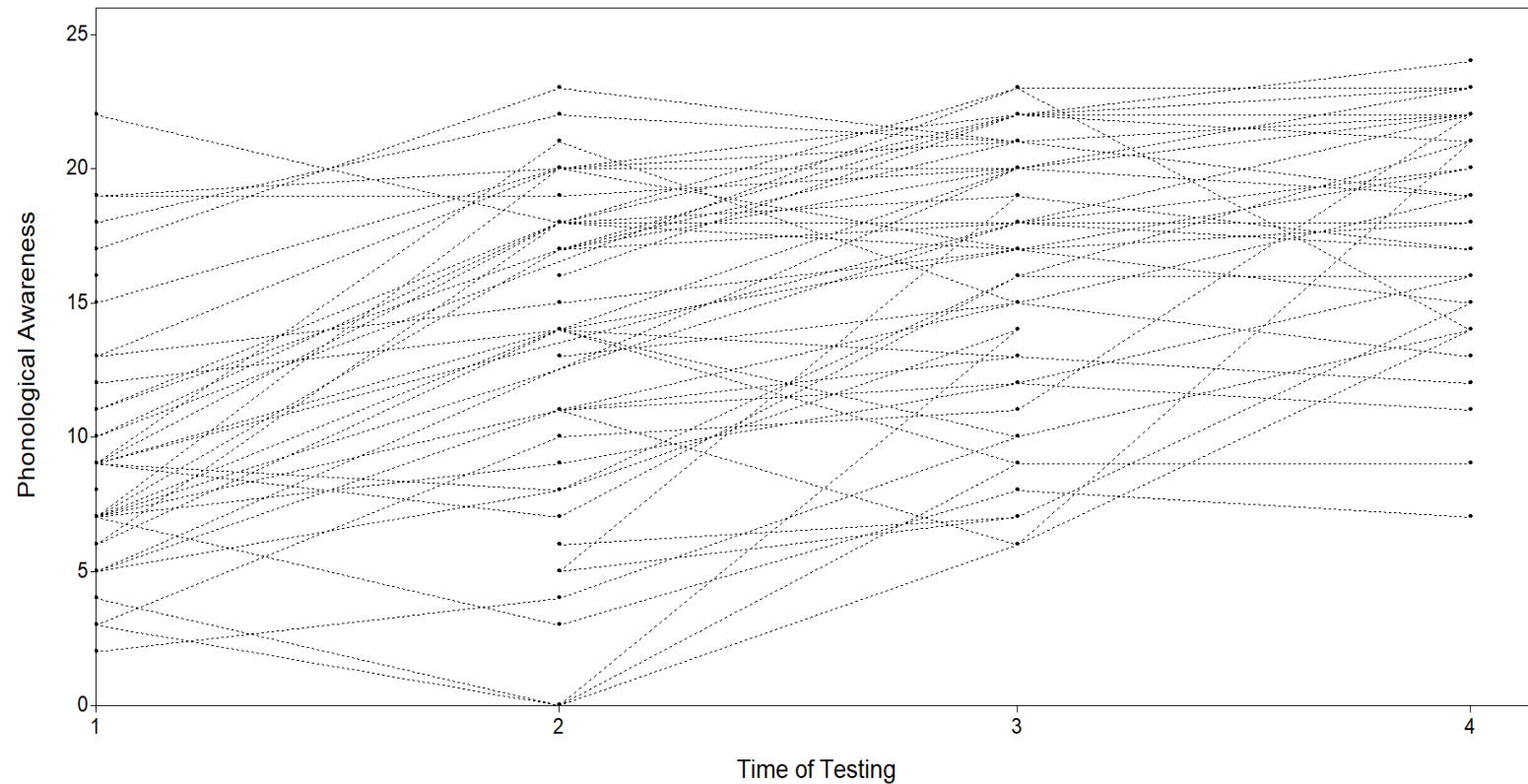


Language Growth



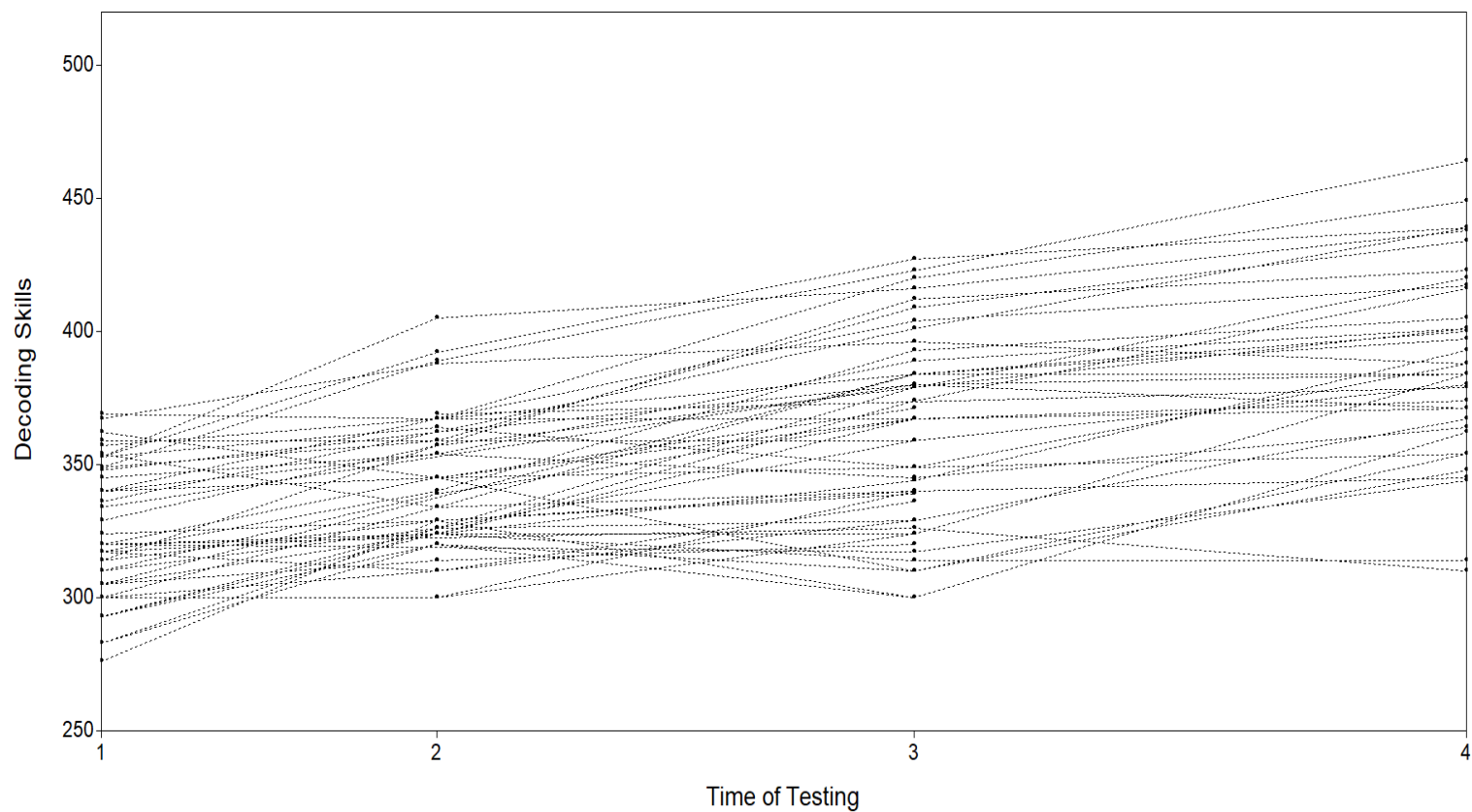


Phonological Awareness Growth



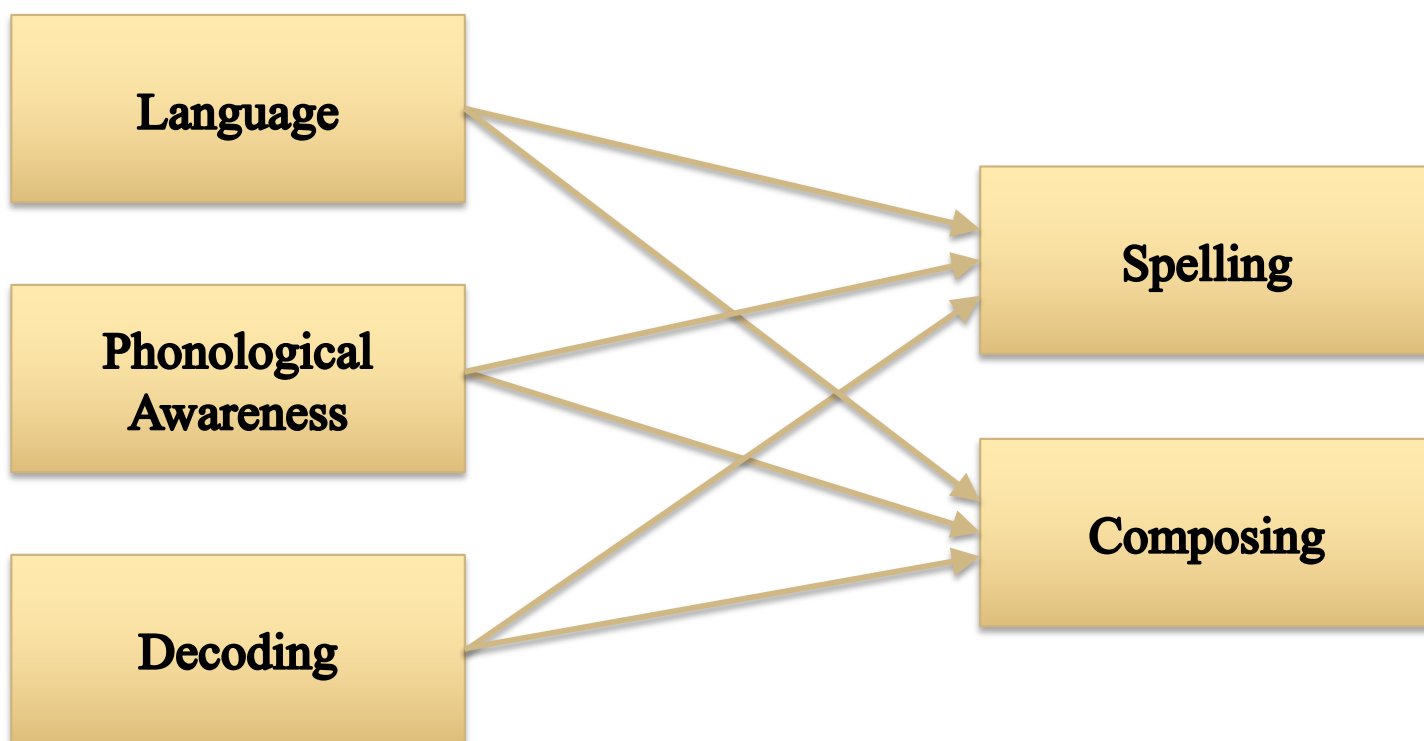


Decoding Growth





Early Skill Level Predicted Writing





Growth Predicted Writing

- Growth rates of language and decoding significantly and positively related to spelling and composing outcomes
- Not the case for phonological awareness





Discussion

- Known precursors of beginning reading are also precursors of beginning writing
- Complements existing work by:
 - Extending predictors to an earlier developmental timepoint
 - Including composing outcomes





Discussion

- Novel contribution of the predictive value of pre-reading growth trajectories to beginning writing outcomes in K/1st grade.
- Consolidation of skills may matter for writing.



Discussion

- Unexpectedly, growth in language related to spelling achievement.
 - Highlights importance of language for transcription skills.
- Lack of relation between growth in phonological awareness and writing



This study suggests that the rate in which children develop language and literacy skills during early childhood is **as important as** the initial skills they bring with them to the first day of school.



How can we accelerate the development of early language and literacy skills in the birth-5 period?





Interactive Read-Alouds

- An important vehicle for conversations that improve language and literacy development
- Extra-textual talk during read-alouds is related to improved learning
- Many efficacious interventions feature interactive read-alouds

Mol et al. (2009); Scarborough & Dobrich (1994); Zucker, Cabell, Justice, Pentimonti, & Kaderavek (2013)



Key Point #4

Engaging young children in early writing activities can potentially facilitate the learning of early skills.

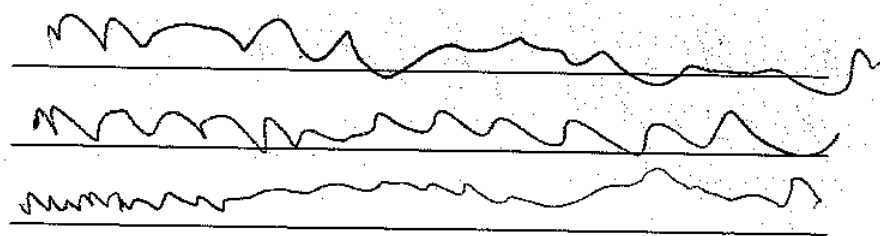
Writing might be another Important vehicle.



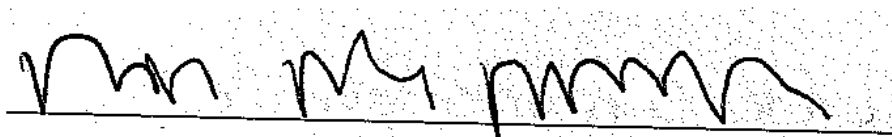


Types of Early Writing Activities

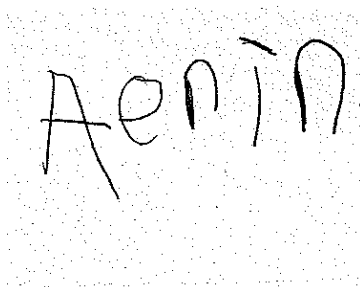
- Morning Message (interactive writing)
- Child-dictated writing
- Journal writing
- Writing in centers
- Writing with a variety of tools: pencil, marker, finger, magnetic letters



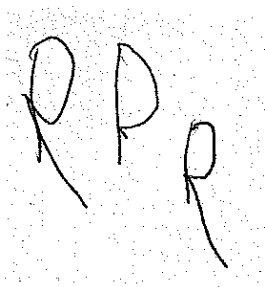
← “Jingle Bells”



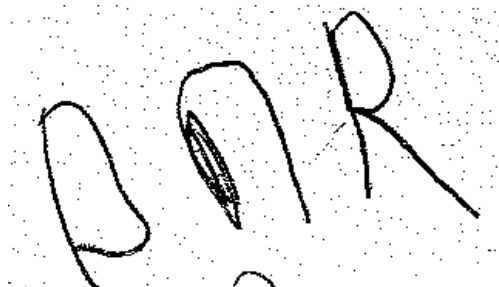
← Three names



Aerin



doctor



sleep



Writing Helps Children's Literacy Grow



- Through engaging in writing, children are like scientists who are ***actively forming and revising hypotheses*** about how written language works.
- Children's writing can serve as a ***springboard*** for instruction about print and sound



Key Point #4

We can potentially boost early language and literacy skills through teacher-child conversations that scaffold children's early writing.



FLORIDA CENTER *for*
READING RESEARCH

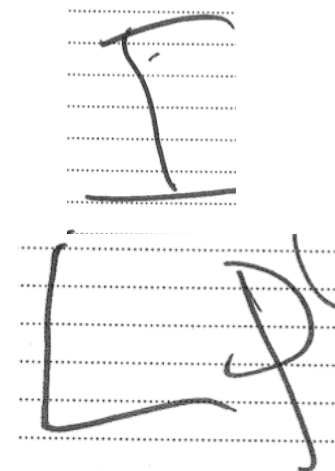
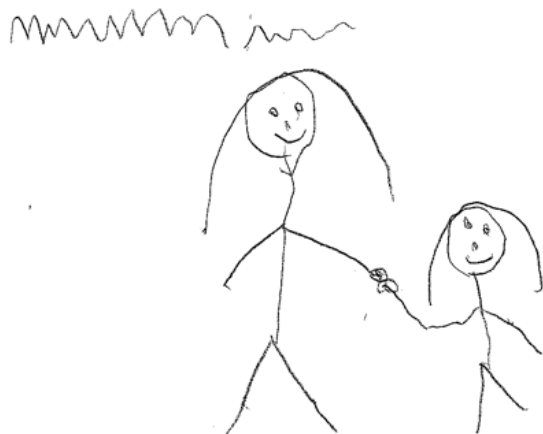
SCAFFOLDING CODE-RELATED LITERACY SKILLS DURING WRITING



A Variety of Writers in Classrooms

How do I write
sun?

What should I say?









Writing Serves as a Window into Children's Literacy Knowledge

- Teachers can **assess** children's understanding of how written language works and the extent to which children are integrating their knowledge of print and sound
- Writing samples can inform teachers of how to help children take the next step in their literacy development by **scaffolding** their writing attempts



Writing Reflects Understandings About Print

COLE

COEEEL

EEEOCL

ONUEOAM

ONEL



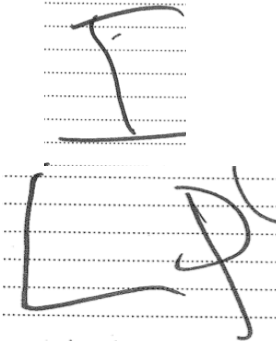



Writing Reflects Knowledge of Print and Sound





The Early Writing Framework

Level 1: Drawing & Scribbling	Level 2: Letters & Letter-Like Forms	Level 3: Salient & Beginning Sounds	Level 4: Beginning & Ending Sounds
 <p>No understanding of the alphabetic principle</p>		 <p>"I love Pennsylvania"</p>	 <p>"hop"</p>

Pre-Alphabetic

Partial Alphabetic

Cabell, Tortorelli, & Gerde (2013); Copp, Cabell, Gabas, Slik, & Todd (2023); Ehri (2005)

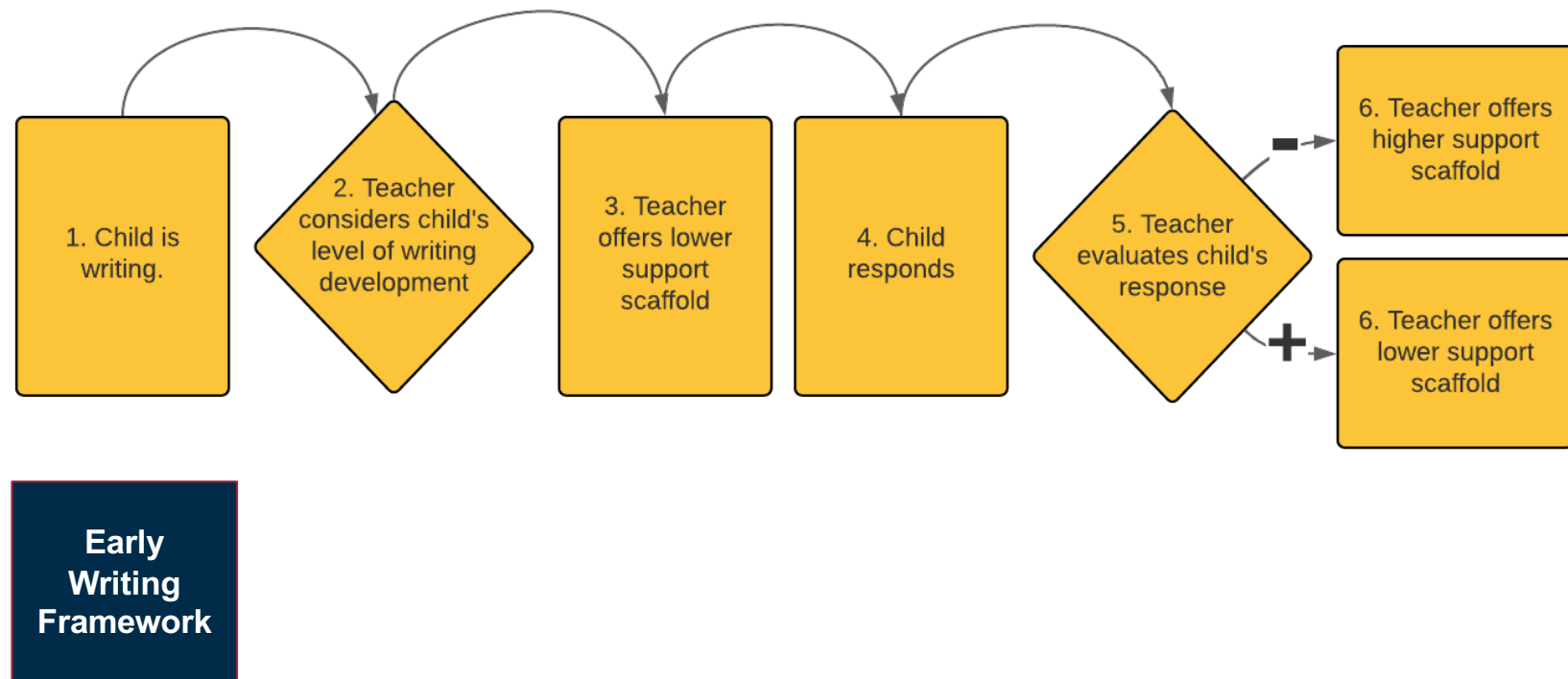


What do we know about scaffolding in the classroom?

Teachers do **differentiate scaffolds.**

Teacher use a **limited repertoire of scaffolding** strategies with children.

In the context of writing, teachers tend to use **higher support scaffolding** strategies more often than lower support strategies.





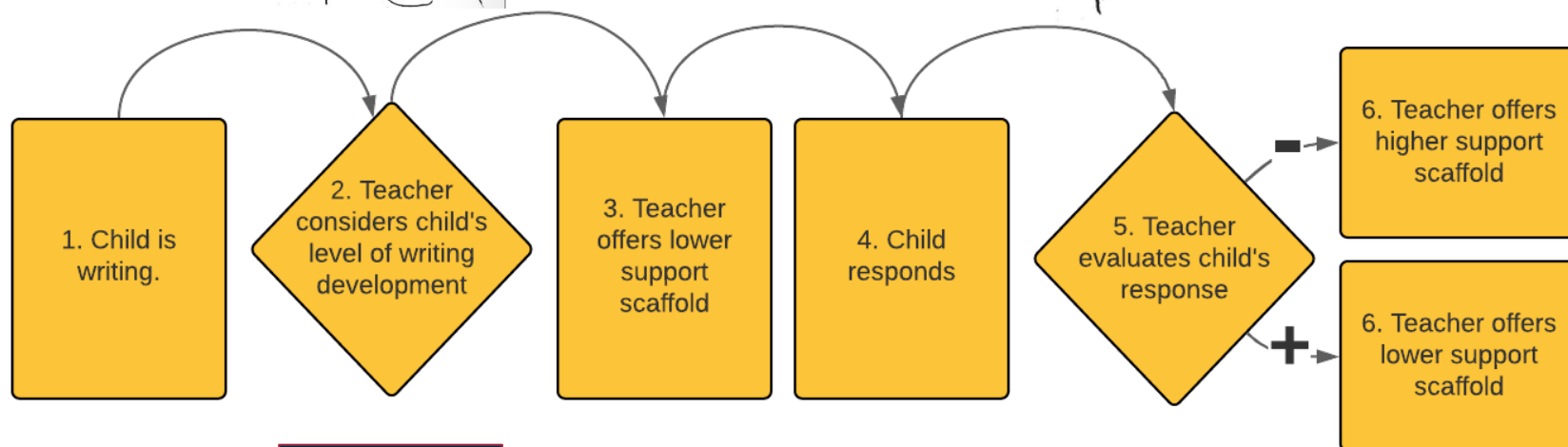
Teacher: What are you writing?

Juliet: I am writing about my mom.

O e + L o p o t

Juliet: I hear /m/.

Teacher: You heard /m/ and I did too! What letter makes the /m/ sound?
(Asking) Let's look on the alphabet chart.
(Tools) Is it M or A?
(Reducing Choices)



Early Writing Framework

Teacher: Okay, the first thing we do when writing a word is think about the sound that we hear. What is the first sound you hear in mom? (Sequencing)

Level 1: Drawing & Scribbling	Level 2: Letters & Letter-Like Forms	Level 3: Salient & Beginning Sounds	Level 4: Beginning & Ending Sounds
		 "I love Pennsylvania"	 "hop"

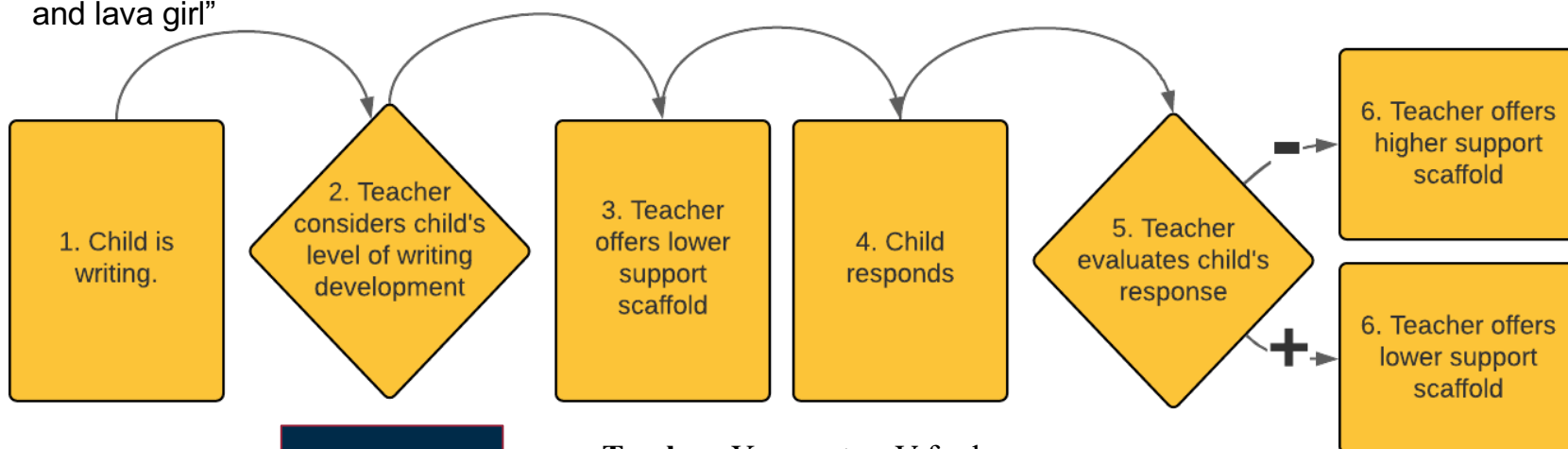


T: “Can you read me what you are writing so far?”

S: pointing with pencil “shark boy and lava girl”

V

L V



Early Writing Framework

Teacher: You wrote a V for lava. (Encouragement) What other sounds do you hear in lava, /l/a- /v/a? (Sequencing)

Level 1: Drawing & Scribbling	Level 2: Letters & Letter-Like Forms	Level 3: Salient & Beginning Sounds	Level 4: Beginning & Ending Sounds
		 “I love Pennsylvania”	 “hop”

Teacher: What’s the next word you are writing? (Sequencing) Remember to stretch it out and write all of the sounds that you hear (Information).



Single Case Design Study

- Non-concurrent multiple baseline design
- Tested sequencing verbal scaffold
- Children in 4-year old-programs who have grasped alphabetic principle (partial alphabetic)
- Children met with an instructor three times per week for approximately 10-15 minutes.
- Maintenance probes took place at 1-, 2-, and 3-weeks post-intervention.

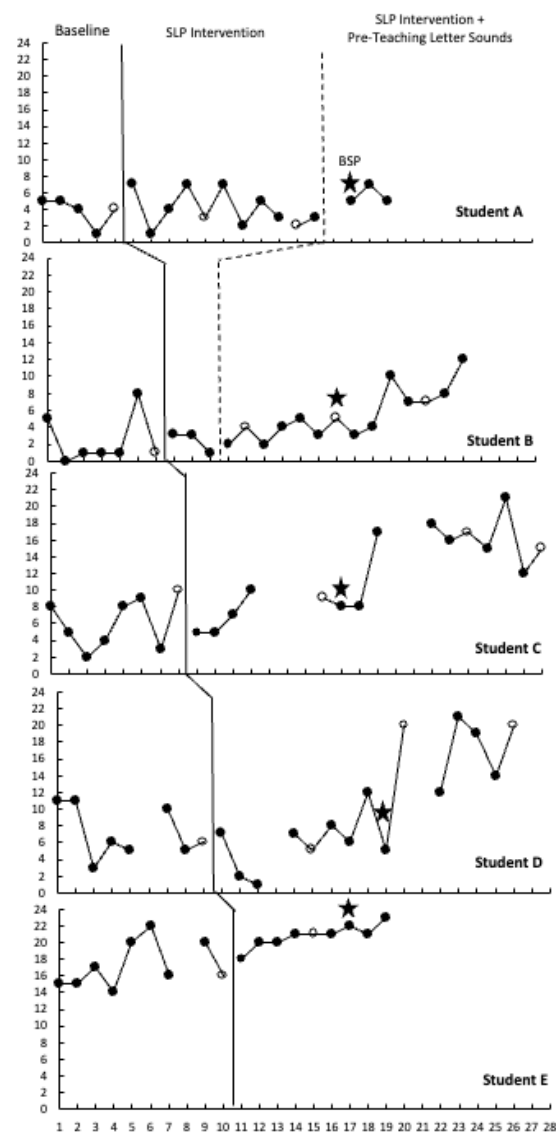


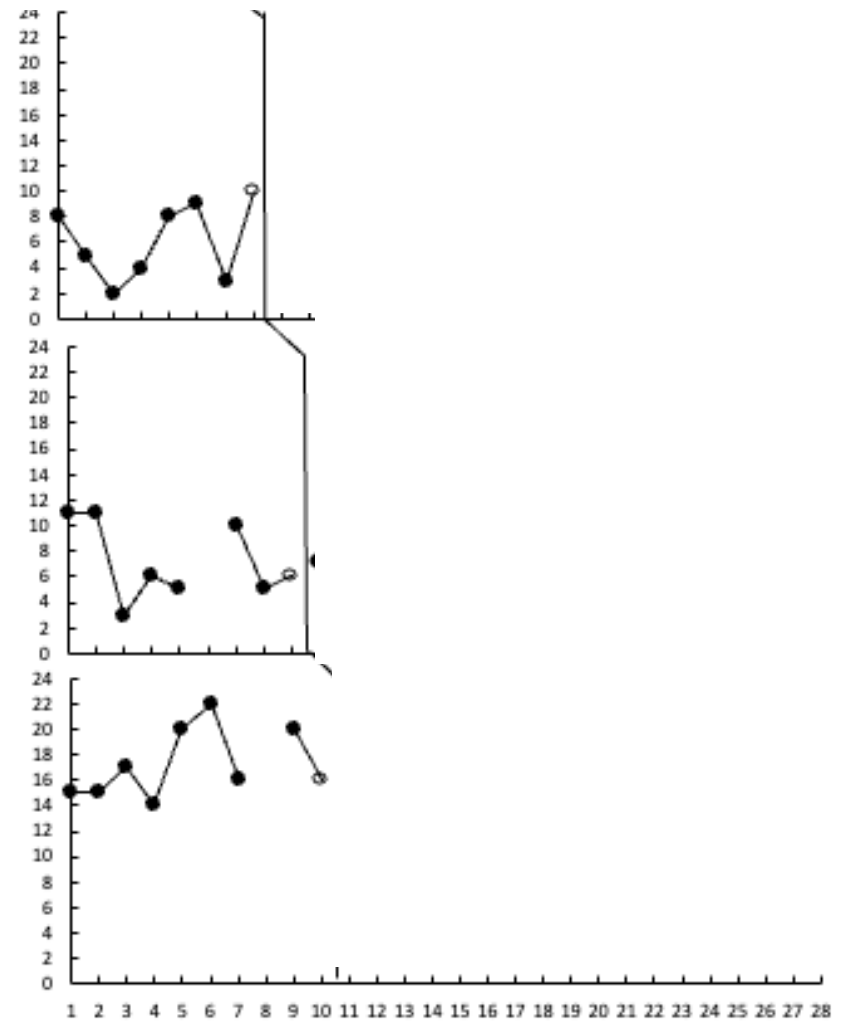
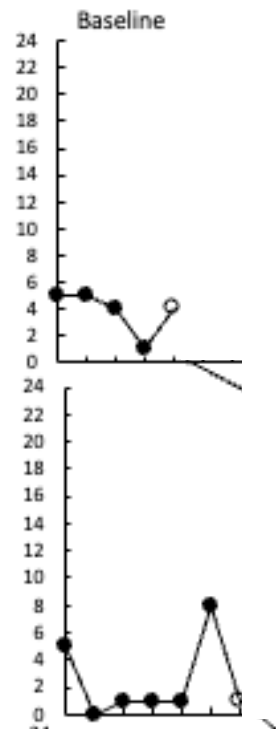
*Decision Guide for Target Scaffolding*

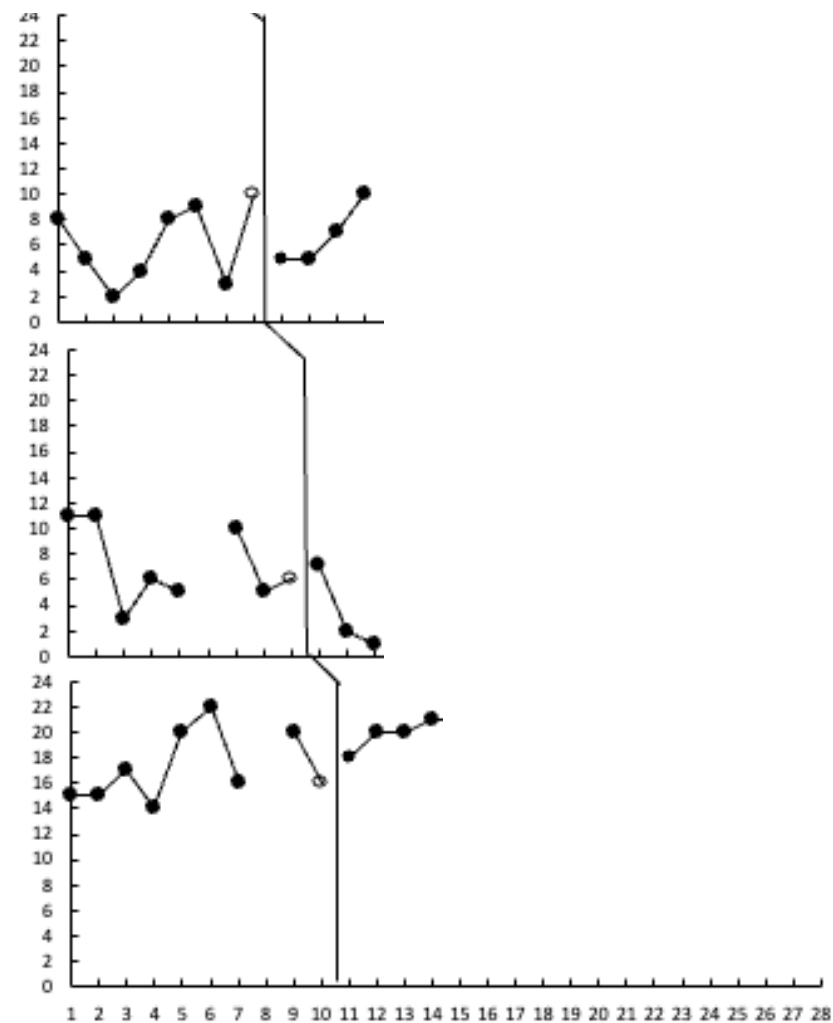
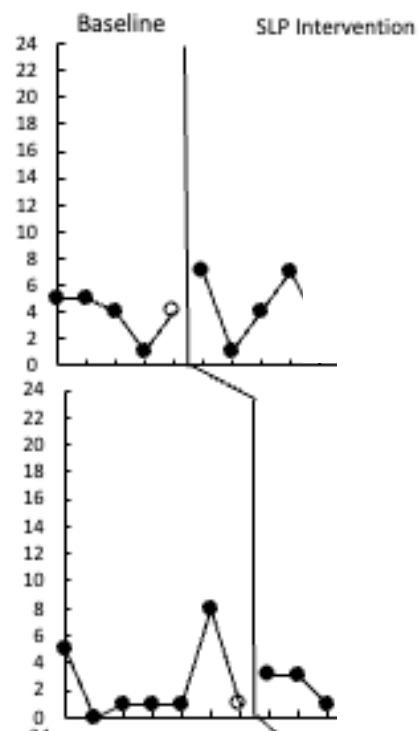
If student attempt...	Priority for Target of Scaffolding
Does not have first sound represented	Initial Sound
Has first sound represented but does not have final sound	Final Sound
Has first and final sound represented but does not have medial vowel	Medial Vowel Sound
Has all three sounds but not in the correct order	Position of the Sounds
Has all three sounds represented in the correct order, but not spelled conventionally	Correct Orthography to Represent Sounds

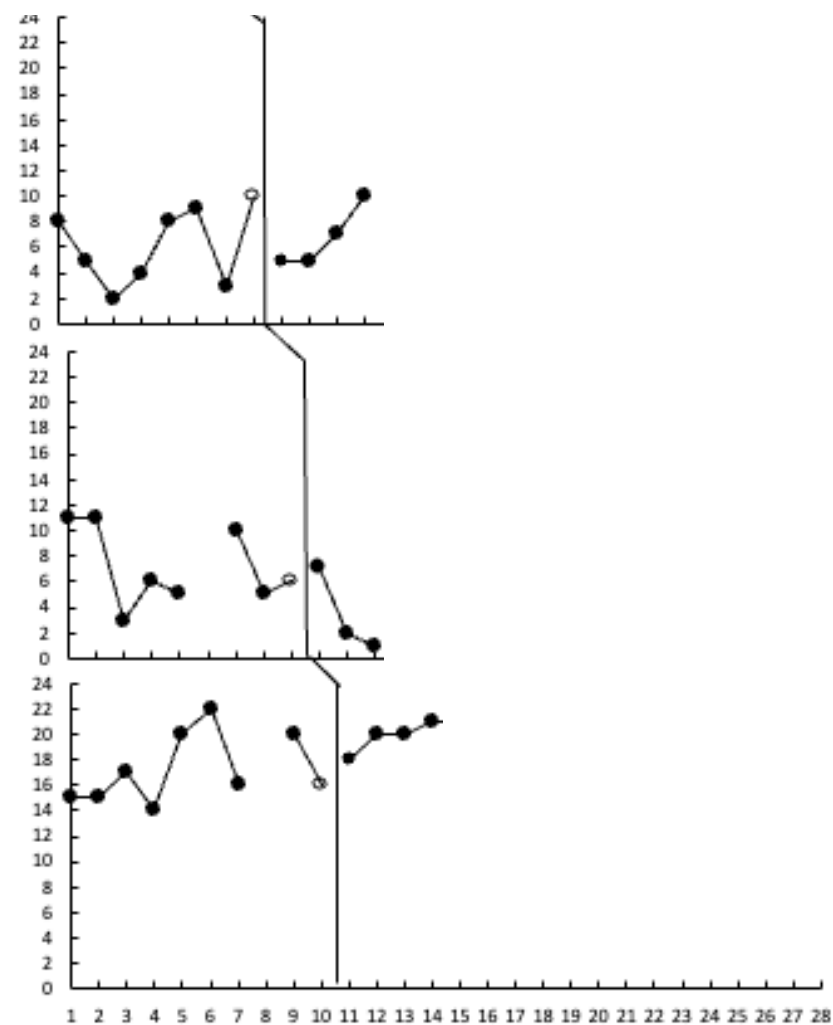
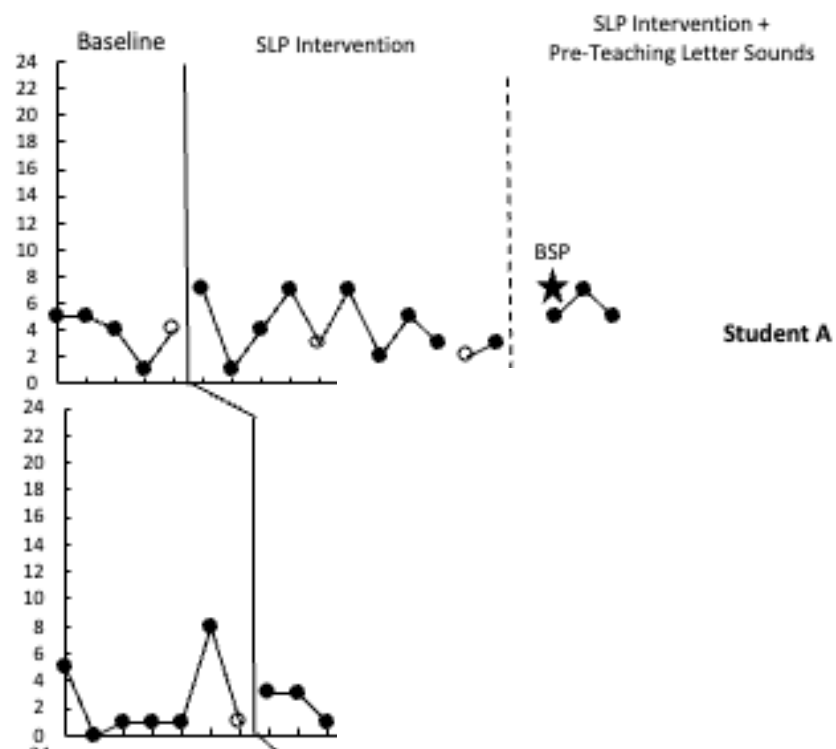


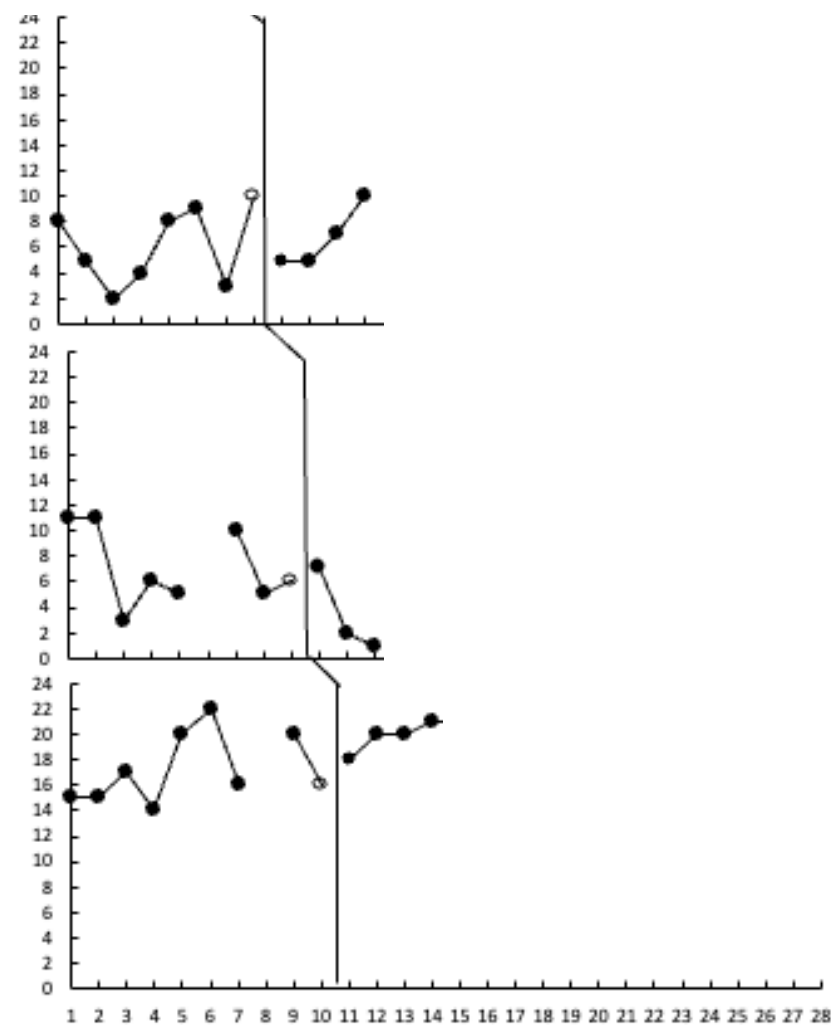
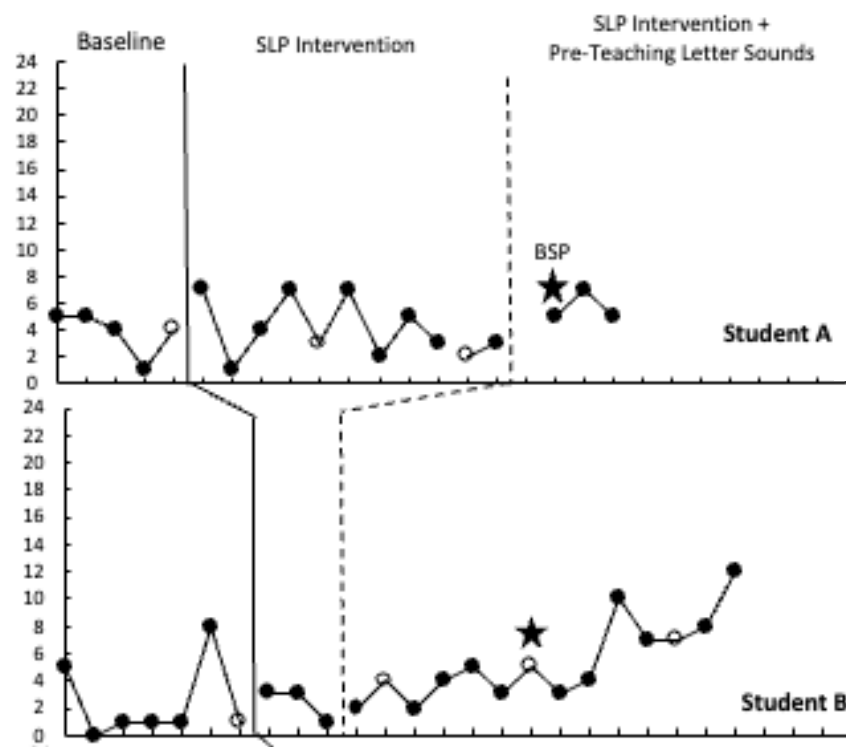
Level	Script
1	Independent Correct – No scaffold
2	<i>“What is the [first, last, or middle] sound you hear in ____ [insert word here]?” Write the sounds you hear in ____ [insert word here].</i>
3	<i>“In the word ____ [insert word here], I hear the sounds /x/ /x/ /x/. What is the [first, last, middle] sound you hear?” Write the sounds you hear in the word ____ [insert word here].</i>
4	<i>“In the word ____ [insert word here], I hear /x/ /x/ /x/ (emphasize the focal sound). The [first, last, middle] sound I hear is /x/ in ____ [insert word here] (emphasize focal sound again).” Write the sounds you hear in the word ____ [insert word here].</i>
5	<i>“In the word ____ [insert word here], we heard the sounds /x/ /x/ /x/. Now let’s write the [first, last, middle] sound /x/ with a X like this [MODEL]. [Remove letter], Now you try. Way to go, now let’s read our word, ____ [insert word here]”.</i>

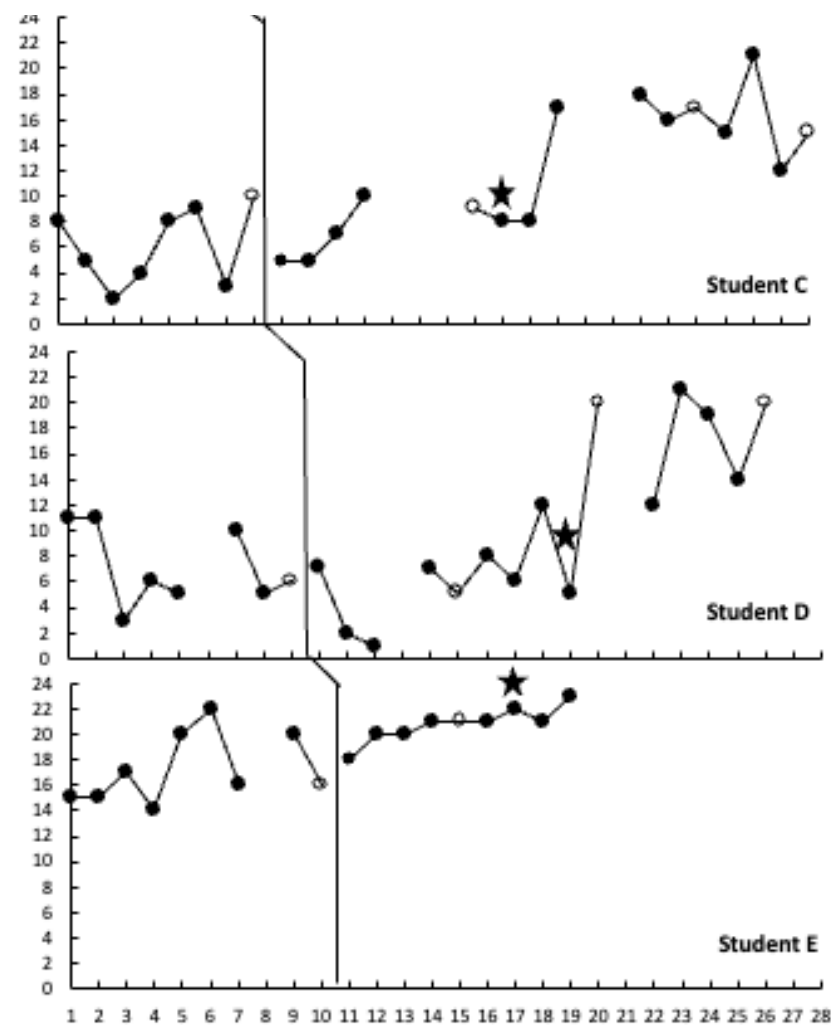
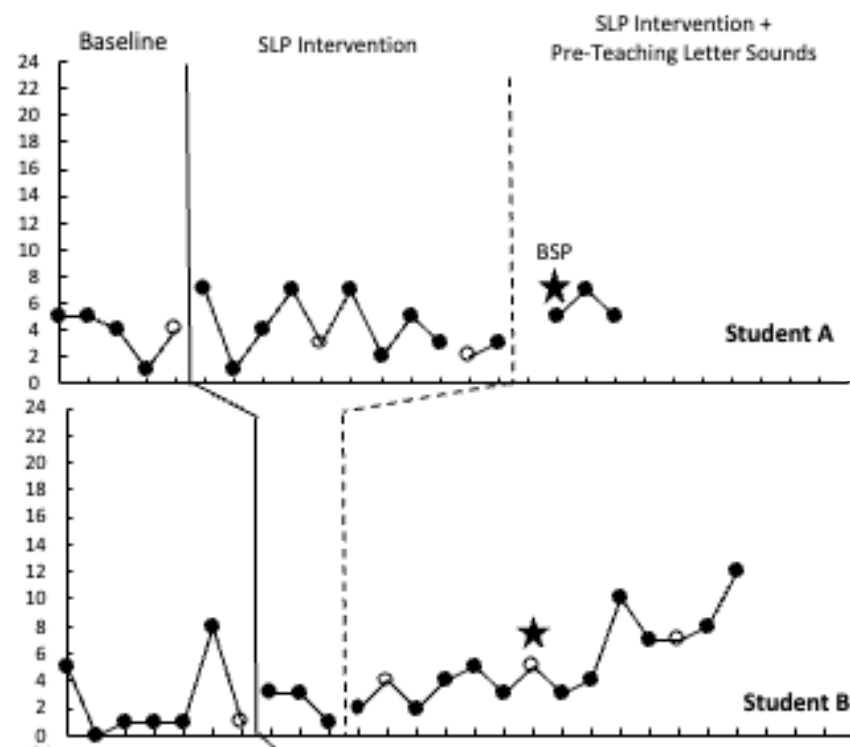














FLORIDA CENTER *for*
READING RESEARCH

SCAFFOLDING ORAL LANGUAGE SKILLS DURING WRITING



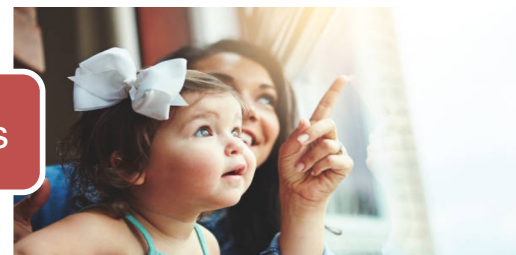
Oral Language

Is the system of words and word combinations used to communicate with others through **speaking and listening**.

Develops from birth!

We use oral language to express and comprehend **knowledge, ideas, and feelings**.

Infants



Toddlers



Preschool
and beyond





Classroom Conversations Matter More than Students' Zip Codes



"This means that children from low-income families, whose syntactic level is quite low at the beginning of the year, may grow as much or more than children from high income families, **if the teachers speak in complex sentences.**"

-Janellen Huttenlocher, University of Chicago

Huttenlocher, Vasilyeva, Cymerman, & Levine (2002)



Available online at www.sciencedirect.com

SCIENCE @ DIRECT®

Cognitive Psychology 45 (2002) 337–374

Cognitive
Psychology

www.academicpress.com

Language input and child syntax[☆]

Janellen Huttenlocher,* Marina Vasilyeva,
Elina Cymerman, and Susan Levine

*Department of Psychology, University of Chicago, 5848 S. University Ave.,
Chicago, IL 60637, USA*

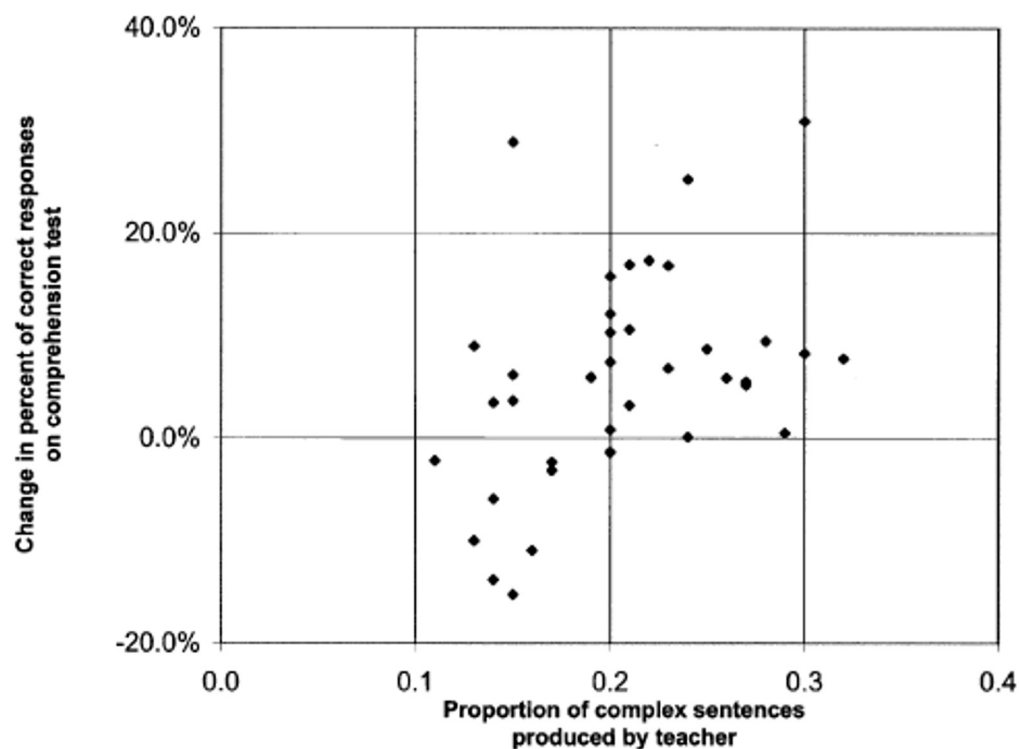
Accepted 20 September 2001

Abstract

Existing work on the acquisition of syntax has been concerned mainly with the early stages of syntactic development. In the present study we examine later syntactic development in children. Also, existing work has focused on commonalities in the emergence of syntax. Here we explore individual differences among children and their relation to variations in language input. In Study 1 we find substantial individual differences in children's mastery of multicausal sentences and a significant relation between those differences and the proportion of multicausal sentences in parent speech. We also find individual differences in the number of noun phrases in children's utterances and a significant relation between those differences and the number of noun phrases in parent speech. In Study 2 we find greater syntactic growth over a year of preschool in classes where teachers' speech is more syntactically complex. The implications of our findings for the understanding of the sources



The Importance of Teacher Talk



Huttenlocher, Vasilyeva, Cymerman, & Levine (2002)



This clock tells us the time and we can move the hands.



Children are likely to follow a teacher complex utterance with a complex utterance of their own.





This clock tells us the time and we can move the hands.

Can I move the hands on the clock and change the time?



Children are likely to follow a teacher complex utterance with a complex utterance of their own.



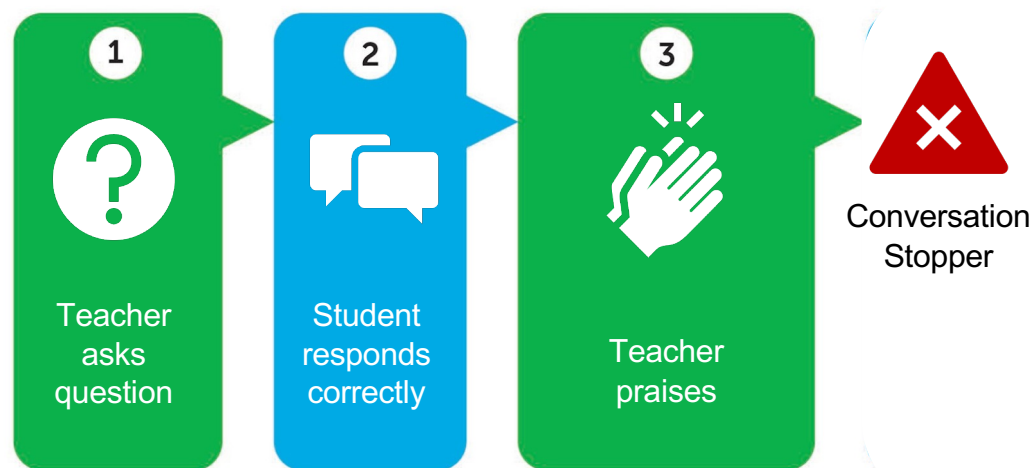
What are the Features of High Quality Conversations?

- Maintaining a conversation on **one topic** over multiple turns. (T-C-T-C-T)
- Teachers **elicit** student participation (e.g., asking open-ended question)
- Teacher **expands** what students are saying.



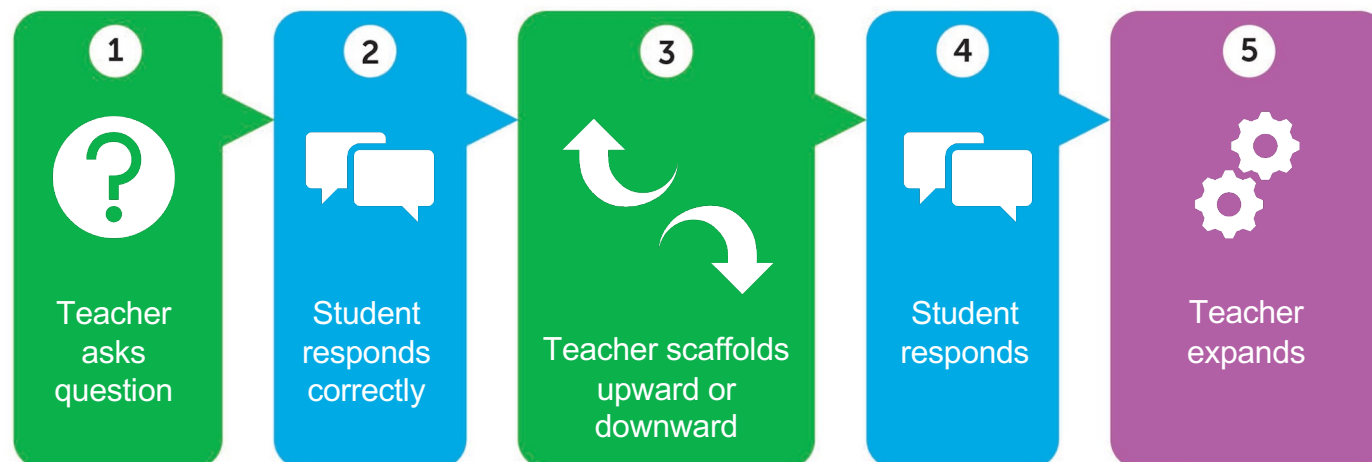
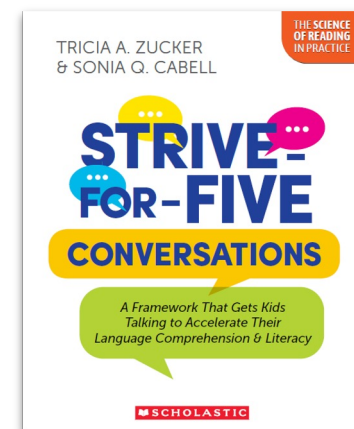


A Small Shift from Regular Conversations



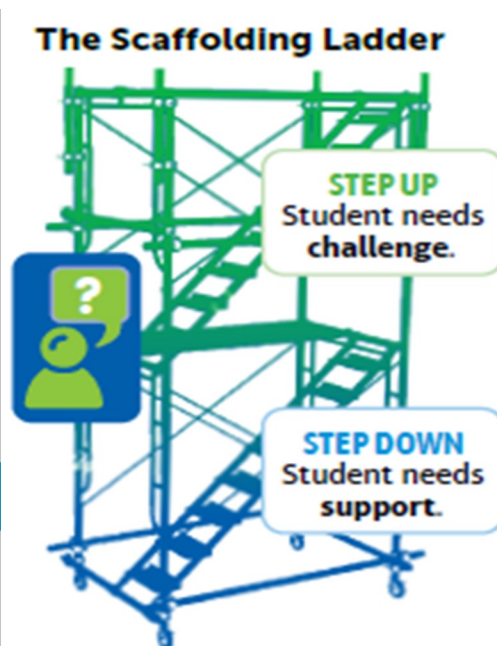
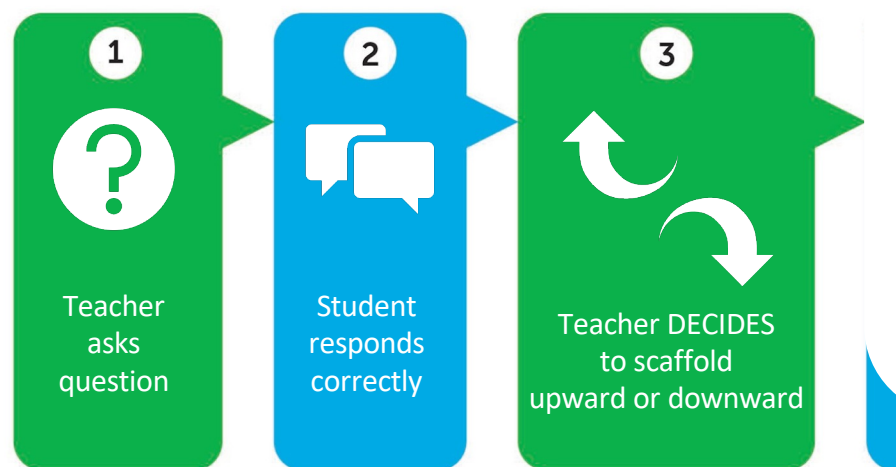
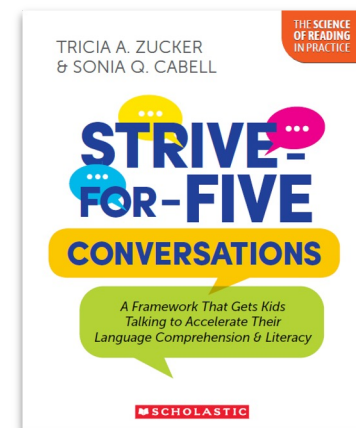


“Strive-for-Five” Conversations





Key Decision Point is Turn #3 “Strive-for-Five” Conversations





Scaffolding to Responsively Guide Language

Upward Scaffold –
Add Challenge



Downward Scaffold –
Support & Simplify

42% of scaffolding
opportunities missed

Scaffolding strategies are **explanations, hints, models, or follow-up questions** caregivers use to organize child thinking or to simplify a task to a level the child can perform with some support.

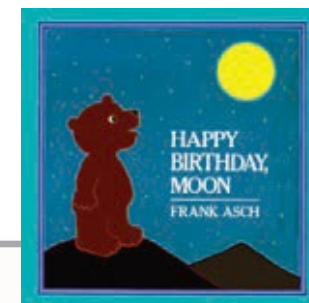
Effective scaffolds are *contingent responses* that match the child's level of understanding.



Conversations during Composing

- After a read-aloud, draw and write about the text
- Guiding Question: What would you like to give to the moon for its birthday?



Name: Ricky

Draw and Write with Scout!

This week we read *Happy Birthday, Moon* by Frank Asch. It's a narrative about a bear who wants to buy the Moon a birthday present.



What would you like to give the Moon for its birthday?



I would give the
moon a birthday because
I would buy him nothing.

©2015-2016 The University of Texas Health Science Center at Houston. All rights reserved.

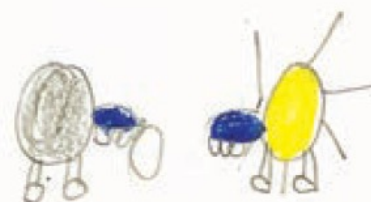
Name: Ethanah 3/1

Draw and Write with Scout!

This week we read *Happy Birthday, Moon* by Frank Asch. It's a narrative about a bear who wants to buy the Moon a birthday present.



What would you like to give the Moon for its birthday?



I would give the moon a softball
so win its day in the moon can play
with its the DR the moon can play with
the sun.

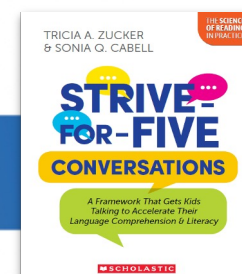
©2015-2016 The University of Texas Health Science Center at Houston. All rights reserved.

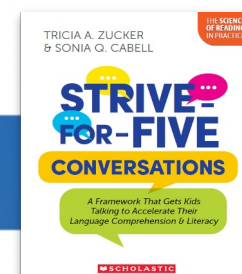





Upward Scaffolding Strategies

Challenge Level	Scaffold Type	What You Do	Example
MINIMAL	Extra Facts	Ask a <i>what, where, when, or how</i> question about related facts, ideas, or word meanings.	"Yes, seeds need soil and sun to grow. What else do they need?"
	Opinions or Judgments	Elicit opinions or attitudes about the quality of something.	"Is it right to fight with your friends?"
MODERATE	Connections and Patterns	Ask the child to link conversation to personal or general experiences.	"What kinds of things make you frustrated like this?"
	Inferences or Emotions	Elicit inferences or ideas about feelings, emotions, or desires of self or a character in a book.	"How do you think she's feeling?"
INTENSE	Predictions and Hypotheses	Ask the child what might happen next or the outcome of an event or what could happen given different scenarios.	"What do you think she would have done if he had not said 'Sorry?'"
	Explain Cause and Effect	Ask the child to explain or infer a chain of events or what made things happen.	"Why do you think she is running away?"





Upward Scaffolding Strategies



Challenge Level	Scaffold Type	What You Do	Example
MINIMAL	Extra Facts 34%	Ask a <i>what, where, when, or how</i> question about related facts, ideas, or word meanings.	"Yes, seeds need soil and sun to grow. What else do they need?"
	Opinions or Judgments	Elicit opinions or attitudes about the quality of something.	"Is it right to fight with your friends?"
MODERATE	Connections and Patterns	Ask the child to link conversation to personal or general experiences.	"What kinds of things make you frustrated like this?"
	Inferences or Emotions	Elicit inferences or ideas about feelings, emotions, or desires of self or a character in a book.	"How do you think she's feeling?"
INTENSE	Predictions and Hypotheses	Ask the child what might happen next or the outcome of an event or what could happen given different scenarios.	"What do you think she would have done if he had not said 'Sorry?'"
	Explain Cause and Effect 8%	Ask the child to explain or infer a chain of events or what made things happen.	"Why do you think she is running away?"

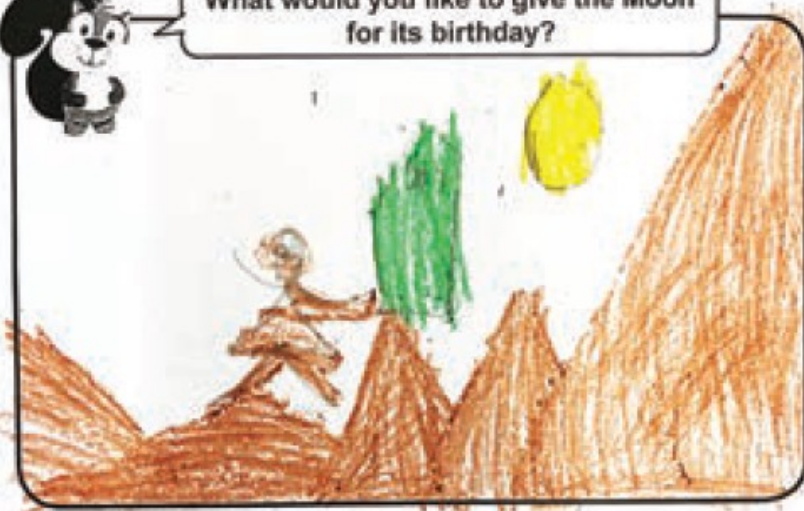
Deshmukh, Pentimonti, Zucker, & Curry (2022)

Name: RICKY**Draw and Write with Scout!**

This week we read *Happy Birthday, Moon* by Frank Asch. It's a narrative about a bear who wants to buy the Moon a birthday present.



What would you like to give the Moon for its birthday?

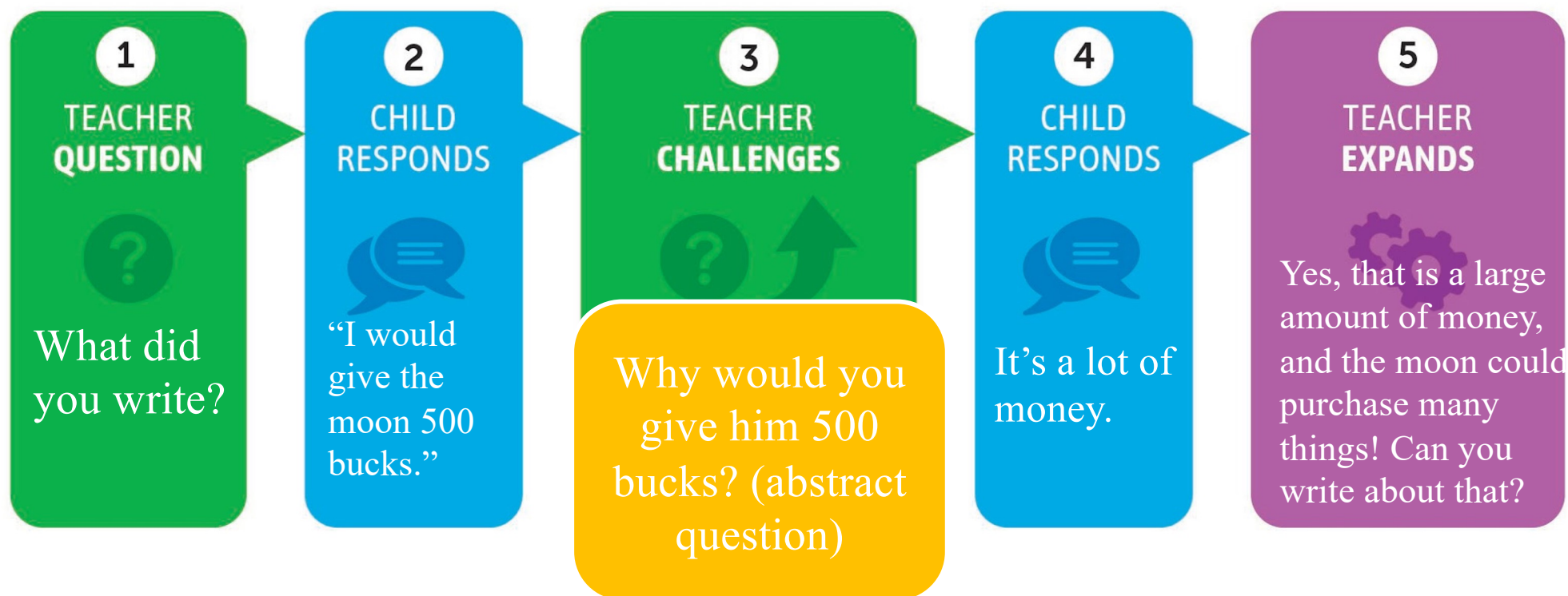


I would give the
moon a birthday cake
I would buy him anything.





Strive For Five – Upward Scaffold





Downward Scaffolding Strategies



Support Level	Scaffold Type	What You Do	Example
MINIMAL	Reframe Question	Reframe the original question to an easier question, an either/or question, or a question with limited response options.	T: What is happening? S: She... T: Is she sharing?
	Give Visual Hints	Point to picture clues or visual reminders to support recall or understanding.	T: What's this? S: (No response) T: It is one of our vocabulary words (points to picture card)
	Recast	Restate the child's answer modeling formal syntax or grammar.	S: I goed to the park. T: You went to the park.
MODERATE	Cloze or Co-Participating	Use a fill-in-the-blank or cloze technique with rising intonation that implies the child should complete the sentence with a word or phrase. Or encourage the child to produce a correct response by doing it together with the teacher or a peer.	T: She decided to let him... S: Pick T: Yes! She let him pick the toy.
INTENSE	Model and Repeat	Provide an exact model and prompt the child to repeat the correct response.	S: They messing up the building T: Castle. Can you say <i>castle</i> ? S: Yeah, castle

TRICIA A. ZUCKER
& SONIA Q. CABELL

THE SCIENCE
OF READING
IN PRACTICE

**STRIVE-
FOR-FIVE**
CONVERSATIONS

A Framework That Gets Kids
Talking to Accelerate Their
Language Comprehension & Literacy

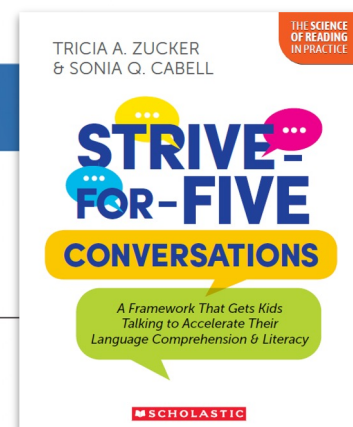
SCHOLASTIC



Downward Scaffolding Strategies

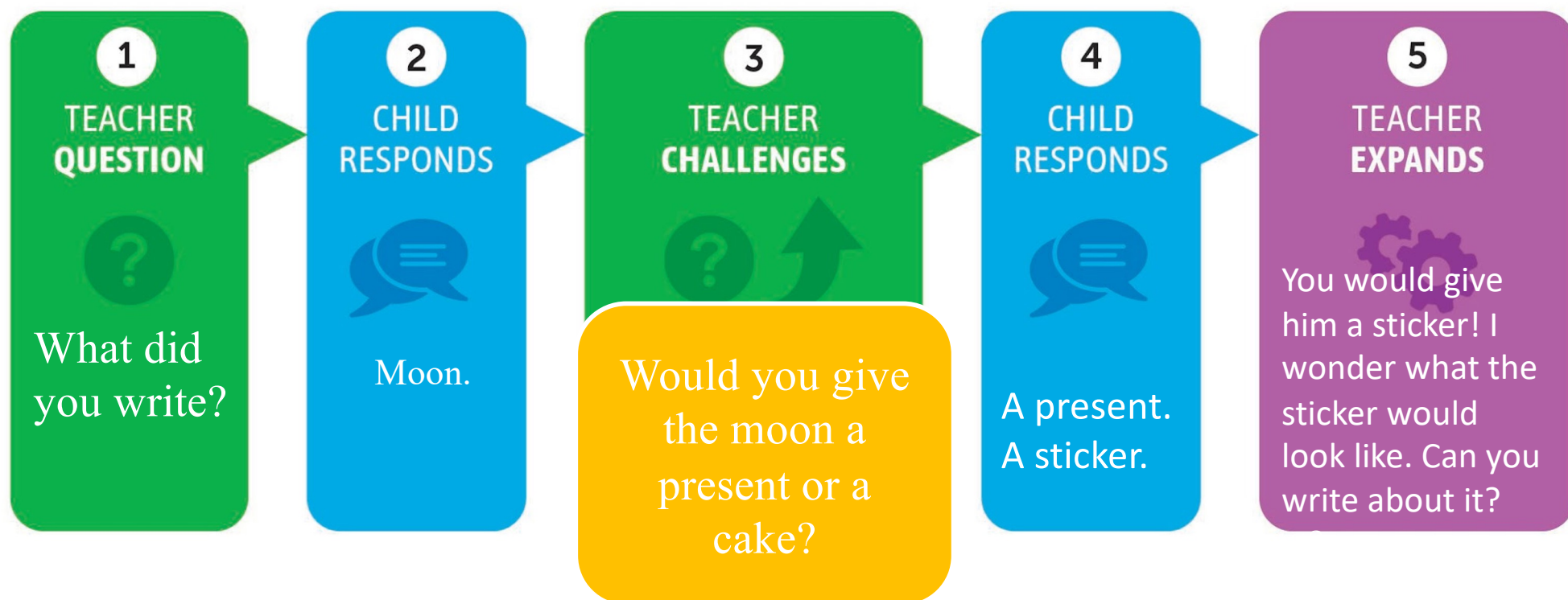


Support Level	Scaffold Type	What You Do	Example
MINIMAL	Reframe Question 28%	Reframe the original question to an easier question, an either/or question, or a question with limited response options.	T: What is happening? S: She... T: Is she sharing?
	Give Visual Hints	Point to picture clues or visual reminders to support recall or understanding.	T: What's this? S: (No response) T: It is one of our vocabulary words (points to picture card)
	Recast	Restate the child's answer modeling formal syntax or grammar.	S: I goed to the park. T: You went to the park.
MODERATE	Cloze or Co-Participating 9%	Use a fill-in-the-blank or cloze technique with rising intonation that implies the child should complete the sentence with a word or phrase. Or encourage the child to produce a correct response by doing it together with the teacher or a peer.	T: She decided to let him... S: Pick T: Yes! She let him pick the toy.
INTENSE	Model and Repeat	Provide an exact model and prompt the child to repeat the correct response.	S: They messing up the building T: Castle. Can you say <i>castle</i> ? S: Yeah, castle





Strive For Five – Downward Scaffold





Name: _____

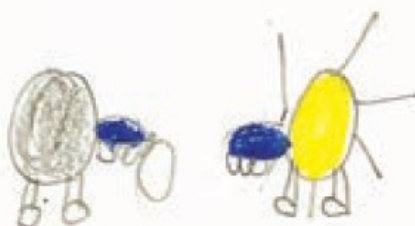
Elhanah 3/1

Draw and Write with Scout!

This week we read *Happy Birthday, Moon* by Frank Asch. It's a narrative about a bear who wants to buy the Moon a birthday present.



What would you like to give the Moon for its birthday?



I would give the moon a baseball
so when its day in the moon can play
with its the DFR the moon can play with
the sun



- 1 **STUDENT:** Ms. Carr, can I show you mine? I wrote, "I would give the moon a basketball so when it is daytime the moon can play. When it's dark, the moon can play with the sun."
- 2 **MS. CARR (concrete question):** Wow, this is very creative. Where is the basketball in your drawing?
- 3 **STUDENT:** It's here. [Student points to center circle.]
- 4 **MS. CARR (abstract question):** I see. Where do you think you would draw Earth if you added it to this picture?
- 5 **STUDENT:** I'm not sure. I think it might be in between them.
- 6 **MS. CARR:** Yes, that would make sense. You could do a little more research if you want. You can go to the computer center and search for a NASA video about day and night on the moon so you can learn more about what it is like on the moon at different times and add onto your message.



Take-Away

Engaging young children in early writing activities can provide an opportunity to support early skills that relate to both word recognition and language comprehension. This can happen through scaffolded teacher-child conversational interactions.



FLORIDA CENTER *for*
READING RESEARCH

THANK YOU!
SCABELL@FSU.EDU
TWITTER: @SONIACABELL



Open Access Resources

TEDx Talk by Sonia Cabell- Writing into literacy: Why early writing matters. TEDx FSU Conference.
<https://www.youtube.com/watch?v=blNjwxzmCE0>

How do I Write...? Scaffolding Preschoolers' Early Writing Skills
<https://www.readingrockets.org/topics/preschool-and-child-care/articles/how-do-i-write-scaffolding-preschoolers-early-writing>

The Rising Star Scaffolding Guide: Supporting Young Children's Early Spelling Skills
<https://ila.onlinelibrary.wiley.com/doi/full/10.1002/trtr.2156>

Using Strive-for-Five Conversations to Strengthen Language Comprehension in Preschool through Grade One
<https://ila.onlinelibrary.wiley.com/doi/full/10.1002/trtr.2266>

Asking Questions is Just the First Step: Using Upward and Downward Scaffolds
<https://ila.onlinelibrary.wiley.com/doi/full/10.1002/trtr.1943>

Going Nuts for Words: Recommendations for Teaching Young Students Academic Vocabulary
<https://ila.onlinelibrary.wiley.com/doi/full/10.1002/trtr.1967>

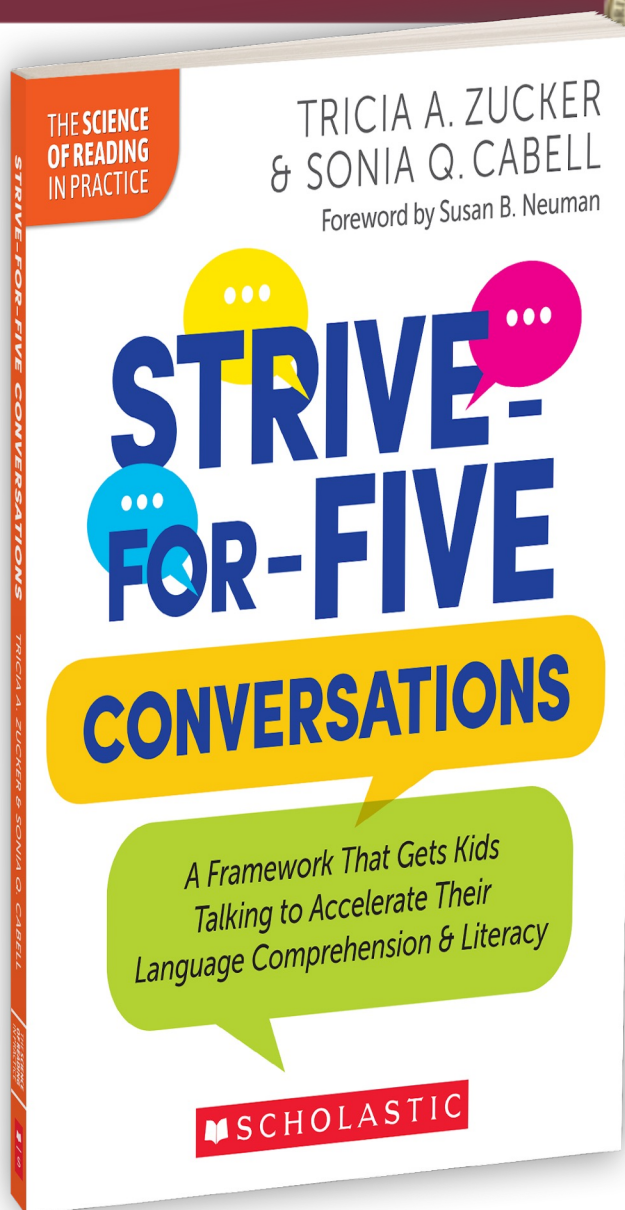


Links to Research Studies Referenced During Q&A

[Rate of Growth of Preschool-Age Children's Oral Language and Decoding Skills Predicts Beginning Writing Ability \(Cabell et al., 2022\)](#)

[Evidence-based Features of Writing Instruction in Widely Used Kindergarten English Language Arts Curricula \(Gabas, Cabell, Copp, & Campbell, 2023\)](#)

[Evaluation of Head Start Curricula for Standards-Based Writing Instruction \(Gerde, Skibbe, Wright, & Douglas, 2019\)](#)



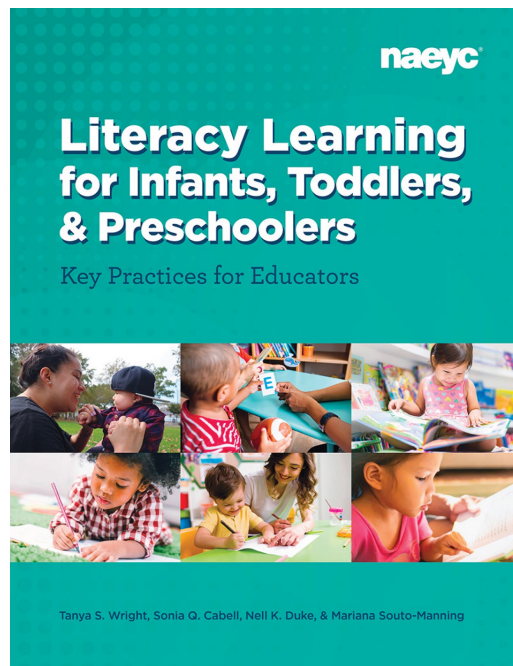
Learn More at
scholastic.com/shop-striveforfive



Strive-for-Five Conversations



Other Resources



Literacy Learning for Infants, Toddlers, & Preschoolers

- Wright, Cabell, Duke, & Souto-Manning
- Published by NAEYC



Other Resources

[Handbook on the Science of Early Literacy](#)

- Sonia Cabell, Susan Neuman, & Nicole Patton Terry
- Published by Guilford

