

Using Strive-for-Five Conversations to Strengthen Language Comprehension in Preschool through Grade One

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ameron listens to his kindergarten teacher, Mr. Jimenez, read aloud Why Do Animals Hibernate by David Martin, using the knowledge he already has about hibernation to help him learn new information about it. He learns some new vocabulary words and deepens his understanding of other words. He also hears the complex language structures used in written language that are currently too difficult for him to read on his own. The informational text helps him understand features of the text genre as Mr. Jimenez draws attention to them, such as how a table of contents works. After reading the book aloud, Mr. Jimenez asks the open-ended question he asked students to think about while he was reading, "Why do animals hibernate?" This question challenges students to think beyond the here and now and make inferences.

Mr. Jimenez: Why do animals hibernate?

Cameron: They want to get away during the winter.

Mr. Jimenez: Why do you think they want to get away dur-

ing the winter?

Cameron: They don't have food.

Mr. Jimenez: Yes, some animals hibernate because food

is hard to find during the winter. So they eat a lot when food is available and go into a

long deep sleep.

As we strive for five turns in our conversations with our students, we support language comprehension in the earliest grades. Language comprehension is the ability to understand and use language in oral form (Gough & Tunmer, 1986; Hoover & Tunmer, 2018). When students have strong language skills, they are better able to understand conversations, books read to them, or books they read themselves. Strong language comprehension also sets the stage for comprehending later (Castles et al., 2018). And reading

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comprehension—or reading for understanding—is our ultimate goal (Snow, 2002). But for that to happen, children need to start developing important skills early in life.

In this article, we introduce the Strive-for-Five framework to help teachers intentionally and strategically create opportunities for rich conversational interactions with their students in pre-kindergarten through first grade. We also explain what the science says about the importance of fostering language comprehension for reading and how to do that through back-and-forth conversations. Finally, we provide examples of how to foster conversations in each strand of the language comprehension part of the Reading Rope (Scarborough, 2001)—literacy knowledge, vocabulary, verbal reasoning, background knowledge, and language structures.

The Strive-for-Five Framework

In our work, we have encouraged teachers to "strive for five" conversational turns with students. This term has been widely used in the field, pioneered by researcher Dickinson (2003); see also Hadley et al., 2020). Our Strive-for-Five framework helps you orchestrate conversations that are responsive to children and challenge their thinking and language use. Strive-for-Five conversations have five turns:

1) Teacher > 2) Student > 3) Teacher > 4) Student > 5) Teacher.

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Each of these conversations takes about 1 min of instructional time, but they accomplish a lot. Strive-for-Five conversations are not happening enough in classrooms (e.g., Early et al., 2010), especially for children experiencing poverty (e.g., Neuman et al., 2018). Our research (Cabell et al., 2015; Deshmukh et al., 2022) shows that many classroom conversations stop short at the third turn, for example:

Teacher: What happened on this page?

Student: Umm, they are mad.

Teacher: Yes, good.

After the third turn, the teacher does not seek another response from the child. In fact, her praise serves as a "conversation stopper." If our goal is to model advanced language that prepares students for reading, we need to have longer, more substantive conversations that contain opportunities for students to push their thinking.

Our research shows that five turns is long enough to elicit a meaningful response but short enough to match most young children's developing attention and language skills.

Let us replay the same conversation using Strive-for-Five framework. Notice how, in Figure 1, the conver-

sation starts with the same open-ended question from the teacher in Turn 1, and the same response from the child in Turn 2. But, in Turn 3, the teacher responds more thoughtfully to what the child said and, as such, keeps the conversation going. In Turn 4, the student deepens her response. Then the teacher wraps up the conversation in Turn 5 by expanding on what the child says by rephrasing or adding more information.

Strive-for-Five conversations require a small shift for most of us. To make that shift, rather than asking only one good question, ask a second question to elicit more language

from the student. Be sure the question extends the student's thinking about the topic and does not stray to a different topic. By doing that, you pull meaningful language from students and show them you are interested in learning more about what they have to say. You build trust because students see that their teacher values their ideas and is interested in keeping the conversation going. In other words, Strivefor-Five conversations say "I see you and hear you" because you focus on one student at a time.

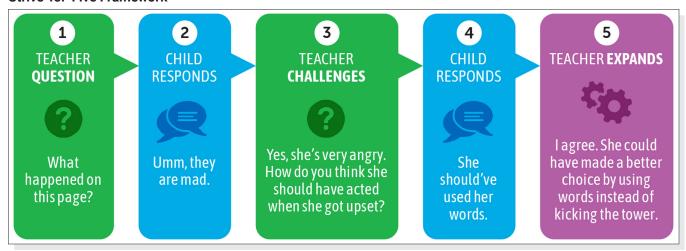
PAUSE AND PONDER

- How does your current practice facilitate language comprehension growth?
- Think about your conversations with children. Where do you usually engage in them? How many turns do your conversations with children typically have? Do they contain just three turns or the goal of five turns?
- Record a short video of your classroom conversations (e.g., 5 min or less). Reflect on your own or with a colleague. What went well? What might you change? On what points in the school day would you like to focus to improve your Strive-for-Five conversations? Why?

How Informal and Formal Language Impact Language Comprehension

To accelerate the language comprehension needed for later reading comprehension, we need to have not only *more* conversations with students, but also conversations that will nurture and nourish their *formal language*, the more

Figure 1
Strive-for-Five Framework



academic language of school and most texts (Foorman et al., 2016). When you read aloud to students, for example, they begin to learn the common vocabulary and language structures of texts.

Words in books and conversations around books are often not used in everyday conversations. For example, a book we might read to children typically contains more advanced vocabulary than a conversation between college-educated adults (Cunningham & Stanovich, 1998). And the conversations children have at home can be quite different in quality from the ones they have at school. For example, consider the following informal conversation between a mother and her 6-year-old son Trey at a restaurant:

Mother: What side do you want?

Trey: French fries!

Mother: No, we need something healthier than that. How

about a vegetable?

Trey: French fries?

Mother: No, choose between broccoli and carrots.

Let us now consider another conversation that Trey has at school after a read-aloud of a book about Asia:

Teacher: What are some things we learned about Asia

from reading this book?

Trey: Three out of every five people on Earth lives

there!

Teacher: Yes, about 60 percent of the world's population

lives on the continent of Asia.

Trey: Yeah, and it's big. Russia is the biggest!

Teacher: Russia is the largest country in Asia and in the

whole world, in terms of land area.

Teacher (starting a new Strive-for-Five conversation with another student): Tracy, what are some other countries in Asia that have large numbers of people or amounts of land?

These conversations tell us a lot about how conversations at home and school differ. The informal conversations often used at home contain interpersonal cues so participants do not have to be as specific. In contrast, school conversations usually focus on topics under study and contain advanced vocabulary (e.g., population and continent) and standard grammar. Trey's teacher knows that the language of learning at school needs to be more precise. That is why in Turn 5 she uses specific details to extend what Trey is saying. Read-alouds and other instructional times of the day encourage the use of more formal language. In this way, you will grow children's content

knowledge and expose them to advanced language models (Cabell et al., 2013).

The Strands of Language Comprehension

The Reading Rope (Scarborough, 2001) is a graphic representation of the skills that underlie word recognition and language comprehension. The strands of each of those components become increasingly integrated and coordinated as reading develops. The strands of language comprehension include literacy knowledge, vocabulary, verbal reasoning, background knowledge, and language structures. We further define each strand and provide examples of instruction that promotes Strive-for-Five conversations to enhance students' language comprehension.

Strand One: Literacy Knowledge

Literacy knowledge includes understanding the features and structures of different kinds of texts. To build literacy knowledge through Strive-for-Five conversations, expose students to a variety of texts—including narrative, informational, and dual-purpose genres—early and often (see Table 1).

Different genres elicit different types of conversations between teachers and children. For example, informational texts—texts that convey factual information or describe how to do something— have been increasingly emphasized in standards. For example, the Common Core State Standards (National Governors Association, 2010) recommend that about 50 percent of texts read aloud in the primary grades be informational. Informational texts (including dual-purpose genres) lead to conversations that contain more formal language (Price et al., 2012; Zucker et al., 2010). They can also impact children's content knowledge development.

Choosing Quality Texts to Read Aloud

Children's level of interest in and enjoyment of an interactive read-aloud depends largely on the texts you choose. To select texts that facilitate Strive-for-Five conversations, you want a text that is not only interesting but also contains multiple vocabulary words worth learning and topics that stimulate conversation.

Be Sure the Text Contains Rich Vocabulary. First, choose a text with rich vocabulary your students need to learn. Quality children's books contain 50 percent more advanced vocabulary words than spoken language, when compared to college graduates' discourse (Cunningham & Stanovich, 1998). In fact, when children are read to routinely in the first 5 years

Table 1
Genre Type, Benefits, and Typical Elements

Genre and subcategories	Key benefits	Typical elements
Narrative Linear narrative that presents characters, setting, and problem and solution Nonlinear narrative that presents events or characters with twists or turns that are not a simple sequence	Develops students' social skills such as emotional understanding and perspective taking Provides models for telling personal narratives, which may include information about setting, key events, and problems and solutions	 "Once upon a time" Talking animals Make-believe or fantasy Characters portrayed in sequence of events Illustrations or photos
Informational Topical research or textbooks that detail a subject "How to" books that explain procedures News articles or magazines that explain current events	Builds knowledge of the world, sparks curiosity, and develops understanding of content-area topics and subtopics Orients children to important topics and then provides descriptions or key attributions of the events or subject of study	 "The term means" Technical vocabulary Timeless or passive verbs Academic terms like "predict, observe" Photos, diagrams, charts, figures
Dual-purpose Sequence of events told by a character or narrator that convey an experience alongside accurate information Historical biography or autobiography	Present factual information in an accessible, hybrid format by telling a story May interweave accurate information and fantasy or imagined elements	 Accurate information Characters (human, animal, or other) experience realistic events Make-believe elements may add excitement

of life, they are exposed to 1.4 million more words than children who are read to less routinely (Logan et al., 2019). Read through any book you are considering reading aloud to confirm that it has multiple words your students would benefit from knowing—perhaps five or six words.

Be Sure the Text Requires Abstract Thinking. Second, to develop strong language comprehension skills, select texts that require some advanced or abstract thinking-such as inferring, problem solving, and reasoning about cause-effect relationships. During read-aloud, teachers tend to push children to use these high-level reasoning skills only when they come to pages that contain high-level topics (Zucker et al., 2010). This makes sense. After all, Strive-for-Five conversations usually start when something in a book warrants discussion. So select stories that will require students to grapple with the characters' complex emotions or problems they are trying to solve. Select informational texts that present facts and ideas that will spark readers' curiosity about how things work and inferring conditions that could change things. Also check informational and dual-purpose genre texts for accuracy and talk to students about what is inaccurate (Donovan & Smolkin, 2002).

Strand Two: Vocabulary

Vocabulary is all the words we know and use. It is also referred to as our lexicon. Receptive vocabulary includes the words

we can understand when listening or reading. Expressive vocabulary includes the words that we use when speaking or writing. Both breadth (how many words we know) and depth (how well we know a word) are important for children's language comprehension (Hadley et al., 2018).

Vocabulary is a robust predictor of reading comprehension (e.g., National Early Literacy Panel, 2008; Ricketts et al., 2007). The more words students know, and the better they know them, the more likely they will be able to understand what they read. Cognitive scientists theorize that we organize vocabulary into networks of knowledge (Willingham, 2006) to represent what we know about the natural and social world (Anderson & Nagy, 1993). Some estimate that young children need to learn 1000–4000 words per year (Biemiller, 2010; Snow & Kim, 2007).

So if we want children to become successful readers, we must start building their vocabulary skills early. Let us consider how Strive-for-Five conversations can do that. This one took place between first-grade teacher, Ms. Carr, and her students, on the playground during recess.

Ms. Carr: Wow! Look at you all jumping rope. Are you trying to get *fit*?

Anthony: Yeah.

Ms. Carr: Yes, you're going to be fit and strong with all

that exercise.

Anthony: My rope is too small.

Ms. Carr: I see what you mean. It doesn't fit the size of your body. You know, fit is one of our multiplemeaning words. It can mean whether something is a comfortable size, but it can also mean getting healthy by eating right and exercising. Now, let's see if we can find you a longer jump rope that fits your size so you can get fit and strong!

Ms. Carr is referring to words she has already taught her students, using the vocabulary cards in Figure 2. She intentionally exposes her students to these kinds of multiple-meaning words during read-alouds and at other times of day. Notice in this Strive-for-Five exchange she used relatable synonyms and examples so students could understand words more deeply. Young children enjoy learning multiple meanings of the same word. They also find it fun to use those words playfully in conversations and in jokes and puns.

Using Picture Vocabulary Cards

Picture vocabulary cards are the most efficient tool for teaching new words directly and explicitly and are part of an effective instructional routine (Zucker et al., 2013, 2019, 2021). If your curriculum contains cards like these, great!

Figure 2
Teaching Multiple-Meaning Words Is a Fun and Effective Way to Build Vocabulary



Use them in your instruction and display them where kids can access them easily for review. If it does not, not to worry. You can easily create them by following the steps given. On half-size pieces of cardstock:

- Show the word: Print or write the word on the front of the card. Young children are learning to map letters onto the spoken word, so may be able to read the vocabulary word; reading the word may help them add the word to their lexicon.
- Include a child-friendly definition: Use an English learner's dictionary (e.g., Oxford Learner's Dictionary online) or a children's dictionary (e.g., Scholastic Children's Dictionary, 2019) to help you prepare a simple definition and write it on the back of the card (e.g., When something is invisible, you cannot see it; Beck et al., 2013). For example, do not use another advanced word (e.g., visible) to explain an already complicated word. The key to making it "child friendly" is to avoid using advanced words to define the focal word.
- Add picture support: Provide a picture that somehow illustrates the word. If the word is hard to visualize (such as the word invisible), then use a picture of a related concept (such as a waiter holding an empty plate or a wizard with a wand that makes things invisible) and plan how you will explain that picture to children by writing the sentence (e.g., "When they were pretending to serve food it was invisible." or "There used to be a frog here but the wizard could do a trick to make it invisible.").

How to Teach Words Using the Cards. Once you have created your cards, here's how we recommend using them to teach vocabulary directly and explicitly.

- Say the word: Ask students to repeat the word so that they establish a clear phonological representation of the word in their mind and know how to pronounce it.
- Define and explain the word: Give students the child-friendly definition of the word and explain its link to the picture. Make this part snappy so you do not lose students' attention. We also recommend directly teaching the word's meaning rather than asking young children to guess what a new word means, as this often confuses the whole class.
- Act out the word or use it in a sentence: Invite children to playfully act out the word with you using gestures or facial expressions. The key is to help children use the word in a meaningful sentence that you model. If you cannot think of a way to act it out, encourage students to use the word in a meaningful sentence that connects with the picture you are showing.

Revisit and reteach the word: Plan opportunities to review the word. For example, reference the vocabulary card when you come to the word in a book or use the word in a content area lesson. For students who need more practice, review vocabulary words in small group and ask them questions that will help them practice saying and using each word.

Teachers who start using this type of explicit vocabulary instruction are likely to see it increases their student's vocabulary and interest in learning more and more words (e.g., Zucker et al., 2021). If you do not have time to make your own vocabulary cards, consider accessing publicly available collections of vocabulary picture cards such as this one we created for our research studies: https://circleactivitycollection.org/circle-vocabulary-collection/.

Strand Three: Verbal Reasoning

Verbal reasoning is using language to explain ideas aloud or think about and learn new information. We use verbal reasoning to make sense of what we read or hear. A big piece of that is understanding abstract concepts by making inferences, or forming a logical conclusion based on reasoning to fill in gaps. Strong readers and listeners constantly make inferences about a text as it unfolds. Writers and speakers do not generally include all the information one must know to understand their message-if they did, it would be quite tedious. Rather, the writer/speaker assumes the reader/listener has background knowledge to understand the general message and fill in gaps. For example, Tricia (author) recently said to her children, "The pool man broke the light. We can't let Rosie out." Well, to understand those statements, the children would have to infer that the accident might have resulted in shards of glass near the pool area, and that Rosie-the dog-should not be let out of the house until it is cleaned up, because she might cut her paws. Inferring has been referred to as the "cornerstone of comprehension" (p. 200; Orcutt et al., 2023). When someone makes an inference, they activate background knowledge. Then they integrate that knowledge with the new information that they are receiving to make sense of it.

With her preschool students, Ms. Palmer is reading aloud *Do Like Kyla* by Angela Johnson. She knows that her students need to integrate their existing background knowledge with information in the text to have a deeper understanding. Ms. Palmer plays an important role in guiding children to practice this through Strive-for-Five conversations that require verbal reasoning to explain ideas aloud or think about and learn new information. Consider her classroom read-aloud conversations and

how they move from simple, concrete understanding of the text to more complex, abstract understanding of it.

Ms. Palmer's open-ended questions about the book move children from concrete to abstract understanding. Open-ended questions that begin with *wh*- words and *how* usually elicit more than a one-word answer (e.g., Deshmukh et al., 2019). Be sure to ask a combination of concrete and abstract questions during every read-aloud, as Ms. Palmer does in the following Strive-for-Five conversation.

- Concrete questions are literal. Readers can answer them using details in the text. The author's words or the illustrations give them the information they need to answer the question.
- Abstract questions require complex thinking or for children assemble information from the text with their background knowledge. These tend to be open-ended questions.

Ms. Palmer: What is the weather like? (concrete)

Gryffin: Snowy and sunny.

Ms. Palmer: Yes, it was snowy, but the sun was shin-

ing. Why do you think the snow makes a

"crunch" sound? (abstract)

Gryffin: Because they are walking in it.

Ms. Palmer: Yes, I bet the snow was deep enough to make

a crunch sound when they stepped on it, but the sun wasn't strong enough to melt the snow and make a "slush, slush" sound. (extends)

How do you know the first question is concrete? The author told you that there was lots of sunshine and that there was snow. Information about the weather is provided on multiple pages. Why is the second question abstract? It pushes you to go beyond what the author says and integrate what students might know about how snow feels and sounds, using information from the text.

For read-alouds, plan questions that fall along the continuum shown in Figure 3, which moves from the most basic, concrete ideas to more abstract ideas that require making inferences and backing up claims with evidence from the text (Blank et al., 1978; van Kleeck et al., 2006). As you can see, concrete thinking involves tangible things you can see, hear, touch, or describe. In contrast, abstract thinking involves ideas beyond what you can observe to consider connections, patterns, and relationships, and to solve problems. You may know other synonyms for concrete versus abstract language, such as: contextualized versus decontextualized or literal versus inferential language (e.g., Snow, 1991; Teale, 2003).

Figure 3 **Continuum of Abstract Language**

Level 1: Naming

 Name what you see or do

CONCRETE ←

 Focus on a whole object or action

Examples:

- What is this?
- Find the...
- Find another one like this...

Level 2: Describing

- Describe how something looks, moves, uses, textures, color, size, etc.
- Focus on a selective part of object or action

Examples:

- What is this part called?
- Which one is bigger?
- What is this used for?

Level 3: Inferring

- Use language to retell experiences or restructure perceptions
- Focus on inferences, judgments, opinions, feelings, and past events

Examples:

- What happened when...?
- How does she feel?
- What can you guess/ infer is happening when...?

Level 4: Explaining

→ ABSTRACT

- Use language to justify and think beyond what you can perceive
- Focus on what might happen in future, why things happen, how to solve problems

Examples:

- Why...?
- How do you know if/that...?
- What if you change/ trv...?

Strand Four: Background Knowledge

Background knowledge is the information a reader or listener has about topics in the text. It also includes the information that a person brings into conversations. Background knowledge helps us make inferences and fill in gaps in a text. We integrate our background knowledge with the text not only to understand it, but also to learn from it. In short, it is essential to reading and listening for understanding (Cromley & Azevedo, 2007; Kintsch, 1998; Stafura & Perfetti, 2017).

But we cannot assume our students have the knowledge they need to comprehend text. So, we need to do more than simply "activate" their knowledge. We need to build it-specifically, their content knowledge: their knowledge about the natural and social world (Connor et al., 2017). In other words, teaching science and social studies topics systematically is important for building the rich store of background knowledge students will need not only in the early grades but also when they move to grade three and beyond.

Integrate Content and Literacy Instruction

One way to build students' content knowledge while strengthening their oral language skills is to use integrated content and literacy instruction, which means either infusing content-area teaching into literacy instruction or infusing literacy teaching into content-area instruction. Research shows that integrated content and literacy instruction not only builds students' background knowledge, but also strengthens their vocabulary and reading comprehension (Hwang et al., 2022, 2023).

One of the best ways to support knowledge building is to engage children in Strive-for-Five conversations before, during, and after content-rich read-alouds. Research shows that when you discuss the book in addition to reading the words on the page, you can help to improve children's vocabulary (Zucker et al., 2013). By asking concrete questions (e.g., Why do plants need water to survive?) and abstract questions (e.g., What do you think happens when a plant does not get water?), you encourage active participation by giving children opportunities to discuss their ideas.

Mr. Fazal is reading aloud the informational book From Seed to Plant (Gibbons, 1991) to his first graders-one of four books he is using to teach them about the lifecycle of plants. His goal is to deepen students' knowledge of that topic not only through listening to the book, but also through Strive-for-Five conversations about the book.

After reading the book, Mr. Fazal reminds students of the question he asked them to think about before the read-aloud.

Mr. Fazal: How does a plant change as it grows?

Kenny: It gets bigger.

Mr. Fazal: Yes, a plant does grow bigger. Tell me more

about that.

Kenny: It starts as a tiny seed. And then it grows.

Mr. Fazal: Yes, when a seed starts to grow, it germinates.

Starting a new Strive-for-Five conversation with another student...

Mr. Fazal: Sarah, then how does the plant change after

that?

Sarah: There's roots going down.

Mr. Fazal: Why do you think the roots grow under the

soil? (abstract question)

Sarah: So we can see the baby plant!

Mr. Fazal: The seedling can grow when the roots get the

water, minerals, and oxygen it needs from the soil.

Notice how Mr. Fazal builds students' knowledge of the lifecycle of plants, while strengthening students' language comprehension. He encourages abstract thinking, and his students are engaged in the topic as they discuss key ideas and advanced vocabulary words. Mr. Fazal knows that it takes time for knowledge to develop, so he gives his students coherent content learning experiences. For example, in addition to read-alouds, he immerses his students in science investigations that involve planting seeds and observing plants grow. He also knows that teaching about the lifecycle of plants will help him build his students' knowledge about other types of lifecycles (e.g., insects and frogs).

Strand Five: Language Structures

Language structures refer to how we combine words to craft sentences, including grammatical rules (e.g., syntax) and how word choice affects meaning (e.g., semantics). These structures matter for understanding written and spoken language. Exposure to written language early on is essential because the language structures of books are often different and more complex than those of spoken language.

Teacher talk—and the level of sophistication of that talk—affects students' understanding. There is a direct connection between the syntactic complexity of what teachers say and how well students can understand formal language. When preschool teachers use formal language structures in their talk, students' understanding of these structures increases (Huttenlocher et al., 2002).

The Strive-for-Five framework is focused on modeling and eliciting formal and mature language structures.

How to Model Formal Language Structures

Through conversations, you can model formal language structures for children, without distracting them from the topic under discussion. We discuss two strategies in this section—recast and extend—which you can use at any conversation turn. But, during whole-class and small-group instruction, we have noticed teachers use them at the fifth turn of a Strive-for-Five conversation to end by giving voice to an individual student's key idea, while allowing all students to listen and absorb important aspects of the conversation.

Strategy 1: Recast. When you recast a child's message, you restructure it in a way that makes it more syntactically correct (Nelson et al., 1996), which provides the child with feedback on a language structure that she has not yet mastered (Cleave et al., 2015). Recasting is a type of downward scaffold to use when a student makes a grammatical or syntactic error.

Student: I goed to the farm and saw two sheeps.

Teacher: Wow, you went to the farm and saw two sheep?!

Student: I winned the game.

Teacher: Congratulations! You won the game!

In the second example shown, a teacher might be tempted to say, "No, you won the game. Say it correctly, 'I won the game." However, asking the child to repeat after you detracts from the conversation and research suggests that children do not need to repeat it after you to learn from your model (Nelson et al., 1996). There's no need to explain details of the error, such as "That's an irregular past tense verb, so you say 'went' instead of 'goed." In fact, you will likely lose young students' attention when you offer those types of unnecessary explanations.

Strategy 2: Extend. You can extend a child's contribution to a conversation by building on it with more information or explanation about an object, action, or topic. Extending is a form of upward scaffold because the teacher adds onto or responds to the child's already accurate message. An extension should always build on the child's focus and respond to the child's interests. The child should be inspired to think about what he just said. You can extend a child's message to make it more semantically complex (Justice et al., 2018). To do that, at your turn in the conversation, repeat the child's message but extend the idea by adding a word, phrase, or more explanation to make it longer. This is a "mirror plus," or a reflection of the child's

message, plus language that increases its complexity and makes students think (Girolametto et al., 2000).

In this example, the teacher adds a word:

Student: A mouse!

Teacher: A tiny mouse.

In this example, the teacher adds a phrase:

Student: Look at that big fish.

Teacher: Look at that big fish swimming in the water.

In this example, the teacher provides a vocabulary word and an idea to the message:

Student: Write my words.

Teacher: You want me to write down your story so you can

read it back later.

In this example, the teacher extends the child's message by providing even more information and explanation:

Student: It's still raining.

Teacher: You're right. It's still raining. The school yard will

be too wet, so we won't be able to go out for

recess today.

An extension does not necessarily have to repeat or rephrase what the child says. It can also keep the conversation going by prompting the child to say more, usually by asking questions that tap into his or her interests.

Student: All her doors are locked.

Teacher: All her doors are locked, but what could happen if

the wolf came in?

When you extend the child's message, you are building students' language comprehension. Whether you are just adding one word to describe the color, size, shape, or texture of something, or whether you are adding more information and length to the child's message, you are building on their ideas systematically to build language or encourage the conversation to continue. Not only do extensions help develop children's language structures, but they also help build children's background knowledge. As teachers are responsive to children's interests, they can extend what children are saying by adding important knowledge to a given topic.

Conclusion: Strive-for-Five to Embrace the Science of Reading

Developing language comprehension early in students' school careers is essential to supporting their overall

literacy development. We must provide students frequent opportunities to hear and use formal language. Focusing on the language comprehension strands of the Reading Rope (Scarborough, 2001), this article discussed ways to accelerate young children's language comprehension by engaging them in Strive-for-Five conversations—conversations that focus on a single topic for multiple turns and build on what students say. Those conversations also give you the opportunity to model advanced vocabulary and syntax, help students to think abstractly, and build their knowledge of the social and natural world.

NOTE

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REFERENCES

Anderson, R. C., & Nagy, W. E. (1993). The vocabulary conundrum. Technical Report No. 570. Center for the Study of Reading.

Beck, I. L., McKeown, M. G., & Kucan, L. (2013). Bringing words to life: Robust vocabulary instruction. Guilford Press.

Biemiller, A. (2010). Words worth teaching. McGraw-Hill SRA.

Blank, M., Rose, S. A., & Berlin, L. J. (1978). The language of learning: The preschool years. Grune & Stratton.

Cabell, S. Q., DeCoster, J., LoCasale-Crouch, J., Hamre, B. K., & Pianta, R. C. (2013). Variation in the effectiveness of instructional interactions across preschool classroom settings and learning activities. *Early Childhood Research Quarterly*, 28, 820–830. https://doi.org/10.1016/j.ecresg.2013.07.007

Cabell, S. Q., Justice, L. M., McGinty, A. S., DeCoster, J., & Forston, L. D. (2015). Teacher-child conversations in preschool classrooms: Contributions to children's vocabulary development. *Early Childhood Research Quarterly*, 30, 80–92. https://doi.org/10.1016/j.ecresq.2014.09.004

Castles, A., Rastle, K., & Nation, K. (2018). Ending the reading wars: Reading acquisition from novice to expert. *Psychological Science in the Public Interest*, 19(1), 5–51. https://doi.org/10.1177/15291 00618772271

Cleave, P. L., Becker, S. D., Curran, M. K., Van Horne, A. J., & Fey, M. E. (2015). The efficacy of recasts in language intervention: A systematic review and meta-analysis. *American Journal of Speech-Language Pathology*, 24(2), 237–255. https://doi.org/10.1044/2015_AJSLP-14-0105

Connor, C. M., Dombek, J., Crowe, E. C., Spencer, M., Tighe, E. L., Coffinger, S., Zargar, E., Wood, T., & Petscher, Y. (2017). Acquiring science and social studies knowledge in kindergarten through fourth grade: Conceptualization, design, implementation, and efficacy testing of content-area literacy instruction (Cali). *Journal of Educational Psychology*, 109(3), 301–320. https://doi.org/10.1037/edu0000128

Cromley, J. G., & Azevedo, R. (2007). Testing and refining the direct and inferential mediation model of reading comprehension. *Journal of Educational Psychology*, 99(2), 311–325. https://doi.org/10.1037/edu0000465

Cunningham, A. E., & Stanovich, K. E. (1998). What reading does for the mind. *American Educator*, 22, 8–17.

Deshmukh, R. S., Pentimonti, J. M., Zucker, T. A., & Curry, B. (2022). Teachers' use of scaffolds within conversations during shared book reading. *Language, Speech, and Hearing Services in Schools*, 53(1), 150–166. https://doi.org/10.1044/2021_lshss-21-00020

- Deshmukh, R. S., Zucker, T. A., Tambyraja, S. R., Pentimonti, J. M., Bowles, R. P., & Justice, L. M. (2019). Teachers' use of questions during shared book reading: Relations to child responses. *Early Childhood Research Quarterly*, 49, 59–68. https://doi.org/10. 1016/j.ecresq.2019.05.006
- Dickinson, D. K. (2003). Why we must improve teacher-child conversations in preschools and the promise of professional development. In L. Girolametto & E. Weitzman (Eds.), *Enhancing caregiver language facilitation in childcare settings* (pp. 41–48). The Hanen Institute.
- Donovan, C. A., & Smolkin, L. B. (2002). Considering genre, content, and visual features in the selection of trade books for science instruction. *The Reading Teacher*, *55*(6), 502–520.
- Early, D. M., Iruka, I. U., Ritchie, S., Barbarin, O. A., Winn, D.-M. C., Crawford, G. M., Frome, P. M., Clifford, R. M., Burchinal, M., Howes, C., Bryant, D. M., & Pianta, R. C. (2010). How do pre-kindergarteners spend their time? Gender, ethnicity, and income as predictors of experiences in pre-kindergarten classrooms. *Early Childhood Research Quarterly*, 25(2), 177–193. https://doi.org/10.1016/j.ecresq.2009.10.003
- Foorman, B., Beyler, N., Borradaile, K., Coyne, M., Denton, C. A., Dimino, J., Hayes, L., Justice, L., Warnick, L., & Wagner, R. (2016). Foundational skills to support Reading for understanding in kindergarten through 3rd grade. Educator's practice guide. NCEE 2016-4008. What Works Clearinghouse.
- Gibbons, G. (1991). From seed to plant. Holiday House.
- Girolametto, L., Weitzman, E., van Lieshout, R., & Duff, D. (2000). Directiveness in teachers' language input to toddlers and preschoolers in day care. *Journal of Speech, Language, and Hearing Research*, 43(5), 1101–1114. https://doi.org/10.1044/jslhr.4305.1101
- Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. Remedial and Special Education, 7(1), 6–10. https://doi.org/10.1177/074193258600700104
- Hadley, E. B., Dickinson, D. K., Hirsh-Pasek, K., & Golinkoff, R. M. (2018). Building semantic networks: The impact of a vocabulary intervention on preschoolers' depth of word knowledge. *Reading Research Quarterly*, 54(1), 41–61. https://doi.org/10.1002/rrq.225
- Hadley, E. B., Newman, K. M., & Mock, J. (2020). Setting the stage for talk: Strategies for encouraging language-building conversations. The Reading Teacher, 74(1), 39–48. https://doi.org/10.1002/trtr. 1000
- Hoover, W. A., & Tunmer, W. E. (2018). The simple view of reading: Three assessments of its adequacy. *Remedial and Special Education*, 39(5), 304–312. https://doi.org/10.1177/0741932518773154
- Huttenlocher, J., Vasilyeva, M., Cymerman, E., & Levine, S. (2002). Language input and child syntax. *Cognitive Psychology*, 45(3), 337–374. https://doi.org/10.1016/S0010-0285(02)00500-5
- Hwang, H., Cabell, S. Q., & Joyner, R. E. (2022). Effects of integrated literacy and content-area instruction on vocabulary and comprehension in the elementary years: A meta-analysis. Scientific Studies of Reading, 26(3), 223–249. https://doi.org/10.1080/10888438. 2021.1954005
- Hwang, H., Cabell, S. Q., & Joyner, R. E. (2023). Does cultivating content knowledge during literacy instruction support vocabulary and comprehension in the elementary school years? A systematic review. Reading Psychology, 44(2), 145–174. https://doi.org/10.1080/02702711.2022.2141397
- Justice, L. M., Jiang, H., & Strasser, K. (2018). Linguistic environment of preschool classrooms: What dimensions support children's language growth? *Early Childhood Research Quarterly*, 42, 79–92. https://doi.org/10.1016/j.ecresq.2017.09.003
- Kintsch, W. (1998). Comprehension: A paradigm for cognition. Cambridge University Press.
- Logan, J. A., Justice, L. M., Yumuş, M., & Chaparro-Moreno, L. J. (2019). When children are not read to at home: The million word gap. *Journal of Developmental and Behavioral Pediatrics*, 40(5), 383–386. https://doi.org/10.1097/dbp.0000000000000657
- National Early Literacy Panel (US). (2008). Developing early literacy: Report of the National Early Literacy Panel: A scientific synthesis of

- early literacy development and implications for intervention. National Institute for Literacy.
- National Governors Association Center for Best Practices & Council of Chief State School Officers. (2010). Common Core State Standards (CCSS) for English language arts and literacy in history/social studies, science, and technical subjects. Author. http://corestandards.org/
- Nelson, K. E., Camarata, S. M., Welsh, J., Butkovsky, L., & Camarata, M. (1996). Effects of imitative and conversational recasting treatment on the acquisition of grammar in children with specific language impairment and younger language-normal children. *Journal of Speech, Language, and Hearing Research*, 39(4), 850–859. https://doi.org/10.1044/jshr.3904.850
- Neuman, S. B., Kaefer, T., & Pinkham, A. M. (2018). A double dose of disadvantage: Language experiences for low-income children in home and school. *Journal of Educational Psychology*, 110(1), 102–118.
- Orcutt, E., Johnson, V., & Kendeou, P. (2023). Comprehension: From language to reading. In S. Q. Cabell, S. B. Neuman, & N. Patton Terry (Eds.), *Handbook on the science of early literacy* (pp. 196–207). Guilford.
- Price, L. H., Bradley, B. A., & Smith, J. M. (2012). A comparison of preschool teachers' talk during storybook and information book read-alouds. *Early Childhood Research Quarterly*, 27(3), 426–440. https://doi.org/10.1016/j.ecresq.2012.02.003
- Ricketts, J., Nation, K., & Bishop, D. V. (2007). Vocabulary is important for some, but not all reading skills. *Scientific Studies of Reading*, 11(3), 235–257. https://doi.org/10.1080/10888430701344306
- Scarborough, H. (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* (Vol. 1, pp. 97–110). Guilford.
- Scholastic Children's Dictionary. (2019). Scholastic Inc.
- Snow, C. (2002). Reading for understanding: Toward an R&D program inn reading comprehension. RAND Corporation.
- Snow, C. E. (1991). The theoretical basis for relationships between language and literacy in development. *Journal of Research in Childhood Education*, 6(1), 5–10. https://doi.org/10.1080/0256854910 9594817
- Snow, C. E., & Kim, Y.-S. (2007). Large problem spaces: The challenge of vocabulary for English language learners. In R. K. Wagner, A. E. Muse, & K. R. Tannenbaum (Eds.), Vocabulary acquisition: Implications for reading comprehension (pp. 123–139). Guilford.
- Stafura, J. Z., & Perfetti, C. A. (2017). Integrating word processig with text comprehension: Theoretical frameworks and empirical examples. In K. Cain, D. L. Compton, & R. K. Parrila (Eds.), Studies in written language and literacy: Theories of reading development (pp. 9–32). John Benjamins Publishing Company.
- Teale, W. H. (2003). Reading aloud to young children as a classroom instructional activity: Insights from research and practice. In A. van Kleeck, S. A. Stahl, & E. B. Bauer (Eds.), *On reading books to children: Parents and teachers* (pp. 123–147). Routledge.
- van Kleeck, A., Vander Woude, J., & Hammett, L. (2006). Fostering literal and inferential language skills in head start preschoolers with language impairment using scripted book-sharing discussions. American Journal of Speech-Language Pathology, 15(1), 85–95. https://doi.org/10.1044/1058-0360(2006/009)
- Willingham, D. T. (2006). How knowledge helps: It speeds and strengthens reading comprehension, learning—And thinking. *American Educator*, 30, 1–12.
- Zucker, T. A., Cabell, S. Q., Justice, L. M., Pentimonti, J. M., & Kaderavek, J. N. (2013). The role of frequent, interactive prekindergarten shared reading in the longitudinal development of language and literacy skills. *Developmental Psychology*, 49(8), 1425–1439. https://doi.org/10.1037/a0030347
- Zucker, T. A., Cabell, S. Q., Petscher, Y., Mui, H., Landry, S. H., & Tock, J. (2021). Teaching together: Pilot study of a tiered language and literacy intervention with head start teachers and linguistically diverse families. *Early Childhood Research Quarterly*, 54, 136–152. https://doi.org/10.1016/j.ecresq.2020.09.001

Zucker, T. A., Carlo, M. S., Landry, S. H., Masood-Saleem, S. S., Williams, J. M., & Bhavsar, V. (2019). Iterative design and pilot testing of the developing talkers tiered academic language curriculum for pre-kindergarten and kindergarten. *Journal of Research on Educational Effectiveness*, 12(2), 274–306. https://doi.org/10.1080/19345747.2018.1519623

Zucker, T. A., Justice, L. M., Piasta, S. B., & Kaderavek, J. N. (2010). Preschool teachers' literal and inferential questions and children's responses during whole-class shared reading. *Early Childhood Research Quarterly*, 25(1), 65–83. https://doi.org/10.1016/j.ecresq.2009.07.001