

Supporting Young Children's Language Learning through Teachers' Use of Evidence-Based Instructional Strategies¹⁾

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Abstract

Much is known about the skills that young children need to be successful readers. The literature identifies two kinds of skills that are key to young children's language and literacy development: meaning-related skills and code-related skills. This article focuses on one of these key skills: meaning-related skills. It provides an overview of what is known about the importance of young children's language development to children's success as readers and describes several evidence-based instructional strategies (strategies that researchers have shown to have a positive impact on children's language learning) that early childhood teachers should use to support children's language development. By using the described strategies, early childhood educators can ensure that their teaching is in harmony with current research findings and that they are providing their young learners with the very best meaning-related skill instruction known today.

Keywords : young children, language learning, meaning-related skills, evidence-based instructional strategies

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Introduction

Today, there is a strong body of research on how children learn to read. Fortunately, that body of research evidences considerable agreement regarding the early literacy skills that serve as the foundation for children's later reading success (National Reading Panel Report, 2000; National Early Literacy Panel, 2008). From that research, we know that to become a skilled reader by age 8, children need to acquire two kinds of skills: (1) meaning-related skills (i.e., language and conceptual knowledge, vocabulary, and abilities to understand written texts), and (2) code-related skills (i.e., understanding that spoken words are composed of smaller elements of speech [phonological and phonemic awareness]; understanding that words are composed of letters that represent speech sounds [alphabetic principle]; and understanding literate vocabulary words (e.g., word, letter, read, page, sentence, write), the relationship between written language units (e.g., letters make up words, words are separated by spaces), and how speech maps to print [print awareness]. In this article, I focus on one of these kinds of key skills, meaning-related skills. I explain why meaning-related skills are so important to children's success as readers, and I provide examples of the kinds of playful, engaging, developmentally-appropriate, evidence-based learning opportunities early childhood teachers can provide to support their young learners' development of meaning-related skills. I chose to focus on meaning-related skills because of the potential applicability of the evidence-based strategies to children's learning of any language, not just English. I acknowledge that all of the research reported in this article was conducted with young children who resided in the United States.

Research Supporting the Importance of Meaning-Related Skills to Children's Success as Readers

It is through language that children make meaning and acquire conceptual knowledge. Young children who are members of a supportive language-learning environment learn many new words every day. Some researchers estimate that these children may learn as many as seven words every day (Snow, Burns, & Griffin, 1998). By the time these children are age 3,

they have a vocabulary of more than 1,100 words. Unfortunately, not all young children are growing up in supportive language-learning environments. An increasing number of children live in poverty, and the literature informs us that children from low-income households have a vocabulary at age three of about 525 words, about one-half that of children from more supportive language-learning environments (Hart & Risley, 1995). More current researchers (Rodriguez & Tamis-LeMonda, 2011) suggest that this difference is evident even before age 3, as early as 15 months of age. Other researchers (Tabors, Roach, & Snow, 2001; Dieterich, Assel, Swank, & Landry, 2006) suggest that not only is the number of words children hear important, but also the kind of words, particularly the number of rare words children hear, has an impact on children's receptive vocabulary. Some use the phrase "word gap" to describe this gulf that separates young children who have numerous rich opportunities to acquire language during their early years from those who do not. Others use the phrase "word catastrophe" because this difference matters. The research literature has consistently identified children's vocabulary abilities as a strong predictor of their later reading achievement (Scarborough, 2001), particularly beyond second grade or age 7 (Storch & Whitehurst, 2002). Hart and Risley's (1995) research, for example, showed that children's vocabulary at age 3 is strongly associated with their reading performance at age 8. Others (e.g., Beck & McKeown, 2007; Stanovich & Cunningham, 1992) have documented the importance of the size of a person's vocabulary to well beyond age 8, to their reading comprehension in high school.

Though much of the oral language research has focused on the relationship between the size or quality (number of rare words known) of children's vocabulary and their reading comprehension, children's oral language development encompasses more than their vocabulary development. The more comprehensive view of oral language development includes narrative and syntax, in addition to semantics. A few studies, such as that by the NICHD Early Child Care Research Network (2005), investigated how this more comprehensive model of oral language influences children's later reading comprehension. Consistent with the research focused solely on children's vocabulary, researchers have discovered that the more comprehensive model is predictive of children's later meaning-related reading performance.

Language's importance to children's success as readers, and consequently their success in life, indicates how important it is for early childhood teachers to provide many language-

learning opportunities for their young learners. Early childhood educators work with children during that time in their lives when children experience their highest rate of language development (Farkas & Beron, 2004). Consequently, the preschool years are a crucial time for intervention, for providing children with effective vocabulary intervention. As Marulis and Neuman's (2010) findings suggest instruction in vocabulary can make a short-term and a long-term difference in children's lives.

Fortunately, the literature provides teachers with many suggestions for effective evidence-based language instructional strategies. A central point in this literature is the need for teachers to create explicit teaching plans. As Neuman and Dwyer (2009) remind early childhood educators, while it might seem as though young children acquire vocabulary effortlessly, research indicates that this is not so. Children learn the meanings of words through multiple exposures over time. By carefully selecting words and planning for children's exposure to them over the day, the week, the project, and the theme, teachers can provide their young learners with the multiple exposures that they need to ensure that the selected target words become words that the children know and can use effectively. Neuman and Dwyer describe it as a slow and steady process where children who are exposed to many spoken words during the day connect with just a few words from the barrage of words they hear that day. This same caveat can be applied to teaching all meaning-related skills. Teachers must explicitly make explicit plans for teaching their young learners the key meaning-related skills.

So what are some of the evidence-based strategies the literature encourages early childhood educators to use with their young learners to support the children's development of vocabulary and the other key meaning-related skills?

Evidence-Based Meaning-Related Instructional Strategies

Strategies to Help Children Construct Meaning from Text

Neuman, Copple, and Bredekamp (1998) summarized what many educators believe and research supports: "The single most important activity for building [children's]

understandings and skills essential for reading success appears to be *reading aloud to children*" (p. 5). More recently, reading to children has been characterized as "a cornerstone of literacy development and classroom practice" (Brabham & Lynch-Brown, 2002, p. 465). This single act-parents' and teachers' reading aloud to children-has received more research attention than any other instructional strategy for enhancing young children's literacy development. The following points summarize key research findings regarding storybook reading: (1) To succeed in school, children need experiences with decontextualized language. Decontextualized language is language for which there is no support available in the immediate environment to help children make meaning. Storybook reading provides children with models for decontextualized language (Dickinson, Temple, Hirschler, & Smith, 1992). (2) Storybook reading exposes children to more complex grammar and vocabulary than that used in typical everyday conversations (Beck, McKeown, & Kucan, 2002; Brabham & Lynch-Brown, 2002). (3) Storybook reading builds children's content knowledge (Neuman & Roskos, 2007, Pinkham, 2012). Books enable children to learn about concepts and the vocabulary associated with these concepts (e.g., outer space, strange animals, other cultures) that they do not encounter in their everyday lives. (4) Storybook reading provides opportunities for children to learn "text structures", frames that identify important information and connections between ideas (Dickson, Simmons, & Kame'enui, 1998; Williams, 2005).

Years ago, teachers' storybook reading was a one-way interaction. The teacher did most of the talking. The teacher read the book, making very few comments while reading. Teachers asked a few questions before reading a book to focus the children's listening, and they asked many questions after the reading of the book. The children sat in an audience mode, listening to the teacher's comments and reading of the story. This way of sharing stories is no longer supported by research. Today, teachers are encouraged to use an interactive reading style. What the literature tells us is that it is the verbal interaction between the teacher and children that has a major influence on children's development of the meaning-related skills (Justice & Ezell, 2000; Wasik & Bond, 2001; Whitehurst et al., 1994) and on children's learning of target words (Senechal, Thomas, & Monker, 1995). Getting children to talk about the text, to think about what is going on in the story, is central to children's language and literacy growth. In interactive reading, teachers and children pose questions throughout the book reading to enhance the children's meaning construction and to show how one makes sense of text

(McGee & Schickedanz, 2007). Teachers and children can discuss who the story is about and the clues that led them to know who the main character was, and the sequence of the story's events (what happened first, next, and last) (Santoro, Chard, Howard, & Baker, 2008). When reading informational or expository texts, teachers can help their children uncover these texts' structure (e.g., compare and contrast, cause and effect, problem and solution) (Santoro, Chard, Howard, & Baker, 2008). Teachers encourage their young learners to offer spontaneous comments, to ask questions, to answer questions about target words, and to respond to each other's questions as the story is read. Teachers use the during-reading book discussions to help children understand what to think about as a story unfolds (Justice & Pence, 2005).

While reading using an interactive style has been found to be effective, in general, not all interactive styles are equally as effectively. Haden, Reese, and Fivush (1996), for example, found that teachers' talk that elicited labeling of items and pictures and recalling events provided explicitly in the text was not as effective as teachers' talk that elicited explanations based on reasons and that required children to analyze, integrate or make inferences at impacting children's comprehension skills. These findings supported Dickinson and Smith's (1994) earlier findings of a significant correlation between teachers' use of analysis, prediction and explanation, and children's comprehension skills. Similarly, the work of Kendeou, van den Broek, White, and Lynch (2007) revealed the importance of children deploying background knowledge, making causal connection of events in stories, and drawing inferences to their reading comprehension skills. In short, how teachers talk during story discussions is critically important. They must model the language and processes that they desire their young learners to acquire.

Vocabulary Development Strategies

Researchers also have described evidence-based vocabulary teaching strategies that teachers of young children can use to support children's vocabulary learning. Each of these strategies requires the explicit teaching of words. Just reading books to children has only a small to moderate effect on children's vocabulary development (Mol, Bus, & deJong, 2009; National Early Literacy Panel, 2008). Just explaining words over the course of the day during those "teachable moments" is not sufficient.

Of course, a challenge that teachers face is which words to teach; there are only so many words teachers can teach. Beck and McKeown encourage teachers to select sophisticated words with high utility that are characteristic of written language. For example, instead of using “lucky”, they recommend that teachers use “fortunate”. They label these “Tier 2” words. Neuman, Newman, & Dwyer (2011) recommend that teachers also consider teaching content-related words critical to developing knowledge in key subject areas. For example, when teaching science, teachers might teach “observe”, “predict”, “compare”, and so forth.

Teachers can enhance children's vocabulary through storybook reading by explicitly teaching words important to understanding the text. The importance of explicitly teaching words during storybook reading is suggested by Senechal's (1997) research. When teachers “just” read a book with the children, providing no explicit attention of the selected target words, children learn about 4% of the story's words. When teachers read the book three or four times, but provide no explicit attention to the target selected words, the children learn about 15% of the words. When teachers read a book three to four times *and* provide explicit attention in the form of definitions of the target selected words, the children can learn as much as 29% of the words. In short, repeated readings and providing explicit definitions are important to children's vocabulary learning.

Several researchers have described strategies for selecting and explicitly teaching children unknown words. Christ and Wang (2012) propose that teachers use a vocabulary decision-making model to select the appropriate words and methods for teaching words. Their model begins with teachers identifying all difficult and potentially unknown words in a text. From this list of unknown words, they suggest that teachers make several decisions. First, teachers need to select a small set of words (2-3 words for preschoolers, 3-5 words for kindergartners) that are “(a) necessary for comprehension, (b) usable in children's lives, (c) able to be taught multiple times across the curriculum, and (d) related to other vocabulary being taught” (p. 75). Once the words are selected, the next decision is which method should be used to teach the target words. If the word represents a new concept for the children and *there are no meaning clues in the text*, Christ and Wang suggest teachers directly teach the word's meaning by providing a brief definition while reading the story, providing multiples examples of the word in sentences after reading the story, and inviting the children to use the target word in sentences. When the text provides meaning clues, teachers are required to make a different

decision. When this is the case, whether the word represents a concept familiar or unfamiliar concept to the children, the teacher should teach a word-learning strategy, such as using context clues to figure out word's meaning.

Roskos and Burstein's (2011) approach to teaching vocabulary varies from Christ and Wang's. They developed a vocabulary teaching strategy, known as Say-Tell-Do, that is a direct approach to teaching vocabulary words in the context of a read aloud or shared book reading. This approach suggests that prior to the teacher's reading of the storybook, the teacher should introduce the children to 3-5 target words from the story, words selected because they are important to the children's understanding of the story. The teacher can use word cards with photos or concrete objects to present each word. The teacher **says** the word (she models) and invites the children to say the word. Then the teacher **tells** about the word and invites the children to turn to a partner and tell about the word. Then, the teacher enacts a gesture (**do**) in association with the target word, and invites the children to enact the gesture. During the reading, the teacher highlights or repeats the words, inviting the children to say-tell-do the selected target words in the context of the story's reading. After reading, the teacher briefly reviews the target words and then moves the children into a play activity. The play activity can be an immediate activity (e.g., a memory game, board game, or puppet play) or a center time activity that the teacher has intentionally planned to encourage the children to use the target words on their own.

Roskos and Burstein's vocabulary teaching strategy is a variation of that developed by Beck, McKeown and Kucan (2002). Beck, McKeown, and Kucan's strategy is a Say-Define-Connect-Say-Use technique, and is used in combination with teachers' selection of Tier 2 words. Tier 2 words are words that children do not normally encounter in everyday speech that can be used in a many different contexts. The teacher discusses each target word with the children, asking them to say the word, telling them a child-friendly definition, and then using each of the target words in a sentence (Beck, McKeown & Kucan, 2002). A teacher's use of the Say-Define-Connect-Say-Use strategy during the reading of *Click, Clack, Moo: Cows that Type* (Cronin, 2000) illustrates this strategy.

In this story, we will hear the word *impatient*.

Say the word with me: *impatient*.

Tell the children the definition. *Impatient means that a person is upset because he or she*

does not want to wait any longer.

Help the children make **connections**. *I am impatient when it takes us a very long time to clean up after center time. Sometimes some of you are impatient when you have to wait your turn to ride one of the tricycles or wait for someone to collect you from the center.*

Say the word with me again: *impatient*.

Use the new word taught in a few sentences. *The farmer was impatient with the cows.*

I was impatient when I had to wait a very long time to see my dentist yesterday.

I wonder if any of you were impatient at any time yesterday.

These steps would be repeated for each of the words taught.

These word-teaching strategies provide children with what is needed to learn words. Each provides children with an explicit explanation of the word's meaning. Finally, each supports children's word learning by increasing the contexts in which children are exposed to new words in meaningful ways. The frequency of exposure to words strongly predicts word learning (Harris, Golinkoff, & Hirsh-Pasek, 2011). How much exposure is needed for children to learn a word? Pinkham, Neuman, and Lillard (2011) discovered that 24 repetitions resulted in 80% of the children successfully remembering the word. Of course, children will not need 24 exposures to learn all words. The Pinkham, Neuman, and Lillard findings alerts teachers to the need to consider the number of interactions with the word that they will provide their young learners. These are the key features of vocabulary teaching strategies identified by Marulis and Neuman (2010) in their meta-analysis of vocabulary intervention research. When teachers use planned and purposeful strategies to teach children vocabulary, children learn more words (Biemiller & Boote, 2006; Beck & McKeown, 2007).

Building Conceptual Knowledge through "Knowledge Networks" Strategy

Other researchers suggest that words should not be taught in isolation, but rather should be "networked". Pollard-Durodola and her colleagues (2012) and Neuman and Wright (2013) stress the importance of teaching thematically. Learning words through intentionally creating networks of concepts and facts helps children retain the words. They warn us that teaching thematically well is more than collecting books on a central topic and planning a series of activities; teaching thematically well means carefully thinking about the meaningful concepts

to be addressed and the vocabulary to be taught. These researchers' approach is to think about the networks of words related to the topic and to teach these networked words simultaneously. When teaching about water, for example, explicitly teaching words like oar, rowboat, paddle, and canoe together; earth, island, river, and ocean together; freeze, melt, liquid, and solid together; and so forth. Pollard-Durodola and her colleagues describe three principles teachers should use to build vocabulary knowledge networks: "(1) build content vocabulary via concepts that align with curricular objectives, (2) building content vocabulary by integrating information and narrative texts to increase multiple exposures to words and concepts, and (3) build content vocabulary through opportunities to talk about connections between words and concepts" (p. 267). Through multiple learning opportunities, teachers should plan for their young learners to learn at least three to four new words each day (Biemiller & Slonim, 2001). Teachers can plan for their children to experience the targeted words through the explicit vocabulary teaching techniques described above, through carefully planned experiences during center time and/or outdoor play time, and through the teachers' intentional use of the target words throughout the study of the topic. These researchers remind us that children learn most words through multiple experiences, not through a single encounter. A carefully crafted set of experiences connected within the study of a topic provides children with multiple opportunities for learning words.

Researchers (e.g., Han, Moore, Vukelich, & Buell, 2010; Meacham, Vukelich, Han, & Buell, 2013) who use this networking strategy to teach vocabulary words have discovered the power of the dramatic play center as a key language-learning context, one that provides young children with many opportunities to hear their teachers and peers use the words and to test out their use of their newly-acquired words in a play environment that mimics a context in the world outside the classroom. For example, when studying health, establishing a food store play setting in the classroom's dramatic play center provides opportunities for children to hear and practice health food-related words (e.g., the names of various kinds of fruits, vegetables, meats, cheeses). Later, changing the dramatic play center to a doctor's or dentist's office play setting allows children to practice a different set of health-related words. Changing the dramatic play center to coincide with the topic under investigation is a useful means to enhance children's language learning.

Teacher Talk Strategies

Research also has identified teacher talk, conversations with children, as important to children's vocabulary, syntax, and narrative production abilities (Beals & DeTemple, 1993; Huttenlocher, Vasilyeva, Cymerman, & Levin, 2002; Weizman & Snow, 2001). This literature provides teachers with several specific suggestions on how they should talk with their young learners. The following points, as summarized by Dickinson, Darrow, & Tinubu (2008), highlight this important literature. Teachers should model appropriate language after a child uses a form incorrectly. When talking with children, teachers should use words that children are not likely to encounter in everyday conversations, and they should intentional aim to expose children to different words. Teachers should extend and expand children's comments into more descriptive, grammatically mature statements. Teachers should engage with children in extended talk on a single topic. In addition, they should discuss cognitively challenging content - topics that provide children with new knowledge about the world. Teachers should use self-talk to describe what they are doing as they are doing it and parallel-talk to describe what the children are doing. By doing this, teachers give words to the actions they or the children are doing. Finally, it is crucial that teachers listen and respond to what children have to say. This ensures that teacher-child conversations are truly two-way, cooperative interactions. The strong message these researchers send educators is that how teachers' talk with their children is critically important to children's language development.

Unfortunately, the literature shows that teachers typically do not frequently engage in a conversation with their children (Dickinson & Tabor, 2001). Instead, they typically give directions or ask children questions that require only a one- or two-word response (Zucker, Justice, Piasta, & Kaderavek, 2010). And, unfortunately, changing how teachers talk with children is difficult (Bond & Wasik, 2009). Teachers have to consciously examine the ways in which they interact with their young learners and monitor their talk. Often to change requires support, like the teachers' participation in professional development experiences focused specifically on their and their children's talk. Wasik (2010), for example, describes a program that she and her colleagues, Hindman and Jusczyk (Wasik, Hindman, & Jusczyk, 2009), developed to increase the frequency of (a) teachers' conversations with their children; (b) the use of open-ended questions that would encourage the children to use extended language; (c)

the mix of child-initiated language and teacher-initiated language; and (d) the teachers' use of more rich and varied vocabulary, new words connected to known concepts, and the teachers' extension of the children's responses using more complex language. This program, with its specific goals and vocabulary development strategies, results in significant improvements in children's vocabulary development.

The emphasis on teachers' talk is so important today that an instrument, the *Classroom Assessment Scoring System (CLASS)* (Pianta, La Paro, & Hamre, 2008), was developed to assess the quality of teachers' talk. This instrument assesses teachers' performance across three domains (emotional support, classroom organization, and instructional support) and ten dimensions. It is the instructional support domain that most specifically focuses on teacher/child interactions. Using the instrument provides an assessment of "how teachers use instructional discussions and activities to promote [children's] higher-order thinking skills, how teachers extend [children's] learning through responses to [children's] ideas, comments, and work, [and] the extent to which teachers facilitate and encourage [children's] language" (2008, p. 5.) The message from this literature is that how teachers interact with their young learners is a primary ingredient in creating quality educational experiences that support children's language learning and launch their future reading and school success.

Conclusion

The literature lends strong support for the use of the meaning-related strategies described in this article. When early childhood teachers provide young children with multiple meaning-related learning opportunities, like those described here, children learn the skills that are key to their success as readers, as children who are able to comprehend the text they are reading. In short, young children's future success in reading depends on early childhood teachers ensuring that the strategies described in this article are evidenced in their classroom.

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