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Dialogic Reading's Potential to Improve Children's Emergent Literacy Skills and Behavior

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Abstract

Young children entering school with poor oral vocabulary skills may be “doubly disadvantaged.” Their poor oral vocabulary skills will likely impede their attempts to become proficient readers while also possibly increasing the frequency of their problem behaviors. Dialogic Reading is a scientifically-validated shared storybook reading intervention that is known to boost at risk children's oral vocabulary skills. As such, use of Dialogic Reading is one potential way to help children avoid both later reading failure and the negative outcomes associated with poor behavior. In this article, we detail both (a) a research-based rationale for using Dialogic Reading and (b) Dialogic Reading's set of procedures and prompts.

Children need strong oral vocabulary skills in order to become proficient readers (e.g., Butler, Marsh, Sheppard, & Sheppard, 1985; Hart & Risley, 1999; National Institutes of Child and Human Development [NICHD], 2000). This is because a well-developed oral vocabulary helps a child acquire a print vocabulary. For example, oral vocabulary helps a young reader who is seeing a word for the first time understand what he or she is reading. Over time, the child's print vocabulary should increase so that his or her reading becomes more automatic. Thus, good oral vocabulary skills are a prerequisite for becoming a proficient reader, in that good oral vocabulary skills are necessary for a child to comprehend text.

Findings from two studies illustrate the importance of acquiring a strong oral vocabulary. Farkas and Beron (2004) found children's oral language skills to be a major determinant of basic skill acquisition and the most influential of the moderating variables impacting later reading success (with other variables including mother's education and various cognitive factors). The NICHD Early Child Care Research Network (2005) reported results from a structural equation model in which first graders oral vocabulary skills was second in strength only to their decoding skills as a predictor of their third grade reading comprehension skills (β s=.20 and .47, respectively).

Because of oral vocabulary's importance in leading to later reading proficiency, it is critical to intervene early when a child's oral vocabulary skills are delayed. Risk factors for such delays include: (a) having a developmental disability (e.g. mental retardation, autism,

hearing impairment); (b) having a parent with a learning disability; (c) speaking a language other than that used in the local curriculum; and (d) living in a household in which exposure to written or spoken language is infrequent (Justice & Pence, 2004). Children with these characteristics or backgrounds are more likely than their peers to need an approach targeting their oral vocabulary skills.

The Link Between Poor Oral Vocabulary Skills and Poor Behavior

Poor oral vocabulary skills and problem behavior consistently co-occur. For example, Kaiser, Hancock, Cai, Foster, and Hester (2000) found that boys scoring high on a measure of problem behavior were about 50% more likely to have low language scores than boys with low behavior scores. Qi and Kaiser (2004) reported a correlation of $-.32$ between Head Start children's scores on a teacher rating of the frequency of their internalizing problem behaviors and a measure of their expressive language skills. Other studies report similar findings (e.g., Caulfield, Fischel, DeBaryshe, & Whitehurst, 1989; Fujiki, Brinton, Isaacson, & Summers, 2001).

The co-occurrence between poor language skills and behavior problems continues to hold as children age. For example, Griffith, Rogers-Adkinson, & Cusick (1997) found that 55%-85% of adolescents enrolled in a behavioral disorders day-treatment facility scored one standard deviation below the mean on a pragmatic language assessment. Giddan, Milling, & Campbell (1996) found that 60% of adolescents admitted to an inpatient psychiatric clinic exhibited language deficits (also see Cohen, Davine, Horodezky, Lipsett, & Isaacson, 1993; Vallance, Cummings, & Humphries, 1998, for similar findings).

Understanding Why Poor Language Skills Might Cause Poor Behavior

Why do poor language skills and poor behavior frequently co-occur? One hypothesis is that low oral vocabulary skills make it more difficult to use pragmatic language, thereby leading to more acting out or withdrawal behavior. Pragmatic language is the ability to establish and sustain topics of conversation, match communication level with others, and to make communication comprehensible to listeners (Norris, 1995). Poor pragmatic language skills might negatively affect a child's behavioral and social decision-making (McDonough, 1989).

Researchers have consistently found a connection between poor pragmatic language competence and behavioral or social skill deficits. Both Bain (2001) and Cohen et al. (1993) found that language deficiencies contribute to difficulties interacting with peers and adults and thus lead to the development of social skill deficits. Fujiki, Brinton, Morgan, & Hart (2001) observed that children with language impairments were much more likely to be withdrawn and avoid peer-to-peer interactions than children displaying typical language development.

Studies also show that language deficits in young children predict later behavior difficulties. In a large-scale longitudinal study of 1,027 children in New Zealand, Silva, Williams, and McGee (1987) found that language delayed children at age three demonstrated more reading and behavior problems at ages seven, nine, and 11. Similarly, Linz, Hooper, Hynd, Isaac, and Gibson (1990) found that insufficient receptive language skill was a predictor of

uncontrollable behavior in adolescents with conduct disorder. Hooper, Roberts, Zeisel, & Poe (2003) found that receptive language deficits in kindergarten predicted conduct problems and inability to control behavior by third grade. There is also some evidence that children's difficulties learning to read contribute to later problem behavior (e.g., Bennett, Brown, Boyle, Racine, & Offord, 2003). For example, Morgan, Farkas, Tufis, and Sperling (2007) found that first graders with poor reading skills were almost twice as likely as average-to-good readers to be task-avoidant as third graders, even after statistically controlling for prior task-avoidance and a wide-range of SES- and demographic-related confounds. Collectively, the aforementioned studies suggest that poor oral vocabulary skills and other language-related deficits may be a source of both a child's reading and behavioral problems.

Dialogic Reading's Potential to Improve Children's Oral Language Skills

If promoting strong oral language skills is indeed important in preventing a child's reading and behavior problems, what tools do practitioners possess that improve these skills? One well-established method to improve a child's oral vocabulary skills is to frequently read storybooks with him or her. Frequent shared storybook reading is known to lead to vocabulary growth and, in turn, later success in reading and other academic areas (e.g. Bus, van IJzendoorn, & Pellegrini, 1995; Crain-Thoreson & Dale, 1992; Debaryshe, 1993; Senechal, LeFevre, Hudson, & Lawson, 1996; Whitehurst et al., 1999). One especially well-validated shared storybook reading intervention is called Dialogic Reading.

Dialogic Reading uses a set of standardized prompts to more explicitly target young children's oral vocabulary and listening comprehension skills (Justice & Pullen, 2003; Whitehurst, Arnold, et al., 1994). Specifically, teachers are taught to (a) ask children to answer open-ending questions about the story's characters, setting, and events in the story, (b) expand on children's answers by repeating the answer, clarifying the answer, or asking further questions, (c) provide praise and encouragement to children for giving input into the story, and (d) build on children's interests when selecting stories and questions regarding the story (Whitehurst et al.). Whitehurst et al. (1988) have shown that reading dialogically to children at risk for academic failure increases both their expressive and receptive language. These gains (on, it is important to note, standardized, norm-referenced tests) have occurred whether the intervention is used in daycare settings, low-income households, or Head Start classrooms (Whitehurst et al, 1994; Whitehurst & Longigan, 1998). The consistency of these gains has led other researchers to identify Dialogic Reading as an evidence-based emergent literacy intervention (Justice & Pullen, 2003).

Using Dialogic Reading in a Classroom

How often do I use Dialogic Reading in my classroom?

Teachers working with a group of at risk children use a "two-prong" approach. First, the teacher reads the book with a small group of children. No one group should be larger than five children (Whitehurst, Arnold, et al., 1994). The teacher would then read the book a second (and third) time to this group (or each of several groups), using the prompts and procedures described below.

Second, the teacher ensures one-on-one interaction over the book. One-on-one interaction helps maximize the intervention's impact. To establish regular one-to-one interactions, teachers have usually worked with their students' parents to make sure that the week's book is also read repeatedly at home (Whitehurst, Epstein, et al., 1994). That is, a student's parent agrees to read the week's particular book with his or her child using the Dialogic Reading techniques. Table 1 presents a sample schedule.

This two-prong approach means that teachers should plan to train parents on how to use Dialogic Reading. This can be done relatively easily. For example, we recently worked with five teachers in a rural, low-income school district to set up such trainings. We invited parents from these five classrooms to attend a one-hour training. Each classroom's school provided day care; we brought pizzas. During the training, parents watched a commercially available video (see below) for about 15 min and then saw an adult lead a "live" book reading session. We then answered any questions about the program. Across these five classrooms, our attendance averaged over 70%.

What do I do when I use Dialogic Reading?

Teachers using Dialogic Reading rely on a standardized set of procedures. These procedures (known by their acronyms, PEER and CROWD) help target children's oral language and listening comprehension skills. Together, use of PEER and CROWD ensures that a child is actively participating (rather than just passively listening) during storybook reading. Offering children frequent opportunities to respond to academic queries is known to result in skills growth (Sutherland & Wehby, 2001). The PEER acronym (for Prompt, Evaluate, Expand, and Repeat) helps in remembering Dialogic Reading's sequence of procedures. First, a teacher (or parent) prompts or asks the group or a particular child something about the book. Second, the teacher evaluates the accuracy of the group's or child's response. If it is incorrect, the teacher expands on the response. Fourth, the teacher asks that the correct response be repeated. Table 2 further details the PEER set of procedures.

The CROWD acronym (for Completion Questions, Recall Questions, Open-ended Questions, Wh- Questions, and Distancing) helps in remembering the types of prompts a teacher should use while reading dialogically. Unlike the PEER acronym, CROWD does not denote a particular sequence. Instead, it stands for all the types of prompts available to the teacher for more fully engaging a child in the reading of the storybook. Some of these (e.g., Wh- questions) help children learn new words or phrases. Others (e.g., Open-ended or Distancing questions) give children an opportunity to use expressive vocabulary, which then gives a teacher a chance to provide corrective feedback to how the child is using his or her oral language skills. Table 3 details the CROWD set of procedures.

How can using the PEER and CROWD procedures help build a child's oral vocabulary?

Consider the difference between the following two teachers. The first points to a page in a book and asks, "What's this a picture of?" A child says, "A truck!" The teacher says, "That's right," and keeps reading.

The second teacher also points to the same page and asks, “What's this a picture of?” Again the child says, “A truck!” In contrast to the first teacher, the second teacher expands on the child's response. For example, she might say something like, “Yes, it's a picture of a big red fire truck. I know it's a picture of a fire truck because it has flashing lights, hoses, and a ladder on it. Tell me again what this is a picture of?” The child then says, “A big, red fire truck!”

The second teacher has used more words and phrases (i.e., big, red, fire truck, flashing lights, hoses, and ladder) than the first teacher (i.e., truck). Hence, the second teacher has exposed the child to more vocabulary. Moreover, the second teacher has also asked the child to repeat the vocabulary (i.e., “big red fire truck”) as a sign that he or she can correctly say the words. By using the PEER and CROWD procedures throughout the book's reading, a teacher should extend the child's oral vocabulary (and listening comprehension) by a) asking questions, b) introducing new vocabulary, and c) briefly practicing this new vocabulary with the child during the storybook reading time. After repeated readings of the same story, the teacher should provide students with opportunities to tell the story in their own words. Meanwhile the teacher (or parent) takes on the role of listener and continues prompting using the PEER and CROWD procedures.

What materials do I need to do Dialogic Reading?

Dialogic Reading requires a set of books that a teacher can use in the classroom, as well as a set that the child's parents can use at home. Teachers can obtain their set through the school or through the school's library. Parents can purchase a set for at home use or visit the community library. Pearson Education Inc. also makes a commercially available set of kits (i.e., *Read Together, Talk Together*) that use Dialogic Reading's procedures. These kits contain a set of books, prompt cards (detailing what vocabulary to introduce, as well as different types of CROWD questions to ask), and a training video. Versions are available for both teachers and parents, and both preschool and kindergarten-aged children.

Concluding Thoughts

We have argued that poor oral vocabulary skills may act as a “common cause” variable for a child's reading and behavior problems. We base this argument on a body of research that consistently points to (a) the co-occurrence of poor oral language skills early on and later poor reading ability, (b) the co-occurrence between poor oral language skills early on and both concurrent and later poor behavior, and (c) initial evidence that poor reading ability early on may cause later poor behavior. Collectively, these studies suggest that teachers of young children need to consider vocabulary delays as a critical target of remediation.

Given the importance of remediating poor oral vocabulary skills, we have described one potential tool that teachers can use to boost these skills. This tool, Dialogic Reading, is considered an evidence-based emergent literacy intervention, in part because it consistently improves children's oral vocabulary skills. We have outlined the schedule that a teacher would establish for using Dialogic Reading, as well as how use of the PEER and CROWD procedures should lead to boosts in at risk children's oral vocabulary. By effectively remediating children's poor oral vocabulary skills, teachers may more effectively help these

children avoid both later reading failure and the negative outcomes associated with poor behavior.

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Table 1

Sample Schedule using Dialogic Reading

Instruction	Day of the Week				
	1	2	3	4	5
Small group	Initial reading of story.		DR – Repeated reading of same story using PEER and CROWD techniques.		DR – Final reading of story. The children become the storytellers and the teacher becomes the listener.
One-on-one		DR – Repeated reading of same story using PEER and CROWD techniques.		DR – Continued use of PEER and CROWD techniques w/ same story. Child begins to tell more of the story.	

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Table 2

Sequence of Prompting and Responding Techniques used in Dialogic Reading – PEER

What does it stand for?	How do you do it?	Example	How does it help?
P – Prompt	Prompt the child to name an object on the page or ask them about characters in the story.	Teacher: “What is this?” Student: “A truck.”	<ul style="list-style-type: none"> • Increases attention • Engages child in the story • Increases knowledge of the plot • Increases vocabulary
E – Evaluate	Evaluate whether the child was correct. If not, think about what additional information you can add to expand the student's vocabulary.	Teacher thinks about response and information to add.	<ul style="list-style-type: none"> • Teacher gives the student individual feedback on his or her response and encourages him or her to add more information
E – Expand	Expand on the student's response by adding a few more words.	Teacher: “Yes, it's a big, red fire truck. Can you say that?”	<ul style="list-style-type: none"> • Encourages the student to say a little more than he or she would normally. • Increases vocabulary
R – Repeat	Ask the child to repeat the response.	Student: “A big, red fire truck.”	<ul style="list-style-type: none"> • Encourages the student to use language

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Table 3

Types of Prompts used in Dialogic Reading - CROWD

What does it stand for?	How do I use it?	Example	How does it help?
C – Completion	Ask the student to complete a word or phrase. (Frequently used in rhyming stories.)	Teacher: Let's finish this page together. I do not like them, Sam-I-am. I do not like _____.	<ul style="list-style-type: none"> Increases students' listening comprehension and use of language
R – Recall	Ask the student details about characters and events in the story.	Teacher: "Who was in the house with Sam?" Students: "A mouse."	<ul style="list-style-type: none"> Engages students in the story Increases recall of details
O – Open-ended	Ask students to describe what is happening in the picture.	Teacher: "Tell me what's going on in this picture."	<ul style="list-style-type: none"> Opportunity for children to use language
W – Wh- questions	Point to something in a picture and ask the students to name the object or action.	Teacher: "What's this called?" Students: "A submarine!" Teacher: "What does it do?"	<ul style="list-style-type: none"> Helps build vocabulary
D – Distancing	Ask questions that relate the story to something in the student's life.	Teacher: "Have you ever eaten eggs and ham? When? Name some foods that you like...foods that you don't like."	<ul style="list-style-type: none"> Helps the student to make connections between stories and their own lives Opportunity for the students to use language

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