

COMPARING THE EFFECTIVENESS OF IN-PERSON AND VIDEO-BASED DIALOGIC READING TRAINING

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Abstract: Dialogic reading is a shared reading activity designed to increase verbal interactions between parents and their preschool-aged children. The current study compares the results of in-person dialogic reading training to video-based training. The purpose of the study is to measure and compare the effect each program type has on the expressive language and vocabulary development of preschool-aged "children of promise" identified as "at-risk" by the public school system. Children's expressive language was measured prior to and after receiving training using the Individual Growth Developmental Indicators (IGDI) picture naming assessment. Children whose parents participated in the video-based intervention (p < .01) and children whose parents participated in the in-person training (p < .05) made significant gains in expressive language scores from pre-test to post-test. There was not a significant difference between groups at the post-test, showing both programs were effective in increasing verbal interactions between parents and their preschool-aged children.

INTRODUCTION

Dialogic reading is a structured form of shared reading that is designed to encourage children's oral language, vocabulary, and grammar skills (Justice, McGinty, Piasta, Kaderavek, & Fran, 2010). Dialogic reading shifts the traditional read aloud interaction from being adult-led to child-led. During dialogic reading, parents ask open-ended questions and expand upon their children's comments and ideas. Parents encourage participation through providing feedback and adjusting their verbal interactions based on their child's interests and ability (Whitehurst Arnold, Epstein, Angell, Smith, & Fischel, 1994). The verbal interactions utilized during dialogic reading expand young children's vocabularies (Wilde & Sage, 2007; Jalongo & Sobolak, 2011) and their use of narratives, questions, and positively impact children's verbal responses (Beals, DeTemple, & Dickenson, 1994). Dialogic reading techniques positively influence children's language skills because they encourage parents to expand on children's conversations, redirect conversation to encourage children's use of particular types of language (e.g. encouraging children to use descriptive words), and expect increasingly complex word choices from children as language develops (Snow, 1983).

Video-based training is cost effective and convenient. However, researchers have found that parents with lower educational levels, which represent many parents of promise, typically prefer in-person instruction (Huebner & Meltzoff, 2005). Also, researchers have questioned the effectiveness of video-based instruction in teaching expressive language skills (Briesch, Chafouleas, LeBel, & Blom-Hoffman, 2008). Therefore, the current study compares the effect in-person and video-based dialogic reading training has on preschool-aged children's expressive language and vocabulary.

METHODS

The current study compares the results of a bi-weekly in-person dialogic reading training conducted at a public preschool over the course of ten weeks to a smaller study providing similar information, to similar parents, in a condensed format on video over a twelve-week period.

IN-PERSON DIALOGIC READING INTERVENTION

The in-person dialogic reading component of this study was conducted in a public preschool that provides preschool programs for children three to five classified as "at risk" based on screening results of children's expressive and receptive language, fine and gross motor skills, and social / emotional and intellectual processing. At the time of the study, it served the second most severe Limited English Proficient population in the county. The school population was 52-percent low-income and had 71-percent limited-English proficiency. The preschool classes incorporate daily mandatory "Family Time" for children enrolled in their preschool program. During this time, parents are asked to



read to their children for 15 minutes each morning before leaving their children at school. These children and families deemed "at risk" by the public school system will be referred to as children and families of promise to reflect their potential and the assets they bring to school (Blasi, 2002).

Parents received dialogic reading training every other week for ten weeks. On Mondays parents received 15 minutes of dialogic reading training focusing on the dialogic reading strategies *Comment, Ask, and Respond (CAR)* and *1, 2,3 Tell Me What You See*. The *CAR* strategy teaches parents to Comment and wait, Ask questions and wait, and Respond and add more. This strategy is part of the *Language is the Key Program* designed by Washington Research Institute. This technique was taught for the first two weeks of training. The last three weeks of training focused on a technique designed by the author called *1, 2, 3 Tell Me What You See*. This strategy asks children to comment on what they see in order to encourage expressive language, parents to teach new words to build expressive and receptive vocabulary, and to connect the story to the child's life to help children connect the story to background knowledge or experiences.

On Tuesdays parents watched the dialogic reading method being modeled. Wednesdays parents received parent notes including sample questions they could ask their child while sharing a copy of the book being taught. Five books were chosen by the teachers. All parents were taught with and used the same five books.

Forty-one parents and children were involved in this study. Twenty parents received dialogic reading training and twenty-one parents served as a control group receiving no dialogic reading training. A majority of the parents participating in the program spoke Spanish in the home (75% of the dialogic reading group and 61% of the traditional Family Time group).

Students' expressive language and vocabulary were measured using the picture-naming portion of the Individual Growth Developmental Indicators (IGDI) test. The IGDI test is designed to monitor the literacy development of young children. Students taking the picture-naming test are presented with pictures on cards and asked to name as many of the objects as they can in one minute. The number of words correctly identified and the number of words attempted are recorded. Students' picture naming ability was assessed prior to the start of the study and at the conclusion of the intervention. The picture-naming portion of the IGDI has been found to be a valid and reliable (McConnell, Priest, Davis, & McEvoy, 2002).

RESULTS

Paired t-tests were performed between groups and within groups across time to determine the effect dialogic reading training had over time on program participants. There was not a significant difference in the number of words correctly identified by children in either the intervention or control group at the time of the pre-test on the IGDI. However, children whose parents received dialogic reading training acquired significantly more words (p < .01) from pre-test to post-test than children in the traditional Family Time group (Table 1). Increases in expressive vocabulary development are especially important because research has consistently shown the importance expressive and receptive vocabulary play in young children's ability to learn to read (Wasik, 2010). This finding supports the effectiveness of using in-person dialogic reading training for increasing young children'expressive language skills.

 Table 1: In-Person Training and Control Groups' Pre-Post IGDI Scores

	In-Person Training Group		Family Time Control Group	
	(N=20)		(N=21)	
	Pre-Test	Post-Test	Pre-Test	Post-Test
	M	M	M	M
Number Correct	11.45	14.32*	11.52	12.48

^{*} p < .01

VIDEO-BASED DIALOGIC READING INTERVENTION

The video-based dialogic reading training was studied at a similar public early childhood center serving children and parents of promise. Video-based dialogic reading training was provided to nine parents using a twelve-minute video that was sent home at the beginning of the program. The parents and children included in this group were evenly divided between parents and children who spoke English, Spanish, and both languages in the home. Each week children brought home a children's book and corresponding parent notes that provided parents sample questions to



ask while reading. No additional dialogic reading training was given. The length of study was expanded from ten to twelve weeks due to holidays and days students were not in attendance for this school.

Video-based training was provided because it is an easy and economical way to provide training to parents. Providing materials that parents can use and view at home can help overcome some of the main obstacles to parent involvement including lack of time, lack of training, and lack of understanding (Wherry, 2010). Arnold, Lonigan, Whitehurst, & Epstein (1994) found that using a videotape to teach the dialogic reading method worked effectively to increase parents' use of dialogic reading skills with children with average or above average expressive and receptive language skills from middle or upper Socio-Economic Status (SES) parents. However, the effectiveness of video-based dialogic training specifically for parents of promise has not been studied.

The dialogic reading training provided on the video used the acronym DARE to help parents learn dialogic reading techniques. DARE was a combination of the CAR and 1,2,3 Tell Me What You See strategies taught to parents in the first study. The video-based training focused on teaching one strategy instead of two to keep things easy for parents receiving video training. However, the content of both training sessions was essentially the same. The DARE strategy, developed by the author, asks parents to:

Discuss the book with their child and ask what their child sees, expand upon their child's responses adding more detail, and asking their child to repeat the extended responses.

Ask their child questions about the pictures and teach new vocabulary related to the illustrations.

Read the story aloud.

Encourage their child to connect the story to real life.

Participants were asked to share a book with their child for 10-15 minutes a day choosing whichever steps of DARE to implement they thought were appropriate depending on their child's interest and readiness level. The books used for this study were chosen and accompanying parent notes were written by the author as part of a program called PARTNERS (Parents as Reading Teachers Nightly Encouraging Reading Success). The books included in the PARTNERS program were chosen because of their detailed and varied illustrations including culturally relevant items children are familiar with that could be used for discussion and retelling. All books selected included a simple plot and supported preschool skills needed according to *The Creative Curriculum Developmental Continuum for Ages 3-5*. Therefore, they were appropriate to teach cognitive development, logical thinking, language development, emergent literacy, and social / emotional development. The books represented a variety of genres and were sent home randomly each week with the corresponding parent notes.

The video-based program's parent notes, similar to those provided to parents in the in-person intervention, provided sample questions parents could use to encourage discussion and language with their child. Sample information provided on the parent notes includes a summary of the story, things that could be taught, a review of the DARE strategy and how it could be used over the week, sample questions, and related vocabulary.

RESULTS

Paired t-tests were performed to determine the effect video-based dialogic reading training had over time on program participants. Children whose parents participated in the video-based dialogic reading training acquired significantly more words (p < .01) from pre-test to post-test based on their IGDI scores (Table 2).

 Table 2: Video-Based Training Group's Pre-Post IGDI Scores

	Video-Based Training Group			
	Pre-Test	Post-Test		
	M	M		
Number Correct	14.55	19.00*		

^{*} p <.01

DISCUSSION

Children in both studies (in-person bi-weekly training and video-based training) were administered the picture naming portion of the IGDI at the beginning and end of the interventions. The in-person dialogic reading intervention group included 20 children and their parents. The video-based training study was smaller, including only 9 children and parents. In order to make comparisons between the effect each type of training had on children's



expressive language, children in both studies were matched according to their initial IGDI scores, chronological age, and language(s) spoken in the home.

Because students' IGDI pre-test scores from both studies were matched, there was not a significant difference in IGDI scores between the two groups before the intervention. Paired t-tests were performed between matched groups and within groups across time to determine the effect dialogic reading training had over time on program participants (in-person training and video-based training). Table 3 shows that there was a significant increase in children's expressive language from pre-test to post-test for both intervention groups, in-person dialogic reading training (p <.05) and the video-based dialogic reading training (p <.01). However, it is important to note that even though children of parents who received the video training showed a greater increase in expressive language from pre-test to post-test, there was not a significant difference between groups at the post-test (Table 4), showing both program's effectiveness.

Table 3: Matched In-Person and Video-Based Groups' Pre-Post IGDI Scores

	In-Person Training Group		Video-Based Training Group	
	(N=9)		(N=9)	
	Pre-Test	Post-Test	Pre-Test	Post-Test
	M	M	M	M
Number Correct	14.33	17.78**	14.55	19.00*

^{*} p < .01

 Table 4: In-Person and Video-Based Groups' IGDI Scores Matched Comparison

	Pre-Test Comparison (N=9)		Post-Test Comparison (N=9)	
	In-Person	Video	In-Person	Video Training
	Training	Training	Training	
	M	M	M	M
Number Correct	14.33	14.55	17.78	19.00

LIMITATIONS

The relatively small number of participants involved in each study is a limitation. Another possible limitation to the generalizability of these findings is the way that eligibility for the preschool programs was determined. Eligibility requirements identifying children of promise for each state are based on local need. Eligibility criteria may vary based on the needs of the local programs and communities (Illinois State Board of Education Early Childhood Division, 2011). The way that children of promise are identified in other regions, states, or countries may differ.

An area for further research is how and how often the video-based training materials were used. Because parent notes were included with each book, the video-based program may have been able to be successfully implemented with children without the video. In the future, a larger study including information regarding participants' use of the training video would help strengthen the claim that the video was integral to the program's success. Another area for further study is the books used for the interventions. The books used for the initial in-person bi-weekly training aligned with the preschool curriculum. However, the illustrations included were often somewhat simplistic or repetitive, possibly limiting the responses and interactions of parents and children in this study. Parents who received the video-based training received materials from the PARTNERS Program that were more appropriate for dialogic reading. This possibly gave these parents better tools to effectively implement dialogic reading techniques.

CONCLUSIONS

Dialogic reading is an effective tool for increasing the vocabulary and expressive language of children of promise. It provides young children with opportunities to share the reading experience with their parents and provides them with exposure to new words in meaningful ways (Hart & Risley, 1995). Participating in dialogic reading provides young children with many benefits including increased opportunities for joint attention, modeling of new vocabulary, increased questioning, and feedback (DeBaryshe, 1995). The results of the studies discussed in this paper support the effectiveness of both in-person dialogic reading instruction and video-based training for children and parents of promise. Therefore, preschools that wish to implement dialogic reading training for their parents can

^{**} p < .05



utilize whichever format fits the needs of their parents and still expect increases in children's expressive language and vocabulary.

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