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Implementation of dialogic reading techniques by teachers of the deaf

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IMPLEMENTATION OF DIALOGIC READING TECHNIQUES BY TEACHERS OF THE DEAF

by

Molly B. Miles

An Independent Study submitted in partial fulfillment of the requirements for the degree of:

Master of Science in Deaf Education

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Approved by: Heather Hayes, Ph.D., Independent Study Advisor

Abstract This study evaluates whether teachers of the deaf use dialogic reading techniques during authentic literature experiences.

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Introduction

Jacqueline Kennedy, wife of the 35th president, John F. Kennedy once said, "There are many little ways to enlarge your child's world. Love of books is the best of all." Books are a critical component to every child's life. Children's interactions with books, and most importantly caregivers' involvement in that process, benefit children in numerous ways. Book reading helps to expand a child's vocabulary, encourages and creates opportunities for bonding with the caregiver, prepares for the school environment, improves attention span, and stimulates imagination. Although any and all interactions with books should be encouraged and cherished, a shared-book reading approach known as *dialogic reading* has proven to be effective with specific populations.

Dialogic reading is a shared-book reading approach in which a caregiver and child interact. The interactions that occur during the dialogic reading process encompass important behaviors on the adult's part. The adult is encouraged to use prompting, evaluating, expanding and repeating with the child. The ultimate goal is that the adult utilizes prompts that elicit longer utterances from the children and attempts to eliminate prompts that only require the elicitation of one-word responses. The dialogic reading technique is most often used with preschool aged students. The adult helps the child become the teller of the story while the adult becomes the listener, questioner, and audience for the child. The technique is described by two acronyms which outline the steps of the process. The first acronym, PEER, describes the short interaction that occurs between the adult and the child. The short interaction consists of prompting the child to say something about the book, evaluating the child's response, expanding the child's response by rephrasing and adding information to it, and repeating the prompt to make sure the child has learned from it. The acronym CROWD describes the various prompts used in the dialogic

reading process. The following prompts are used in dialogic reading: completion prompts, recall prompts, open-ended prompts, wh- prompts, and distancing prompts. Figure 1 presents a graphic representation of the PEER and CROWD components.

Research has shown dialogic reading to be effective with students of varying backgrounds. The vast majority of research has been conducted using the following three populations: typically-developing children, children from low-income families, and children with language delays. Studies on typically-developing children will be discussed first.

A study conducted by Arnold and colleagues (1994) studied 64 mother-child pairs. The children ranged in age from 24 to 34 months. Children were divided into one of three conditions: a control condition, a direct training condition and a video training condition. For the first week, parents were instructed to read as they typically would and to record the frequency of their reading. After the first week, the instruction varied for weeks two through five. Mothers were given different content at each of their trainings. At the first training mothers were told the following items: ask "what" questions, follow answers with questions, repeat what the child says, help the child as needed, praise and encourage, shadow the child's interests, and have fun. At the second training, the mothers were taught to do the following: ask open-ended questions and expand what the child says. Mothers in the direct training condition received training on weeks two and four of the five-week program. Mothers in the video condition received training on the same schedule as mothers in the direct training condition; however, they did not receive any individual direct instruction. The fourth and final visit was one in which the post-assessments were administered. Findings revealed that the video group outperformed the control group on post-tests of receptive and expressive language. The video group scored 3.3 months ahead on the receptive test, and 5.1 months and 3.9 months ahead on two expressive language tests. The

direct training group outperformed the control group on one expressive language task, but did not outperform as would have been expected on the other expressive language test and the receptive language test. The authors also compared the effectiveness of the video training versus the direct training. The video training group yielded scores significantly higher than those of the direct training format on the Expressive One-Word Picture Vocabulary Test (Gardner, 1981) and the Peabody Picture Vocabulary Test (Dunn & Dunn, 1981).

Whitehurst and colleagues (1988) studied 30 typically-developing children and the impact of dialogic reading on their vocabulary. The children ranged in age from 21 to 35 months. The children were divided into either a control or an experimental group. Parents in the experimental group participated in two training sessions throughout the four-week intervention. The training sessions each lasted 25 to 30 minutes and involved verbal explanations of the skills involved in dialogic reading, watching the experimenter and assistant demonstrate the techniques and lastly the parents participating in a role-playing activity in which another adult acted as the child. At the end of the four weeks, the parents and child returned for post-testing on receptive and expressive vocabulary as well as expressive language. Nine months following post-testing, 22 of the original subjects were retested. The subjects were retested using the same tests that were used for the posttest: Illinois Test of Psycholinguistic Abilities (Kirk, McCarthy, & Kirk, 1968), Peabody Picture Vocabulary Test (Dunn & Dunn, 1981) and the Expressive One-Word Vocabulary Test (Gardner, 1981). Mean length of utterance for the children in the experimental group increased from 2.12 to 2.55 and from 1.92 to 2.04 in the control group. Standardized test scores of those in the experimental group were 8.5 months ahead of those in the control group on the Illinois Test of Psycholinguistic Abilities and 6 months ahead of those in the control group on the Expressive One-Word Vocabulary Test. Information about the differences on the Peabody

Picture Vocabulary Test were not noted. Follow-up testing nine months later still yielded a six month advantage in terms of expressive language and vocabulary for the experimental group.

A study conducted by Blom-Hoffman and colleagues (2007) focused on 18 parent-child dyads. The parent-child dyads were divided into two groups. One group was provided a videotraining format for the implementation of dialogic reading along with a laminated guide sheet while the other group was given a modified version of the laminated guide sheet. Parent-child dyads were videotaped at the beginning of the study, and at 6 and 12 weeks post-treatment. The experimental group showed a steady increase in verbalizations compared to the control group. The control group had slightly fewer on-task verbalizations from the first assessment to the second assessment and then showed improvements from the second assessment to the third assessment. The authors suggested that students enrolled in the dialogic reading training exhibited improvement in expressive language skills (as measured by quantity of vocalizations) from the beginning to the end of this study.

Thus, studies on typically-developing children show that dialogic reading techniques have positive effects on language skills. Next, studies on dialogic reading and children from lowincome families will be discussed.

In a study by Valdez-Menchaca and Whitehurst (1992), a dialogic reading intervention was implemented on children from low-income families in order to determine the effectiveness of the technique in this particular population. The authors looked at 20 children from low-income families ranging in age from 27 to 35 months who were enrolled in Mexican daycares. Preassessments were given to all of the children and then they were randomly placed into one of two interventions. The following tests were given as pre-assessments: Peabody Picture Vocabulary Test – Revised (Dunn & Dunn, 1981), Expressive One-Word Picture Vocabulary Test (Gardner,

1981) and Illinois Test of Psycholinguistic Abilities (Kirk, McCarthy, & Kirk, 1968). The interventions were implemented 30 times for 10 to 12 minutes over a 6- to 7-week period. The dialogic reading intervention group spent their time looking at books and eliciting information from the children using dialogic reading techniques. The control intervention group engaged students in one-on-one activities that fostered development of perceptual and fine motor skills. After the six- to seven-week period ended, the students were administered posttests. The posttests administered were the same standardized assessments used at pretest. The students' standard scores in the experimental group went from 87.9 to 95.8 on the Peabody Picture Vocabulary Test: Revised and from 76.6 to 83.4 on the Expressive One-Word Picture Vocabulary Test. Participants in the control group received a standardized score of 88.5 on the pretest and 88.7 on the posttest for the Peabody Picture Vocabulary Test – Revised and received a standardized score of 76.3 on the pretest and 75.4 on the posttest of the Expressive One-Word Picture Vocabulary Test. Thus, in less than 2 months, children in the experimental group improved their language and vocabulary skills dramatically.

Another study focusing on children from low-income backgrounds was conducted by Lonigan and Whitehurst (1998). The authors investigated 114 3- and 4-year-olds from lowincome backgrounds. At post-testing, only 91 of the children were still present in the study. Children were initially assessed using three standardized tests of expressive language. After preassessment, the children were randomly assigned to one of four experimental conditions. The experimental conditions were school reading, home reading, school plus home reading, and a control condition. The school reading condition was one in which the teacher or aide used dialogic reading techniques with children in groups of no more than five children. The home reading piece of the intervention was one in which the caregivers were trained to use dialogic

reading at home through a videotape similarly to how the teachers were trained to use dialogic reading. Children within the control group did not have specific instructions or activities to follow. The interventions lasted for six weeks and at the end the children were post-tested using the Peabody Picture Vocabulary Test – Revised (Dunn & Dunn, 1997), Expressive One-Word Picture Vocabulary Test (Gardner, 1981) and Illinois Test of Psycholinguistic Abilities (Kirk, McCarthy Kirk, 1968). Results of this study yielded that both teachers and caregivers can produce significant improvement in regards to expressive language. In the high compliance centers, meaning, results from pre-test to post-test showed significant increases compared to those of individuals in the low-compliance centers. Children's mean length of utterance increased from .63 to 1.03 for total words produced, therefore, depicting a significant increase in expressive language abilities when dialogic reading is thoroughly implemented.

Whitehurst and colleagues (1994) studied 70 3-year-olds from low-income families. Children were pre-tested using several standardized tests of language abilities including; Peabody Picture Vocabulary Test – Revised (Dunn & Dunn, 1981), Expressive One-Word Picture Vocabulary Test – Revised (Gardner, 1990), expressive subscale of the Illinois Test of Psycholinguistic Abilities (Kirk, McCarthy & Kirk, 1968) and the Our Word (Whitehurst, Arnold, Epstein, Angell, Smith, & Fischel, 1994). After the previous assessments were conducted, the children were randomly assigned to one of three conditions: school reading, school + home reading, and activity + attention control. The children were in the assigned condition for six weeks, post-tested, and then received a follow-up assessment six months after the initial post-assessment. Findings of this study yielded that preschoolers acquire new vocabulary in the context of dialogic reading, small groups are effective with dialogic reading, daycare teacher and primary caregivers from low-income families can be effective teachers, and

these techniques resulted in improvements on standardized tests from pre-assessment to postassessment. Both the school group and school + home group showed improvements from pre-test to post-test. However, the most significant improvements were noted in the school + home group.

A study conducted by Whitehurst and colleagues (1999) focused on 280 children from low-income backgrounds. Some of the children attended Head Start during the 1992-1993 school year (127) and some attended Head Start during the 1993-1994 school year (153). Two interventions were utilized during this study. The first intervention was dialogic reading in which the students participated in the intervention three to five times a week at school and then, using the same books at home, participated in one-on-one reading at home. Parents and teachers were trained using a twenty-minute training video. The second intervention implemented was a phonemic awareness curriculum known as *Sound Foundations*. Activities from this curriculum were implemented on Mondays, Wednesdays, and Fridays. The authors found that children who received the literacy intervention, which included dialogic reading, improved in reading scores at post-test and at kindergarten follow-up. Although the authors did not separate the effects of dialogic reading from those of the phonics program, clearly dialogic reading played a role in increasing the children's reading skills.

To summarize, dialogic reading techniques have proven to be effective with children from low-income families in improving language and reading skills. Next, studies focusing on the impact of dialogic reading on students with language delays will be discussed.

In a study by Hargrave and Senechal (2000), 36 children with poor expressive vocabularies ranging from 3 to 5 years of age were studied. Pre-tests given to the students included the Peabody Picture Vocabulary Test – Revised (Dunn & Dunn, 1981) and the

Expressive One-Word Picture Vocabulary Test – Revised (Gardner, 1990). After pretests were given to the students, the students were randomly assigned to a regular reading group or a dialogic reading group. Caregivers were asked to participate in a home intervention in which (depending on their child's assignment at school) they were trained to implement dialogic reading techniques or asked to read in their customary fashion. Both interventions lasted for four weeks. Book vocabulary for the dialogic reading group improved from 2.2 words at pre-test to 4.3 words at post-test. Scores on the standardized assessments improved in both expressive and receptive language for the dialogic reading group. On the expressive standardized assessment the scores improved from 80.8 to 85.5. On the receptive standardized assessment scores improved from 84.2 to 86.8, therefore, indicating that both expressive and receptive scores moved into the low end of the average range. These improvements were better than the improvements seen in the control group.

Dale and colleagues (1996) conducted a study in which 33 mother-child dyads were studied. Children participating in this study exhibited language delays. A pre-test was conducted by videotaping the dyad and coding the video for certain characteristics. The dyads were then assigned to one of two conditions: book reading program or conversational language program. The book reading program focused specifically on dialogic reading, whereas the conversational program focused on language development through conversation. Mothers in both conditions underwent two trainings in which they were taught and shown demonstrations of certain characteristics to carry out when interacting with their child. Improvement was noted in both conditions; however, expressive language improved for children in the dialogic reading group, whereas, it decreased from pre-test to post-test for children in the conversational group.

Results from the previous studies demonstrate the effectiveness of dialogic reading techniques with children with language delays. Increases in the production of vocabulary words as well as an increase in standardized scores on expressive and receptive assessments were noted.

Significant amounts of research has been done in regards to the impact dialogic reading has on typically developing children, children from low-income families, and children with language delays. To my knowledge, only one study has investigated the effectiveness of dialogic reading techniques with children who are deaf/hard of hearing and use listening and spoken language as their main mode of communication. A study was conducted in Hong Kong to determine the impact dialogic reading has on students who are deaf/hard of hearing receptive vocabulary.

A study by Fung and colleagues (2005) was conducted with deaf/hard of hearing kindergarten and early primary aged students in Hong Kong. Children were recruited from the local school for the deaf (Hong Kong School for the Deaf) or from five different mainstreaming schools. The children's families spoke Cantonese. Of the 28 students, 17 were from the Hong Kong School for the Deaf while the other 11 students were from one of five mainstreamed schools. Twenty-eight students in kindergarten, first, or second grade were pretested using a receptive standardized assessment and then placed into one of three conditions: dialogic reading group, typical reading group or control group. Each one of the groups received the same eight storybooks. The dialogic reading group received the eight storybooks with an attached page containing five prompts as used with dialogic reading. The typical reading group were given the storybooks, but received no additional information. The control group received the books as well; however, they did not receive their books until the eight week intervention was completed

with the other two groups. Results of this study yielded that students in the experimental group improved their receptive vocabulary scores from a 91.1 at pre-test to a 114.22 at post-test, whereas, students in the control group demonstrated a decrease in standardized scores from pretest to posttest, 70.11 to 66.56. Prior to the intervention, the students were in the low average range and upon completion of the intervention students were well within the high average range.

Although the previous study yielded findings that demonstrate the effectiveness of dialogic reading on receptive vocabulary with students who are deaf/hard of hearing, the research with this population is scarce. One possibility is that teachers of the deaf, because they are experts at eliciting language, may already be using dialogic reading techniques, albeit informally. In an effort to determine the possibility of dialogic reading being implemented with students who are deaf/hard of hearing in a listening and spoken language environment, I looked at what teachers of the deaf are doing when reading stories aloud to their students. More specifically, I focused on one portion of the dialogic reading process. I looked at the types of prompts teachers of the deaf area using with their students and the proportion of time each prompt is used during a 15-minute period. I would expect that teachers of the deaf are using prompting because the way in which we teach children who are deaf/hard of hearing is through prompting and questioning among many other techniques. After determining if teachers of the deaf are using prompting during authentic literature experiences, I want to determine the pattern of the prompts and the extent to which some kinds of prompts are used over other kinds of prompts. Therefore, the goal of the current study was to quantify the types of prompts and frequency of use during a short reading session using authentic literature (stories that are not from basal readers). My hypothesis was that teachers of the deaf use dialogic reading techniques, specifically the prompts that are

part of the dialogic reading process, because dialogic reading techniques closely align with best practices in deaf education.

Methods

Participants

Participants in this study included teachers of the deaf at a private school that serves children who are deaf/hard of hearing, ages birth through 12 years. Children at this school learn to listen, talk, and read without the use of sign language. Teachers were observed in both the pre-k/k and primary departments of the school. Three teachers of the deaf in the pre-k/k department were observed and five teachers in the primary department were observed. All teachers hold a Master's Degree.

Procedures

Consent was obtained from the co-principals at the school and then from the individual teachers who were referred by the co-principals. Once consent was obtained, numbers were assigned to each of the participants to ensure confidentiality. A schedule was then created with observation dates and times and gave them to the teachers of the deaf and the co-principals at the school. On the scheduled date of observation, the principal investigator went into the classroom and set-up the video camera in position so that the teacher was the only visible person on the recording. Teachers were not given any special instructions other than to read a story of their choice to their students and to read and interact with the students as they would on any given day. The principal investigator left the video camera in the off position until the authentic literature experience began. The teacher of the deaf read a story of her choice to the students. The principal investigator videotaped the classroom teacher for a 15-minute portion of the authentic literature experience beginning with the start of the story. The principal investigator

turned the video camera off at the end of the authentic literature experience or at the end of the 15 minutes, whichever occurred first. The principal investigator packaged up the video camera and left the classroom. Upon completion of all videotaping, the principal investigator watched the video taped segments and coded each video using a rubric described below.

Coding Analysis

For the purposes of coding, I decided not to look at the dialogic reading process in its entirety, but rather to look at the types of prompts used by teachers of the deaf during authentic experiences, therefore, looking at the first piece of the PEER process (*Prompts*). A table was created using Microsoft Word. The table contained a place for information in regards to the teacher id #, date and time. The table also contained each of the five prompts and examples of each of those prompts as well as an "other" column for prompts that did not fit into one of the five categories. In addition, a section for tallies in regards to the number of times each prompt was used was present. Lastly a comments section was available for information to be written, if necessary, when coding the videos.

Results

After videotaping 7 teachers of the deaf during a 15-minute authentic literature experience, the videotapes were coded for information in regards to the prompts used. As previously mentioned, the CROWD acronym describes the types of prompts used during the dialogic reading process. The prompts used during dialogic reading include *completion, recall, open-ended, wh-* and *distancing* prompts. For this study, an *other* column was created. Prompts listed under the *other* column fell under the category of *yes/no* prompts which are not part of the dialogic reading process. Proportions were calculated to determine the proportion of time the

teachers used specific prompts during their authentic literature experience. Table 1 shows the percentage of prompts used from greatest to least.

In addition to the types of prompts used, the average numbers of prompts were analyzed. Within the 15-minute authentic literature experience, the number of prompts used by teachers of the deaf ranged from 24 prompts to 68 prompts indicating that some teachers of the deaf used 3 times the amount of prompts other teachers of the deaf used. To further analyze the number of prompts used, the average number of prompts used per minute was determined for each teacher of the deaf. The number of prompts used per minute ranged from one prompt a minute to between four and five prompts a minute. Table 2 depicts the average number of prompts used per minute by each teacher of the deaf.

To recall from earlier, prompts used in dialogic reading include *completion, recall, openended, wh-* and *distancing* prompts. After carefully coding the videos, *yes/no* prompts were added to the *other* column because they were an additional prompt used by teachers of the deaf. Table 3 depicts one of each type of prompt used by a teacher of the deaf during the 15-minute authentic literature experience.

Lastly, the prompts were analyzed in comparison to Bloom's Taxonomy. Bloom's Taxonomy looks at questioning for purposes of assessment at six different levels. The six levels of Bloom's Taxonomy, beginning with low-level and progressing to high-level include *knowledge, comprehension, application, analysis, syntheses,* and *evaluation*. Of the total number of prompts used by the group, 64% were considered to be low-level, 17% high-level and the remaining 19% were completion prompts which did not seem suited to fit into either the highlevel or low-level category.

Discussion

The degree to which each type of prompt was used by teachers of the deaf varied. The largest percentages of prompts used by teachers of the deaf were *wh*- prompts at 38%. *Wh*-prompts included question forms such as *who, what, when, where,* and occasionally *how* and *why. How* and *why* only fit into the *wh*- category if there was a correct and specific response to the question. Otherwise, *how* and *why* question forms were counted under the category of open-ended prompts. Likely reasons for the increased use of *wh*- prompts are the naturalness of *wh*-prompts and the specificity of the prompts. When reading stories, commons prompts to elicit understanding of the story include *wh*- prompts. They are natural and efficient at eliciting understanding of a story. Knowing this could account for the high proportion of *wh*- prompts utilized by teachers of the deaf throughout a 15-minute authentic literature experience.

The second prompt utilized more than the other prompts, at 26%, was the *other* category which included *yes/no* prompts. Reasons for a fairly high usage of *yes/no* prompts might include the fact that *yes/no* prompts require little language to correctly respond to the prompt. *Yes/no* prompts also efficiently elicit the information the teacher is seeking and allow the teacher to move on from that point. Though *yes/no* prompts technically only require a response of *yes/no*, this was rarely the case in the seven classes I observed. The majority of the time, students responded with more than a *yes/no* response. This was not surprising considering a main goal in auditory-oral settings is language elicitation and growth, and therefore students are used to providing longer utterances than one word.

Completion prompts, used 19% of the time, provide students with the majority of the language and only require them to fill in small pieces. Depending on the age, abilities and

language of the students using *completion* prompts can be an efficient and effective way to elicit pertinent information from the students in regards to the story.

Recall prompts were used 8% of the time by teachers. For the purpose of this study, prompts were considered to be *recall* when asked at the beginning of a story as an extension to the reading of the story on the previous day and when asked at the end of the story. The relatively small proportion of time in which *recall* prompts were utilized was not surprising because the majority of the videos extended past the 15-minute period. With this in mind, recall prompts were only noted if the teacher asked them at the beginning of the story as an extension to the reading on the previous day.

Open-ended prompts were used 6% of the time by teachers of the deaf. *Open-ended* prompts require students to generate an answer independently and then formulate the language in order to express the answer. Therefore, *open-ended* responses demand more from students in terms of cognition and language. Students attending auditory-oral schools are often doing so because of a language delay. Responding to *open-ended* prompts when a language delay is present can be a challenging task which might explain why teachers of the deaf utilize fewer *open-ended* prompts than other prompts.

The fewest prompts used throughout the 15-minute period by teachers of the deaf were *distancing* prompts. *Distancing* prompts are prompts that tie information from the story to a previous experience. Students who are deaf/hard of hearing often have limited background knowledge due to their inability to incidentally hear. Despite whether or not there is a lack of experiences, students who are deaf/hard of hearing do not have the ability to overhear, so unless explicit information is provided during the experiences, students get little benefit from the experiences. Knowing this, it is difficult for the teachers of the deaf to tie information to previous

experiences unless they were experiences that occurred with the class as whole such as a fieldtrip.

The prompts used by teachers of the deaf can be analyzed and placed within the categories of Bloom's Taxonomy. The majority of prompts used by teachers of the deaf fit into the low-level questioning category (64%), whereas, 17% of the prompts used by teachers of the deaf were considered high-level questioning. Detail questions are used frequently by teachers of the deaf, while higher-level thinking questions are used less frequently. This is not surprising given that higher-level thinking questions require the child to have receptive and expressive complex language skills.

Overall, results from this study demonstrated that teachers of the deaf are using dialogic reading techniques as a group, and this is good, given that we know dialogic reading techniques are quite effective.

Recommendations

Teachers of the deaf are utilizing dialogic reading techniques, but when comparing dialogic reading techniques to Bloom's Taxonomy there are some areas in which teachers of the deaf could improve. When we look at the higher-level questions, we see not only less as a group (17% of questions are high-level), but some teachers never used higher-level prompts. For example, 5/7 teachers of the deaf never used a distancing prompt. A balance between low-level and higher-level questioning is essential to best meet the needs of all students in the classroom. Utilization of too many lower-level prompts does not provide students with the opportunity to further their thinking and think more critically about the material being learned, whereas, utilization of too many higher-level prompts does not provide students with the opportunity to develop basic knowledge in which to further their knowledge on. Therefore, teachers of the deaf

need to find a balance between low-level and high-level prompts to better meet the needs of their students.

Limitations

One limitation to this study was time. Although information from each of the authentic literature experiences was coded for 15-minutes, the majority of the authentic literature experiences extended past the 15-minutes. Had the videos been coded for longer periods of time, a more accurate representation of the prompts used by teachers of the deaf throughout an entire authentic literature experience might have been noted, perhaps representing more of a balance between low-level and high-level prompts.

Another limitation to the study was the lack of information about class groupings/students. In relation to Bloom's Taxonomy, both low-level and high-level prompts are essential for students to have increased, positive learning outcomes. A maintained balance between both is best. Students must have the basic information in order to acquire deeper knowledge, but students also have to learn how to think past details and more critically. Having information about the class groupings/students might have provided more insight in regards to the reasons behind why each individual teacher of the deaf used specific prompts more than others.

Lastly, discrepancies between the ways in which authentic literature experiences were conducted might have resulted in some variance. Some of the experiences I videotaped were students' first encounter with the book, while other experiences were extensions to the previous day's work with the book. Depending on this, the allotment of time varied. Some teachers spent the first few minutes reviewing from the previous day which incorporated different forms of prompts, while other teachers only read the story without a review, which included a different

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form of prompts. If each of the videos began with the reading of the story and ended while the story was still being read, the results might have been more indicative of the prompts used strictly during authentic literature reading.

Implications for Future Research

An extension to this study could be one in which the baseline data is collected similarly to this study and then the researcher conferences with the teachers of the deaf to determine exact reasons as to why the teachers used the specific prompts they did. More specific information might give the researcher insight into why the teachers did what they did. Also, video recordings may be effective ways for teachers to monitor their own prompting, and possibly modify their practices as needed.

Broadening the ideal of dialogic reading even further, it would be interesting to look at the impact of dialogic reading on students who are deaf/hard of hearing. I found little research to support that dialogic reading is an effective technique to use with students who are deaf/hard of hearing. Therefore, conducting a pre-assessment with students who are deaf/hard of hearing, dividing students into control and experimental groups, implementing a dialogic reading intervention with the experimental group and then conducting a post-assessment would provide information in regards to whether students who are deaf/hard of hearing benefit from the techniques of dialogic reading.

References

- Ardnold, D.H., Lonigan, C. J., Whitehurst, G. J., & Epstein, J. N. (1994). Accelerating language development through picture book reading: Replication and extension to a videotape training format. *Journal of Educational Psychology*, 86(2), 235–243. doi:10.1037/0022-0663.86.2.235
- Blom-Hoffman, J., O'Neil-Pirozzi, T., Volpe, R., Cutting, J. & Bissinger, E. (2007). Instructing parents to use dialogic reading strategies with preschool children: Impact of a videobased training program on caregiver reading behaviors and children's. *Journal of Applied School Psychology*, 23(1), 117–131. doi:10.1300/J370v23n01_06
- Dale, P.S., Crain-Thoreson, C., Notari-Syverson, A., & Cole, K. (1996). Parent-child book reading as an intervention technique for young children with language delays. *Topics in Early Childhood Special Education*, *16*(2), 213–235.
 doi:doi:10.1177/027112149601600206
- Dunn, L. M., & Dunn, L. M. (1981). Peabody Picture Vocabulary Test (Revised). Circle Pines, MN: American Guidance Service.
- Dunn, L. M., & Dunn, L. M. (1997). Peabody Picture Vocabulary Test (3rd ed.). Circle Pines,MN: American Guidance Service.
- Fung, P. C., Wing-Yin Chow, B., & McBride-Chang, C. (2005). The impact of a dialogic reading program on deaf and hard-of-hearing kindergarten and early primary school-aged students in Hong Kong. *Journal of Deaf Studies and Deaf Education*, 10(1), 82–95. doi:10.1093/deafed/eni005

- Gardner, M. F. (1981). Expressive One-Word Picture Vocabulary Test. Novato, CA: Academic Therapy.
- Gardner, M. F. (1990). Expressive One-Word Picture Vocabulary Test (Revised) Novato, CA: Academic Therapy.
- Hargrave, A. C., & Senechal, M. (2000). A book reading intervention with preschool children who have limited vocabularies: The benefits of regular reading and dialogic reading. *Early Childhood Research Quarterly*, *15*(1), 75–90. Retrieved from http://dx.doi.org/10.1016/S0885-2006(99)00038-1
- Kirk, S. A., McCarthy, J. J., & Kirk, W. D. (1968). Illinois Test of Psycholinguistic Abilities. Urbana, IL: University of Illinois Press.
- Lonigan, C. J., & Whitehurst, G. J. (1998). Relative efficacy of parent and teacher involvement in a share-reading intervention for preschool children from low-income background. *Early Childhood Research Quarterly*, 13(2), 263–289. Retrieved from http://dx.doi.org/10.1016/S0885-2006(99)80038-6
- Valdez-Menchaca, M. C., & Whitehurst, G. J. (1992). Accelerating language development through picture book reading: A systematic extension to Mexican day care. *Developmental Psychology*, 28(6), 1106–1114. doi:10.1037/0012-1649.28.6.1106
- Whitehurst, G. J., Arnold, D. S., Epstein, J. N., Angell, A. L., Smith, M. & Fischel, J. E. (1994).
 A picture book reading intervention in day care and home for children from low-income families. *Developmental Psychology*, *30*(5), 679–689. doi:10.1037/0012-1649.30.5.679

Whitehurst, G. J., Falco, F. L., Lonigan, C. J., Fischel, J. E., DeBaryshe B. D., Valdez-Menchaca, M. C., & Caulfield, M. (1988). Accelerating language development through picture book reading. *Developmental Psychology*, 24(4), 552–559. doi:10.1037/0012-1649.24.4.552

Whitehurst, G. J., Zevenbergen, A. A., Crone, D. A., Schulz, M. D., Velting, O. N., & Fischel, J.
E. (1999). Outcomes of an emergent literacy intervention from Head Start through second grade. *Journal of Educational Psychology*, *91*(2), 261–272. doi:10.1037/0022-0663.91.2.261

Figure 1



Table 1

Prompts	Percentage of Times Used
Wh-	38
Other (yes/no)	26
Completion	19
Recall	8
Open-ended	6
Distancing	3

Percentage of Time Teachers of the Deaf Used Specific Prompts

Table 2

Teacher ID	Average Number of Prompts Per Minute
1	2
2	5
3	3
4	3
5	2
6	2
7	3

Average Number of Prompts Used Per Minute by Teachers of the Deaf

Table 3

Prompt	Example
Completion	Little Lucy has bear's feet and
Recall (Prior to opening to the book and	What is Jess doing at the beginning of the
beginning to read)	story?
Open-Ended	Trixie and Sonya had the wrong Knuffle
	Bunnies. How did that happen?
Wh-	What is the bottom of pizza called?
Distancing	Do you remember yesterday when we
	ordered our food? And we had to
	waitRemember waiting and waiting and
	we were hungry. Did you guys wait with
	good manners or did you play with the
	flowers and eat sugar? No, you guys did a
	great job! Froggy seems to be having a
	hard time.
Other (yes/no)	Is this book about animals?

Sample Prompts Used by Teachers of the Deaf

Appendix A

ID #:			Date:		Time:	
	CROWD Prompts]	
Dialogic Reading Techniques	Completion	Recall	Open-Ended	Wh-	Distancing	Other
Examples	"I do not like green eggs and"	"What happened to the bird?"	"Tell me what's happening in the picture."	"Why is the cat running?"	"Remember when we went on a bus. Where did we go on the bus?"	
Tallies						
Comments	:					