Preschool Teachers’ Perceptions About Dialogic Reading and the Relationship with Implementation Success

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Abstract
Many children who are identified as being at academic risk are from low-income households and have lower than average levels of reading achievement. Since children’s preschool experience with books has been linked to school readiness a possible strategy for reducing the achievement gap is to expose at-risk children to dialogic reading (DR). DR includes specific read-aloud strategies that promote children’s language and vocabulary development. In order to facilitate children’s development, it is important that preschool teachers have a sound understanding of DR and are able to skillfully implement DR strategies. The purpose of this study was to explore (a) the nature of teachers perceptions of DR (b) how well teachers enact DR and the degree of variation teachers’ practice, and (c) whether teacher characteristics are associated with either perceptions of or skills in enacting DR practices. This study included five lead teachers and five assistant teachers. Data included videotapes of DR sessions in the classroom and individual interviews. Results suggested that teachers were moderately effective in their DR practices. In terms of the level of cognitive and linguistic challenge presented to children during DR sessions, teachers used more lower level than higher levels question and feedback strategies and scored a little above the mid-point on ratings of global instructional quality. This suggests that there was room for improvement in teachers’ DR implementation quality. There was an unexpected lack of correspondence between the technical and global aspects of DR quality. In general lead teachers were more skillful than assistant teachers. As a group teachers felt that DR was a worthy technique and reported becoming increasing comfortable implementing DR in their classrooms. However, teachers’ declarative knowledge of DR was limited and teachers were unlikely
to identify the same strengths and weaknesses in their own practices as the researcher. There was some degree of correspondence between teachers’ interview data and their observed DR quality and those teachers with the highest and lowest levels of implementation skill gave distinctive interview responses. Discussion focuses on the findings of four major themes, teacher’s quality of DR compared to their perceptions, successful DR, teacher change process, and suggestions for improving DR training and coaching, and the limitations of this particular study.
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Statement of Problem

Individual differences in early educational achievement can have long-term consequences for children. Many children who enter school are identified as at risk for educational problems. These children who are identified as at risk are primarily from low-income households and tend to have lower-than-average levels of reading achievement and lack the reading skills needed for school success (Alexander & Entwisle, 1988; Adams, 1990; U.S. Department of Education, 2002).

Children’s preschool experience with books may play an essential role in explaining SES-based differences in school readiness (Adams, 1990). For example, Ninio (1980) examined social class differences and found that middle class mothers asked more “what” questions that required their children to label items illustrated in the book. Lower-income mothers asked more “where” questions that prompted children to point to items without necessarily speaking. The study found that high-SES children showed larger productive vocabularies during book-reading sessions. A proposed solution to this academic gap is dialogic reading. Dialogic reading is a method of sharing books with young children that includes specific reading strategies that promote language and vocabulary development ((Arnold, Lonigan, Whitehurst & Epstein, 1994; Valdez-Menchaca & Whitehurst, 1992; Whitehurst, Epstein, Angell, Payne, Crone & Fischel, 1994). Incorporating dialogic reading strategies into children’s everyday experiences should increase their chances of attaining the language skills needed for school success.
Exposing children from low-income households to rich dialogues, whether in a school or home environment may encourage and support language skills that are needed for future reading and school achievement.

**Background on Low-Income at Risk Populations and the Need for Change**

Children from low-income families are disproportionately at risk for educational problems (Alexander & Entwisle, 1988). Children from low-income families are more likely to start school with fewer academic skills than their more advantaged peers and this academic gap tends to remain throughout their educational careers (Hart & Risley, 1995).

Children growing up in low-income environments have lower-than-average levels of reading achievement and higher rates of special education placement, making up over half of the population of students that are served under the Individuals with Disabilities Education Act (IDEA) (U.S. Department of Education, 2002). Differences in children’s early childhood experiences play an influential role in shaping school readiness and contribute to academic skill disparities at school entry (Stipek & Ryan, 1997).

Differences in language learning opportunities, such as infrequent dialogue and restricted vocabulary in low-income households may have lasting consequences for children’s later reading success (Hart & Risley, 1995; Hoff, 2003). Hoff (2003) found differences in children’s first three years of life in the quality and quantity of vocabulary used by mothers who were from lower socioeconomic status. Hart and Risley (1995) found that by age three, children from low-income households had considerably fewer words in their vocabularies compared to middle- and high-income families.
The 2000 U.S. Census revealed that almost one million children are enrolled in federally supported Head Start classrooms (U.S. Census Bureau, 2002). Since Head Start classrooms mainly serve low-income families, these preschoolers could benefit from high quality preschool literacy programs. For many low-income children, out-of-home settings such as preschool classrooms are the main place where they experience shared book reading (Wasik & Bond, 2001). Therefore, using effective language and literacy strategies like shared book reading could have a significant impact on at-risk children’s literacy development.

Shared picture book reading is thought to offer a vital context for the attainment of emergent literacy skills (Adams, 1990). A review by the National Educational Literacy Panel revealed that shared book reading can have considerable and positive impact on young children’s oral language skills (National Early Literacy Panel, 2009). In fact, the panel concluded that, “Shared reading activities are often recommended as the single most important thing adults can do to promote emergent literacy skills of young children” (National Early Literacy Panel, 2009, p. 179). There is also evidence that book reading is associated with long-term outcomes for children. For example, Stevenson and Fredman (1990) found a relationship between the frequency of preschool shared reading experiences and individual differences in the reading, spelling, and IQ scores of 13-year-olds.

Researchers have proposed several reasons as to why book reading supports language and literacy development (Dickinson & Tabors, 1991; Freppon, 1991, Morrow, 1992; Snow, Tabors, Nicholson & Kurland, 1995). Books contain many words that
children would most likely not encounter during daily conversations. Reading aloud exposes children to new and more complex words and grammatical forms. Through repeated book readings, children can build word meanings over multiple occasions. During shared reading time, adults often use verbal interaction strategies (such as expansions) that facilitate vocabulary and language skills (Snow, 1983). A final key element of shared book reading is that it provides opportunities for learning decontextualized language (i.e., talking about situations or ideas that are not immediately present), requiring children to make sense of ideas through linguistic cues (Cochran-Smith, 1984; Snow, 1983; 1993; Snow & Dickinson, 1991).

**Theories Behind Dialogic Reading**

Dialogic reading is based on Bandura’s social learning theory (SLT) and Vygotsky’s sociocultural theory (Whitehurst et al., 1988). A major theme of Vygotsky’s theoretical framework is that social interaction plays a crucial role in the development of cognition and that social learning precedes development (Vygotsky, 1978). Stemming from this is the notion that cognitive development depends on what Vygotsky called the zone of proximal development (ZPD); the ZPD is the level of development attained when children engage in tasks with the assistance of a more skillful partner (Vygotsky, 1978). The zone of proximal development is the difference between what a child can do with help and what he or she can do without help.

Dialogic reading has a social aspect that is similar to Vygotsky’s social development theory. Dialogic reading can be seen as a social learning environment since children attain the essential vocabulary needed for successful reading outcomes through
their interaction with adults in the book-reading setting (Gormley & Ruhl, 2005).

Dialogic reading is based on the premise that language development may be increased if the boundaries of the proximal zone are pushed further than they might be spontaneously and if the boundaries are based on children’s level of potential development (Reese & Cox, 1999). When learning how to implement dialogic reading, adults are trained to raise standards for a child’s verbal contributions over time, i.e., by encouraging the child to say just a little more than he or she normally would (Zevenbergen & Whitehurst, 2003).

Thus, DR strategies make use of Vygotsky’s concept of the zone of proximal development (Rogoff, 1990; Vygotsky, 1978).

Dialogic reading is also based on Bandura’s social learning theory. The general principles of social learning theory are that (a) people learn by observing, (b) learning can occur without an external change in behavior, and (c) cognition plays a role in learning (Ormrod, 1999). Bandura (1977) stated that:

Learning would be exceedingly laborious, not to mention hazardous if people had to rely solely on the efforts of their own actions to inform them what to do. Fortunately most human behavior is learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action. (p. 22)

Social learning theory explains human behavior in terms of continuous reciprocal interaction between, cognitive, behavioral, and environmental influences (Bandura, 1977). Dialogic reading incorporates both cognitive and behavioral aspects of social learning theory. Behavioral influences in dialogic reading occur when a response to a
stimulus is reinforced, such as when the adult asks a question and then says “good job” in response to the child’s answer (Skinner, 1953). Asking frequent questions to promote learning and practice, providing immediate verbal feedback, and gradual increasing expectations for the complexity of children’s responses are all examples of behavioral influences. Frequent modeling of vocabulary and language structures and children’s spontaneous use of aspects of the adult’s verbal models into their own speech are examples of cognitive influences.

**Defining Dialogic Reading**

A particular style of shared book reading, known as dialogic reading, was developed by Grover Whitehurst and his colleagues as an early language intervention; it was later included as a component of broader early literacy interventions. Dialogic reading is thought to be causally related to language growth and by extension, to later school achievement (Whitehurst, Falco, Lonigan, Fischel, DeBaryshe, Valdez-Menchaca, & Caulfield, 1988; Whitehurst et al., 1994; Whitehurst et al, 1999). It is thought to provide an environment that allows preschoolers a chance to attain the necessary emergent literacy skills needed for reading and school success (Whitehurst et al., 1994).

In a traditional classroom reading setting, the adult reads a book from cover to cover while children sit quietly and listen to the story. This is a one-sided style of interaction. Dialogic reading as described by Whitehurst et al (1999) consists of an adult helping the child become the teller of the story. There is a shift in roles where the adult becomes the listener, the questioner, and the audience for the child (Whitehurst & Lonigan, 1998; DeBarshye & Gorecki, 2007). Dialogic reading offers the child rich
conversation and goes “beyond the text of the story and invite[s] [a] dialogue between the adult and the child” (Wasik & Bond, 2001, p. 243).

There are three main components of the dialogic reading style: (a) *evocative* techniques are used to encourage the child to take an active role during story time (for example the adult asking “what” questions), (b) *feedback* from the adult is encouraged in the form of modeling, expansions, corrections, and praise, and (c) *progressive change* in adult standards for the child’s developing abilities and constantly encouraging the child to do just a little bit more than he or she normally would (Whitehurst & Lonigan, 1998).

In dialogic reading, the adult asks a high number of cognitively challenging questions, gives high quality feedback on children’s comments, is responsive to children’s interests, and takes several turns per conversational topic (Gormley & Ruhl, 2005). To allow for a sufficient intensity of verbal interaction, it is recommended that dialogic reading be done in small groups or one-on-one rather than in a large group setting.

During dialogic reading, the adult uses questions and prompting strategies to engage children in thoughtful conversations. Examples of possible eliciting strategies include: pointing prompts, yes/no questions, what questions, descriptive questions, fill-in prompts, open-ended questions, and distancing questions. These strategies are listed in approximate order from least to most challenging.

Pointing prompts such as “Show me the frog,” do not require a verbal response from the child; he or she can respond with a gesture. Yes/no questions such as, “Is this a dragon?” also place minimal verbal demands on the child. Descriptive and what
questions require that the child labels or describes a character or object in the book; however, support for the answer may be found by the pictures. For example, the teacher may ask, “What is the color of the cake?” referring to the book’s illustrations. Fill-in prompts are usually based on rote responses to patterned language in the text. For example, the adult starts with, “And the big, bad, wolf said I’ll … ” then pauses, waiting for the child to complete the familiar sequence. All of these elicitation strategies are close-ended. There is usually a single, correct or expected answer for the child to provide.

Open-ended and distancing questions are examples of higher-level elicitation strategies. In order for the child to think about abstract answers the adult has to ask higher order skills questions. These types of questions often include words such as “how?” “why?” and “what do you think?” These types of questions are more abstract and the child cannot answer simply by looking at the pictures in the book. Open-ended and distancing questions may not even have a correct answer and are meant to promote decontextualized talk and/or longer sentences and conversation.

Another part of dialogic reading is the response and feedback strategies provided by the adult. These techniques include: praise and repetition, expansion, correction, and topic continuation (DeBaryshe & Gorecki, 2005). The purpose of praise and repetition is to let children know that they were right in their response as well as to motivate to children engage in continued dialogue. For example a child might say, “That’s a dog!” and the adult responds, “Yes, it’s a dog.” Expansion responses are close repetitions that add on a little bit more information to what children say. For example, a child might say,
“It’s purple,” and the adult replies “The purple shirt is dirty.” Expansion responses model more advanced language and help children hear the small differences between what they said and what the teacher said. Expansions can also encourage children to repeat the adult’s model, as well as motivate the child to engage in further dialogue (DeBaryshe & Gorecki, 2005).

Correction feedback strategies model a more accurate response. They also help the child understand a concept. For example an adult might ask “How many apples do you see?” The child replies, “four” and the adult follows up by saying “I’m not sure that’s right. Let’s count together, one, two, three, three apples!” Topic continuation is a strategy in which the adult provides comments that add more information and/or relate to the child’s topic without repeating or incorporating the child’s words. For instance a child might say “That’s a tall tree,” and the adult would reply “It takes a long time, hundreds and hundreds of years for trees to grow that tall” (DeBaryshe & Gorecki, 2005). Topic continuation provides new information that increases the child’s understanding, it also models more advanced language, and increases the length of the conversation on a focused topic.

**Outcomes of Dialogic Reading**

Research suggests a relationship between dialogic book reading and both short-term outcomes and later language growth and school achievement. Dialogic reading benefits children’s receptive and expressive vocabulary, narrative skills, letter knowledge and print awareness (Whitehurst et al, 1994; 1988). These language development skills are thought to be the basis for school readiness (Snow, Burns, & Griffin, 1998).
In one of the first studies of dialogic reading, Whitehurst et al. (1988) asked parents of two-year-old children to read aloud using either a dialogic or a regular reading style. Mothers were randomly assigned to one of two conditions and the dialogic reading group received two short lessons on using that style. Mothers in the dialogic condition asked more open-ended questions, attribute questions such as color and shape, and responded with more expansions. Their children talked more during the reading sessions, used longer phrases, and one month later had higher posttest scores on tests of expressive vocabulary and descriptive language. At a nine month follow-up, children from that dialogic reading group were still about 6 months ahead of their peers on expressive language tests, such as the verbal subscale of the Illinois Test of Psycholinguistic Abilities and the Expressive One Word Picture Vocabulary.

Hargrave and Senechal (2000) found that children who received dialogic reading for ten minutes per day made significantly greater gains in expressive vocabulary skills compared to children who were not in a dialogic reading group. This was a 4-week long study that included of 36 children between the ages of three and five located at two daycare centers. The teachers who were doing the dialogic reading received training in dialogic reading prior to the intervention. Results revealed that children in the dialogic reading condition made significantly greater gains in expressive vocabulary scores than did children in the regular reading environment. This pattern of findings is consistent with the series of studies carried out by Whitehurst and his colleagues (Whitehurst & Lonigan, 1998; Whitehurst et al, 1999). Hargrave and Senechal suggested that asking questions during dialogic reading was key to supporting language learning. The adult
asking questions provided children with opportunities to construct responses, use language, and as a result improved their language skills.

In a randomized study, Wasik and Bond (2001) found that 61 4-year-old at-risk children who were an interactive book reading intervention group scored higher on receptive and expressive standardized language tests. The children in the control group were also read to however, the teachers were not trained on interactive shared book reading techniques. During this 15-week long study, teachers were trained to ask open-ended questions and to engage children in dialogues based on Whitehurst’s (1988) work. Teachers read books to children and emphasized and highlighted the vocabulary in the books by presenting tangible objects that represented the words. Props used to demonstrate the new vocabulary were placed in the classroom to provide children with multiple opportunities to use the book-related words. The children in the comparison group were read the same books for the same amount of time. Results concluded that the children in the intervention group whose teachers provided multiple opportunities to interact with vocabulary words learned more book-related vocabulary compared to the other children.

Reese and Cox (1999) randomly assigned 48 four-year-old children to a describer-style group (the interactions focused on describing pictures during reading), a comprehender-style group (focused on story meaning), or a performance-oriented style (focused on introducing and later discussing story meaning at the end of the reading session for six weeks. For six weeks, children were read to individually by outside readers 2-3 times a week. The reader in the describer-style group made five comments
and asked five questions during the story and focused on labels and descriptions of the pictures. The reader in the comprehender-style group also made comments and asked five questions; however, they focused on predictions and inferences about the storyline as well as the inferences about the characters’ emotions. The reader in the performance-style group introduced the story with five comments and then asked for five inferences at the end of the storybook; this is similar to some of the higher level questioning techniques that are used in dialogic reading. Findings indicated that the describer-style group, which was most similar to dialogic reading, had the greatest benefits for receptive vocabulary and print skills. These findings are in line with other studies demonstrating the benefits of a similar dialogic style of reading (e.g., Whitehurst, Epstein, et al., 1994).

In a review paper of ten experimental studies, Cutspec (2004) found evidence that dialogic reading leads to positive gains in language development for children three years of age and younger. All studies where either in a home, lab, or daycare setting and included dialogic reading instruction prior to intervention. The duration of each study ranged from four to eight weeks. Cutspec (2004) found that five out of the ten experimental students looked exclusively at the home environment (Arnold et al., 1994; Dale, Notari-Syverson, & Cole, 1996; Huebner, 2000a; 2000b; Whitehurst et al., 1988), two studies looked at the daycare environment (Lonigan, Anthony, Bloomfield, Dyer, & Samwel, 1999; Valdez-Menchaca & Whitehurst, 1992), and three looked at home and/or daycare environment (Crain-Thoreson & Dale, 1999; Lonigan & Whitehurst, 1992; Whitehurst, Arnold, et al., 1994). The Arnold et al. (1994) and Whitehurst et al (1988) studies looked at 4-week long interventions in either a lab or home setting with the
parents doing individual dialogic reading sessions 3-4 times a week. Arnold et al.’s (1994) results revealed that children in the DR group had a longer mean length of utterance and higher expressive vocabulary scores than did children in the regular reading group. Whitehurst et al. (1988) found that children in a dialogic reading group had higher expressive vocabulary scores than did children in a regular reading group. Furthermore, data from a nine-month follow-up indicated that expressive vocabulary advantages for the DR group were maintained.

Valdez-Menchaca and Whitehurst (1992) looked at individual dialogic reading sessions in the day-care setting using wh- questions, open-ended questions, corrective feedback, and praise. Twenty children who were two years old were read to on a daily basis for six weeks. Results revealed that children in the dialogic reading group had greater expressive and receptive vocabulary than children in the control group.

Similar results were found by Whitehurst, Arnold, Epstein et al., (1994) and Crane-Thoreson and Dale (1999). These studies included DR in the home and/or daycare environment. Whitehurst, Arnold, and Epstein et al., (1994) involved 73 children between the ages of three and four. There were three randomized groups: dialogic reading at school, dialogic reading at school plus home, and control. For six weeks parents did one-on-one dialogic reading sessions at home on a daily basis while teachers did dialogic reading in small groups daily. Both parents and teachers received dialogic reading training. Findings supported previous studies on dialogic reading (e.g., Valdez-Menchaca & Whitehurst, 1992; Whitehurst et al., 1988) in which children in the dialogic reading groups had better expressive vocabulary scores than the control group. However,
children who received dialogic reading at home plus at daycare had higher scores than children who received intervention at the daycare only. In addition, at a six month follow-up the expressive vocabulary growth was still maintained.

Lonigan and Whitehurst (1998) looked at 91 children in the home and/or daycare environment. The children were between the ages of two and five were randomly placed into one of four condition groups: dialogic reading at daycare, dialogic reading at home, dialogic reading at daycare and at home, and control. The children received daily dialogic reading sessions in small groups at daycare, while the parents did individual dialogic reading at home on a voluntary basis. Results indicated that when treatment conditions were collapsed, children in any DR condition had higher expressive language outcomes than control children. For one outcome measure, treatment effects were found only in high-compliance centers. Depending on the outcome measure, effect sizes were strongest for either the home-only group or the home plus school group.

Cutspec (2004) concluded in his review of three similar studies (Crain-Thoreson & Dale, 1999; Lonigan & Whitehurst, 1998; Whitehurst, Arnold, Epstein et al., 1994) that children in the home plus the daycare environments demonstrated greatest gains, followed by the home environment, followed by the daycare environment. These findings suggest that one-to-one dialogic reading conditions may have more positive effects on language development than small group reading sessions.

Cutspec (2006) also reviewed evidence from 11 randomized experimental studies with children ages four and five. Six of the eleven randomized studies were previously discussed (Crain-Thoreson & Dale, 1999; Dale et al., 1996; Hargrave & Senechal, 2000;
Lonigan, Anthony, & Bloomfield et al., 1999; Lonigan & Whitehurst, 1998; Reese & Cox, 1999). Two out of the eleven studies focused on home and daycare environment.

Whitehurst, Epstein, et al., (1994) and Whitehurst, Zevenbergen, et al., (1999) both compared a dialogic reading intervention group with ongoing Head Start curriculum with a comparison group implementing just an ongoing Head Start curriculum. Both studies were 30 weeks long with the first study having 167 preschool children and the second study having 280. Each study had the teachers do group dialogic reading sessions 3-5 times a week, while the parents did dialogic reading one-on-one 3-5 times a week. Results from Whitehurst, Epstein, et al., (1994) showed that the more parents participated in DR at home, the greater the gains in their children’s language skills.

One study from Cutspec’s (2006) review focused on the school environment (Branscum, 1998), one focused on the home environment (Chow & McBride-Chang, 2003), and the last one focuses on dialogic reading in the daycare environment (Sabbatini, 2001). Cutspec concluded that children in all the experimental dialogic reading groups demonstrated greater vocabulary scores on standardized language tests and MLU regardless of the implementation setting. All follow-up assessments confirmed the continuance of gains identified at the end of the intervention period (Cutspec, 2006). Based on this review and the review written about 2- and 3-year olds Cutpsec (2004, 2006) concluded that dialogic reading has a considerable effect on preschool children’s expressive language, mean length utterance, and linguistic awareness.

While many researchers have demonstrated the positive effects and benefits of dialogic reading, some studies revealed less positive results. For example, Cutspec
(2004) reviewed a study by Lonigan et al. (1999). This study used a two group randomized experimental design. An outside reader read to ninety-five children aged two to five on a daily basis. The outcome results favored the dialogic reading group on measures of the descriptive use of language, while results favored typical shared-reading on measures on listening comprehension and alliteration focus. The increases in phonological sensitivity should be interpreted with caution, however, because the effect was found on only one measure regarding phonological sensitivity and the overall performance of children in all groups was at or near chance levels. These results suggest that group reading interactions may not be adequate to construct broad improvements in children’s oral language skills.

Senechal and Cornell (1993) designed a study to explore whether preschool children learn novel vocabulary from a single reading of a storybook. One hundred-sixty four- and five-year-old children were randomly placed in one of four reading conditions: questioning, recasting, word repetition, verbatim reading. A script was created to introduce 10 target words and a pretest-posttest was used to assess whether vocabulary was learned. In the questioning condition children were asked what and where questions when target words were introduced. In the recasting condition, the adult read the sentence with the target word and then repeated the sentence but replaced the target item with a synonym. In the word-repetition condition, the adult repeated the sentence with the target word. In the verbatim condition, children only listened to the story and were not encouraged to participate. Results revealed that reading the book verbatim was just as
effective as asking questions or recasting new target vocabulary. This suggests that active participation in the book reading did not enhance children’s vocabulary learning.

**The Teacher Change Process**

Professional development programs involve systematic attempts to bring about change in teachers’ classroom practices, their attitudes and beliefs about a new innovation, and students’ learning outcomes (Guskey, 2002). Getting teachers to change may be a difficult task to accomplish. Teachers resist complicated, theoretical, and longitudinal changes more so than changes in management practices or temporary changes (Duffy & Roehler, 1986). As in all types of professional practice (Schön, 1983), lasting change in the behavior of teachers occurs as a result of trying something new, reflecting on its consequences, and then trying it again with alterations as needed or desired. Two essential factors need to be taken in to account in order for professional development programs to be effective. First, what motivates teachers to engage fully in professional development activities? Second, and perhaps more important, what is the process by which change in teachers typically occurs (Guskey, 1986)?

Achieving change may be especially difficult when a program seeks to achieve higher standards using alternative approaches than what is currently being exercised. For example, when a preschool classroom uses a different curriculum approach compared to what other preschool classrooms are using. Change in this case refers to teachers doing something that others suggest they should do (Richardson, 1990). Something that has to be taken into account with regards to teacher change is whether someone outside the classroom decides what changes teachers will make.
One model of the teacher change process is that changes in teachers’ attitudes and beliefs will lead to specific changes in their classroom behaviors and practices, which in turn will result in improved student learning (Guskey, 2002). Professional development initiatives built around this model would start by addressing teachers’ beliefs.

Guskey (2002) proposed an alternative model of teacher change. Instead of having attitudes and beliefs come first, he proposed that significant change in teachers’ attitudes and beliefs occurs after teachers see evidence of improvements in student learning. These improvements usually result from changes that teachers have made in their classroom practices such as using a new curriculum, new materials, or modifying teaching procedures or classroom formats. Guskey (2002) stated that:

It is not the professional development program per se, but the experience of successful implementation that changes teachers’ attitudes and beliefs. They believe it works because they have seen it work, and that experience shapes their attitudes and beliefs. (p. 383)

Guskey (2002) suggests that the vital ingredient in changing in teachers’ attitudes and beliefs is proof of improvement in the learning outcomes of their students. When teachers see their students reach higher levels of achievement, become more involved in classroom activities, or express greater self-confidence and self-assurance, significant change in teachers’ beliefs and attitudes will likely take place (Guskey, 1986). Teachers’ knowledge of teaching is validated by practical results, so without confirmation from the classroom, “attitude change among teachers with regard to any new program or innovation is very unlikely” (Guskey, 1986, p.7). On the other hand, Freeman (1989)
observed that the key ingredient to teacher change and long-term development is awareness of the need for change. Teacher change and development require an awareness of the need for change or at least experimentation with available alternatives.

Smylie (1988) suggests three antecedents that are likely to influence change in individual teacher practice through staff development: (a) teachers’ pre-training psychological states, (b) characteristics of teachers’ immediate task environment, such as the classroom, and (c) the interactive circumstances of schools. Psychological antecedents include personal teaching efficacy, which refers to “teachers’ perceptions of their own ability to influence student learning” (Smylie, 1988, p. 6). Research on teaching efficacy suggests that teachers are more likely to adopt and implement new classroom strategies if they have confidence in their own ability to manage their classrooms and influence student learning. Teachers’ sense of their self-efficacy can come from their school environments or their certainty about their practice. Just like Guskey (2002) suggested, information teachers receive about students’ learning, whether from formal assessments or moment to moment responses provides a basis for teachers to assess the effectiveness of alternative classroom strategies (Smylie, 1988).

The classroom environment refers to class size, class academic heterogeneity, and concentration of low-achieving students. In a large classroom it may be difficult to make one-on-one time with students, which may limit teacher experimentation and change due to problems of management and control (Smylie, 1988). Other factors such as the ratio of low achieving versus higher achieving children in classroom and attending to the
learning needs of all students could affect teacher experimentation and change, especially when change presents a threat to classroom control (Smylie, 1988).

The interactive contexts of schools refers to a principal’s emphasis on goals, supervision, and facilitation of teachers’ work; teachers’ interpersonal relationships, openness of expression, participative decision making, encouragement of experimentation, collegial interaction about instruction; and principals’ facilitation of collegial interaction. When teachers decide whether to embrace new knowledge or skills, they are likely to rely on “knowledge, beliefs, and perceptions related to their own practice and on cues from the organizational environments of their schools and classrooms” (Smylie, 1988, p. 11).

Literacy coaches can also play an important role in the teacher change process. According to Walpole & Meyer (2008) a literacy coach has three main roles, the sharing of: leadership skills, diagnosis and assessment skills, and instructional skills all used in an effort to better student learning. Literacy coaches are not principles, teachers, or reading experts; instead they provide content knowledge and resources to teachers about learning and teaching literacy (Walpole & Meyer, 2008).

One model of literacy coaching is “cognitive coaching.” This approach includes a fusion of cognitive psychology and collaboration. It promotes self-directed learning of teachers. This coaching strategy encourages teachers to recognize and identify their concerns and promotes reflective dialogue with their literacy coach. There are three steps involved in this model: planning, lesson observation, and reflection. During the planning stage, the teacher set goals, develops trust with coach, and reflects on upcoming lessons.
During the lesson observation stage the coach observes the teacher in action and gathers data relating to the teacher’s goals. The last stage, reflection, involves reviewing and revisiting goals and lessons, asking reflective questions, and analyzing the success of the lessons (Walpole & Meyer, 2008). In order to encourage reflective planning, instruction, and study of the teaching, cognitive coaches must have an exceptional understanding and awareness of the teaching process (Walpole & Meyer, 2008). Reflection then places a stress on learning through questioning and exploring to guide to a development of understanding (Smyth, 1992). A cognitive coach can help teachers become more aware of their own areas of weakness. With the help of these coaches, teachers can start to have a deeper understanding of the innovation they are practicing, for example implementing dialogic reading. As a result, teachers’ accuracy of successfully implementing dialogic reading can be improved.

**Unresolved Issues**

Despite the numerous studies on dialogic reading, researchers still need to address several remaining issues. Many studies, especially the later Whitehurst studies included dialogic reading as one component of a larger emergent literacy intervention. Thus, the relative contribution of dialogic reading versus other components remains unclear.

Another issue to be examined is the long-term effects of dialogic reading. How do heightened emergent literacy skills in preschool affect reading comprehension and word decoding in elementary school? The issue of teachers’ beliefs about the benefits and/or challenges of dialogic reading need to be addressed. Finally, the process of teacher change needs to be addressed and explored within the context of dialogic reading.
innovations. It is important and worthwhile to explore whether teacher’s beliefs relate to their motivations and if so does that come across in their success regarding the implementation of dialogic reading? Do supports such as professional development workshops help teachers change and learn how to use dialogic reading strategies? The ways in which significant and worthwhile change in teaching practice can be brought about, specifically during dialogic reading needs to be investigated because it will help coaches, mentors, and curriculum developers learn what makes a new innovation work for present and future training purposes.

**Integrating Issues of Dialogic Reading and Teacher Change**

Past research on dialogic reading has focused on child outcomes (e.g., Whitehurst et al., 1988, 1994, 1998, 1999; Lonigan, et al., 1999; Hargrave & Senechal, 2000). Less attention has been paid to whether teachers accurately implement the desired reading practices. And almost no attention has been paid to the factors that might predict which teachers may be relatively successful in implementing dialogic reading.

The purpose of this study was to explore the role that teachers’ perceptions play in the process of successfully implementing dialogic reading. I sought to find out what made some teachers more successful at dialogic reading, what the barriers or challenges were to implementing this reading technique, and to compare the quality of dialogic reading sessions with teachers’ beliefs about it. My research questions were (a) what are teachers’ perceptions about dialogic reading? (b) how well do teachers enact dialogic reading and what degree of variation is there in the quality of teachers practice? (c) are
teacher roles (i.e., being a lead vs. assistant teacher) associated with either beliefs or skills in enacting dialogic reading?

**Method**

**Participants**

The participants included five Head Start teachers and five assistant teachers from the Honolulu Community Action Program-HCAP Head Start program. Informed consent was collected from all participating teachers (see Appendix A). Head Start is a national program that provides comprehensive developmental services for low-income preschool children from three to five and social services for their families. Children that were accepted into the Head Start Program had to meet 2009 Federal Head Start income eligibility guidelines. The annual household income in 2009 had to be between $ 12,460 and $ 42,560 (National Archives and Records Administration, 2009), which also took into account family size. Four of the target classrooms followed a year-round full day schedule and was staffed by a lead teacher and two assistant teachers. One of the target classrooms followed a part-day schedule and was also staffed by a lead teacher and two assistant teachers. All the Head Start sites had no more than 20 children. In each classroom I recruited the lead teacher and the assistant teacher who had the fewest years of teaching experience. Only one classroom had an assistant teacher with more teaching experience compared to the lead teacher.

The educational requirements for lead teachers are higher than for assistants and in addition, most lead teachers have been in the field longer. A lead teacher has to have an Associate in Science (A.S) degree, while the assistant teacher has to have a Child
Development Associate (CDA) certificate. A CDA is an accelerated training that is for preschool teachers and other childcare workers who want to learn the basic principles of early childhood education. By selecting a lead and less-experienced assistant teachers I increased variation in teacher roles and experience and perhaps also in knowledge, confidence, and quality. I was also able to compare differences in reading quality, ease of learning the new techniques, and beliefs about reading practices across the two groups.

All teachers were participants in the Hui A‘o Mua Early Reading First (ERF) project. ERF classrooms used the Learning Connections curriculum and dialogic reading was included in Learning Connections lesson plans on a regular basis. All participants were offered the same amount of formal training hours on dialogic reading techniques. Actual training hours may have varied if individuals were unable to attend a particular scheduled workshop.

Before their participation in the ERF project, the classrooms used the Creative Curriculum (Dodge, Colker, & Heroman, 2002). The Creative Curriculum (CC) had a book reading component called Woven Words that has similarities with dialogic reading. Woven Words and DR share some read-aloud strategies. However, Woven Words also focuses on social and emotional skills and has a list of preselected books. Most teachers had some prior experience with dialogic reading; whether it was through their CC curriculum or previous knowledge about dialogic reading. Specifically, seven of ten teachers had prior experience with DR through their participation in the ongoing ERF project which started in December of the prior school year. In addition, four of the lead teachers had more extensive DR experience having been involved in a two-year Learning
Connections pilot study conducted during the 2001-2002 and 2003-2003 school years (DeBaryshe & Gorecki, 2007). Three assistant teachers joined the ERF project in July 2010 and had little or no prior experience with DR. All of the teachers participated in this study during summer 2010.

**Measures**

The measures used included interviews with participating teachers and quantitative scores derived from videotapes of teachers’ dialogic reading sessions.

**Teacher interview.** I conducted a 60-minute interview with nine of the ten teachers (see Appendix B). One teacher was not able to participate in the interview due to emergency medical leave. The purpose of the interview was to (a) gauge teachers’ understanding of dialogic reading techniques, (b) reveal their perceptions about dialogic reading and (c) ask teachers to reflect on a DVD sample of their own reading interactions. Each interview was audiotaped and transcribed.

The general structure of the interview was to start with questions regarding teachers’ understanding of dialogic reading and their beliefs about it (items 1-6, see Appendix B). The next step was to view a short segment of the first of three video DVDs that were collected of the teacher doing dialogic reading. Then the interview questions continued with a focus on teacher reflection regarding the quality of that particular dialogic reading session (items 7-9, see Appendix B). Eight out of the ten teachers had previously videotaped themselves implementing dialogic reading on three separate occasions. Two teachers were only able to complete two dialogic reading sessions due to emergency leave circumstances. I selected three segments from the tapes to use during
the interview at the end of the study. For the first segment, I selected a scene that showed a strong example (or the teachers’ best example) of a well implemented dialogic reading strategy based on my own knowledge of DR from ERF workshops and research pertaining to DR. The other two segments came from a second and/or third video of this teacher’s reading. From each of those two tapes I selected a segment depicting effective use of a dialogic reading strategy and/or a segment depicting an area in need of improvement. After we went over the first dialogic reading session, I proceeded to the second and third DVD asking the same questions (items 7-9, see Appendix B).

**Dialogic reading quality measure.** The dialogic reading quality measure was a quantitative measure of dialogic reading quality (see Appendix C). I created this measure based on (a) the Learning Connections manual (DeBaryshe & Gorecki, 2005), specifically the section on dialogic reading, (b) the Early language & Literacy Classroom Observation pre-k tool (Educational Development Center, 2008), and (c) DeBaryshe’s dialogic reading strategy behaviors and definitions (DeBaryshe, 1987). My measure was very similar in content to the observation protocols used by Whitehurst et al. (1988) and DeBaryshe (1987). The tools used in these two studies had good inter-rater reliability as determined using the intraclass correlation based on a one-way analysis of variance (ANOVA) model (Bartko, 1976). In the Whitehurst et al. study the average intraclass correlation across 15 reading behaviors was .86. In DeBaryshe’s (1987) picture book reading study the mean intraclass correlation for the parent reading behaviors was .89. These two studies showed that observers could be trained to use the coding system with
high levels of accuracy. Because my coding system was similar, I expected to achieve similar results for inter-rater reliability.

The DR quality measure included 15 dialogic reading behaviors (see Appendix C). Teacher utterance was used as the unit of analysis. The dialogic reading behaviors were defined to be mutually exclusive, with the exception of one behavior (praise), so each teacher utterance, could be described and counted with a single dialogic reading code. I used a time stamp to view each videotape in 20-second intervals. Within 20-second intervals I counted the frequency of each of the 15 dialogic reading behaviors. I combined the 15 dialogic reading behaviors into six broader categories: low cognitive demand questions, medium cognitive demand questions, high cognitive questions, low complexity feedback, high complexity feedback, and other.

Low cognitive demand questions included pointing, yes/no, and what questions. Medium cognitive demand questions included print tracking/phonological awareness, attribute questions and completion prompts. High cognitive questions included open-ended and distancing questions. Low complexity feedback included praise, repetition, and corrections. High complexity feedback included topic continuation and conversation. The other feedback strategy was a category all on its own and included utterances that were unrelated to the book, such as behavioral requests. The reason for making composite scores was to reduce the number of variables for the purposes of making tabulations easier to discuss and simplify data analysis.

The second part of the dialogic reading quality measure included five items each of which were scored using a 5-point rating scale. These items measured less discrete
characteristics of the reading session such as affect, wait time, and whether the teacher provided children with an appropriate level of challenge. These items were created for my study and have not been validated in prior research.

A second observer was trained to a criterion of 80% or better reliability before coding the project data. Archival dialogic reading video tapes were used to establish reliability prior to coding project data. Ten to twenty percent of dialogic reading videos were coded by the second observer. I was the primary coder for the all of the dialogic reading DVDs. The average intraclass correlation between the second coder and myself was .85.

**Procedures**

I recruited ten HCAP Head Start teachers and informed consent was collected from all participating teachers (see Appendix A). Informed consent was not needed from parents as they have already given permission for their children to be videotaped as part of the larger Early Reading First project.

Teachers were asked to video tape themselves doing dialogic reading three times during the period of August through October 2010. The teachers decided whether they recorded themselves once a week or once every two weeks. At the end of each DR session, the teachers were asked to record on the tape their answers to four questions about the session they had just completed (see Appendix B). I used these questions to track any changes to the teachers’ responses regarding their preparation for dialogic reading (see Appendix B). Little data was actually gathered since not all of the teachers answered these four questions at the end of each dialogic reading session. Therefore, in
those cases I proceeded to ask them these four questions after our general interview questions.

Each classroom was given a video camera and tripod to use for the remainder of the study. Teachers were given instruction on how to make videotapes (see Appendix D). I also showed each teacher how to use the video equipment, discussed good areas in their classroom for holding dialogic reading sessions, and helped each teacher practice using the equipment.

Videos. A total of 28 videotapes were collected. Eight of the ten teachers were able to videotape themselves three times. Two teachers were only able to videotape themselves twice due to emergency leave circumstances. I used all the collected videotapes from each teacher to help establish dialogic reading averages. The dialogic reading qualitative measure was used to gather information on teachers’ DR scores. Table 1 represents the descriptive statistics on six dialogic reading composite scores as frequencies and rate per minute and five dialogic reading ratings.

Data Analysis

Qualitative analysis of teacher interviews. Each teacher interview was transcribed. I had another person double check my transcriptions by listening to the audio tapes: if there were any discrepancies, we both went back and listened to the interview to establish agreement on what was said. I then read all the transcripts in their entirety several times in order to get a sense of the interviews as a whole and to see if my preliminary codes were a good fit. My preliminary codes were created to closely match the interview questions. I used Creswell’s (1998) suggestion about creating a short list of
codes and then expanded my codes as needed when I re-reviewed the data. The preliminary codes were: goals of dialogic reading, comfort level, differences and similarities to other reading techniques, what is most helpful in learning DR, what is least helpful in learning DR, opinions of DR, and how feelings/comfort with DR have changed.

I then started to code and categorize my data. I did this by identifying a text segment and assigned a code label for it, and continued throughout each transcript and searched for segments that had the same code label. I described in detail and developed themes through a classification system, which I created during the process of going over my data. For example, if I found that my codes fit into a hierarchical system, such as a tree representation where least abstract themes are at the bottom and most abstract at the top, then I used this kind of system to represent my data.

After I was done coding each transcribed interview, I counted the number of times each code appeared. I used the frequency counts of the codes to help me identify important themes. Themes were abstract constructs that are broader than codes. For example a code might have been comfort level with implementing dialogic reading, and a theme that might have arose from that code was that teachers’ comfort with dialogic reading was a direct result of teaching experience. The key issues or themes, which I identified were supported with interpretations and evidence. I used vignettes and direct quotations from the interviews to support the themes I found. I identified four broad themes: articulation and accuracy of dialogic reading, practical management issues, increasing comfort with dialogic reading, and teachers’ self-awareness.
**Quantitative analysis of teacher videotapes.** Each teacher’s recorded dialogic reading session was stored on a DVD. I used a dialogic reading quality scale to assess the quality of each dialogic reading tape. The scores were expressed as descriptive statistics on six dialogic reading composite scores and five dialogic reading ratings (see Table 1).

I identified patterns among the teachers. For example I compared the average dialogic reading quality scores of lead teachers and assistant teachers I also looked at how each teacher’s DR quality scores dialogic reading compared to his or her beliefs. I attempted to answer the “why” question by looking for any consistencies between teacher’s beliefs and practices as revealed in the interview and how it compared to their average dialogic reading scores. For example, if a teacher stated she was confused with the dialogic reading process and was not comfortable using it, I reviewed that teacher’s average dialogic reading video quality score and looked to see if the quality was low. Another example was if a teacher was confident and comfortable using dialogic reading, I looked to see if the average score across all three dialogic reading sessions was high.

Next I compared the beliefs and dialogic reading quality scores of lead teachers versus assistant teachers. I looked for similarities and differences in their beliefs. I looked to see which teachers, lead or assistant, were better at dialogic reading and attempted to explain why. I again attempted to answer the “why” questions based on the interview data and quality rating scores of each teacher and put together plausible answers. Next, I looked at two teachers with the highest scores and two teachers with the lowest scores to try to explain the reasons behind their scores. I looked at their years of
experience and their interview responses to rationalize why they were good or poor at implementing dialogic reading.

**Role as Researcher**

I was as a graduate student in the College of Education at the University of Hawai‘i. I also worked as graduate assistant with the Center on the Family at the University of Hawai‘i, working on the Early Reading First project (ERF). The way I got access to the participants of this study was through my job with the Center on the Family. I worked with several Head Start preschools that are participating in the ERF project and the particular ones I used for this study were classrooms I have visited before.

My role within the classrooms that were used for the study started out somewhat limited, however it did grow. I was familiar with all the teachers, having met them at two teacher trainings. Starting in spring of 2010, I visited one of the classrooms that was part of this study on a weekly basis for about two months for the purpose of providing tutoring to high-need children. Since I had weekly contact with two of the participants, I may have been influenced to seek out more affirmative perceptions about dialogic reading. I also realize that I am not a preschool teacher and may have misinterpreted some of the teachers’ perceptions and opinions. To guard against bias I had a second coder score 20% of the dialogic reading videos and a second transcriber to look over my transcriptions.
Results

Content from Dialogic Reading Scores

Descriptive statistics relating to the dialogic reading videotape data are presented in Tables 1-2. Table 1 includes fifteen DR interaction scores and the six composite scores derived from these items; all scores are expressed as rates per minute. Table 1 also contains five DR quality ratings and a total rating that is the sum of the five individual rating scores. The pattern of DR interaction scores shows that teachers made frequent use of some of the higher-level target DR strategies; however, teachers also made frequent use of other strategies that are less likely to facilitate language growth.

The two most frequently used high-level DR strategies were topic continuation and open-ended questions. Three frequently used low-level strategies were yes-no questions, repeating the child, and simple praise. At the level of composite scores, teachers used similar rates of low- and high-level questions, and relatively low rates of medium-level questions. In addition, they used low-level feedback almost twice as often as high-level feedback.

This pattern suggests that teachers did not fully internalize the goals of DR. If they had, one would expect to see infrequent use of low-level strategies and a preponderance of medium and high-level strategies, respectively, depending on the skills of participating children.

Table 2 shows composite dialogic interaction scores, global DR rating scores, and overall ranks for each teacher, listed in descending order based on teacher identification number. As shown in Table 2 there are two columns that show rank. Rank was determined by two methods because each method yielded different teacher rankings. The
The first method used to determine rank was to calculate the percentage of each teacher’s average high level questions compared to his or her total speech in rate per minute. The second method looked at the highest average global DR rating score for each teacher.

One pattern Table 2 shows is that teachers gave more low complexity feedback than high-complexity feedback during their DR sessions. In addition, about half of the teachers asked more low level questions compared to high level and medium level questions. This included lead and assistant teachers. This pattern correlates with the finding that only one teacher asked about 27% of high level questions compared to the rest of her speech during the entire DR sessions; the rest of the teachers asked a lower percentage of high level questions.

Results from Table 2 show that the top two ranking teachers based on percentage of high level questions are Lead Teacher #1 and Assistant Teacher #10 while the bottom two ranks were assigned to Assistant Teachers #8 and #2. However, based on average global DR rating scores the top two ranking are Lead teachers #5 and #3, and the bottom two ranking are Assistant Teachers #6 and #2. These findings are further discussed later. Overall, the quality of dialogic reading from most of the teachers was sufficient, but not extraordinary.
Table 1

*Descriptive Statistics on Dialogic Reading Observation Data*

<table>
<thead>
<tr>
<th>DR Interaction Scores</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>St. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pointing questions</td>
<td>-.00</td>
<td>1.94</td>
<td>.19</td>
<td>.44</td>
</tr>
<tr>
<td>Yes/no questions</td>
<td>.12</td>
<td>2.45</td>
<td>1.24</td>
<td>.62</td>
</tr>
<tr>
<td>What questions</td>
<td>.00</td>
<td>1.23</td>
<td>.55</td>
<td>.33</td>
</tr>
<tr>
<td>Print questions</td>
<td>.00</td>
<td>.29</td>
<td>.01</td>
<td>.06</td>
</tr>
<tr>
<td>Attribute questions</td>
<td>.00</td>
<td>1.1</td>
<td>.20</td>
<td>.25</td>
</tr>
<tr>
<td>Completion questions</td>
<td>.00</td>
<td>1.18</td>
<td>.25</td>
<td>.31</td>
</tr>
<tr>
<td>Open-ended questions</td>
<td>.44</td>
<td>3.10</td>
<td>1.53</td>
<td>.60</td>
</tr>
<tr>
<td>Distancing questions</td>
<td>.00</td>
<td>1.30</td>
<td>.45</td>
<td>.34</td>
</tr>
<tr>
<td>Praise feedback</td>
<td>.15</td>
<td>3.34</td>
<td>1.57</td>
<td>.90</td>
</tr>
<tr>
<td>Repetition feedback</td>
<td>.52</td>
<td>3.64</td>
<td>2.0</td>
<td>.86</td>
</tr>
<tr>
<td>Expansion feedback</td>
<td>.00</td>
<td>.61</td>
<td>.15</td>
<td>.19</td>
</tr>
<tr>
<td>Correction feedback</td>
<td>.00</td>
<td>.23</td>
<td>.06</td>
<td>.07</td>
</tr>
<tr>
<td>Topic continuation feedback</td>
<td>.35</td>
<td>4.41</td>
<td>1.63</td>
<td>.94</td>
</tr>
<tr>
<td>Conversation feedback</td>
<td>.00</td>
<td>.87</td>
<td>.29</td>
<td>.24</td>
</tr>
<tr>
<td>Low level questions</td>
<td>.59</td>
<td>4.40</td>
<td>1.98</td>
<td>.87</td>
</tr>
<tr>
<td>Medium level questions</td>
<td>.00</td>
<td>1.56</td>
<td>.46</td>
<td>.43</td>
</tr>
<tr>
<td>High level questions</td>
<td>.44</td>
<td>3.75</td>
<td>1.98</td>
<td>.67</td>
</tr>
<tr>
<td>Low complexity feedback</td>
<td>1.03</td>
<td>6.08</td>
<td>3.77</td>
<td>1.35</td>
</tr>
<tr>
<td>High complexity feedback</td>
<td>.35</td>
<td>4.47</td>
<td>1.92</td>
<td>1.98</td>
</tr>
<tr>
<td>Other</td>
<td>.00</td>
<td>1.95</td>
<td>.46</td>
<td>.53</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DR Quality Ratings</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>St. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bringing book to life</td>
<td>1.00</td>
<td>5.00</td>
<td>3.32</td>
<td>1.31</td>
</tr>
<tr>
<td>Teacher sensitivity</td>
<td>2.00</td>
<td>5.00</td>
<td>3.21</td>
<td>.99</td>
</tr>
<tr>
<td>Appropriate level of challenge</td>
<td>1.00</td>
<td>5.00</td>
<td>3.25</td>
<td>1.08</td>
</tr>
<tr>
<td>Effective management</td>
<td>2.00</td>
<td>5.00</td>
<td>4.57</td>
<td>.74</td>
</tr>
<tr>
<td>Depth of conversation</td>
<td>1.00</td>
<td>5.00</td>
<td>2.89</td>
<td>1.23</td>
</tr>
<tr>
<td>Total DR score</td>
<td>10.00</td>
<td>24.00</td>
<td>17.25</td>
<td>4.06</td>
</tr>
<tr>
<td>Session length (mins)</td>
<td>5.17</td>
<td>20.00</td>
<td>9.96</td>
<td>3.78</td>
</tr>
</tbody>
</table>

Note. Interaction reading scores are expressed as rate per minute. DR quality ratings range from 1-5 with higher scored indicating higher quality.
Table 2

**Rankings Based on Higher Proportion of more High Level Questions and Global Rating**

<table>
<thead>
<tr>
<th>I.D.</th>
<th>Rank based on % of high level questions</th>
<th>Rank based on avg. global rating score</th>
<th>Lead or Assistant</th>
<th>Avg. high Q (rpm)</th>
<th>Avg. high complex feedback (rpm)</th>
<th>Total avg. global DR rating</th>
<th>% of High Q rpm/total rpm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>6</td>
<td>Lead</td>
<td>2.30</td>
<td>1.43</td>
<td>16.67</td>
<td>26.68</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>9</td>
<td>Assistant</td>
<td>1.14</td>
<td>2.35</td>
<td>11.33</td>
<td>13.78</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>1</td>
<td>Lead</td>
<td>2.28</td>
<td>3.77</td>
<td>23.00</td>
<td>16.06</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>2</td>
<td>Assistant</td>
<td>2.12</td>
<td>1.61</td>
<td>20.00</td>
<td>19.59</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>1</td>
<td>Lead</td>
<td>1.83</td>
<td>2.19</td>
<td>23.00</td>
<td>16.22</td>
</tr>
<tr>
<td>6</td>
<td>9</td>
<td>7</td>
<td>Assistant</td>
<td>1.41</td>
<td>1.92</td>
<td>14.67</td>
<td>13.91</td>
</tr>
<tr>
<td>7</td>
<td>6</td>
<td>4</td>
<td>Lead</td>
<td>1.80</td>
<td>1.55</td>
<td>18.00</td>
<td>16.61</td>
</tr>
<tr>
<td>8</td>
<td>5</td>
<td>8</td>
<td>Assistant</td>
<td>1.73</td>
<td>.78</td>
<td>12.00</td>
<td>18.50</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>3</td>
<td>Lead</td>
<td>2.99</td>
<td>2.06</td>
<td>19.67</td>
<td>21.79</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>5</td>
<td>Assistant</td>
<td>2.35</td>
<td>2.02</td>
<td>17.00</td>
<td>24.23</td>
</tr>
</tbody>
</table>

Note. Q stands for questions. Rpm stands for rate per minute. Rankings for average global DR score contain two teachers with the first rank, therefore rank goes from 1-9.

**Content From Interviews**

**Codes.** My preliminary codes were created to closely match the interview questions. I used Creswell’s (1998) suggestion to first create a short list of codes before I even looked at the data and then expanded this list to categorize the complexities of my data. My preliminary codes were: goals of dialogic reading, comfort level, differences and similarities to other reading techniques, what is most helpful in learning DR, what is
least helpful in learning DR, and opinions of DR. After I started coding I found the need to include sub-codes that went under each higher order code, and then to further categorize the sub-codes into a third, more specific level.

Table 3 shows the preliminary codes with sub-codes that were added; it does not show all the sub-codes because there were too many. Frequency was defined as the number of discrete sections within a transcript that were attached to a particular code. The 15 sub-codes that appeared most often are listed below in descending order of occurrence:

1. A goal of DR is connecting the book to the children’s daily life
2. Feeling more comfortable doing DR over time
3. A goal of DR is vocabulary
4. DR strategy to get child’s interest and attention
5. DR strategy is to be prepared
6. DR strategy is the considered the types of questions being asked
7. Do DR in a quiet location
8. A DR strategy is the combination of children selected to participate
9. A most helpful is coaching
10. A DR strategy is individualization
11. A difference in DR from other reading styles is questioning strategies
12. The hardest aspect if DR s keeping children’s attention
13. A DR goal is building new knowledge
14. A difference in DR is having children participate actively
Table 3

*Five preliminary codes with sub codes*

**Code 1: Goals of DR**
- book handling
- having children comfortable about reading
- comprehension
- connecting the book with everyday life + knowledge
- expanding on storyline
- language skills
- respect
- small groups
- vocabulary
- DR strategies

**Code 2: Comfort Level**
- easiest about doing DR
- hardest about doing DR
- feel more comfortable doing DR today
- what made it easier

**Code 3: Differences & Similarities**
- Differences b/w DR and other techniques
- Similarities b/w DR and other techniques

**Code 4: Most + Least Helpful**
- what was least helpful
- what was most helpful

**Code 5: Opinions of DR**
- DR is good
- location matters
- time matters
- what does DR leave out
Themes. Counting the number of times each code appeared helped me identify important themes in the interview data. I focused on codes that appeared most often; however some issues arose infrequently were also considered if those issues appeared to be significant. For example, if an issue was discussed by only one teacher, but this teacher had very high or very low scores for dialogic reading quality, their interview responses were looked at in more detail. Four major themes were identified and are listed in order of most importance to least: articulation and accuracy of DR goals, practical management issues, increasing comfort with DR, and teachers’ self-awareness.

Articulation and accuracy of dialogic reading goals. Teachers were indirect and implicit when they discussed their beliefs about dialogic reading goals. Teachers also tended to give short and vaguely worded responses. Many of the interviews were short due to teachers’ short responses and explanations. For instance, one teacher said the goal of DR is “to build … literacy and stuff” (Assistant Teacher #2). The word stuff was an unclear description of what children gain from DR and did not articulate what gains the children receive from using different DR strategies. The length of this teacher’s response was comparable to the short responses that most teachers gave during the interview.

In addition, most teachers did not discuss why they would use the different DR strategies they mentioned. Nor did teachers talk about specific expected outcomes or gains children receive as a result of teachers employing DR strategies. This suggests that teachers may not fully understand the justification for doing DR and its benefits for the children. Perhaps the reason for teachers’ lack of awareness stems from weakness in training in promoting teachers’ understanding about DR.
For example, when I asked Assistant Teacher #6 about the goals of DR, she replied, “help them learn about their reading skills.” She was not specific about which reading skills she believed the children gain. Lead Teacher #9 said that the goals of dialogic reading included “book handling and all that other stuff.” These vague responses suggest that the teachers were not able to fluently express their beliefs regarding the intended goals of DR.

Another vague response came from Lead Teacher #5 who said a DR goal was “get children to help with comprehension and language.” Language could incorporate many different aspects such vocabulary, expressive oral language skills, and listening oral skills. Being more specific about what kind of language skills children gain from DR would signify the teacher’s depth of understanding about DR principles. The finding that teachers having a hard time articulating their beliefs about the goals of DR combined with their short responses suggests that teachers had an incomplete level of understanding about DR and/or that teachers were not able to clearly express their understanding of DR.

No single teacher mentioned what the curriculum designers considered to be all or most of the key goals of dialogic reading. Some of the key goals include having children use more complex sentences and vocabulary when commenting on a book, building on children’s prior knowledge, creating new knowledge and new vocabulary, and increasing children’s comprehension of the story (Whitehurst et al., 1988). Most teachers identified 7-10 goals, including some secondary goals such as book handling. Assistant Teacher #4 had the most accurate statements about DR and was the most articulate. She not only mentioned the most DR goals but also mentioned those goals that are considered to be
important by curriculum designers. This was an assistant teacher who ranked fourth on the quality of her DR sessions based on the percentage of high-level questions asked (see Table 2).

Three teachers stated that an intended goal of DR was to have children comprehend the story, “My understanding about DR is that is should help children with comprehension” (Lead Teacher #5). And another teacher was more specific, when she said:

I think it’s to give the children to understand the meaning of the book by asking questions. Good questions throughout the story so that it will help them to understand, I guess, I don’t know how to say it, the way the story goes or so by the end of the book they know lie this is what happened in the beginning, the middle, and this is what happens at the end. (Assistant Teacher #8)

Other teachers mentioned goals such as book handling, e.g., “to read from left to right, top to bottom” (Lead Teacher #5) and “I guess you know book handling and all that other stuff. Book handling, turning the page, reading left to right” (Lead Teacher #9). Another teacher mentioned “having children respect themselves” as an important DR goal (Lead Teacher #7). Although these goals are not identified as key goals in the research on dialogic reading, they are appropriate for early childhood classrooms.

Since none of the teachers identified all the intended goals of DR, more coaching and perhaps training on the basics of dialogic reading is needed. Teachers’ understanding about the intentions and gains of dialogic reading did not exactly match with key DR goals that research has identified.
**Practical management issues.** A second theme that emerged was practical management issues. Nine teacher interviews shed light on issues that were roadblocks for successful implementation of DR. Several of the teachers identified concerns that were associated with DR: time, location, and preparation. During the reflective part of the interviews, six out of nine teachers mentioned something about location and their satisfaction about it. Regardless of teachers’ experience and DR scores, the majority of the teachers believed the location where they conducted their DR session mattered. For example, after I showed Lead Teacher #1 one of her DR segments and asked her if she met her goal, her response indicated that she was not satisfied with the location of her DR session because of the surrounding noise:

I didn’t think it worked as well, because we did it outside and there was an accident happened, so you know, that’s a big thing that you should look at when you are doing dialogic reading. What is the area around, where you are at, and what time you are doing it and I guess you know so you can get the best quality conversation with the children. (Lead Teacher #1)

When I showed Assistant Teacher #6 one of her segments and asked her what she was least satisfied, her reply indicated that she needed to pick a more quiet area:

I did it [DR] with children around the classroom. So they tend not to focus. Like sometimes, because children are playing outside, or not inside but in other centers … so then if I wanted to do it again, I want it in a quiet area, wherein children are not around, cause that time children are around and I was doing it in the middle. (Assistant Teacher #6)
A similar response came from Assistant Teacher #8 when I showed her one of her DR segments and then asked what she was least satisfied about. She replied, “because we were in another classroom, they were more excited being in that surrounding or that environment. They wanted to like, go play it” (Assistant Teacher #8). This response implied that having done DR in a more familiar environment would have been more successful. Lead Teacher #7 told me that she was happiest with her location because it was on “the quiet rug and there were not that many distractions.” Again, this was in response to a question about what the teacher was happiest with, and her answer was her location because it was quiet and therefore conducive for doing DR.

All those examples suggest that teachers may not have taken enough consideration and/or planning about the location of doing DR. Prior to the study, I gave video taping instructions to each teacher. The first thing that was written on those videotaping instructions was to pick a quiet area to do dialogic reading (see Appendix D). Concerns about finding a quiet and/or familiar location were expressed by both lead and assistant teachers and occurred during the section of the interview when they critiqued their own videotapes, which leads me to consider that the underlying reason for this concern was lack of management in planning. Taking the time to plan out strategies about where to do DR may not only solve teachers concerns about location but also improve the quality of their DR.

The time of day when DR was done was another key topic that was brought up by lead and assistant teachers. During the reflective part of the interview, four out of the nine teachers recommended doing DR in the morning, and one teacher recommended this
during her general interview. After asking Lead Teacher #1 to reflect on the purpose and goals of her strategy, she replied that she didn’t think she met her goals because of the time and location of her DR:

I think it's [DR] better in the morning because the children are fresher and I think they have more focus, because we live in Hawaii so as the day goes it gets hotter, so sometimes it could be that the children are more restless. (Lead Teacher #1)

Since this teacher viewed and reflected on her own DR segments, she was able to realize that the time of the day she did DR mattered. It mattered because it affected her DR goals and the overall quality of her DR session. After viewing a DR segment, Assistant Teacher #4 said that she was least satisfied with the time of day she did her DR session:

Again, I would have to say not to do it in the afternoon. It’s not a good idea to do it at the end of the day! The children are more restless, and I have less energy too. I would do it before lunch time period.

Another teacher told me if she could do a DR session over again she would “do it earlier and not where there is so much distraction, where the kids could focus” (Assistant Teacher #10). Evidence suggests that because teachers were recognizing that it would be more beneficial doing DR in the morning because children are more awake is a sign of time management and/or coaching issue.

The last topic that was revealed under this theme was preparation. During the general part of the interview five out of the nine teachers revealed that the hardest thing about doing DR was preparing for it. Specifically, several teachers mentioned finding the
time to prepare for the DR was hard. When I asked Assistant Teacher #4 what the hardest thing about doing DR was she replied, “getting prepared. Teachers don’t have enough time in the day.” Another teacher said:

   The hardest is the prepping, it takes time to prep and being in a full day program I’m kind of very limited. We have children from seven in the morning till you know, five, so prepping is the hard part. (Lead Teacher #7)

   Those two comments suggested that preparing was not the hardest part; it was finding the time during the day to prepare. Other teachers felt that preparing for DR was hard in itself, “I think the hardest thing for me is picking books and prepping them for the questions” (Lead Teacher #9). Another assistant teacher said the hardest about DR was “Making sure I like prep before hand, so I know the book enough” (Assistant Teacher #2).

   Increasing comfort with DR. Overall, teachers reported becoming more comfortable doing DR; most teachers enjoyed DR and found it to be a positive experience. Teachers’ comfort level was one of the codes appeared most often in the general portion of the interviews. When teachers were beginning to learn to do DR they were nervous and scared. All teachers said they became more comfortable doing DR as time went on. Four teachers said that they became more comfortable primarily because of practice. A few teachers mentioned not being as comfortable when they were being watched, either via videotape or a person.

   For example when I asked Assistant Teacher #4 about her comfort level with doing DR, she replied:
Before I was soooo terrified! I was scared to read to the children even though they are just children. Because I thought I was going to have to ask questions now. I feel a lot more comfortable now, because of a combination of things both practice and children’s progress…definitely DR is a good thing to do. It gets kids involved. I feel like it’s a good stepping stone.

This teacher’s response revealed that she was scared to do DR but she gained more confidence in doing DR because of both practice and the gains she saw in children.

Another teacher also revealed feeling worried in the beginning but with practice got more comfortable:

Well, at first I was kind of nervous. Not knowing how to do it. Even though I was told, it’s different. You know, the first time trying it, not having maybe knowing the right questions to ask… I think each time is getting better. (Assistant Teacher #10)

When I asked Lead Teacher #1 how comfortable is she doing DR, she gave a similar response:

Um.. I am kind of, like maybe little bit over the middle. Like 50%. I guess if you put on 100% scale. When I started it in January, I was maybe 30% so, I’ve gotten better and I feel more comfortable, and I think it is not so much in whether I am going right or wrong, I think it’s how my way or thinking has changed. I think before I, I tried too much to like prep ahead of time, and have sticky notes all around asking questions and thing. And my style is more to be like to be I guess to be more to be on the spur of the moment.
Finally, another teacher expressed being very comfortable except when being watched:

Actually, I feel pretty confident, and I like doing that, talking about the front of the book and the pictures, the letters, you know I like doing that cause I know it’ll help them to get ready for kindergarten. The only thing I’m not comfortable with is, the video taping … (Lead Teacher #7)

Similar responses about comfort level came from all the teachers and they all mentioned feeling more comfortable doing DR today compared to the day they first started. Overall, all the teachers got more comfortable with doing DR with time and practice.

**Teachers’ self-awareness.** During the reflective part of the interview, six out of the eight teachers viewed a segment of their own DR video that I felt showed an area in need of improvement. Only Lead Teacher #5 commented on the weakness I had identified. I chose to show this teacher a DR segment that showed her interrupting a child in the middle of his speech to turn the page. When I played this segment her response was:

I should have given more time for the children to respond, because I kind of cut off one of the children and didn’t let him finish. So if I could do it again I would do a more one on one book reading with him. (Lead Teacher #5)

For a different teacher, I selected a segment that showed the teacher not letting some children complete their thoughts as well as “shushing” them in order to continue with the story. After viewing this segment I asked the teacher what she was least
satisfied with and her reply was, “I think it would be the same as the first one. Location.
I think the questions were right it wasn’t too much. Yeah. Just location” (Assistant
Teacher #8). The segment I selected to discuss with a third teacher showed her asking
low type DR questions and not having back and forth conversational loops. After the
teacher viewed this segment, I asked her what she was least satisfied with and she replied:

    I think the timing was kind of wrong and the location I picked, it was like right at
    noon time so I was out in the bright sun and the kids were getting hot. So the
    location and people were coming and going and saying goodbye. (Assistant
    Teacher #10)

Both of these examples suggested that the teachers were not able to identify the
areas for improvement that I had noticed. The teacher’s comments about not being
satisfied were nonetheless valid and are discussed later in another theme under “practical
management issues.”

**Teachers’ Quality of DR Compared to Their Beliefs**

This section compared each teacher’s beliefs to his or her average DR scores.
When I refer to average DR scores this includes the low, med, and high level questions,
low and high complexity feedback, and the “other” category which included behavioral
prompts and non-related book talk. When I referred to average global DR rating this
included one score that was derived from five less discrete items: bringing the book to
life, teacher sensitivity, appropriate level of challenge, effective management, and depth
of conversation. I refer to each teacher as a “she” in order to protect the identity of the
single male participant. Table 4 shows each teacher’s role, years of preschool teaching experience, and whether they had prior experience with DR. Most teachers have had prior experience with DR from either the *Learning Connections* pilot study (DeBaryshe & Gorecki, 2007), which incorporated DR, and/or being part of the ERF project from previous school year.

**Table 4**

**Teacher Experience**

<table>
<thead>
<tr>
<th>Teacher role</th>
<th>Prior exp through</th>
<th>Prior exp through</th>
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<td>LC</td>
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</tr>
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**Lead Teacher #1.** This was one of the most experienced lead teachers with 20 years teaching experience. This teacher also had previous experience with DR through...
the Learning Connections pilot study. The pilot study was done several years’ prior to validate Learning Connections (LC) curriculum. This teacher understood the importance of DR, and it was translated into action. She was a lead teacher who ranked number one according to the percentage of high-level questions asked (see Table 2). This teacher asked more high-level questions during her sessions; however she gave more low complexity feedback than high complexity feedback.

During the interview this teacher was able to discuss some of the key goals of DR. For example she mentioned, "sharing their [children’s] own personal experiences” and "to expand on their, I guess sentences, to speak in longer sentences” (teacher #1). This teacher understood some of the key goals of DR and was also ranked number one based on percentage of high-level questions asked. However, she ranked number six based on her global DR rating score. This rank is consistent with some of her beliefs expanded in the interview. She indicated that she was a little resistant and perhaps not completely invested in implementing DR. Although she was exposed to DR in the LC pilot, she was not required to continue doing DR after the study was completed. The interview revealed that she preferred her old or perhaps usual style of reading. For example, when I asked her about her comfort level with DR she replied:

I didn’t care to do it because it was something that was different and it was… after doing reading certain way for so many years that the change sometimes is hard. You know because you really have to think about what your goal is and what you’re doing. And I think I think as time went on I felt more comfortable
and until now I think I feel not totally comfortable with it but I think I do a lot better than I did before. (Lead Teacher #1)

She also stated that she did not like all the input from her coach on how to do DR, “Sticky notes weren’t helpful in that it prevented me from asking certain type of questions according to the children’s interests” (Lead Teacher #1). She stated that she wanted children to enjoy the readings and not always feel pressured to answer questions, and “have fun with the story, I mean, if they’re not having fun with the story then you’re kind of like just blowing hot air” (Lead Teacher #1). This teacher’s understanding of important DR goals combined with some of her resistance to implementing DR, compared with her both of her ranks.

**Assistant Teacher #2.** This individual was her first year teaching and had no previous experience with DR. Table 2 shows that she had the lowest average global DR rating, the lowest percentage use of high-level questions, and that she asked more low level questions than high level questions. This pattern of low quality observed DR implementation is consistent with the profile presented in this teacher’s interview. She was vague in her answers and did not go into depth nor did explain why she used the DR strategies she mentioned. For example when I asked her about the goals of DR she replied, “to help them like build their literacy and stuff and new vocabs and just help them like expand their knowledge” (Assistant Teacher #2).

Assistant Teacher #2 had no previous experience with teaching and DR, hence she could not compare its strategies to other styles of reading, “I don’t really know I
never did this kind of stuff, it’s different from what I am used to.” In addition, she was not completely comfortable doing DR:

I am getting more comfortable but still like kind of nervous about it, that I am asking, I am thinking about it, ‘is that open-ended, I don’t know?’ I think about it a lot when I am doing it, so it’s not coming naturally yet. (Assistant Teacher #2)

The hardest for her was “keeping their [the children’s] attention, like making sure I pick a good book so that they don’t run away and not want to just run off and not answer, not listen” (teacher #2). The most helpful support or this inexperienced assistant teacher when learning to do DR was practice and modeling from the coach. The quality of this teacher’s DR was consistent with her responses from the interview, since this teacher was not only a novice at teaching, but doing DR as well. She was not used to DR, did not understand all of the goals, and was nervous doing it.

**Lead Teacher #3.** This lead teacher has 17 years of teaching experience. She was ranked number eight based on the percentage of high-level questions asked. However she tied for rank number one along with another lead teacher according to global DR rating scores (see Table 2). This teacher had the lowest score for the ‘other’ category suggesting that there were few behavioral interruptions during her DR sessions. She also scored the highest on providing high-complexity feedback along with the highest average global rating score (see Table 2). This teacher had prior experience with DR in the LC pilot study. However, I was not able to compare her DR scores with her beliefs since no interview was completed.
Assistant Teacher #4. This was an assistant teacher with four years teaching experience and no prior DR experience. She was ranked fourth based on the percentage of high-level questions asked. However, she ranked number two according to average global DR rating scores (see Table 2). This teacher had several responses that were unique compared to what other teachers mentioned. She was the only teacher who mentioned: having children feel comfortable during reading as a DR goal, having teachers feel comfortable with the material as a DR strategy, that seeing children’s progress made it easier doing DR, and that not being prepared was least helpful to her when learning DR. This teacher also covered the most essential DR goals and strategies in her interview. Her opinions shed light on the level of declarative knowledge and the kind of beliefs one may need to have in order to be successful at implementing DR. This evidence suggests that this teacher’s beliefs did align with the quality of her DR.

Lead Teacher #5. This was a lead teacher with 13 years of teaching experience and prior DR experience from the LC pilot study. Her responses from the interview suggested that she understood the goals of DR because she was one of the few teachers who mentioned specific DR goals. Her scores from Table 2 indicate that she ranked number one based on average global DR rating scores. She ranked number seven according to percentage of high-level questions asked during DR. When I asked this teacher about the goals of DR she was able to discuss several key DR goals that curriculum designers considered important:

My understanding about DR is that it should help children with comprehension and language. Building their vocabularies. Important DR strategies are using
props to help understand story and vocabulary and the right combination of children. To read in a small group of children. To read from left to right, top to bottom. To introduce new vocabulary. (Lead Teacher #5)

She was also comfortable doing dialogic reading when not being watched by others, she said “The more I practice the more confident I get. It’s becoming easier over time and I am getting comfortable overtime as I do DR” (Lead Teacher #5). In her videos she appeared comfortable and a natural using the DR techniques. Lead Teacher #5 gave unique answers that differed from other teachers, e.g., she mentioned “the right combination of children” as an important DR strategy. She was also one of the few that gave an opinion on what DR leaves out, however did not expand on why she thought that “Maybe [DR] only leaves out special needs children” (Lead Teacher #5).

This evidence suggests that this teacher’s experience combined with her beliefs should have made her successful at DR. Her first rank according to global DR scores supports this evidence. However, she also ranked seventh when looking at her percentage of high-level questions asked during DR. This teacher asked lots of questions and spoke a lot during DR but perhaps it was not as beneficial because she did not ask enough high-level questions during her sessions and therefore did not rank very high in that category. The interview and videotapes showed that this teacher was not reading primarily to ELL or special needs children, therefore more higher level questions could have been asked.

**Assistant Teacher #6.** This was an assistant teacher with two years teaching experience and no prior experience with DR. This teacher scored in the bottom two ranks
according to percentage of high-level questions asked during DR, and in the bottom three ranks when looking at her global DR rating score. As shown in Table 2, this teacher asked more low-level questions than high-level ones and had a low average global DR rating score. Her beliefs about DR goals were somewhat different from what researcher and curriculum developers advocate. For example, when asked about the intended goals of DR she replied, “For me the goal is to let the children know what you are reading and get their attention” (Assistant Teacher #6).

This teacher was also nervous doing DR if someone was watching her and found that the hardest part of DR was getting the children’s attention. Her comment about getting children’s attention compared with her “other” score. This teacher scored the highest in the ‘other’ category, which meant she had a lot of behavioral prompts and talk not related to the book. Her DR videos also revealed that she had trouble with effective management, and hence, her average global DR rating was low.

Even though she was able to expand on her beliefs about the goals of DR in her reflection part of the interview, she was still vague. For example, she believed that an important DR strategy was “Asking children what they think about the picture and the story and to get their attention” (Assistant Teacher #6). I was not sure if she meant a DR strategy was to get children’s attention or pick a book that gets their attention. In addition, what kind of questions did she ask to get the children to think about the picture? Overall, this teacher’s beliefs were associated with her low DR scores. Even though she liked doing DR, evidence suggests that she does not yet have a full understanding of DR,
since she was not able to identify the target goals of DR in the interview and on her DR videos.

**Lead Teacher #7.** This was the other most experienced lead teacher with 20 years of teaching experience. She had previous DR experience being in the LC pilot study. Table 2 shows that this teacher ranked sixth according to her percentage of high-level questions asked during DR, while ranking fourth on her global DR rating score. This teacher scored high in the ‘other’ category that meant she had lots of behavioral prompts and talk not relating to the book during DR. Yet, this teacher understood the goals of DR and gave thorough answers:

> My understanding is that dialogic reading is a way to get children to think to answer open-ended questions, get them to relate it to themselves in their own lives, teaches them new words, having the children respect themselves. (Lead Teacher #7)

Her responses suggested she understood at least one important DR strategy, asking high-level questions. She said, “In my opinion it’s open ended questions. It’s having the children think, using their heads to think” (Lead Teacher #7). Videotapes showed that she was very confident when doing DR. However, she was not a top scoring teacher, so I went back and looked at her videos to get a sense of what was missing or why her scores did seemed to not align with her attitudes.

In her videos she asked lots of questions and gave lots of low-complexity feedback. However, despite her focus in the interview on open-ended questions she did not ask many higher-level questions nor did she engage in many conversational loops
with the children. In addition, she did not score high on the ‘teacher sensitivity’ item. The videos revealed that she did not give enough time for children to respond and sometimes overlooked children’s comments. In this case, the teacher had a relatively strong understanding of DR but this was not shown in the quality of her practice.

**Assistant Teacher #8.** This was another inexperienced assistant teacher in her first year in the classroom with no prior DR experience. This teacher ranked fifth based on her percentage of high-level questions asked during DR and ranked eighth according to her global DR rating score. Looking at Table 2 it looks like she did not ask very many questions at all, whether low, medium, or high-level. However, her percentage of high-level questions compared to the total amount of her speech during DR was fairly high.

Her responses from the interview suggested that she did not have a complete understanding of the goals and techniques of DR. In fact some of her responses were similar to another low scoring assistant teacher. They both perceived an important DR strategy as “Sitting at eye level so the children can see the book” (Assistant Teacher #8) and that the hardest thing about DR was “Hoping that the book is, catches their interest, and that they like the book. Pretty much if they don’t like the story line they’re just gonna dilly dally go play” (Assistant Teacher #8).

This teacher believed that the main goal of DR was for children to understand what was happening in the story. She also believed that she was “pretty confident” and comfortable with doing DR (Assistant Teacher #8). Even though this teacher indicated she understood DR, her rank on both percentage of high-level questions and global DR rating suggest that she may have over-estimated the depth of her understanding of DR.
**Teacher #9.** This was a lead teacher with 13 years of teaching experience with no prior DR experience. According to Table 2 this teacher asked a lot high-level questions and ranked third on both percentage of high-level questions and global DR rating score. This teacher had a good sense of key DR goals, for example she said, that a DR goal was “Vocab…getting children to interact with the story. Understand that stories can be tied into their own personal experiences ... book handling” (Lead Teacher #9). She believed that an important DR strategy was “Open-ended questions so that they [children] can tell you parts of the story to better understand it. Not open ended but maybe to the age or developmental level so that they can again tie in and comprehend the story” (Lead Teacher #9).

This teacher mentioned that “Getting them [children] to follow and participate as much as you would like would probably be another challenge” (Lead Teacher #9) and this belief was consistent with her low teacher sensitivity item score. This teacher revealed that she had trouble getting the children to participate during DR and she also scored low on an item that measured whether the teacher was sensitive to each child’s needs and noticed attempts from children to participate. The evidence suggests that the quality of this teacher’s DR did align with her beliefs.

**Assistant Teacher #10.** This was an assistant teacher who did not have previous experience with DR. She was very optimistic about DR and said she really enjoyed doing it. She ranked second for percentage of high-level questions and fifth for global DR rating score. Her videos showed that she asked a lot of questions and was prepared;
however, in some instances, she did not give enough wait time for the children to respond, which brought down her score for teacher sensitivity.

She understood some of the main goals of DR, “To have children expand their language and to make the stories meaningful and relate them to real life experiences. And to, throughout the class just use the book and the story with their language” (Assistant Teacher #10). Unlike most other teachers, she mentioned that it was easy for her to pick the books and DR goals. She felt that keeping the children’s attention as the hardest part of DR, “The hardest part is when I couldn’t get their attention, either the story was not their level or it was like just read, and they weren’t getting what I was trying” (Assistant Teacher #10). Her opinions about children’s attention corresponded with her low child engagement scores. This teacher was unique in showing an awareness of her areas of weakness in DR implementation.

Who is More Successful at Dialogic Reading: Lead or Assistant Teachers

Comparison of dialogic reading quality scores. Descriptive statistics and a one-way ANOVA were conducted for each of seven dependent variables: low, med, and high cognitive questions, other, low and high complexity feedback, and average global DR scores. The data are reported for lead versus assistant teachers in Table 5. Based on the size of the means, the general pattern is that lead teachers provided higher rates of book-relevant speech (they were higher than assistant teachers for all interactive behaviors expect Other) and had higher global rating scores. Inferential tests were also conducted but should be regarded with caution due to the small sample size; with only 10 teachers it was difficult to have enough statistical power to detect a group difference.
Lead teachers were significantly higher on the sum of the five global ratings $F(1,8) = 6.06, p = .039$.

Table 5
*Means and Standard Deviations for Videotapes by Teacher Level*

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<thead>
<tr>
<th>DR Interactions &amp; Global Ratings</th>
<th>Lead Teachers</th>
<th>Assistant Teachers</th>
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<tr>
<td>Low questions (rpm)</td>
<td>2.19</td>
<td>1.83</td>
<td>.78</td>
<td>.36</td>
<td>.79</td>
</tr>
<tr>
<td>Medium questions (rpm)</td>
<td>.58</td>
<td>.33</td>
<td>.37</td>
<td>.25</td>
<td>.88</td>
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<tr>
<td>High questions (rpm)</td>
<td>2.24</td>
<td>1.75</td>
<td>.48</td>
<td>.50</td>
<td>1</td>
</tr>
<tr>
<td>Low feedback (rpm)</td>
<td>4.18</td>
<td>3.49</td>
<td>.90</td>
<td>1.01</td>
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</tr>
<tr>
<td>High feedback (rpm)</td>
<td>2.20</td>
<td>1.71</td>
<td>.94</td>
<td>.60</td>
<td>1</td>
</tr>
<tr>
<td>Other (rpm)</td>
<td>.34</td>
<td>.53</td>
<td>.30</td>
<td>.37</td>
<td>1</td>
</tr>
<tr>
<td>Avg Global DR score</td>
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<td>15.00</td>
<td>2.88</td>
<td>3.59</td>
<td>1</td>
</tr>
<tr>
<td>Bringing book To life</td>
<td>4.27</td>
<td>2.53</td>
<td>.89</td>
<td>1.02</td>
<td>1</td>
</tr>
<tr>
<td>Teacher sensitivity</td>
<td>3.77</td>
<td>2.77</td>
<td>.64</td>
<td>.72</td>
<td>1</td>
</tr>
<tr>
<td>Appropriate level of challenge</td>
<td>3.53</td>
<td>3.10</td>
<td>.77</td>
<td>1.25</td>
<td>1</td>
</tr>
<tr>
<td>Effective management</td>
<td>4.73</td>
<td>4.47</td>
<td>.43</td>
<td>.60</td>
<td>1</td>
</tr>
<tr>
<td>Depth of conversation</td>
<td>3.77</td>
<td>2.13</td>
<td>.72</td>
<td>.77</td>
<td>1</td>
</tr>
<tr>
<td>Session length (minutes)</td>
<td>10.61</td>
<td>9.69</td>
<td>3.28</td>
<td>3.27</td>
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</tbody>
</table>

Note. rpm stands for rate per minute.

The analysis revealed that there were no significant differences between lead and assistant teachers when looking at aggregated scores (e.g., the low, med, high categorical levels). However, looking at the individual 15 categories, the analysis revealed three
behaviors where the trend was in the direction of statistical significance. Lead teachers tended to ask more completion prompts and open-ended questions and responded with more praise. The significance levels were as follows: completion $p = .069$, open-ended $p = .090$, praise $p = .077$. Even though these significance values are not .05 or under, they were less than .10 and would have achieved conventional levels of significance if one-tailed tests were used.

**Comparison of teacher beliefs from interviews.** The interview data were considered in light of areas in which lead and assistant teachers showed group similarities and differences. There were fewer differences than similarities in beliefs between lead and assistant teachers. In considering both similarities and differences, I only included ideas mentioned by two or more teachers. The 15 shared beliefs are listed:

1. A goal of DR is to connect book to children’s everyday lives and prior knowledge
2. A goal of DR is to build children’s vocabulary and SEER words
3. A DR strategy is to have the child’s interest or attention on the story
4. A DR strategy is to have a right combination of children
5. A DR strategy is to be prepared
6. A DR strategy is to ask different types of questions during the session and include SEER words
7. The hardest part of DR is keeping children’s interest and attention
8. The hardest part of DR is finding the time to prepare
9. They are getting more comfortable to do DR each time
10. Having the children participate in the reading makes DR different
11. Using different questioning strategies makes DR different
12. Having the children be stimulated to think makes DR different
13. Having coaches is helpful when learning DR
14. DR is good because it gets children to participate and be involved
15. It is better to do DR in the morning

I identified four differences between the two groups. First, only lead teachers mentioned that a goal of DR was book handling. Second, only lead teachers mentioned talking with other teachers about DR as a helpful learning strategy. Third, only assistant teachers mentioned that a goal of DR was to gain new knowledge. Fourth, only assistant teachers mentioned that a DR strategy was sitting at eye level with children.

**Interview responses from the top two ranking teachers based on percentage of high-level questions.** Based on who had asked highest percentage of high-level questions as a proportion of total speech, the top two ranking teachers were lead teacher #1 and assistant teacher #10. Lead Teacher #1 had 20 years of teaching experience and held an Associates degree. Assistant Teacher #10 had 18 years of teaching experience and had a CDA. Lead Teacher #1 gave more low-complexity feedback than high complexity feedback. Assistant Teacher #10 gave about the same amount of low and high complexity feedback and also gave fairly a high rate of high-complexity feedback.

Figure 1, *Sources Clustered by Coding Similarity* shows a cluster analysis that was created through the qualitative software program QSR NIVIVO 9. This cluster analysis depicted a visual pattern of sources (teachers) grouped by the similar pattern of
code frequencies used from their interview responses. The cluster analysis shows a horizontal branching diagram where similar teachers are clustered together on the same branch and different items are further apart. Figure 1 shows Lead Teacher #1 and Assistant Teacher #10 clustered together on the same horizontal branch. This means that they were similar in terms of the way I coded their interview response. This suggests that these two teachers had similar perceptions about dialogic reading.

Figure 1

_Sources Clustered by Coding Similarity_

There was one code that was unique to Lead teacher #1 and Assistant teacher #10. They were the only ones who mentioned that a difference between DR and other styles of reading was that DR has goals. For instance when I asked Lead Teacher #1 how DR was different from other reading styles she replied, “In dialogic reading, you kind of want
them to expand, that's the main goal” and “I guess you would think supposedly have a
goal that you want the children to hit so that it is more meaning to the story.” When I
asked the same question to Assistant Teacher #10 she replied, “Before I would just read a
story and not really think about what I would be asking. It would be like yes and no
question, and what is on the picture. But now, I think about what I’m going to ask them.”
It is also possible that that these two teachers successful because of their many years of
teaching experience.

**Interview responses from the top two ranking teachers based on global DR rating scores.** The highest average global DR rating scores was the second ranking method used. According to Table 2 the top two ranking were Lead Teachers #3 and #5. However, since Lead Teacher #3 did not complete the interview portion of the study, I looked at the next highest-ranking teacher that was interviewed: Assistant teacher #4.

Lead Teacher #5 was a lead teacher with 13 years of professional teaching experience who had an Associates degree. Assistant Teacher #4 was an assistant teacher with 4 years of professional teaching experience who had her CDA. Table 2 shows that Lead Teacher #5 and Assistant Teacher #4 both use a high rate of high-level questions; however compared to the rest of the teachers they did not give as much high complexity feedback.

Since I noticed that the top three highest scoring teachers interviewed shared
beliefs that were exclusive to the three of them, I included Lead Teacher #9 in this
analysis. Lead Teacher #9 had 13 years of professional experience, and also had a high
average global DR rating score. Below is a report of the shared beliefs that were exclusive to the three high scoring teachers.

**Small groups.** The top two teachers were the only ones who mentioned group size during the general interview questions, and the 3rd highest-ranking lead teacher #9 mentioned this during her reflective part of the interview. Even though all teachers did their videotaped DR sessions in small groups, only these three teachers identified group size as an important component of DR. When I asked teachers their understanding about the goals of DR teacher #4 replied, “To interact on a smaller level,” while teacher #5 said “To read in a small group of children.” Although the top ranking teachers mentioned small groups as a DR goal none them mentioned why it was important to do DR in small groups.

**Comprehension.** During the reflective part of the interview the top two teachers mentioned that an important DR strategy was to increase children’s comprehension, “The purpose was to get them [children] to think on their own and to problem solve, I wanted them to think about the character” (Assistant Teacher #4). The third highest scoring Lead Teacher #9 mentioned comprehension during the general segment of her interview. Only these three teachers discussed children’s comprehension, which suggests that a focus on comprehension is associated with high quality enactment of DR. All three teachers scored high on the item measuring “depth of conversation,” perhaps the reason was because they were thinking about ways to increase children’s comprehension.

Again, the cluster analysis of interview content shows a degree of correspondence with the teacher rankings for DR video data. In Figure 1, where teachers are clustered by
the similarity of interview codes, Lead teachers #5 and #9 are clustered together. Assistant Teacher #4 is on the next closest branch. Figure 2 shows the results of a different method of clustering in which teachers are grouped based on similarity of the actual words appearing on the interview transcripts. Again, Assistant Teacher #4 and Lead Teacher #5 appear on a same horizontal node, indicating that they used similar words during the interviews. The sub-codes that were distinctive about teachers #4, #5, and #9 were both under code 1: goals of DR, to have smaller group size and to increase children’s comprehension. Teachers used words such as “better understand,” “think,” and “smaller groups.”

**Interview responses from the two lowest ranking teachers based on percentage of high-level questions.** According to method one, the bottom two ranking teachers were determined based on the percentage of high-level questions asked during DR. As shown in Table 2, the bottom two scoring teachers were Assistant Teachers #2 and #6. Assistant Teacher #2 had one year of teaching experience while Assistant Teacher #6 had four years of teaching experience. Both Assistant Teachers #2 and #6 asked more low-level questions than high-level questions during their DR sessions. As shown in Figure 2, these two teachers also used similar words such as, “something new,” “relate,” “theme,” and “learn,” during their interviews.
In addition, these two teachers shared one mutual belief that was exclusive to the two of them. During the reflective portion of the interview, they both mentioned something about the seating arrangement and/or location of children during DR. When I asked Assistant Teacher #2 about what she was least satisfied with in one of her DR clips, she mentioned “and they [children] were like getting wet and moving them around was distracting and kind of threw off the whole thing.” When I asked the same question to teacher #6 she replied:

I would have tell them to sit down in front of me ‘cause they choose to sit down by me rather sitting down in front of me. I think that would be better … they gotta have eye contact. That’s really want I wanted them to do but they tend to sit down. (Assistant Teacher #6)
These two teachers also shared beliefs that were not exclusive to the two of them; these are listed below.

**Keeping children’s attention.** Both Assistant Teachers #2 and #6 said that keeping children’s attention was one of the hardest things about DR. When I asked Assistant Teacher #2 what the hardest thing about dialogic reading was she said, “To me it’s like keeping their attention, like making sure I pick a good book, so that they don’t run away, and not want to just run off and not answer, not listen.” Assistant Teacher #6 said, “For me, the hardest part is getting the children’s attention. Cause I think, I did one when they were about to pick them up, so they tend to lift their attention and can not focus.” Three other teachers also mentioned that keeping children’s attention was one of the hardest aspects of DR.

**Location.** During the reflective part of the interview both Assistant Teachers #2 and #6 expressed that the location of where to do DR mattered. Before videotaping began I instructed all the teachers to do their DR sessions in a quiet area. However, Assistant Teachers #2 and #6 noticed that the type of location mattered. For example doing DR outside, “I probably would have changed it when I did it, because I did it when everybody was outside playing, so it was kind of noisy” (Assistant Teacher #2). For another DR segment Assistant Teacher #2 stated that she was “dissatisfied with the noise, I probably would have put them inside because the rain was kind of distracting” (Assistant Teacher #2). This teacher noticed that even though she thought she was taking her group of children away from the noisy classroom, there was still noise outside from
the rain. Therefore, it was not enough taking children away from one environment to another unless one is quieter and more beneficial to learning.

When I asked Assistant Teacher #6 what she was least satisfied with and if she could do her DR session over again what would she change, her reply was:

I did it with children around the classroom. So they tend not to focus… so If I wanted to do it again, I want it in a quiet area, wherein children are not around, cause that time children are around and I was doing it in the middle.

Evidence suggests that these two teachers were both bottom ranking because they both lacked teaching experience combined with shared beliefs regarding difficulties during implementation of dialogic reading.

**Interview responses from the two lowest ranking teachers based global DR rating scores.** The average global DR rating scores determined the second method of ranking the bottom two scoring teachers. According to Table 2 the bottom two ranking teachers in the global DR rating category were Assistant Teachers #2 and teacher #8. Assistant Teacher #2 was the only teacher that ranked the lowest in both methods of ranking. Assistant Teacher #6 who ranked in the bottom two on percentage of high-level questions also ranked in the bottom three according to global DR scores.

Both Assistant Teachers #2 and #8 had one-year professional teaching experience. These two assistant teachers both had the least teaching experience out of all the ten teachers who were part of the study. Even though these two teachers shared several DR beliefs, these beliefs were not exclusive to the pair. However, I did find several examples where both of these teachers talked about the same topic where the top ranking teachers
according to global DR scores did not. Two of those beliefs, keeping children’s attention and location, also included the other bottom ranking Assistant Teacher #6 as discussed previously. Their shared beliefs are reported below.

**Keeping children’s attention.** In addition to Assistant Teachers #2 and #6, Assistant Teacher #8 said that keeping children’s attention was one of the hardest things about DR, while the top two ranking teachers did not. When I asked Assistant Teacher #8 what the hardest thing about dialogic reading was she said, “The hardest would be hoping that the book is, catches their interest. And that they like the book. Pretty much if they don’t like the story line they’re gonna dilly dally go play.”

**Modeling by coach.** Both Assistant Teachers #2 and #8 mentioned that the most helpful when learning DR was modeling by their coach. When I asked Assistant Teacher #2 about what was helpful when she was learning how to do DR, she replied, “The most helpful was with like the coaches, with like the ERF, that I get to see it done, so that I know what I am trying to do.” She also continued on and said, “Like the coach came in and she did it for me and then, she sat with me when I did it. And we went over after so” (Assistant Teacher #2). Assistant Teacher #8 also mentioned that modeling by coach and watching other teachers was helpful. Perhaps because these two teachers had the least experience, they found it especially beneficial to learn about DR through the example of live modeling.

**Location.** During the reflective part of the interview both Assistant Teachers #2 and #8 expressed that the location of where to do DR should be taken into consideration. The two highest ranking teachers did not mention anything about location during their
interviews. In addition, DR videos revealed that the top two ranking teachers based on global DR scores read in a quiet and conducive area for learning.

Instructions were given prior to the study, which suggested doing DR in a quiet space. However, Assistant Teachers #2, #6, and #8 noticed that the kind of location was important. For example, as previously stated Assistant Teacher #2 discussed the noisy environment outside.

Assistant Teacher #8 was least satisfied with the location she did DR, because it was in another classroom where the children were not used to being. She mentioned “Because we were in another classroom, they [children] were more excited being in that surrounding or that environment. They wanted to like go play it. I mean knew we were there to read.” Even though this teacher took her group of children into a quiet environment, it was still not conducive to learning because it was a novel location that served as a distraction.

When looking at the bottom ranking teachers as determined by percentage of high-level questions asked and global DR scores, there were a several shared beliefs among them: the importance of location in maintaining children’s attention, modeling by coach, and the challenge of keeping children’s attention. This suggests that novice teachers need assistance in fundamental issues relating to group management and may derive more benefit than other teachers from direct modeling.

Discussion

This study explored teacher’s perceptions about dialogic reading, how well teachers enacted dialogic reading, and whether teacher’s job title was associated with
either beliefs or skills in enacting dialogic reading. In this section I discuss (a) four major themes, (b) teacher’s quality of DR compared to their perceptions, and (c) DR implementation success as a function of the teacher’s classroom role. I also describe limitations of the study and ideas for future research.

**Summary of four major themes**

**Articulation & accuracy of DR.** The benefits of dialogic reading as suggested by Whitehurst et al. (1988) include building vocabulary and increasing children’s sentence structure and ability to participate in back-and-forth conversation. Other goals of doing dialogic reading include building on children’s prior knowledge, creating new knowledge, increasing story comprehension, strengthening general conceptual development, expanding language skills, individualizing book-related instruction, and reading in small groups of children (Hargrave & Senechal, 2002; Lonigan et al., 1999; Sabbatini, 2001; Whitehurst et al., 1994, 1999). Dialogic reading, either alone or in combination with alphabet-focused instruction has been shown to enhance language and emergent literacy skills, including receptive and expressive vocabulary, narrative skills, letter knowledge, and print awareness (Whitehurst et al, 1998, 1994; 1988; Cutspec, 2004, 2006; Arnold et al., 1994).

As a collective group, the teachers mentioned the range of DR goals during their interviews; however, not one teacher was able to include all the target goals of DR. In addition, teachers’ discussions were not highly detailed or articulate. This suggests that teacher’s understanding of DR’s intended goals and strategies is incomplete or perhaps that they had simply trouble expressing their knowledge about DR. It is important that
teachers understand DR goals and strategies in order to successfully implement meaningful and productive DR sessions. A possible reason as to why most of the teachers were not able to articulate the essential goals of DR was the lack of DR training from their coaches. The coaches’ agenda during the time of the study focused on classroom assessment tools and not DR.

Perhaps ERF can have coaches start focusing on DR techniques and strategies early on in the school year, so teachers are able to understand the importance of the techniques that they are being asked to do. Additionally, the formal training workshops provided should include a stronger focus communicating the goals and expected benefits of DR and ensuring that teachers could explain these goals in their own words.

Since some teachers identified modeling as one of the most helpful things when learning DR, perhaps providing more information via different observation modes might help teachers understand better. Modes could include teacher-to-teacher modeling, coach modeling, and video modeling. Furthermore, during the training I would suggest all modeled examples should include an explanation of the demonstration teacher’s goals, the reasons behind the selected strategies used in demonstrations, and comments on children’s reactions. This would avoid a situation in which teachers see the modeling but not understand or focus on the important aspects of the demonstration.

**Practical management issues.** Finding the best time and location to do DR and finding the time to prepare for it are all issues that potentially could be solved by better time management. Teachers concerns suggest that the barriers to successful implementation of DR possibly rest on time and or group management skills. Taking the
time to plan and create solutions to these practical management issues could be done as a whole team that includes teachers, managers and/or coaches.

Furthermore, I would suggest that ERF trainings incorporate management issues. This would include both planning time and techniques for effective small group instruction, including when and where to hold DR sessions, effective behavior management, and methods for maintaining children’s attention and motivation. This would give teachers who are struggling with time management skills a chance to acquire useful and practical information on how to plan out activities in a timely manner and how to make progress on basic teaching skills before they focus on the details of DR.

Perhaps first there needs to be encouragement from management for professional communication among teachers about any issues that teachers struggle with in the classroom. For instance, teachers might find that they are not the only ones who have barriers while doing DR. The second step would be efforts to reform issues. Plausibly, reflecting on problems and solutions, teachers may develop a better understanding of the DR goals. An ongoing discussion among teachers who encounter similar issues can facilitate change by encouraging the sharing of solutions to problems, as well as supporting the sense that with time improvement is possible.

**Increasing comfort with DR.** All the teachers felt more comfortable with doing DR today compared to the day they started. Practice and better child management skills was the one thing that helped increase teacher’s comfort with DR. This finding relates with what Guskey (2002) suggested. He suggested that the process of teacher change depends on the experience of successful implementation. Teachers will believe in a new
innovation or process when they see it work because it will shape their attitudes and opinions. In other words, successful implementation of dialogic reading comes with practice and the more teachers practice the more comfortable they feel with the process, and the more successful they will become. This suggests that sufficient time must be allowed for teachers to adapt to DR practices. Teachers may also benefit from periodic open discussions about how comfortable and competent they feel about their DR practice.

Additionally, in order for teachers to believe that DR is beneficial, they need to practice until they feel more comfortable and experience successful DR implementation. This idea held true for most teachers except one. Lead Teacher #7 expressed being comfortable doing DR, yet did not rank very high. Since it was difficult for teachers to analyze vs. less successful DR implementation. This finding leads me to suggest that a teacher can feel comfortable without being good or accurate in one’s self-assessment. This result supports the idea that teachers would benefit from having a literacy coach who is there to support teachers progress and self-awareness.

**Teacher’s self-awareness.** Reflection is thought to provide teachers an opportunity to participate consciously and creatively in their own growth and development (Schon, 1987) and to reinterpret and reframe their experiences from a different perspective (Munby and Russell (1990). Self-reflection is not an easy practice since it encompasses self-awareness and critical thought. For example, Richard and Lockhart (1994) considered the practice of teacher reflection as incorporating teachers collecting data about teaching, examining their own attitudes, beliefs, and practices. Guskey (2002) suggested that in order for teachers’ attitudes and beliefs to change they
must first see evidence that the new innovation is working. Therefore, someone like a
cognitive coach can help facilitate the teacher change progress by supporting teacher’s
self-awareness and reflection regarding DR and its learning outcomes.

By and large, teachers did not notice the same strengths and weaknesses on their
videotapes that I identified. This suggests that the teachers and I had different priorities,
and/or that these teachers were not yet able to able to analyze and critique their dialogic
reading skills. Key goals of cognitive coaching is for teachers to recognize and identify
their concerns and engage in reflective dialogues with their literacy coaches about how to
address these concerns and challenges (Walpole & Meyer, 2008). Even though
reflective processes are beneficial, people are often not skilled in the self-reflective
process and are often unmindful of their behavior or the impact their behavior has on
other people (Jordan & Troth, 2004). Thus, a coach may not only help establish action
plans and goals but also ensure that they focus on observable concrete behaviors that are
clearly noticeable to the teacher.

In addition to having a coach assist with teacher’s self-reflection, co-viewing a
previously recorded video doing DR can bring powerful tool. Teachers usually rely on
their own memory to recapture events of what they think has happened without being
objective (Wong, Yung, Cheng, Lam, & Hodson, 2006). When teachers watch their own
videos they are acting as distant observers and are able to consider alternative
standpoints. Therefore, by having teachers reflect on their own videos, it will better help
them uncover their personal understanding of what it means to be a good dialogic reader
and hopefully see their areas of improvement.
Teacher’s Quality of Dialogic Reading Compared to their Perceptions

Overall many of the teacher’s perceptions aligned closely with their DR scores. However, there were some exceptions to this pattern. Assistant Teachers #6, #8, and Lead Teacher #7 shared beliefs in their interviews that did not appear to be demonstrated in their videotaped DR interactions. These teachers shared their perceptions about the goals of DR, such as asking higher-level questions, but their scores indicated that that they did not ask a high percentage of those types of questions. Furthermore, Lead Teacher #1 understood DR goals and strategies and was ranked number one for the proportion of high-level questions, but was somewhat resistant to this reading style. This example of teacher resistance parallels research on the teacher change process. Guskey (2002) suggests that the essential element in changing teachers’ attitudes and beliefs is evidence of improvement in the learning outcomes of their students. In order for a teacher to commit to a new teaching innovation, such as DR, the teacher needs to see proof and evidence that it works. When teachers see their students attain higher levels of achievement and become more involved in classroom activities, significant change in teachers’ beliefs and attitudes will likely take place (Guskey, 1986). Perhaps, this one teacher needs to see proof that DR works. She might have to wait until the end of the year to see language assessment results from the children in her small groups in order to commit to this reading technique.
Successful Dialogic Reading

Data analysis from interviews and average DR scores suggested that lead teachers were more successful at implementing DR. Lead teachers asked more questions, responded more, had lower behavioral prompts during DR, were better able to bring the book to life, were more sensitive to children during DR, asked more appropriate questions, had better effective management skills, and had deeper more meaningful conversations. In addition one of the top ranking teachers according to Table 2 was a lead teacher. Lead teachers generally have more years of experience, and this study in particular had four out of the five with more teaching experience compared to their assistants. This suggests that teaching experience may be associated with better skills in enacting DR. However, teacher interviews revealed that there were more shared DR beliefs than differences between lead and assistant teachers. Overall, even though evidence suggests that lead teachers were better at implementing DR, there was still a need for continued improvement for all the teachers.

Teacher interviews provided further insight about DR beliefs. Teachers were able to identify some management barriers that prevent them from successful DR implementation. The next step would be to generate solutions within classrooms for overcoming those barriers such as time, location, and preparation. One possible solution is through ERF trainings on time management skills along with having teachers communicate amongst other teachers within their own classrooms and even with other teachers who are part of the ERF project.
**Bringing it all Together**

Research suggests that the typical path of the teacher change process first includes teachers responding to a new innovation in the easiest way, by focusing on classroom procedures and materials. Teachers first focus on the practicality of any new information they are provided (Doyle & Ponder, 1977; Barlett, 1990; Fullan & Hargreaves, 1992). Later teachers have more general concerns with new understandings of their practice and deep level change. This happens with the help of a professional, such as a literacy coach, who “shapes the situation” with a term Schon (1983) calls reflection-in-action (p. 79). This is an interactive loop in which both the situation and the teachers’ view of it continually change. Teacher development thus occurs in spiraling cycles of performance made up of interconnected sequences of innovate-reflect-adjust moves through which something tried and considered gradually becomes integrated into teachers everyday practice and schema (Grotjahn, 1991).

When teachers have achieved a certain comfort level in affective integration of the innovation, then they will be able to extend their perceptions beyond the classroom to reflect and generalize on their experience and to attempt to explain it (Schon, 1983; 1987). This reflection can be supported with the help of a literacy coach. Such attempts to understand what has happened as a result of new practice can eventually lead to a changed perception of the innovation—in this case, successful implementation of DR—which may then feed into other changed perceptions—for example, the goals and strategies of DR.

The process of teacher change can be applied to the teachers in this study. When
learning how to do DR, some of these teachers were at first consciously incompetent at implementing DR. Meaning these teachers believed to understand the techniques and strategies DR, however, evidence suggested that not all the teachers perceptions aligned with their DR scores. However, most of the teachers who reported being more comfortable doing DR and those with prior DR experience had moved on to being consciously competent. Meaning those teachers were able to start internalizing the new innovation and identify some of the key goals and strategies of DR and in turn were more successful at implementing DR. Crossing over from being consciously incompetent to consciously competent may require the help of a coach to help teachers reflect on the implementation of DR.

Since results suggested that it was difficult for many to be reflective, coaches should assist struggling teachers through guided reflection using previously recorded teacher videos. Coaches should model DR strategies that are included in the ERF LC manual as well as general instructional management techniques such as teacher warmth, affect, and teacher sensitivity that are not mentioned in the original training materials. Coaches could help teachers discover the benefits of DR. Perhaps by monitoring children’s engagement and participation during DR. Since Guskey (2002) suggested that attitudes and beliefs could be changed with evidence, perhaps teachers might be more enthusiastic about DR if they could see end results. Thus, if teachers were more motivated to do DR, perhaps with practice they would start feeling more comfortable with the techniques and in turn become more successful. Subsequently, they would then see evidence that it works which would help teachers commit to the reading technique
and alter their perceptions about it.

Limitations

There were several limitations to this study that may have comprised the validity of this work. First, it was harder than expected to establish reliability between the second coder and myself. We practiced with archival DR transcripts and coded twelve archival DR videos before reaching 80% reliability. Second, two of the teachers were only able to complete two DR videos, so their scores and ranks may have been less reliable; in addition one teacher could not participate in the interviews. Third, this study included a small number of participants. Due to this reason, findings may not generalize to other preschool teachers.

Another limitation was my inexperience at interviewing. Upon reflection, I did not probe teachers about their responses and follow up with additional questions during the interviews. Because of this, I may have not unveiled the complete picture of teachers’ perceptions regarding DR.

Implications for Future Research

This study produces many questions for future research. One continuation of this study would be to interview each teacher’s coach. This would serve to provide a better picture about what support teachers received for doing DR, what training was provided, and what issues arose. Also, to establish generalized beliefs, uncover clear patterns, and have and stronger statistical outcomes more than 10 teachers would have to be included. To answer questions about teacher change, a study like this would be more useful if it was conducted over a longer period of time, such as a school year. Also, since there were
a few technical difficulties, I would suggest for someone to come in and videotape each DR session to ensure it is successfully recorded and it is audible.
References


and mathematics enhancement curriculum. (Available from the University of Hawaii Center on the Family, Miller Hall 107 2515 Campus Road Honolulu, Hawaii 96822).


reading and language development in preschool classrooms. *Journal of Educational Psychology, 93*, 243-250.


Appendices
Appendix A

Consent Form
Early Reading First
Dialogic Reading Study

You are invited to take part in a study of teachers’ beliefs on dialogic reading. You are a potential participant because you are a teacher who is part of the Early Reading First project. The research is being conducted by Natalya Mekkoyeva. I ask that you read this form before agreeing to be in the research.

Purpose
The purpose of this research is to find out more information about teachers’ beliefs and understanding about the use of dialogic reading techniques and how their beliefs compare to the quality of their dialogic reading. I am interested in learning about the possible challenges and difficulties about dialogic reading. I want to learn more about what teachers’ are thinking about when implementing dialogic reading.

Procedures
If you agree to be in this research, and sign the consent form, I ask that you video-tape yourself doing dialogic reading three times during the summer. Your classroom will be provided with a video camera and tripod to use for the remainder of the school year. I will also ask you to participate in one audio-recorded interview that should last no longer than an hour.

Risks and Benefits
All of the questions during the interviews will focus around dialogic reading, your comfort level with it, your strategies, your challenges and/or success with it, your beliefs about the process and the goal(s). You may refuse to answer or discuss any of the questions during the interviews. The study will remove any information that will make it possible to identify you. Your participation will remain confidential. The benefits of this research will help curriculum developers, managers, coaches, mentors, and researchers know more about the areas of dialogic reading they should be focusing on. As well as assisting teachers throughout the more complicated and challenging steps of learning and implementing dialogic reading. This research will also shed light to the process by which change in teachers usually occurs, specifically with the process of implementing dialogic reading in this case.

Confidentiality
The records of this study will be kept private. Anything you tell me will remain confidential. In any sort of report of the study, I will not include any information that will make it possible to identify you. I am not asking for your name, address, or phone
number. Your name and other identifying information will not be kept with the videotapes and interviews. The audio-recorded interviews and DVD’s will be kept in a locked file; only the researcher will have access to those records.

Voluntary nature of study
Your decision whether or not to participate in this research will not affect your current or future relations with the Early Reading First project or the staff part of the ERF project. Even if you sign the consent form you are free to stop being part of the study at anytime.

Contact
The principal investigator conducting this study, which is a subset of the bigger ERF study, is Natalya Meekoyeva, a graduate assistant at the University of Hawaii as well as a staff member on the Early Reading First project. You may contact the assistant at the University of Hawaii by calling (808) 956-9912. If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, contact: University of Hawaii Institutional Review Board, B-104, (808)956-5007.

I have read the above information and understand that my participation with this study is voluntary and I may stop at any time. I consent to participate in the study.

____________________________________
Signature of participant

____________________________________
Date

____________________________________
Signature of researcher

____________________________________
Date

Participant received a copy.
Appendix B

Interview Protocol Project: Teacher’s Beliefs on Dialogic Reading

Time of interview:

Date:

Place:

Interviewer:

Interviewee:

Describe the purpose of the interview as well as the format prior to starting

Purpose:
To seek a more in depth explanation of teachers’ thoughts, beliefs, and practices relating to dialogic reading.

Format of interview:
Before we begin, I’d like to provide three ground rules for our interview. These rules are meant to establish a safe environment for sharing your points of view.

1. First, please know that there are not right or wrong answers to any of the questions I am going to ask…
2. Second, your opinions and perspectives are valued in this interview and will be respected
3. Third, everything that is shared here remains confidential. I will not use your name in any report I write and my records are kept using ID numbers not names.

I will start off by asking you some general questions about dialogic reading such as what you think about it and how comfortable you are with this technique. Then we will go into questions that specifically focus on the three video-taped dialogic reading sessions. I will ask for your opinion about the sessions, as well as stop and look at particular parts from each video tape- for example places where you are using a specific dialogic reading strategy or where the children are doing something interesting.

Do you understand how this will go, are you comfortable?

Questions:

1. What is your understanding about the goals of dialogic reading?
Let teacher respond, then prompt for each area if not addressed:

Prompts:
· What about DR supposed to help children learn?
· What are important DR strategies?

2. How is DR similar or different from other styles of reading with children?

Prompts:
· How is it similar or different from other ways you have been taught to read to children?
· How is it similar or different from ways that you used books before ERF?

3. How comfortable are you doing dialogic reading?

Prompts:
· Do you feel confident or at ease when doing DR? Why or why not?
· What about DR is hardest for you? Easiest?

4. What has been the most/ and least helpful to you in learning how to do DR?

Prompts:
· Examples from ERF support- workshop, coaching, readings what specifically helped?
· Practice, trial & error
· Other teachers, mentors, course work?

5. In what ways do you think DR is a good thing to do?

Prompts:
· Does DR help/ hinder children?
· Is there anything important that DR leaves out?

6. How have your feelings about DR or your comfort in using DR changed over time? Has anything regarding DR changed since you started doing it (from January)?

Prompt:
· More/ less confident?
· Easier to implement?

STOP
· Review a segment from the teacher’s taped dialogic reading segment #1
7. What are your thoughts about what went well during this DR session?

Prompts:
•
• What were you happiest with? (e.g. questions, responses, feedback, book, location, interest, noise, attitude, affect?)
• What do you think the children gained from the session?

8. What are things you are least satisfied with during this DR session, if any?

Prompts:
• Was there anything you did not like about this sessions or thought could have been better? (e.g. questions, responses, feedback, book, location, interest, noise, attitude, affect?)
• If you could do this session over again, is there anything you would change? Why?

9. What was the purpose of this technique/strategy that you used in this segment?

* The first interview will ONLY include a segment depicting an effective DR strategy
* The second and third interview will include 1 segment depicting an effective use of DR strategy, and/or 1 segment depicting an area of improvement for DR strategies

Prompts:
• What are you doing here and why?
• How well did it work?
• How did the children respond?
• Did you meet your goal?
• Would you do something differently if you had a second chance?

Review DR segment #2
Ask same questions 7-9.

Review DR segment #3
Ask same questions 7-9

Original four questions asked right after dialogic reading
1. How did you select your book? Do you still agree on how you select your books or has your method changed? If so how?
   *Your response (from tape):*

2. How did you pick your group of children? Do you still agree or has method changed and why?
   *Your response (from tape):*

3. Did you prepare in advance? Why Has your method of preparing changed?
   *Your response (from tape):*

4. Did you have any particular goals you wanted to accomplish? Have your goals changed and why?
   *Your response (from tape):*
Appendix C
Quality of Dialogic Reading
Frequency sampling: count the number of times each question appears, every 20 seconds.

Section I Strategies

<table>
<thead>
<tr>
<th>Dialogic Reading Strategies</th>
<th>Response/ Feedback Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pointing Questions</td>
<td>1. Praise (verbal and non-verbal)</td>
</tr>
<tr>
<td>2. Yes/No questions</td>
<td>2. Repeat</td>
</tr>
<tr>
<td>3. What Questions</td>
<td>3. Expansion (e.g. repeat + new info)</td>
</tr>
<tr>
<td>4. Print tracking, phonological awareness (focus on sounds and or letters)</td>
<td>4. Corrections</td>
</tr>
<tr>
<td>5. Attribute Questions (e.g. size, shape, color, function, location, number)</td>
<td>5. Topic continuation</td>
</tr>
<tr>
<td>6. Completion Prompts (fill-in questions)</td>
<td>6. Conversation</td>
</tr>
<tr>
<td>7. Open-ended Questions</td>
<td>7. Other</td>
</tr>
<tr>
<td>8. Distancing Questions (e.g. predict, define, comparisons)</td>
<td></td>
</tr>
</tbody>
</table>

**Note**

**Questioning**
- Low cognitive questions: pointing, yes/no, and what
- Medium cognitive questions: print tracking, phonological awareness, attribute and completion
- High cognitive questions: open-ended and distancing

**Feedback**
- Low complexity feedback: praise, repeat, expansions, corrections
- High complexity feedback: topic continuation, conversation
- Other
Rate each question as either exemplary, strong, basic, inadequate, or deficient (circle it)

Section II
Engagement and Content

<table>
<thead>
<tr>
<th>Reading Style</th>
<th>1 Deficient</th>
<th>2 Inadequate</th>
<th>3 Basic</th>
<th>4 Strong</th>
<th>5 Exemplary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bring book to life through animation, tone of voice, affect, etc.</td>
<td>0-10% of the session where the teacher used none or one of the following: gestures, affect, tone change, use of props, acting out, showing excitement</td>
<td>20-30% of the session where the teacher used any of the following: gestures, affect, tone change, use of props, acting out, showing excitement</td>
<td>40-60% of the session where the teacher used any of the following: gestures, affect, tone change, use of props, acting out, showing excitement</td>
<td>70-80% of the session where the teacher used any of the following: gestures, affect, tone change, use of props, acting out, showing excitement</td>
<td>90-100% of the session where the teacher used any of the following: gestures, affect, tone change, use of props, acting out, showing excitement</td>
</tr>
<tr>
<td>2. Sensitivity of child’s needs. By providing enough wait time, hints, warmth to child</td>
<td>0-10% of the session where teacher is sensitive to child’s needs by providing either: enough wait time, helpful hints when struggling, awareness of children to participate, warmth towards child, not cutting child off</td>
<td>20-30% of the session where teacher is sensitive to child’s needs by providing any of the following: enough wait time, hints when child is struggling, awareness of child trying to participate, warmth towards child, letting child complete their comments</td>
<td>40-60% of the session where teacher is sensitive to child’s needs by providing any of the following: enough wait time, hints when child is struggling, awareness of child trying to participate, warmth towards child, letting child complete their comments</td>
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</tr>
<tr>
<td>3. Appropriate level of challenge.</td>
<td>0-10% of the session where teacher presents challenging questions, uses scaffolding, and brings in age appropriate vocabulary</td>
<td>20-30% of the session where teacher presents challenging questions, utilizes scaffolding techniques according to child, and uses appropriate vocabulary</td>
<td>40-60% of the session where teacher presents challenging questions, utilizes scaffolding techniques according to child, and uses appropriate vocabulary</td>
<td>70-80% of the session where teacher presents challenging questions, utilizes scaffolding techniques according to child, and uses appropriate vocabulary</td>
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<tr>
<td>4. Effective management</td>
<td>0-10% of the session where teacher demonstrates well use of their time: takes only a few seconds to handle behavior problems, redirects staff to handle classroom issues, minimizes conversation with staff/adults that is disruptive and unrelated to book</td>
<td>20-30% of session where teacher demonstrates well use of their time during reading by doing any combo of the following: taking only a few seconds to handle behavior problems, redirecting staff to handle classroom issues, minimizing conversation with staff/adults that is disruptive and unrelated to book</td>
<td>40-60% of the session where teacher demonstrates well use of their time during reading by doing any combo of the following: taking only a few seconds to handle behavior problems, redirecting staff to handle classroom issues, minimizing conversation with staff/adults that is disruptive and unrelated to book</td>
<td>70-80% of the session where teacher demonstrates well use of their time during reading by doing any combo of the following: taking only a few seconds to handle behavior problems, redirecting staff to handle classroom issues, minimizing conversation with staff/adults that is disruptive and unrelated to book</td>
<td>90-100% of the session where teacher demonstrates well use of their time during reading by doing any combination of these: taking only a few seconds to handle behavior problems, redirecting staff to handle classroom issues, minimizing conversation with staff/adults that is disruptive and unrelated to book</td>
</tr>
<tr>
<td>5. Depth of Conversation</td>
<td>0-10% of session where the length and complexity of teacher-child conversations are well thought out, require thinking, and are meaningful.</td>
<td>20-30% of session where the length and complexity of teacher-child conversation are well thought out, require thinking, and are meaningful for both child and adult</td>
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Score Form

Section I

<table>
<thead>
<tr>
<th></th>
<th>Low type questions</th>
<th>Medium type questions</th>
<th>High type questions</th>
<th>Low feedback</th>
<th>High feedback</th>
<th>Other</th>
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<tbody>
<tr>
<td>Number of questions</td>
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<tr>
<td>Length of entire session</td>
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<tr>
<td>Average # of questions/ per min</td>
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<td>Average # of questions/ per session</td>
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<tr>
<td>Mean</td>
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<tr>
<td>Standard deviation</td>
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</table>

Section II

1. Bringing book to life
   1 2 3 4 5

2. Teacher sensitivity
   1 2 3 4 5

3. Appropriate level of challenge
   1 2 3 4 5

4. Effective management
   1 2 3 4 5

5. Depth of conversation
   1 2 3 4 5

Score

<table>
<thead>
<tr>
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<th>Score</th>
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<td></td>
</tr>
<tr>
<td>5. Depth of conversation</td>
<td></td>
</tr>
</tbody>
</table>

Subtotal  ____
Definitions
For section I

**Pointing questions:** Adult prompts child to show or point to something in the book. The purpose is to show vocabulary comprehension.
   Example: “Show me the pony”

**Yes/No questions:** Request for which a yes or a no response is appropriate. The purpose is to show vocabulary comprehension.
   Example: “Is this Matthew?”
   “Do you see a dog?”

**What questions:** Request for a specific name or label. The purpose is to name people and objects (nouns).
   Example: “What is Sally holding?”
   “Who is this?”

**Print tracking and/or phonological awareness:** Adult tracks print with finger or pointer, could label punctuation. Adult comments and/or requests information about letters and sounds in the book.
   Example: “What letter is this?”
   “Who knows the sound letter b makes?”
   “Which direction should I read?”

**Attribute questions:** Request for information about attributes of objects, such as color, size, shape, function, location, parts and action. The purpose is to describe objects using adjectives, adverbs, comparative words, emotional terms, etc.
   Example: “Where is Fifi standing?”
   “How many balloons are there?”

**Completion (fill-in) questions:** Adult begins a sentence and pauses. Waiting for child to finish it. The purpose is to reinforce sentence structure, new vocabulary, alliteration and rhyme.
   Example: “The sun came out in the ...”
   “He was a big ...”

**Open-ended questions:** Request for verbal information that does not specify or constrain a child’s response. The purpose is to allow the child to choose topic and the vocabulary. It encourages children to reply with complex phrases and sentences and to take longer conversational time.
   Example: “Tell me what is happening here?”
   “What can you say?”
   “What do you want to talk about here?”
**Distancing questions:** Request for information that goes beyond immediately present evidence. Includes why questions, asking for inferences about future events, drawing comparisons between the story and child’s experiences, and asking to define words. The purpose is to require the child to think and talk about things that are not present on the page.

Example: “What will happen if he goes outside?”

“What does frustrated mean?”

**Praise:** Let’s the child know that he/ she was right, and it motivates the child.

Example: child “that’s a butterfly!”

teacher “yes”

child “he went to the zoo!”

teacher “uhuh, yep”

**Repetition:** Exact repetition of what child said.

Example: child “sandwiches”

teacher “sandwiches”

**Expansion:** A close repetition that adds a little more information to what the child said. The purpose is to model slightly more advanced language. It also helps the child hear small differences between what was said and what the teacher said.

Example: child “It’s red”

Teacher “Yes, the books are red”

**Correction:** Modeling a more accurate response. And/or an immediate correction.

Example: teacher “How many are in the car?”

child “three”

teacher “actually four”

teacher “Where does Willy live?”

child “in pond”

teacher “No, in the ocean”

**Conversation:** Teacher discussing the book that is not contingent on child speech and does not require a verbal response from the child.

Example: teacher “I’ve gone to the zoo before and I have never seen a jaguar!”

teacher “That’s strange, I thought all fire trucks were yellow?”

**Topic continuation:** Comments that add more information and or relate to the child’s topic without repeating or incorporating the child’s words. The comments provide
new information that increases understanding, models more advanced language and conversation for the child. It also increases the length of the conversation on a focused topic.

Example: child “that boy was mean”
            teacher “when the boy turned away, that’s disrespecting someone”
            child “giraffe!”
            teacher: “they live in Africa in very hot weather and they have super long necks too”

Other: Comments that are more managerial, commands, requests, behavioral prompts.
Example: “Tommy, sit down and criss cross your legs”
            “Auntie Suzy can you close the door and turn on the lights?”

Helpful rules for coding section I:

1. The only category that can be combined or counted twice is praise + another strategy. Every useful utterance will be coded in one category, no double counting.
   Example: child “lots and lots of cookies!”
            teacher “Yes, lots of big cookies”
   This will count as praise for the (yes) and expansion for adding (big)

2. If there is a question asked and topic continuation, code it as a question only.
   Example: child “monsters in the attic, that’s weird”
            teacher “Why do you think it’s weird, is it because you monsters usually don’t live in attics?”

3. If there is random conversation going on such as behavior management issues, code it under other.
   Example: “Cody what do we say if we hit one of our friends in the classroom?”

4. If there is a question regarding print and or phonological awareness, code it under print/phonological focus only.
   Example: “Which letter here says /a/”
            “Who sees another letter like this one?”
            “Which way do we start reading?”

5. Pointing questions only count if teacher asks to NAME a picture
a. If teachers ask about shape, color, or counting it goes under ‘attribute.’

6. Repeat: Can be exact repetition or similar utterance (phrase). If teacher adds new info, then code it under “expansion.”

7. Distancing: If teacher asks, “do you know what X means?” Code it under ‘distancing,’ even though it sounds like a yes/no question. She is asking to define it.

8. Completion: Can also be if teacher gives a hint or partial answer. Example
   b. “straw…..”
Explanations
for section II

**Bringing Book to Life**

This is where the teacher uses animation such as changing their tone of voice throughout the story, using affect, showing excitement at different parts, and using gestures or body movement. The teacher can also use props as examples to enhance the story or to clarify new vocabulary, such as showing a scarf to define this word. The teacher can act out scenes or just be dramatic at certain parts of the book.

**Sensitivity to Child**

This is where the teacher is sensitive to each child’s needs (the ones that are being read to, not to be confused with entire class). The teacher provides enough time for children to think about their response, as well as allows time for children to complete their comments. The teacher may notice attempts from children to participate and will encourage those children to do so. The teacher may provide helpful hints to struggling children. The teacher accepts wrongs answers and displays warmth throughout story book reading.

**Appropriate Level of Challenge**

This is where the teacher presents challenging questions related to the book that are not too easy or too difficult for children. Challenging here will vary and depend on each child, for example whether they are English Language Learners. It is teacher’s role to decide what types of questions are appropriately challenging for their group of children. The teacher may use scaffolding techniques to provide appropriate assistance for each child. An example of a scaffolding technique is the teacher giving plausible responses to a child who barely speaks English and having the child pick the one he/she agrees with. The vocabulary that the teacher uses is age appropriate (meaning not simple or too abstract for preschoolers) and if it is new vocabulary to the children, they discuss the new terminology. New vocabulary use is encouraged.

**Effective Management**

This is where behavior management does not take time away from storybook reading, it is fast and efficient. The teacher may provide quick little reminders about how to behavior, but does not stop activity and engage in an instructional conversation about behavior issues. The teacher may redirect other classroom related issues to other staff or assistant teachers and places her focus back to the reading group. The teacher does not engage in conversations that are not related to the book, for example administrative issues with other staff members.

**Depth of Conversation**
This is where the teacher takes times to ask thoughtful questions that go beyond the superficial obvious ones, such as “what” or “descriptive” questions. The teacher may guide the conversations to encourage analysis and reasoning. The questions require the children to think about and ponder their answers or comments. The conversations between the teacher and child are fairly long (meaning multiple back and forth exchanges) and meaningful for both child and adult. The teacher may also link concepts and comments to previous learning experiences and/or child’s actual life.
Appendix D

Video taping instructions

1. Find a quiet area to do your dialogic reading session

2. Place the tripod behind where the children will sit, insert the battery into the video camera and attach the video camera on the tripod.

3. Set up the video screen to be pointed directly at you, zoom in or out to find appropriate image of you with children’s backs turned to the camera

4. Place the appropriate mini DVD labeled DR #1, DR #2, or DR #3 into the video camera to record on

5. Select your group of children to whom you will read

6. Hit the red record button before sitting down and beginning to read

7. After reading session is complete, dismiss the children, repeat each question and answer it before turning off the record button:
   a. How did you select your book?
   b. How did you pick your group of children?
   c. Did you prepare in advance?
   d. Did you have any particular goals you wanted to accomplish?

8. After answering the questions, stop the recording session. Take out the mini DVD and fill in the date, time, book, and name on it. Keep the mini DVD in the classroom until it is collected

9. Take out the battery and place it on the charger, so it is charged for your next dialogic reading video taping session