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Preschool Teacher Language and Children's Language Acquisition

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PRESCHOOL TEACHER LANGUAGE AND CHILDREN'S LANGUAGE ACQUISTION

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Abstract

Preschool for children may be the first experience in a structured setting with a teacher. A preschool environment can be an opportunity to build and increase a child's language acquisition. The primary focus of this research project was to analyze two types of teacher language when interacting with preschool children, open-ended and closed-ended dialogue. The project sought to determine how these two types of teacher language impact language acquisition for preschool children. The project began with a literature review of types of teacher language and the impact of language acquisition for preschool children. Action research involving one on one adult child interactions was facilitated by a count of a child's words in response to open-ended and closed-ended questioning. This study found that preschool children will increase their words spoken when asked open-ended questions as compared to closed-ended questions. Teachers need to be cognizant of the impact of open-ended questioning to provide opportunities for children to increase their words which can then promote extended back and forth conversations. The research document includes recommendations for practice to support children's language acquisition through the use of open-ended dialogue.

Introduction

Early childhood educators maintain the belief that effective teacher-child interactions are essential to promoting young children's language acquisition. Such interactions can be defined as conversations that consist of back and forth exchanges between teachers and children throughout a preschool day. As stated by Bond and Wasik (2009) conversations are an effective tool for language development in preschool classrooms. Conversation skills become communication for life, and preschool can be an environment to build children's language. If teacher-child interactions are high quality in which preschool teachers provide ongoing and

relevant feedback, children's language acquisition should increase (Wasik & Hindman, 2013). Teachers should understand that all interactions with children whether social or instructional can serve as a foundation for early language acquisition.

Since preschool children can develop language skills through interacting with teachers, some essential questions arise. How does teacher language impact children's language acquisition and could some teacher language limit children's language acquisition? Teacher language or teacher talk is defined as the type of statements or questions that teachers use throughout a typical instructional day. This research project was to determine how different types of teacher language impacts preschool children's language acquisition. As a program director for a preschool I personally observe teachers interactions with children. During classroom observations I see different types of teacher and child interactions. My observations include evidence that different teacher language elicits different responses from children. These different child responses impact the back and forth exchanges required for extended conversation. If early language and conversation skills are relevant to future literacy as stated by Scarborough (2001) the question arises as to how teachers could sustain and lengthen conversations. One particular focus of this research was to study preschool teacher use of questioning to extend conversation, specifically focusing on open-ended and closed-ended questions. It is of interest to me, how to best engage children in extended conversation.

Research that supports a relationship between oral language and development of successful literacy skills has been well documented. Scarborough (2001) emphasizes that children's verbal abilities are consistently the best indicators of later reading achievement. The profession of early childhood education should be an avenue for early literacy education and teacher-child interactions should promote language acquisition to support later literacy. This research project

could benefit preschool programs in regards to increasing children's language acquisition. If specific questioning techniques are found to contribute to extended conversations which build language, preschool educators must strive to include these techniques to enhance future literacy development. Literacy skills are important to all children as they progress through school and subsequent life experiences.

Literature Review

In an educational setting, preschool education provides many benefits for children's first learning experiences. Among the many benefits of preschool, language acquisition is of utmost importance and is an area that deserves positive instructional results. Developing language skills is one of the critical goals in a preschool child's education and early childhood educators must recognize the significance of building children's language. When young children with limited language are given a gift of preschool, educators must make the most of that gift to children. When children come to preschool they should be engaged in rich vocabulary encompassed with meaningful participatory conversation. Verbal interactions contribute to children's vocabulary growth which, in turn, is strongly correlated to future reading achievement (Biemiller, 2003). Teacher-child conversation is an important tool in preschool and should be used to provide comfortable conversation supporting good language modeling alongside concept development. Oral language skills contribute significantly to future reading comprehension (Biemiller, 2003). Therefore it is essential for preschool teachers to recognize oral language development as the foundation for all literacy skills. Preschool educators should always strive to provide the best preschool benefits possible to the youngest learners to support and enhance later literacy development. Success in literacy is success in school and life.

Language Acquisition and Later Literacy

Language represents a foundation for literacy learning in preschool. Considering this critical role of language acquisition and later literacy development, preschool teachers must reflect on how to create opportunities to build children's vocabulary. Scarborough (2001) states verbal abilities are consistently the best predictors of later reading achievement. Furthermore, Scarborough (2001) goes on to describe that reading acquisition is a process that begins as early as preschool. The author strongly brings to attention that children arrive at school with huge differences of basic knowledge and literacy skills.

The importance of oral language acquisition as it relates to literacy has been researched in many literacy specific areas. Many research studies find the support children receive for language has lasting effects on later reading development and comprehension. Biemiller (2003) is such a supporter of vocabulary development as an indicator of reading success; he warns that vocabulary acquisition will not occur without direct intervention from teachers. Cabell, Justice, Piasta, Curenton, Wiggins, Turnbull, and Petscher (2011) support the research that oral language is a significant antecedent to children's reading success and as other researchers have found, there is an even larger divide for children from low income families who often enter school with less language.

Dickinson and Tabors (2002) actually suggest that quality teacher-child interactions can facilitate vocabulary and language skills better than other preschool factors. They support the belief that educators at all levels must have a fundamental understanding of early literacy and embrace the knowledge that preschool experiences support literacy development. A longitudinal study conducted by Dickinson and Porche (2011) found that preschool teachers' use of advanced language during free play predicted fourth grade reading comprehension and word recognition,

mediated by kindergarten language measures. It was also found that fourth grade scores were higher when teachers tended to talk less during free play and were more responsive to permitting children to extend their thinking and use more language. Additionally they found that vocabulary acquisition can support later decoding since children are familiar with pronunciation of words. Dickinson and Porche (2011) also correlated preschool large group activities with teachers' employing efforts to maintain attention having a direct effect on later comprehension. Fourth grade vocabulary, again mediated by kindergarten receptive vocabulary was related to precise book discussion focusing on vocabulary in preschool. Tompkins, Zucker, Justice, and Binici (2013) suggest that teacher-child interactions during play with mild exposure to inferential demanding questions provide an opportunity for children to engage in conversations that include predicting, reasoning, planning and hypothesizing. Such practice with language at the preschool level can lead to advancing children's future ability to use these skills for reading comprehension. Similar results were yielded by Scarborough (2001) that text will not be comprehended by children if they do not know words in a spoken form as they are unable to use language structure, and lack background knowledge to interpret text. All of these deficits can be described as oral language limitations.

Additionally Strickland and Shanahan (2004) describe the findings of the National Early Literacy Panel that specific skills have a direct link to children's literacy development. The National Early Literacy Panel yielded results that 11 variables qualified as predictors of children's later decoding skills and comprehension. Among these 11 variables, oral language, alphabetic knowledge and print knowledge were some of the broader areas that preschool teachers can significantly impact. These studies allow the assumption that rich language experiences in preschool can develop vocabulary critical to vocabulary development and later

literacy comprehension. Biemiller (2003) supports extensive knowledge of words as necessary to become a proficient reader and states that although vocabulary is recognized as having a strong correlation to reading success, not many educational programs focus on teaching vocabulary. Instead, vocabulary growth is established by home environments, especially before third grade. Additionally, Biemiller (2003) strongly suggests that educational practices emphasizing word recognition skills in primary grades, assumes the child will obtain the necessary vocabulary once they learn to read is a flawed practice. This practice leaves vocabulary acquisition to be acquired by possible poor oral language modeling from home environments, chance and television. The author emphasizes that vocabulary and comprehension are established by both differences in home language support and school instruction. Home language can be impacted by children's family economic circumstances. Vocabulary knowledge must be taught just as phonic skills and math (Biemiller, 2003). Vocabulary development can be attained when children are provided numerous opportunities to use language in a preschool classroom. Dickenson and Tabors (2002) correlate oral language as the foundation of early literacy with three dimensions of children's experience during preschool that are related to later literacy success. The three dimensions are exposure to varied vocabulary, extended discourse and cognitive and linguistically stimulating home and classroom environments (Dickenson &Tabors, 2002). Additionally, Scarborough (2001) believes there are several aspects of verbal ability other than phonological awareness that are equally consistent predictors of later reading, from a young age.

Preschool classrooms provide time for social and instructional interactions between adults and children. A research study conducted by Gest, Holland-Coviello, Welsh, Eicher-Catt, and Gill (2006) went beyond the acquisition of specific oral language to discovering what areas in Head

Start classrooms support children's language skills. They found book reading by teachers provides the most reliable and richest levels of language and linguistic input introduced to children; however they also found that book reading is only a small amount of daily time and book reading quality needs to be enhanced. Most of children's language interaction with teachers occurs outside of book reading. Massey (2004) reiterates that conversational encounters can be planned educational events that are vital to child acquisition of oral language skills and that teachers must understand the magnitude of this strategy to build literacy skills. Research supports the importance of vocabulary as related to literacy. High quality intentional interactions can easily be a natural avenue to help children learn varied vocabulary and positively impact a children's language acquisition (Wasik & Iannone-Campbell, 2012). The researchers conclude that children learn vocabulary through multiple and relevant exposures to words they hear within a familiar context. Additionally the words children are exposed to must be accompanied by precise definitions embedded within rich language teacher-child interactions (Wasik & Iannone-Campbell, 2012). Surprisingly, Scarborough (2001) concludes the relationship between early language and literacy development and subsequent later reading achievement is similar in many studies, regardless of the differing goals and research procedures. The studies that are referenced, consistently describe a relationship between preschool language problems and school age reading problems. It has been noted in many studies that young children are most frequently surrounded by adult talk without time and consideration for the children to process the adult language (Cabell et al.,2011; deRivera, Girolametto, Greenberg, & Weitzman, 2005; Dickenson & Tabors, 2002; Durden & Dangel, 2008; Massey, 2004; Wasik & Hindman, 2013; Wasik & Iannone-Campbell, 2012). Children need and deserve a rich language and conceptual knowledge base along with verbal reasoning skills to later be able to interpret written text.

Teacher Language and Language Acquisition

In a preschool environment how teachers talk with children is vital in developing children's language. Also to be considered is the amount of verbal interactions that take place in various daily preschool settings that could pose opportunities to increase children's language development. Evidence suggests early language exposure allows children to learn from teachers and peers. According to several research studies, the type of teacher language or teacher talk used in conversations and how it can engage children in conversation can impact a child's language skills (Bond & Wasik, 2009; Tompkins et al., 2013; Wasik & Hindman, 2013; Wasik & Iannone-Campbell, 2012). Wasik and Iannone-Campbell (2012) believe the language that teachers use determines the amount and quality of vocabulary development. They continue to state that children must continually hear unfamiliar words attached to what children already know so that they can begin to comprehend word meaning and subsequently use the word in their own dialogue. Oral language development is enhanced when children participate in interactions with adults and peers that include one-on-one and small groups, when they frequently have extended conversations with adults and when they listen and respond to book reading (Strickland & Shanahan, 2004). Rich language includes varied vocabulary that describes and informs content, which teachers can facilitate by responding and elaborating on children's ideas and statements (Bond & Wasik, 2009). Furthermore children need to receive and use helpful guidance about the content of their conversations and their language use to continue to successfully practice rich language that has been properly modeled (Bond & Wasik, 2009).

Teacher language or teacher talk is defined as the type of statements or questions that teachers use throughout a typical instructional day. Researchers have described teacher verbalizations as statements that may consist of directions, classroom management, open or closed-ended

questioning, conveying information or praise (deRivera, Girolametto, Greenberg, & Weitzman, 2005; Durden & Dangel, 2008; Lee & Kinzie, 2010; Meacham, Vukelich, Han, & Buell, 2014). Teachers who use interesting and varied words while talking to children constantly provide a vocabulary rich environment to foster oral language growth where children hear and subsequently experiment with the new vocabulary (Durden & Dangel, 2008). Engaging in pretend play and conversation is often the safest way for children to begin engaging in back and forth exchanges with teachers (Bond & Wasik, 2009). During dialogue the teacher must model language exchange as part of conversation function to help children become more comfortable talking to an adult which in turn promotes language skills (Bond & Wasik, 2009). Additionally it is not just the variety of words that teachers use; it is the variety of words that children use to respond to teachers (Dickenson & Tabors, 2002).

A research study of teacher-child interactions during familiar preschool classroom activities conducted by Ndoro, Hanley, Tiger, and Heal (2006) utilized descriptive assessments to better understand antecedents and consequences of teacher instructions. The study determined what type of instructions were delivered, how they were delivered and the children's responses to types of instruction. Within the varied activities the authors discuss differences between teacher-led activities as compared to child-initiated activities. Assessment activities were primarily teacher led instructions. Although teachers initially set the stage for free choice activities for children to experience, there was more direct prompting from teachers than expected. Ndoro et al. (2006) continue to ask if teachers provide too many prompts instead of commenting or engaging a child while working in a free choice area. The study showed high levels of instruction did not occur, as teachers predominately commented on children's usage of materials.

Tompkins et al. (2013) conducted a study to examine preschool children and teacher exchanges involving inferential talk, and how this type of talk, which asks children to go beyond the present time, might scaffold children's expression leading to higher level talk. It was noted that different types of children's play makes a difference in teacher-child interactions. The study was conducted with small groups of children during a specific play activity involving play dough as structured play based activity. The study specifically was to examine how much inferential talk occurs but also to determine if children would produce inferential talk in response to teachers' inferential questions. The study did not show that higher level inferential questions promoted longer responses from children. The data from the study did illustrate that the play context of the open-ended and interactive nature of play dough, did promote teacher questions of high inferential content and immediate inferential response from children.

Extended discourse was shown to occur during normal conversations in everyday activities although free play is observed as the ideal opportunity for children to engage in stronger language acquisition (Dickenson & Tabors, 2002). Play is a natural activity for children to learn best as they talk aloud while playing, describing what they are doing and what they are planning to do next, communicating with peers all the while providing a familiar and enjoyable venue for using language (Bond & Wasik, 2009). Varied but typical classroom activities provide distinctive opportunities for teacher-child language (Gest et al., 2006). Book reading introduces rich and varied language with linguistic challenges, free play affords pretend talk to expand concepts and ideas, and mealtime offers time for talk which involves past and future experiences. Gest et al. (2006) continue to find that teachers have similar spontaneous language to children during free play, mealtime and book reading, using a similar mix of statements, questions and directives. The authors maintain that each activity offers communication skills regardless of the

setting. It is noted that adults play a significant role in oral language acquisition as young children learn how conversations work by observing and interacting with adults who are accomplished speakers of language (Massey, 2004). An important skill that Massey (2004) recognizes is that through adult-child interactions children learn the social norms such as taking turns as a conversational partner as well as learning grammar and vocabulary.

It is of concern that a majority of studies indicate that teacher language predominantly consists of giving children directions, managing the classroom, providing information, stating generic praise, and not engaging in language exchanges. Durden and Dangel (2008) yielded similar results that language use with children includes predominately assessment questions and informative statements with little occasion for children to have a need to respond, even in instructional settings. Preschool teachers must be available and prepare for interactions during the typical preschool day, especially during book reading, playtime and meal times as the most productive times to promote oral language (Massey, 2004). Teachers should recognize that everyday conversations throughout a typical preschool day are a critical opportunity to contribute and build children's oral language skills (Gest et al., 2006). A suggestion from Wasik and Hindman (2013) is that teachers must ensure that children use target words and ideas when responding and they must initiate this by providing particular words and ideas, and genuinely scaffold children's language. This type of teacher language would include modeling how children can ask questions to learn new things.

A belief of Biemiller (2003) is that teaching children common words used frequently in language is a better strategy than teaching uncommon and complex words. He supports the belief with the evidence that children require a foundation of familiar words to comprehend new and advanced text. Moreover, he sees little evidence of primary education promoting

vocabulary. Biemiller (2003) correlates acquiring normal vocabulary as a prerequisite for reading comprehension. The author views a vocabulary gap during kindergarten and second grade as impacting reading comprehension. Although he stresses that vocabulary instruction must be continuous through direct explanation as well as in response to questions about words, which should begin with very young children. This basic root word vocabulary growth requires continuous support which should occur in educational settings (Biemiller, 2003). Gest et al. (2006) agree that pretend talk provides unique opportunities to extend talk that supports linguistic challenges and that there is considerable room for intervention and improvement for teachers' use of elaborated vocabulary.

Dickenson and Tabors' (2002) results found that children did better on language assessments when preschool teachers talked less during free play. This may reflect that teachers are better attuned to children when they listen more thus allowing more time for children to put their ideas into words (Dickinson & Tabors, 2002). During free play relaxed back and forth exchanges with limited amounts of teacher talk proved beneficial. The researchers actually found if teachers tried to sustain dialogue during large group, it was not successful as children within the large group lost interest and did not attend (Dickinson & Tabors, 2002). Language represents a foundation for literacy learning in preschool. The amount of verbal interactions in various settings increases children's language development and teachers should be cognizant of these settings. Free play consistently allows the best opportunities for language exchanges in a comfortable and relaxed manner. Of great importance for teachers to fully respect is that when children feel secure, they engage actively in learning, and when insecure, they avoid activity and interaction.

Sustaining Conversations

Acknowledging the researched fact that children's oral language skills increase later literacy development, it is necessary to create consistent, meaningful opportunities for conversations to occur in preschool in order to develop and extend language (Bond & Wasik, 2009). Teacher-child interactions can be described as conversations that consist of back and forth exchanges between teachers and children throughout a preschool day. Conversation is an important tool for promoting oral language development (Bond & Wasik, 2009). Wasik and Iannone-Campbell (2012) clearly demonstrates that conversations with others allow children to use language in relevant ways, builds early language and vocabulary skills.

Conversation skills become communication for life, and preschool can be a setting to build children's language. As stated by Bond and Wasik (2009) conversations are a necessary and relevant avenue for language development in preschool classrooms where teachers and children must actively listen to each other in order to engage in purposeful dialogue to intentionally expand children's language. Wasik and Hindman (2013) agree that for children to build language skills they must engage in conversations to practice meaningful communication. Additionally the authors state that children must learn from adults who are skilled users of language allowing subsequent conversations where children hear new words with understanding and then practice using the words (Wasik& Hindman, 2013). If teacher-child interactions are high quality in which preschool teachers provide ongoing and relevant feedback, children's language acquisition should increase (Wasik & Hindman, 2013). Conversation that includes teacher language should become back and forth exchanges that support and extend children's thinking and subsequent acquisition of language. Bond and Wasik (2009) find that children's language skills increase when they take an active part in conversations with teachers who are

able to scaffold language and create opportunities for children to learn and practice sentence structure. Wasik and Iannone-Campbell (2012) further state that purposeful conversations guided by teachers provides opportunities for children to use and hear vocabulary multiple times which then allows children to experiment and use new words. Moreover, engaging in conversation intended to develop children's vocabulary must be paired with teachers planning for purposeful, strategic conversation that incorporates vocabulary development attained through activities and experiences provided in the classroom (Wasik & Iannone-Campbell, 2012). Teachers must create a setting where children engage in purposeful conversation allowing children to use and explore the meaning of new words within related experiences, otherwise children will not easily learn word knowledge (Wasik & Iannone-Campbell, 2012). Such practices for sustaining conversations are designed to support children's understanding and use of new vocabulary. Meaningful back and forth feedback encourages children to think about responses and intentionally attempt to use new vocabulary, which supports prior knowledge and the ability to use new vocabulary in proper context (Wasik & Iannone-Campbell, 2012).

In support of continuous conversation, deRivera et al. (2005) found preschool children used more words when responding to open-ended questions. Sustaining conversation offers children more time to express themselves as well as use and experiment with new and varied language. Such exchanges could be facilitated by open-ended questioning to sustain conversations. Dickenson and Tabors (2002) describe conversations as extended dialogue which becomes an important contributor to children's language. They further state that adults can extend and enrich conversations with children. Their study findings support teacher-child interaction and types of conversation as the most meaningful difference to early language and literacy development. Extended discourse requires children and teachers to use more than one sentence to build

linguistic structure to express explanations and pretend talk (Dickinson & Tabors, 2002). Frequent conversations with children engage them in challenging forms of talk and correlates with sensitive and responsive teachers (Gest et al., 2006). Another dimension expressed by Gest et al. (2006) is that they found a positive association of quantity of teachers' talk and teachers' responsiveness lead to higher rates of challenging talk. Teacher sensitivity is related to teacher availability for children to engage in challenging talk (Gest et al., 2006).

Preschool can provide an essential venue for extended conversations, as children are willing to listen, process and respond. Conversation is quite simply stated as "if children only use a few words to respond to a question, they are not able to practice using language as fully as they should" (Wasik & Hindman, 2013, p. 308). Several studies have suggested that cognitively challenging dialogue is infrequent in preschool as teachers do not actively engage children in conversation (Massey, 2004). Massey states that teachers devote time to children's pretend play but the conversations are not sustained with stimulating content, instead the teacher engages in classroom management strategies. When this occurs, children are not provided a venue to share explanations or ideas or even respond to teachers' questions or statements. A Durden and Dangel (2008) study found similar findings as they documented very few high-cognitive demands during small group activities even though the activity was language rich. The children's responses tended to be one word and their thinking was not challenged. In the area of reciprocal conversation the study showed teachers controlling the direction of back and forth conversation. Much of the teacher language was to convey information for the instruction of the small group objective. Durden and Dangel (2008) view small group activity as a venue to support naturally occurring conversation between teacher and child and although the materials for small group were readily accessible to children, even with a guided approach, language from

the teacher was primarily to provide directions. The authors suggest that teachers consider how small group activities should encourage authentic conversation and cognitive challenging talk. The ultimate goal of sustaining conversations is to ensure teachers engage in extended back and forth conversations with children that provide ample time for children to hear and use new words. Cognitive challenge for children is necessary to foster higher-order thinking and the most successful venue for children to acquire the capacity to learn and use new words is within a meaningful experience. Wasik and Hindman (2013) agree that management only talk gives children few chances to hear new vocabulary words and rarely a chance to speak their own thoughts. In addition, an abundance of teacher management talk leaves little time for a teacher to precisely define new vocabulary. Wasik and Hindman (2013) continue that in addition to questions teachers should make statements that invite children to elaborate on their activities in the classroom.

Similar results were yielded by Tompkins et al. (2013) during their study of teacher-child talk. Approximately two thirds of teacher language was comments and managerial questions. After removing the comments and managerial questions the researchers were able to determine that teachers' questions were balanced between literal questions and inferential questions. The results for children's response were children responded to half of the literal questions and only one third of the inferential questions. The Tompkins et al. (2013) study supports the belief that to engage in conversations with children, questions within play are more likely to engage children in back and forth language than directives or comments.

Cabell et al. (2011) conducted research that involved professional development over the course of one school year to attempt to change preschool teachers' conversational performance. The teachers received professional development on two methods to promote ongoing back and

forth classroom conversations with children. The focus was to teach teachers to be conversationally responsive partners, by following children's lead, asking open-ended questions. Further skills taught were to expose children to advanced language models by repeating children's words and expanding and extending children's ideas. Both practices were intended to promote high quality dialogue in which children and teacher would take multiple turns (Cabell et al., 2011). The results, even with targeted professional development were minimal as only half of the classroom conversations encompassed four or more turns. Only 10% of conversation lasted ten or more turns. Although there was no evidence to support significant gains in children's language skills, children did speak more frequently using a greater variety of words within longer statements. The Cabell et al. (2011) researchers did find when teachers concentrated conversation strategies in fewer conversations; children's vocabulary growth was greater. To sustain conversations, teachers should encourage, question, predict, and guide children's exploration and problem solving. For children to be able to incorporate new words into everyday vocabulary, Wasik & Iannone-Campbell (2012) emphasize that children must continually use these words in multiple contexts.

Building Children's Language through Responses

Preschool teachers tend to design instruction around themes and most may not realize concept development and building language skills can occur simultaneously through teacher-child interactions. Teachers can support genuine language gains for children as teachers and children integrate new and familiar words as related to theme learning. Wasik and Bond (2009) found that when preschool teachers presented vocabulary in theme learning including book reading and theme related activities children more likely to learn vocabulary. This is good news for teachers who tend to teach by themes rather than project or investigative learning. Rather than learning

words in isolation, new vocabulary can be intertwined with theme learning. Theme based teaching is prevalent in preschool classrooms which allows teachers to use prompts focused on particular words and ideas that align with lesson plans prepared. Children remember new words when they have multiple opportunities to use the words. Although in contrast to more natural conversations, this intentional focus on specific content and language helps ensure that children respond with targeted concepts and corresponding vocabulary. During instruction and introduction to new concepts and words, children should be permitted to explain their thinking which can be intentionally extended by open-ended teacher language.

When asking children to respond, if children are given time to think and explain their thinking, varied and advanced language should follow. Wasik and Iannone-Campbell (2012) state that to best support scaffolding for children's language development teachers must allow children the time to think about their response as a part of purposeful and relevant conversations. They further found that when teachers do ask open-ended questions, teachers frequently do not allow children to respond to the questions or follow up with a closed question which children then answer without using new thoughts. As an affirmation to this dilemma, Wasik and Iannone-Campbell (2012) found that teachers rarely follow up an open-ended question with another open-ended question to further enhance a child's responses. Teachers often quickly move on to another child asking the same question or proceed with another question (Wasik & Iannone-Campbell, 2012). When these common practices are applied, children have no reason to expand language. Wasik and Hindman (2103) emphasize that teachers need to make an intentional effort to focus many of their prompts on the theme vocabulary and concepts. This detailed planning is essential for ensuring children's attention and talk is focused on the learning

objectives. Once teachers have children talking they can keep children talking using the vocabulary and ideas of the lesson.

Once teacher language is facilitated, Wasik and Hindman (2013) agree that offering an open-ended question is only the beginning and allowing children to respond using their own language is just as imperative as questioning. Durden and Dangel (2008) found that even in quality preschools the dialogue during most activities is often teacher dominated with simple questions rather than asking questions to stimulate children's thinking. Even in small group instruction where Durden and Dangel (2008) acknowledge there is more opportunity to talk individually with children and introduce vocabulary, language is limited to managing children and providing instruction and information. An interesting observation by Durden and Dangel (2008) was that children tend to use complete sentences when children initiate conversation. In comparison, they learned through their research that children respond most frequently with only one word when adults initiate conversation. This observation was not mentioned by other researchers.

Research further acknowledges that current educators understand the relevance of good teacher-child interactions but do not engage in better practices while working directly with children. The study by Lee and Kinzie (2010) concludes that the lack of high quality questions may deprive students of a stimulating educational environment that should increase language cognitive abilities. Teachers recognize that engaging children in conversation encourages children's language use, but even while working with very small groups of children, quality reciprocal dialogue is limited. Another study by Pence, Justice, and Wiggins (2008) involving a full year of teacher training and targeted to implement teacher-child interactions within a precise language-focused curriculum still yielded a low teacher use of language-focused instructional practices. This study on preschool teachers' fidelity to curriculum found that on average,

teachers even after being provided professional development, did not implement the language-focused curriculum and to an even lesser extent implement language techniques to stimulate teacher-child language (Pence et al., 2008). The Pence et al. (2008) study did show that some language based curriculum are uncomplicated enough for teachers to implement following minimal training, while other aspects are more challenging. However, the key feature of language-focused curriculum is the emphasis on teacher-child language. Teachers were able to implement more tangible practices but not implement practices that require a modification in the way they interact with children. Pence et al. (2008) suggested that efforts be concentrated on helping teachers learn to use language acquisition interactions rather than implementing the improvement of classroom activities. Wasik and Hindman (2013) yielded similar results as preschool classrooms they studied did not fully provide opportunities for children to build language. They actually found most classrooms teachers do most of the talking, leaving little time for children to talk. The second part of their research study showed that teachers do not use rich or complex language most of the preschool day. They use simple language focused on behavior management, such as giving directions, responding to misbehavior or providing generic praise (Wasik & Hindman, 2013). Similarly Wasik and Hindman (2013) believe if children only use a few words to respond they are not able to practice using language as fully as they should. Feedback must be helpful especially when encouraging children to complete their thoughts through sentences. This involves the teachers using and modeling complete sentences in their own dialogue. Teachers must listen carefully to what children say and provide feedback that directly relates to the child's response. During feedback, Wasik and Hindman (2013) advise that asking the open-ended question is only part of the language exchange, ensuring that children respond is equally or more important. This can be accomplished by teachers encouraging as

much child talk as possible by comparing and contrasting children's ideas. Evidence of the benefits of feedback as suggested by Wasik and Hindman (2013) are that children gain by expressing their ideas to teachers and classmates.

Durden and Dangel (2008) conclude that "teachers and teacher educators need to be more cognizant of their language, including its purpose and opportunities to facilitate cognitively challenging conversations with young children" (p. 251). Asking a teacher to change questioning techniques does not come easily and there must be planned efforts to engage children in specific back and forth exchanges to initiate child responses. Studies validate evidence that preschool teachers understand the importance of open-ended dialogue for children's growth but do not implement this basic and fundamental instructional practice. Many descriptive classroom studies support the belief that teachers do much of the talking in preschool classrooms, leaving little time for children to use and experiment with language (Wasik & Iannone-Campbell, 2012). Preschool teachers should provide the youngest learners with the opportunity to build confidence to express their knowledge through a wide range of appropriate language that coincides with their eagerness to learn about their world. The more children talk about concepts while using new words by making connections to prior knowledge, the better chance the words will become part of their everyday knowledge (Wasik & Iannone-Campbell, 2012).

There is a need to further understand the importance of building children's language as a foundation for later successful literacy skills. Literacy skill development is an important benefit of children's first school experience. It is of particular interest that the literature reviewed thus far, finds that even when teachers acknowledge the importance of interactions as extremely beneficial they do not engage in conversations with children. Early childhood educators should

be responsive to the significance of language acquisition and consciously move away from directive and closed-ended to open-ended dialogue to encourage responses. Research shows that closed-ended dialogue limits children's reciprocal speech and does not extend to back and forth exchange. Open-ended dialogue stimulates more language use as back and forth exchanges are extended. Moving away from closed-ended questions, even during assessment, and moving towards open-ended dialogue should become an area for growth for the teacher, as closed-ended questions end conversations abruptly and end growth for the child entrusted in their care. As teachers enhance capacity to engage in purposeful conversations, they learn to implement conversation throughout a child's preschool day to continuously develop language daily.

Open-Ended and Closed-Ended Questions

Questioning as a strategy in early childhood education can be emphasized and strongly supported in language acquisition leading to early language and literacy development. Questions are considered to be one of the important strategies teachers use to engage children in dialogue (deRivera et al., 2005). Asking children questions are an important part of teacher-child interactions and questions are one of the most commonly used teacher-child interactions in preschool. Questions are naturally designed to elicit a response, therefore when children respond to meaningful questions, they problem solve, scaffold their own learning and practice using new words. The research study by deRivera et al. (2005) found that questions are a necessary role in promoting conversations because asking questions maximizes young children's attention and encourages them to respond. A definition of open-ended dialogue by deRivera et al. (2005) is if a question can be answered by a single word response or multiple word response. Open-ended dialogue is thought to elicit children's thoughts and explanations as the researchers found that preschool children will offer a larger demonstration of their language abilities when answering

questions that are open-ended. deRivera et al. (2005) found that preschool children used more multiword responses to open-ended questions than to any other type of question. They also identified questions related to a topic children were involved in as eliciting more multiword responses. In conclusion to the study, deRivera et al. (2005) suggests that teachers need to attend to open-ended questions as well as content specific questions to elicit higher level and enriched language production.

Teacher-child interactions must provide children the chance to use vocabulary words they are learning, to develop their conceptual knowledge. Teachers must encourage children to explicitly use new words being taught, by including open-ended questions and statements that incorporate the unfamiliar words while setting the stage for a multiple word response (Wasik & Iannone-Campbell, 2012). This strategy ensures that children would need to connect new words to concepts they are learning about by building vocabulary and concept development simultaneously. Bond and Wasik (2009) agree that asking open-ended questions affords better opportunities for teachers to engage children in conversations that permit children to talk and use vocabulary in a relevant manner as a means to explore the meaning of new words. Durden and Dangel (2008) additionally found functional and cognitive demand to differ according to activity. In a teacher guided and exploratory rather than teacher directed activity teacher language was more open-ended. The open-ended language encouraged more thinking and genuine reciprocal language from children (Durden & Dangel, 2008).

Current research has found that preschool teachers use language differently in different activities and different areas of the classroom. Meacham, Vukelich, Han and Buell (2014) focused on one area, sociodramatic play as they believe it is an interest area that supports children's language development. This research was conducted to examine preschool teachers'

use of questions as they participated in children's play specifically in the dramatic play area of a preschool classroom. The teachers collectively used open-ended questions 11% of all teacher language and used closed-ended questions 24% of all teacher language. The majority of teacher language at 64% consisted of non-question comments (Meacham et al., 2014). Almost all the teachers had similar results and general commenting was consistently more frequent than questioning. Children responded to only 23% of all teacher language either verbally or non-verbally. The children were unresponsive 77% to all teacher language. The children verbally responded to only 14% of non-question language and verbally responded to 38% of open-ended questions and 27% of closed-ended questions (Meacham et al., 2014). The overall research supports the use of open-ended questions and the use of closed-ended questions to encourage children to talk and model language. Children's rate of response to open-ended questions was higher and the no response rate was lower. Of interest was that although open-ended questions prompt children to use more language, children still gained from closed-ended questions. It was noted that children's rate of response to closed-ended questions was not much less than open-ended questions. Meacham et al. (2014) provided evidence that closed-ended questions actually provided good teacher language modeling and help children to learn how such questions are used in real life experiences. The authors did caution that even though the difference in child response was not significant, repeatedly using closed-ended questions will limit children's language as the responses are complete in one or two words. The researchers state that both open-ended questions and closed-ended questions both initiate verbal interactions and should continue as a means for children to experiment with language. The researchers emphasized that when children only hear statements they lose a variety of opportunities to acquire and practice language (Meacham et al., 2014). Finally the study showed the more teachers talk, the fewer

questions they tend to ask children, significantly limiting children's chance to interact. Likewise, they found when teachers use open or closed-ended questions children verbally interacted more frequently than if the teacher did not talk to them at all. When teachers did talk with only comments, children did not respond as often, further limiting chances to practice language.

Bond and Wasik (2009) define closed -ended questions as having only one correct answer requiring few words. deRivera et al. (2005) further define these as questions that actually restrict a child's response, questions that generate a one-word response. deRivera et al. (2005) indicated that open-ended questions and topic-continuing questions were related to children's multiword responses. Also when teachers repeatedly ask closed-ended questions even during pretend play, children's opportunity to speak was actually hindered because responses were single or few words. Open ended questions seem particularly amenable to engaging children in extended cognitively challenging conversations, as they place relatively little constraint on children's responses. Accordingly, deRivera et al. (2005) refer to open-ended questions as low constraint and children's response to these questions tend to be longer and more variable in their content than those of high-constraint questions such as yes/no questions. These definitions correlate with the Lee and Kinzie (2010) findings that open-ended questions are more likely to elicit responses utilizing more varied vocabulary and more complex sentence structure. Lee and Kinzie (2010) support the belief that closed-ended questions tend to elicit short response utilizing limited vocabulary. The cognitive level and language use of children's responses showed that open-ended questions intended for prediction and reasoning were likely to elicit language with higher levels of cognitive skills. Children's responses to closed-ended questions intended for recognition and recall were likely to elicit language with lower levels of cognitive skills. This

language had limited vocabulary as children respond with short answers, often only using one or two words (Lee & Kinzie, 2010).

Considering research, it is apparent that open and closed-ended dialogue can specifically determine how children respond. Although there seems to be teacher acknowledged importance of open-ended questions, deRivera et al. (2005) found that three-quarters of questions were closed-ended. Anecdotal evidence as well as several research studies show the majority of preschool conversation is closed-ended by teachers merely making a statement about what children are doing or a directive telling children what to do or how to do something (Meacham et al., 2014). Another study motivated by the understanding that questioning is a vital component for language acquisition in preschool was conducted by Massey, Pence, Justice, and Bowles (2008) who found the majority of questions were management questions used to maintain conversation and manage behavior rather than questions used to make inferences or predictions to increase vocabulary. Unlike comments, questions specifically invite children to take a turn in teacher-child interactions, even though not all questions provide children with opportunities to engage in more challenging language (Massey et al., 2008). Lee and Kinzie (2010) found substantially more closed-ended questions than open-ended questions in the area of science instruction. Open-ended questions were 35% of the total number of questions and closed-ended questions were 65% of the total number of questions. The researchers did note that in some exchanges the teacher shifted from one type of question to another. The most prevalent was a 21% shift from open-ended to closed-ended and occurred when a child struggled to response to the initial open-ended question. In only 1% of exchanges did a closed-ended question evolve into an open-ended question to extend exchanges (Lee & Kinzie, 2010).

There are appropriate venues for different types of teacher language as when teachers are gathering assessment of children's knowledge. Although closed-ended questions can be used for children to recognize and recall facts, such language consists of lower level skills (Lee & Kinzie, 2010). Conversely, for children to practice newly acquired language, open-ended dialogue elicits children's responses of more vocabulary, complex sentence structure, and higher level thinking. Lee and Kinzie (2010) add that asking children to predict or reason elicits higher level skills using Bloom's Taxonomy. As children and teachers have back and forth exchanges encouraged through questioning, children's ideas are validated and respected and open further avenues for children to naturally build skills. Closed-ended dialogue elicits children's responses of a one word answer, not in the format of a sentence and lower level thinking. This type of exchange stops conversation and ends opportunities for children to learn and experiment with new language.

The Wasik and Hindman (2013) study focused on the strategy of asking open-ended questions to build language skills. The authors emphasize that open-ended questions provide opportunities for children to express ideas and receive feedback. Since the study focused on open-ended questions the authors used the term open-ended prompt, which is a question or statement with more than once correct answer and initiates a more than one word response. The researchers used the terminology open-ended prompts because both questions and statements allow children to hear and use language in a relevant manner. Wasik and Hindman (2013) describe closed-ended questions as having one correct answer facilitated by one or two words. These researchers also acknowledge such questions can serve the purpose of assessing children's knowledge for specific content. To really build early language skills, open-ended prompts offer children more opportunities to talk and share ideas. Open-ended prompts help teachers learn what children

know and can model additional questions for children to ask about in relation to a topic. Such interaction shows children that their teachers are interested in listening to them and invite them to participate in reciprocal conversations (Wasik & Hindman, 2013). Even though research shows that teachers are aware of the importance of open-ended conversation with children, recent research shows a very large absence of children using extended language.

Using open-ended prompts is only the beginning of helping children build language. The children must respond with new language skills. What makes a difference for children's language acquisition is the opportunity for children to have time to gather ideas and then respond (Wasik & Hindman, 2013). Teachers must continue to engage children by asking follow up questions to encourage children to talk as much as possible. Although difficult in some classroom activities, wait time must be provided. Once teachers get children talking they must keep children talking. When teachers are successful in asking children questions that become back and forth exchanges, children are able to practice using new language skills (Wasik & Hindman, 2013). As conversation continues, teachers responses should directly relate to what children have discussed, being cautious not to move on too quickly to another question.

Wasik and Hindman (2013) yielded similar results as other researcher concluding many preschool teachers regularly miss opportunities to engage children in dialogue. Wasik and Hindman (2013) address the specific times of a preschool day and the best scenarios to incorporate open-ended prompts. Teachers must learn and be cognizant of the value of open-ended prompts throughout the day, in every area of the classroom, inclusive of large group and small group time. Using the technique of open-ended prompts is an effective and promising tool to promote early language skills for young children (Wasik & Hindman, 2013). The field of early language and literacy has promoted the use of open-ended dialogue as an effective tool to

develop language, vocabulary and language skills. Open-ended questions allow children the needed time to respond, but just as important is that these types of questions provide the teacher the chance to scaffold children's language by providing proper feedback to further extend the child's thinking and use of language (Wasik & Iannone-Campbell, 2012). Wasik and Hindman (2013) add that open-ended prompts address more complex ideas which allow for children to compare and contrast during responses. Although Wasik and Hindman (2013) emphasize open-ended prompts can and should happen continuously and often, most teachers find that certain parts of the day work better for certain kinds of exchanges. Small group time is an excellent time for children to receive individualized attention where open-ended questions should be planned in anticipation of the activity in which children are engaged. Additionally small group instruction which is a staple of preschool classrooms allows teachers to meet children at their developmental language level and provide language scaffolds, especially for children who exhibit less language.

Preschool teacher talk (Tu & Hsiao, 2008) provided excellent specific types of teacher talk in this research study. The study consisted observations during children's free play with and without a formal science lesson. Findings were that preschool teachers used more statements containing praise or acknowledgement and closed ended questions during children's free play. When a formal science activity was facilitated teachers used more statements containing information and attention focused questions. The most frequent teacher child interactions were learning guidance, followed by specific information talk. Teachers used more verbal statements than questioning statements. It was documented that within learning guidance statements teachers set behavioral expectations during the activity to maintain classroom management. The two most frequent questioning statements were closed questions and problem-posing questions.

Teachers rarely used follow-up statements, action, comparison and reasoning questions (Tu & Hsiao, 2008). Preschool teachers used more measuring and counting questions in block and manipulative areas of the classroom and more reasoning questions in the dramatic play areas where children are able to role play. Teachers interact most often in the art and sensory area and least often in the science area (Tu & Hsiao, 2008). Of note is that children did not sustain dramatic play when the teacher was not attentive.

Cabell et al. (2011) state bluntly teachers do not intuitively nor naturally speak in ways for children to acquire language. This statement is counterintuitive to an image of a caring and nurturing preschool teacher whose sincere intention is to educate children. Much of the research in this literature review supports this unproductive reflection. Most preschool children arrive at school ready to learn all they can from teachers, peers and their new environment. Preschool teachers must not let this enthusiasm become a lost opportunity to build children's language. Children's oral language skills have been shown to support later literacy, which becomes an imperative life skill. Teachers must be intentional in all conversational efforts and during much of a preschool day, to build children's capacity for language. An essential educational practice to support children's language acquisition is through extended back and forth verbal interactions. Such interactions include closed and open-ended teacher dialogue. Sustained interactions can be facilitated by the appropriate use of open-ended dialogue that invites children to use and experiment with language during conversations. The action research will provide an indication of how preschool children respond to closed and open-ended questions during a very familiar and comfortable area of play.

Research Questions

1. How does the type of teacher language use in preschool, impact language acquisition for children?
2. How does the type of teacher language limit language acquisition?
3. How does open-ended and closed-ended teacher dialogue impact back and forth exchanges?
4. What are recommendations of practice for preschool teachers to extend conversations that build language for children?

Methodology

The primary research methodology for this project was to establish through a study of scholarly peer reviewed literature how teacher language in preschool impacts children's language acquisition. Children's language acquisition has been determined by several researchers to impact later literacy. The scholarly literature describes the type of teacher language occurring in preschool settings. Teacher language was defined as specific types of language. Following descriptions of teacher language, the impact of children's language acquisition in response to teacher language was analyzed and synthesized. One component of the literature review was to determine if teacher language could limit language acquisition for children. Once the relationship of teacher language and children's language was established, the literature was reviewed to determine how conversations with children can be sustained. The literature review focused on open and closed-ended questions posed to children and how questioning can relate to building children's language through responses. The goal was to specifically identify how open and closed-ended questioning impacts teacher-child back and forth exchanges.

My current job position as a preschool director offered the opportunity to conduct an action research project. The data gathered is quantitative with no distinction of child identity. The data gathering was a straightforward count of a child's words in response to open and closed-ended pre-determined questions in a pre-determined setting. If the child did respond, data was gathered as to what type of response the child utilized in regards to a one word or more than one word response. The purpose of the action research was to determine how specific questioning impacts the number of words a child uses in responding. Approval to conduct action research was obtained from the Institutional Review Board for the University of Mary Washington. Approval to conduct action research in a school setting was approved by Spotsylvania County Public Schools, who request a research project submission following completion of the project.

The sample of children was currently enrolled preschool children with appropriate consent from the parents or guardians. It was a challenging effort to acquire 20 signed Informed Consent Release forms (see Appendix A). The demographic this particular preschool serves may have found the required form difficult to understand. An advantage was that previously established relationships provided an opportunity for classroom teachers to individually describe the project to parents. Once this was accomplished, permission for four to five children from four preschool classrooms was granted. The sample of children was 20 preschool children ages 4 to 5 years. The selection was a convenience sample of typically developing children, not based upon a child's current level of language skills.

The action research consisted of one on one adult interaction with a child during choice time, which is one hour of the instructional day where children select from eleven or more interest areas where they would like to play. The hour is an uninterrupted time period to provide time for extended play and discovery. Due to the typical preschool noise level and the sensitivity of the

voice recorder, I positioned myself as close to the classroom door as possible. As expected, there was no hesitation of any child invited to join me as most children naturally seek out individual attention and gravitate to adults entering a classroom. To ensure a controlled condition, I brought the supplemental materials to the classroom. My assumption was that when children are exposed to new materials their interest is more easily sustained, however throughout each session there was no problem keeping children attentive. As also expected, many children had to be turned away due to the fact that I did not have a signed Informed Consent Release form. To help with the immediate disappointment I allowed the children to take some play dough with them to another interest area. The play dough texture and color was pre-determined to provide consistency to the data gathering. None of the 20 children asked to leave the data gathering area. In actuality it was difficult for them to leave once the data gathering was complete. Time did not allow them to have extended time with me; however I was sensitive and appropriate in providing a successful transition to another interest area.

Each session began with the child and me, exploring the play dough. We engaged in some simple back and forth introductory conversation. I showed the children the voice recorder and explained and modeled how it worked. None of the children seemed unfamiliar with the device. Once comfort and rapport was quickly established I told the children when I would start and stop the voice recorder and what would occur each time. The open and closed-ended questions were pre-determined (see Appendix B). I was prepared in advance to manage conversation if a child began their own questioning and statements. This did not occur as the children remained engaged at the task at hand. To accurately count each child's words, I used a voice recorder. I transcribed the number of words spoken by the child from the voice recorder onto a Data Gathering Form (see Appendix C). The completed Data Gathering Form only identifies the child

with a number from 1 to 20. There was a check box to identify non-verbal responses and additionally a check box for unintelligible sounds. Upon completion of the voice recordings, I transcribed and recorded the raw data into an excel spreadsheet, entering how many words a child used to verbally respond to each of the five pre-determined open and five pre-determined closed-ended questions. The completed data from the excel spreadsheet was used to determine the impact of the use of questioning to extend conversations with children.

Analysis

The action research conducted in this study was to determine the impact of open-ended questions. The action research involved 20 preschool children of the ages 4 and 5 years. The data collected was analyzed to identify if children used more vocabulary when they were asked open-ended questions. Results were determined by counting the exact number of words spoken for each of five closed-ended and five open-ended questions. To begin the data analysis the exact number of words for each child and each of the ten questions was placed into a table (see Table 1).

Table 1

Number of Words Spoken by Each Child

	Closed- Ended Questions						Open-Ended Questions						
Question:	**1**	**2**	**3**	**4**	**5**	**Average**	**1**	**2**	**3**	**4**	**5**	**Average**	**Increase**
Child 1	1	1	1	1	7	**2.2**	3	2	7	12	7	**6.2**	**4**
Child 2	1	1	0	0	2	**0.8**	6	4	11	3	13	**7.4**	**6.6**
Child 3	1	1	1	1	2	**1.2**	2	32	9	3	3	**9.8**	**8.6**
Child 4	0	1	1	1	6	**1.8**	4	5	20	9	17	**11**	**9.2**
Child 5	0	1	0	0	2	**0.6**	4	8	5	2	5	**4.8**	**4.2**
Child 6	1	1	1	1	2	**1.2**	2	2	3	0	0	**1.4**	**0.2**
Child 7	1	1	0	1	8	**2.2**	7	5	3	6	7	**5.6**	**3.4**
Child 8	0	1	1	1	1	**0.8**	5	29	8	5	4	**10.2**	**9.4**
Child 9	1	1	1	1	2	**1.2**	3	5	9	6	2	**5**	**3.8**
Child 10	1	1	1	1	3	**1.4**	32	5	26	3	13	**15.8**	**14.4**
Child 11	1	1	1	1	11	**3**	24	6	9	7	6	**10.4**	**7.4**
Child 12	1	1	0	1	9	**2.4**	2	3	3	1	7	**3.2**	**0.8**
Child 13	1	1	1	3	8	**2.8**	64	4	3	13	15	**19.8**	**17**
Child 14	0	1	0	0	2	**0.6**	13	5	0	4	5	**5.4**	**4.8**
Child 15	1	1	0	1	2	**1**	4	3	12	6	14	**7.8**	**6.8**
Child 16	0	1	0	0	1	**0.4**	4	0	0	1	3	**1.6**	**1.2**
Child 17	1	7	3	2	4	**3.4**	39	3	27	35	45	**29.8**	**26.4**
Child 18	1	1	0	0	4	**1.2**	2	8	0	4	1	**3**	**1.8**
Child 19	1	1	1	1	2	**1.2**	27	3	15	6	4	**11**	**9.8**
Child 20	1	1	0	0	3	**1**	9	3	3	6	1	**4.4**	**3.4**
	Closed Ended Average:					**1.52**	**Open-Ended Average:**					**8.68**	**7.16**

Table 1 shows that children responded to closed-ended questions with an average of 1.52 words, and responded to open-ended questions with an average of 8.68 words. The average increase in words per child was 7.16 additional words. The results of the data find that open-ended questions generated more child language by an average of 471%.

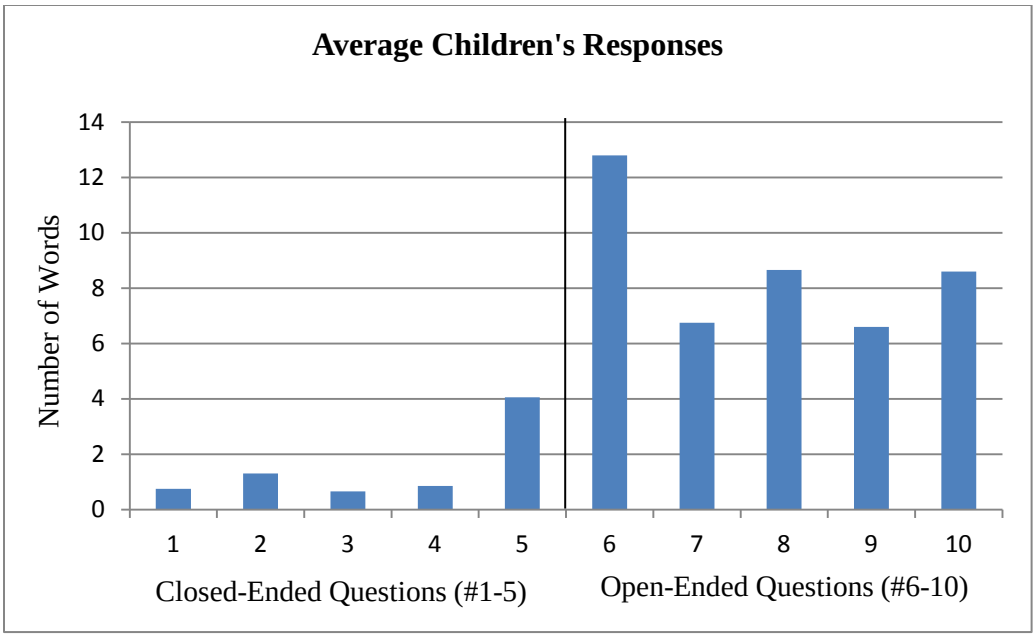

Figure 1. Average number of words spoken for each question. The data shows an increase of words spoken for open-ended questions as compared to closed-ended questions.

The following analysis describes the ten pre-determined questions presented to children for data gathering.

Questions 1-5 presented as closed-ended indicated the following:

- Question 1 "Do you like to play with play dough?" never generated more than a one word response.
- Question 2 "What color is the play dough?" only generated a one word response except for Child 17 who shared other colors of play dough in existence.
- Question 3 "Does play dough smell?" only generated a one word response except for Child 17 who used three words to explain his like for play dough. This question generated the most non-verbal responses as almost half of the children expressed agreement by a nod of the head.

- Question 4 "Is the play dough sticky?" again generated a one word response or non-verbal response. Child 13 responded with the most words of three, expressing the play dough was not sticky.
- Question 5 "What did you make?" generated the greatest amount of words spoken of the closed-ended questioning as this question offered a bit of opportunity for a child to elaborate. Most children answered with one to three words.

Questions 6-10 presented as open-ended indicated the following:

- Question 6 "How did you make that?" generated the most increase of words as children described how they had just made something. It was an immediate experience they easily recalled with additional language.
- Question 7 "What will you do if it gets smashed?" did not generate a large number of words as many of the children responded that they would simply start over. Child 3 and Child 8 both responded with a few words for question 6, and then used question 7 to describe question 6 in detail.
- Question 8 "How do you think we make play dough?" appeared to be dependent on prior knowledge. Five children responded with the three words "I don't know" and three children had a non-verbal response. The children with prior knowledge responded with many words.
- Question 9 "Why do you think play dough feels squishy?" showed the least amount of words spoken. This question provided the opening for children to respond only using the single word "because" or with a response of one or two other words.

- Question 10 "What else can you do with play dough?" although generated an average increase in words, many children did not go into detail of what they would make additionally.

The following three figures show the words spoken by each of the 20 children:

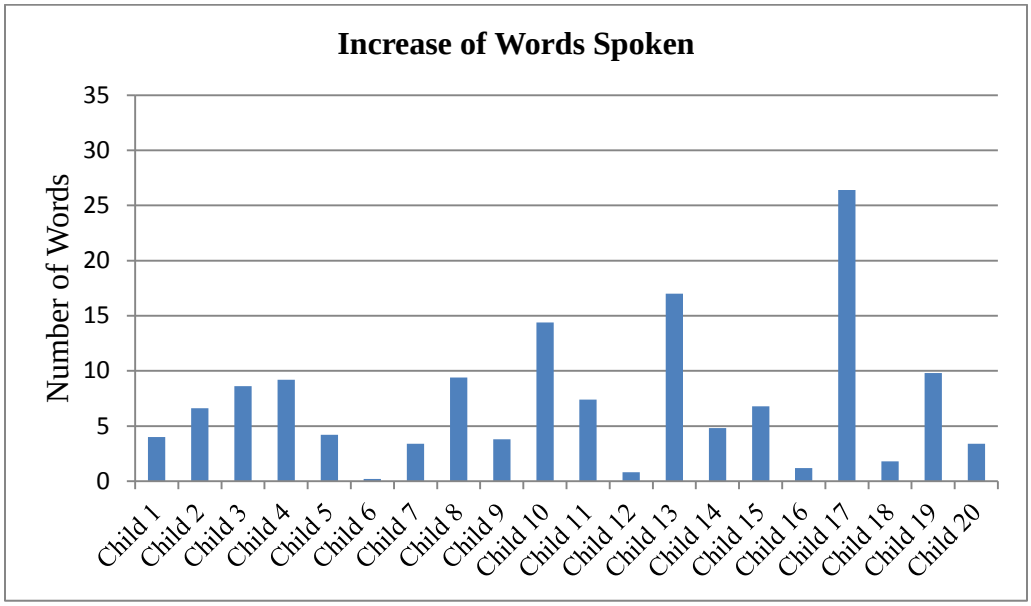

Figure 2. Every child demonstrated an increase of words spoken.

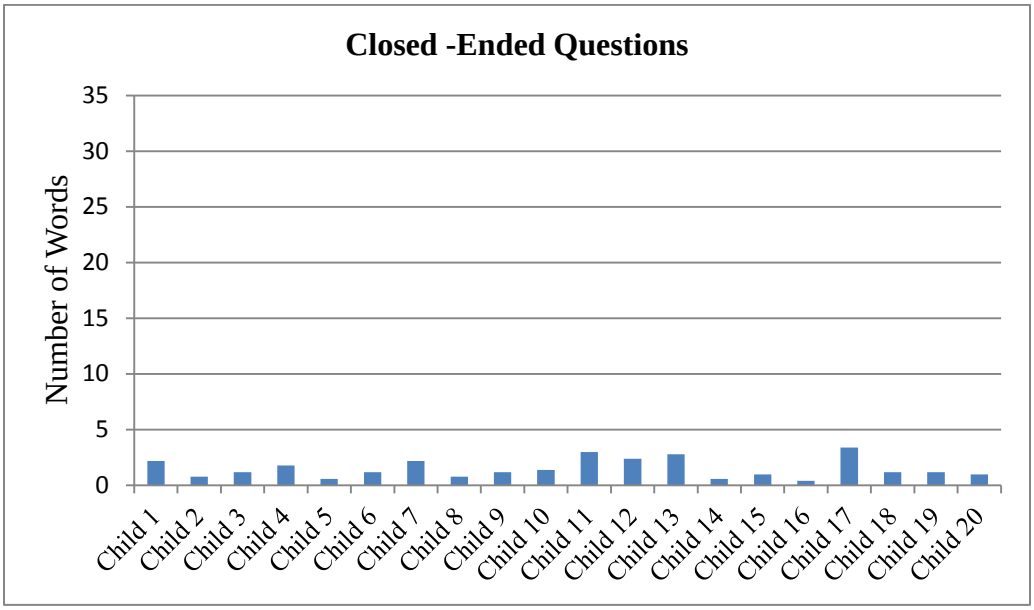

Figure 3. Average number of words spoken by each child for closed-ended questions.

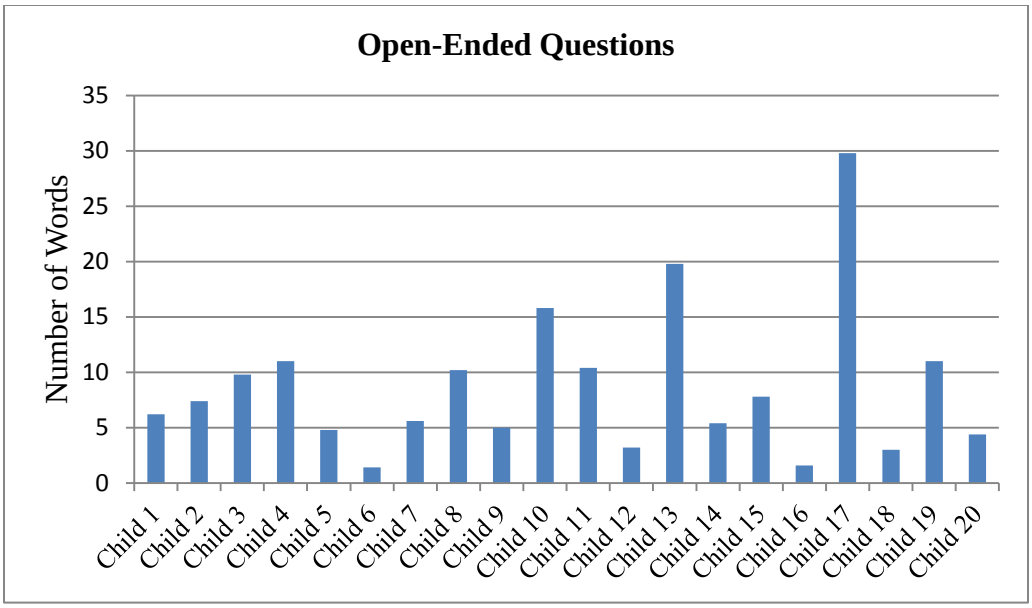

Figure 4. Average number of words spoken by each child for open-ended questions.

The following two figures include the two children with the least and most spoken words:

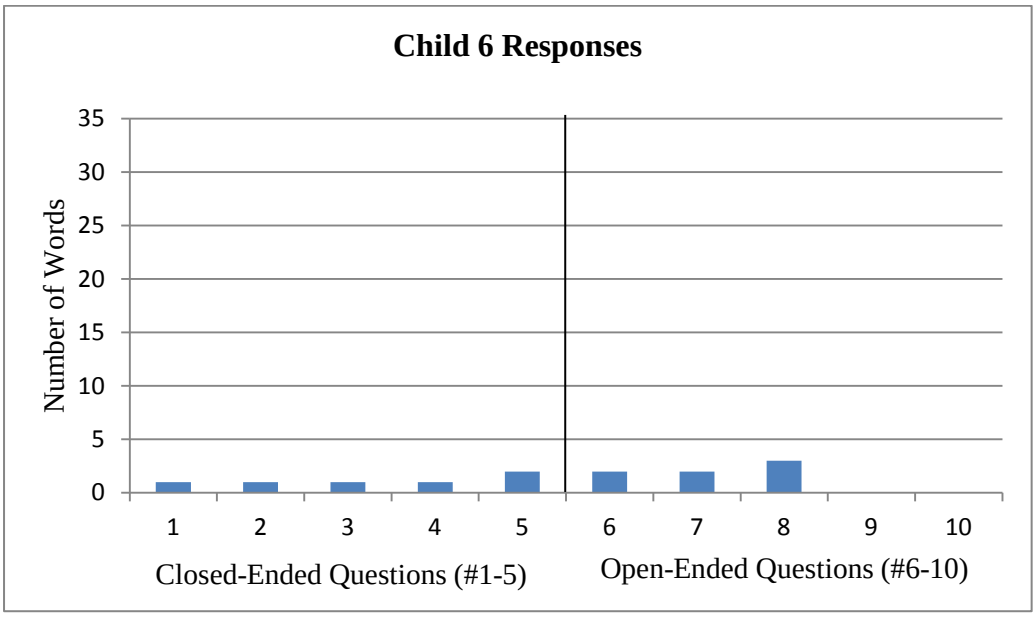

Figure 5. Child with the least increase of words spoken.

Child 6 had the least increase of words spoken, but despite no responses to questions 9 and 10, Child 6 showed an increase in words spoken for open-ended questions. Child 6 showed an increase of 0.2 words, a 17 % increase of words spoken.

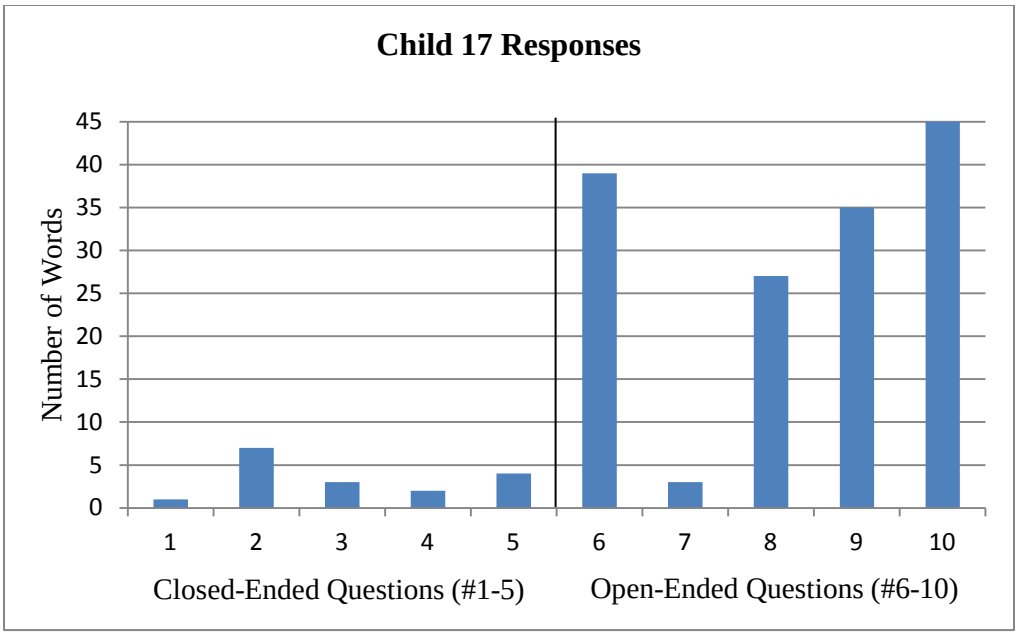

Figure 6. Child with the most increase of words spoken.

Child 17 had the most increase of words spoken. Question 7 did not reflect this increase. The remaining open-ended questions had significant increases. Child 17 showed an increase of 26.4 words, a 776% increase of words spoken.

The following three figures are provided to illustrate some of the variances of responses:

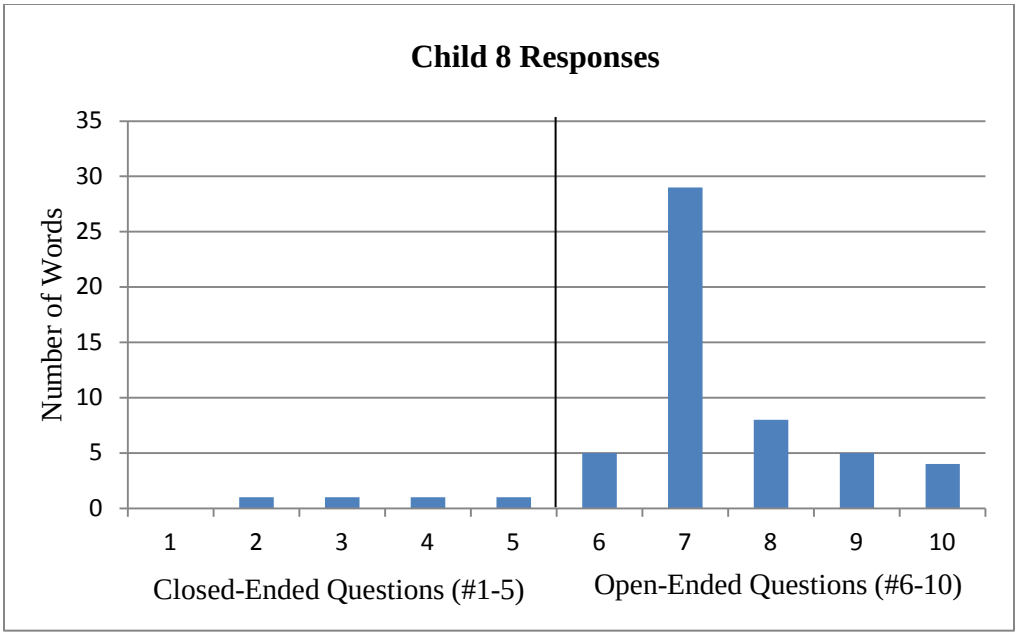

Figure 7. Child with atypical number of words for one question.

Child 8 showed typical responses except for a large increase for question 7. Child 8 showed an increase of 9.4 words, a 118% increase of words spoken.

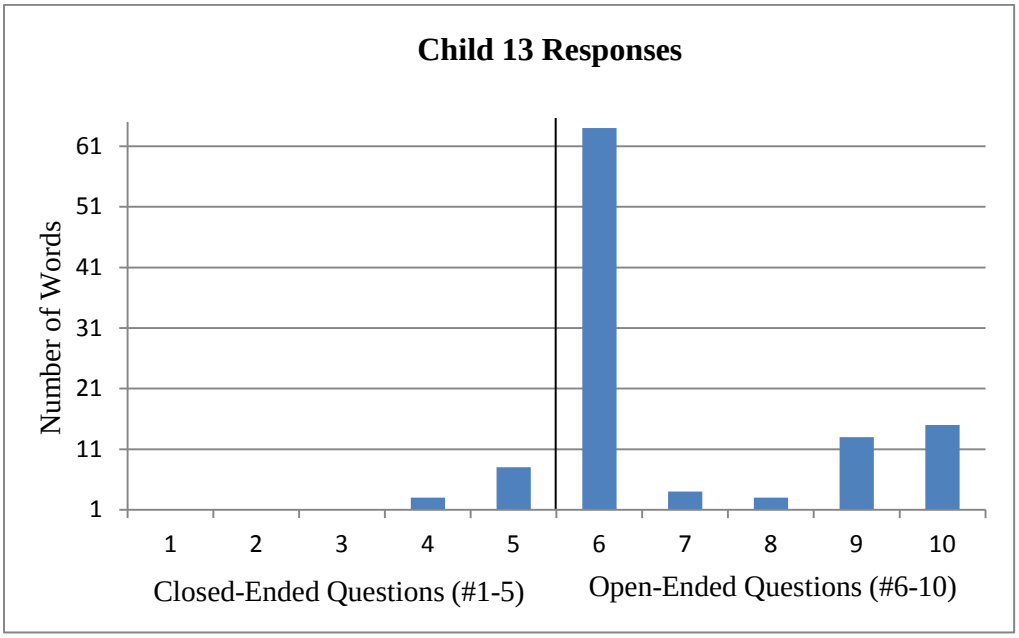

Figure 8. Child with atypical number of words for one question.

Child 13 had an extraordinary increase of words for question 6. Child 13 response to question 6 of 64 words was the most words recorded for any question. The remaining questions for Child 13 were more typical. Child 13 showed an increase of 17 words, a 607% increase of words spoken.

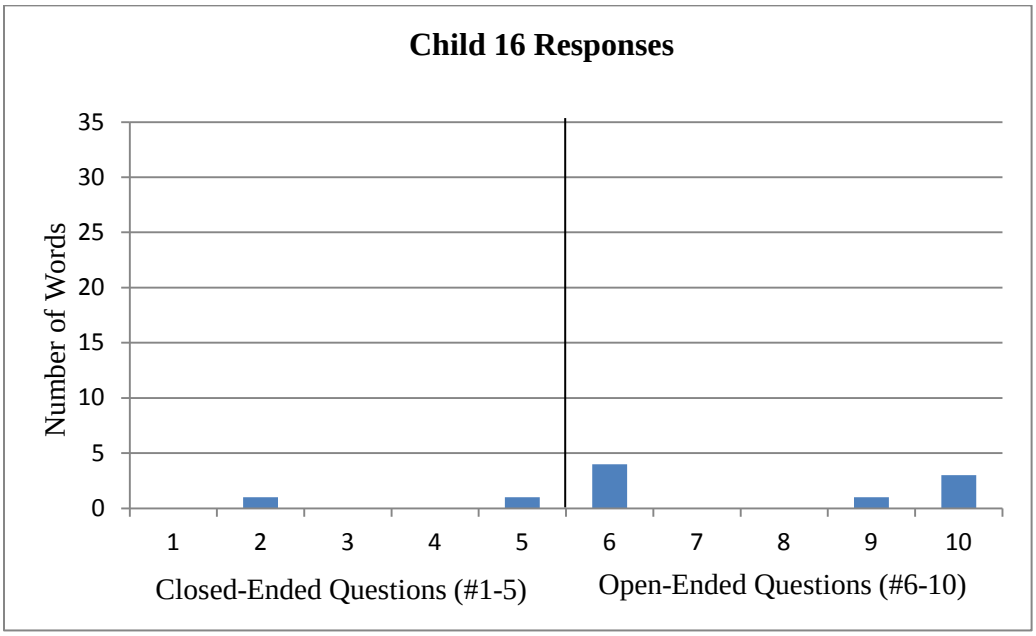

Figure 9. Child with atypical responses.

Child 16 did not respond with a word for five of the questions. When Child 16 did respond, the closed-ended number of words was above the average, as was open-ended questions 6 and 10. Open-ended question 9 was below the average words spoken. Although Child 16 exhibited an inconsistency in responses the increase of words spoken was 1.2, a 300% increase in words spoken.

The following two figures include the two children with a closed-ended question response with the most words spoken.

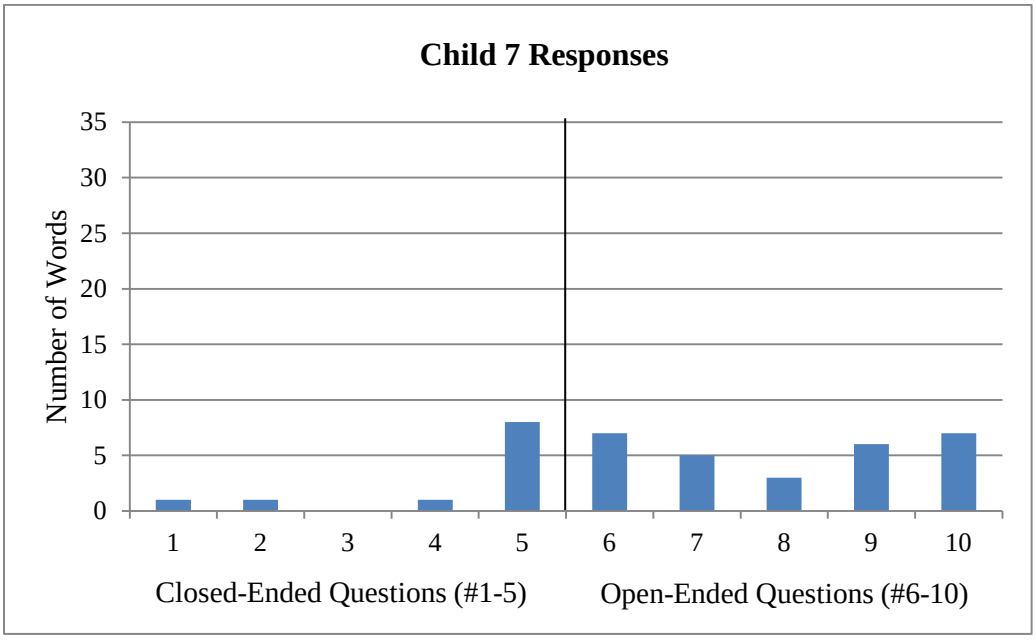

Figure 10. Child with most words spoken was closed-ended question.

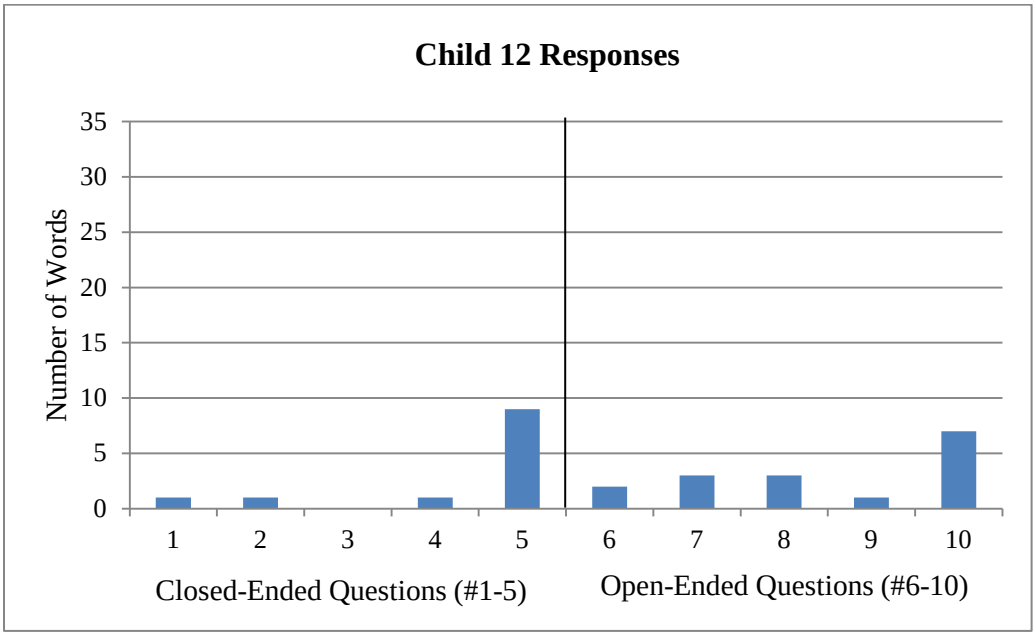

Figure 11. Child with most words spoken was closed-ended question.

Child 7 and Child 12 each had a closed-ended question response with the most words. Even with this variation, both children had an increase in words spoken. There was no pattern established with this result as Child 7 had a 3.4 increase of words, a 155% increase and Child 12 had a 0.8 increase of words, a 33% increase.

Information obtained from the literature review and data obtained from the action research lends the opportunity to draw several conclusions relating to the research questions posed pertaining to preschool teacher language and children's language acquisition.

Discussion

This study was motivated by the understanding that preschool teacher language during daily adult-child conversation is an essential component and if used productively can be a language acquisition strategy. The purpose of this study was to examine teacher language and how it correlates to language acquisition. The action research was to specifically examine the impact of questioning techniques, focusing on closed-ended and open-ended questions. The action research counted the amount of words spoken when a preschool child was asked five closed-ended and five open-ended questions while playing with play dough. Play dough was selected as it is a familiar preschool material. Consequently when children were asked open-ended questions the number of words included in their responses greatly increased in a very small ten to fifteen minute segment of time.

The action research conducted with 20 preschool children yielded results that the average increase in the amount of words spoken was 471% when they were asked open-ended questions as opposed to closed-ended questions. Throughout the study the children did not exhibit any problem behaviors or disinterest. It is important is to recognize and acknowledge that this significant increase took place in a ten to fifteen minute segment of an instructional day.

The questions were pre-determined and some could be better representative of the type of questioning for more accurate research. Open-ended question 3 was dependent upon children's prior knowledge rather than a child being provided the opportunity to respond with more words. As the researcher and a former preschool teacher I did not anticipate that several classrooms would not have provided the very ordinary experience to make play dough as a learning activity. If the child had prior knowledge of making play dough the number of words to describe the process greatly increased. Many of the children responded with "I don't know." The question should not have been included to determine increased use of language. Closed-ended question 5 provided more of an opportunity for children to respond with more language than the previous four closed-ended questions. The observation made was that some of the children used this question to describe with a few more words, what they had made due to the fact that it was an instantly relevant experience.

This small study contributes to Dickinson and Tabors (2002) suggestion that quality teacher language can facilitate vocabulary better than other preschool factors. Specifically the type of language a teacher uses in preschool, can impact language acquisition for children. Furthermore, the initial inquiry was whether different types of language were associated with more words spoken by a child. The findings indicated that overall open-ended questions rather than closed-ended questions overwhelmingly generated more words spoken by a child. This finding aligns well with existing literature that states teacher language can impact a child's opportunity to increase the use of words (Bond & Wasik, 2009; Tompkins et al., 2013; Wasik & Hindman, 2013; Wasik & Iannone-Campbell, 2012).

A second research question was to address how the type of teacher language limits language acquisition. The results of this study indicate that when an adult primarily engages in closed-

ended questions, the child does not use additional words to further describe or explain their reply. This finding is supported by Durden and Dangel (2008) and Massey (2004) who found evidence that language use with preschool children that offer little condition for children to have a need to respond, limits language exchanges. As a result of literature studied and the data generated by the action research, the type of teacher language can limit language acquisition.

The literature review identifies several researchers (Bond & Wasik, 2009; deRivera et al., 2005; Lee & Kinzie, 2010; Meacham et al., 2014; Wasik & Hindman, 2013) that provide a correlation to an increase in children's language when teachers engaged in open-ended questioning. This research study particularly studied how closed-ended and open-ended questions would impact a child's use of language. The data for this query demonstrated a considerable impact on the amount of children's language when a comparison was made between the two types of questions presented to a child. Closed-ended questions resulted in an average of 1.52 words which abruptly ended any further conversation on the part of the child. Conversely, open-ended questions resulted in an average of 8.68 words per child spoken. This is an average of 7.16 additional words per child. Although numerically it may not seem large, it is in actuality a 471% increase and additionally what must be considered is the increase occurred in a small ten to fifteen minute session.

The study showing that children did increase words spoken is an important means to increase preschool children's language acquisition. Through this study, preschool teachers should understand the importance of questioning to increase language. Preschool teachers should promote language acquisition by implementing intentional strategies to build children's language which is imperative for future literacy (Biemiller, 2003; Scarborough, 2001).

Conclusion

To summarize the results of the action research provide an important finding while examining questioning as a context for language acquisition. Although the study was only a small number of children, it provides practical evidence of the value of engaging preschool children in conversations composed of open-ended questions rather than closed-ended questions. The increase of 471% in a mere ten to fifteen minute period of time is significant when compared to an average six hour instructional day. Preschool teachers must acknowledge this research and consider the impact if open-ended questioning is utilized throughout the instructional day.

The literature review identifies many researchers that similarly find that conversations must be purposeful and intentional to extend and promote adult-child back and forth dialogue (Bond & Wasik, 2009; Dickenson &Tabors, 2002; deRivera et al., 2005; Gest et al., 2006; Wasik & Hindman, 2013; Wasik & Iannone-Campbell, 2012). All of these researchers found that if interactions are high quality, children's language acquisition should increase.

The research findings by deRivera et al. (2005) and Wasik and Hindman (2013) suggest that preschool teachers engage in open-ended questioning as one of the most important strategies to elicit multiple word responses from children. This action research study suggests that to increase children's language acquisition by engaging in open-ended questions which generate more words used in conversation, preschool teachers should reflect upon their own language. Preschool teachers need to recognize the ability of their interactions with children as a means to increase children's use of words. The focus should primarily be questioning statements as they facilitate back and forth conversation throughout an instructional day.

Finally, Biemiller (2003) and Scarborough (2001) correlate acquiring extended normal vocabulary as a prerequisite for reading comprehension during later literacy development.

Hence the results of this study underscore the critical importance of recommendations of practice for preschool teachers.

Recommendations for Practice

High-quality interactions provide an opportunity to facilitate children's language acquisition. The literature review in this research project concluded that language is a powerful tool for learning and teachers must appreciate that all interactions with children whether social, managerial or instructional, present opportunities for extensions of language. Furthermore there is an implication that language rich preschool can compensate for children's below average language. This project offers recommendations for practice to guide teachers to optimize language use in several universal areas of a preschool environment. All preschool teachers must understand and embrace the major role they have in supporting children's long term literacy development. A promising practical suggestion for preschool teachers to extend conversations that build language for children is to consistently and strategically engage in open-ended dialogue.

Dickinson and Tabors (2002) confirm that teachers must constantly extend children's oral language and while providing this opportunity for growth, a better and more enjoyable experience will be facilitated for both teachers and students. To begin teachers must acknowledge changes that must occur during teacher-child interactions. No longer is conversation with children just for gathering information, conversation is a valuable tool for language acquisition. It is the beginning of a reciprocal relationship where each participant realizes that what they share with each other is important and meaningful. To develop conversation skills with children teachers need to establish a trusting relationship by asking questions that are genuine and relevant to their life as endorsed by Durden and Dangel (2008).

Teachers can make a connection to a child's life by asking specific questions about family members or some of their favorite things. Thoughtful responses build the necessary relationship to encourage children to become a comfortable conversational partner. Preschool teachers must listen attentively to discover the direction of the child's lead to become a true conversational partner. To ensure teacher-child conversations occur, the teacher should reflect daily about a social interaction with each child that did not involve directives for classroom management. To build this skill a teacher should consider maintaining a daily log to record each teacher-child conversation asking if they learned anything new about the child.

If preschool teachers prepare lessons through theme based or project based instruction, they can begin an intentional process of incorporating morning messages into lesson plans to strategically include vocabulary. The vocabulary selected should foster language acquisition as well as concept development. The teacher must then continually throughout the unit of study use the introduced new words in conversation. The back and forth strategy of using shared vocabulary encourages children to include the new words in their responses. New vocabulary allows children to incorporate new words into their explanations and descriptions subsequently becoming a part of their language.

As acknowledged by Wasik and Iannone-Campbell (2012) children need to use and hear vocabulary multiple times in meaningful context for them to learn new words and concepts. Durden and Dangel (2008) endorse the idea for teachers to reflect upon their own language. They must consider the function of language as going beyond the traditional providing information to promoting children's thinking by soliciting children's opinions. Open-ended activities utilizing authentic materials should be provided that require children to respond

through explanation, interpretation and evaluation. The goal is to naturally provide multiple opportunities to use words

Children's play in a high quality preschool is an uninterrupted time where children choose to engage in creating meaningful experiences in various interest areas often referred to as center time. Wasik and Hindman (2013) contend that center time is a natural setting to scaffold children's learning while providing feedback that promotes the explicit use of new words. To obtain the best result during center time, teachers must intentionally become actively involved in children's play by joining in as a play partner. Once the teacher has successfully joined the play, back and forth dialogue that supports and advances children's thinking and learning should be established through open-ended prompts. The recommendation is to concentrate on one selected interest area and practice the art of questioning before moving to another interest area. During this quality time together if children respond with only one word, additional questions should be asked to extend the interaction. Additional questions should contain the words, what, when, where, why, what if, and how, regularly throughout a variety of activities. An effective practice to help remind teachers to ask these types of questions is to simply post the words in different areas of the classroom. This provides a silent but efficient reminder to teachers as well as providing the chance a classroom visitor would try the approach. This can also be accomplished by preparing open-ended prompts on cards and have them available while playing in the interest areas.

The next area to practice promoting extended language conversations is during small group time, which occurs in every preschool setting. According to Durden and Dangel (2008) the characteristics of small group naturally support individual back and forth dialogue to foster higher-order thinking. There are a smaller number of children and the teacher is afforded more

time to focus and concentrate on their own language. Additionally there is time to listen attentively to an individual child's responses and more time to prepare a response that will build more vocabulary.

As the teacher has practiced the art of open-ended conversation in all the interest areas during center time and small group, the recommendation is to begin to view all parts of the preschool day as potential learning experiences. Wasik and Iannone-Campbell (2012) observe that conversations can occur during any typical preschool activity to even include transitions, playground play and shared meals. More strategic and planned purposeful conversation can occur during read-alouds, center time, small group, and morning circle. During all conversations teachers guide children through the exploration of new vocabulary and purposefully create openings for children to talk about what they are learning. This approach stimulates more language use and validates children thinking subsequently building children's language.

A critical recommendation for practice is for teachers to allow children appropriate time to respond. As Wasik and Hindman (2013) suggest posing the open-ended prompt is only the beginning. Providing appropriate wait time increases the likelihood of a child responding. Children who are developing oral language skills need extra time to process their thoughts and articulate their ideas. Teachers need to offer children permission to think about their answers, build on their knowledge and use new vocabulary in relevant and meaningful ways (deRivera et al., 2005; Wasik & Iannone-Campbell, 2012). Providing wait time also allows the teacher time to prepare scaffolding questions. There should always be follow up with ongoing meaningful feedback that invites the child to think and expand on their responses.

During all teacher-child interactions, deRivera et al. (2005) recommend that educators should be counseled to increase the use of open-ended discussion and decrease closed-ended discussion.

They confirm that topic continuing questions allow complex responses and all teachers must recognize the value for promoting language productivity. To support teachers to adopt these recommendations for practices they must be asked to commit to memory that closed-ended questions stop conversation quickly which instantly stops children's talking and thinking. They must also commit to memory that open-ended questions are questions that have more than one right answer which naturally facilitates increased interest, talking and thinking. Children's language skills can be improved through improved instructional practices and a preschool teacher can enhance children's acquisition of language and oral language skills.

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Appendix A

Informed Consent Release

Dear Parent or Guardian,

My name is Dawn Miller and I am currently enrolled in a graduate program at the University of Mary Washington. I am inviting your child to participate in a research study. Involvement in the study is voluntary, so you may choose to allow or not to allow your child to participate. In the remainder of this letter I will explain the study. Please feel free to ask any questions that you may have about the research; I will be happy to explain anything in greater detail.

As the program director and instructional leader for Spotsylvania County Public Schools Head Start I am interested in learning more about how preschool children acquire language skills. I have learned from reading research that children's success in later literacy is impacted by language acquired at an early age. It has been found that the more language children have, their literacy skills are increased. I would like to learn if teachers' interactions with children impact the amount of language children use. As part of this research project your child will be asked open ended and closed ended questions while playing with play dough, a familiar material. The interaction between me and your child will take approximately 15 minutes. Your child will be engaged in a conversation with me concerning what they are doing with play dough. This conversation will be voice recorded in order to collect accurate data. The study is a onetime event in the comfort of your child's classroom with both teachers present at all times.

Your child's participation in this research study will be totally confidential. To ensure confidentiality, I will assign a number to your child's responses, and only I will have the key to indicate which number belongs to which child. In any articles I write or any presentations that I make, each child will only be identified with a number, such as child 1, child 2. I will not reveal any identifying details about your child.

The benefit of this research is that your child will be helping us to understand if the amount of language children use is increased by the type of questions teachers ask them. This information could help provide better practices in preschool. The risks to your child for participating in this study are minimal due to the fact that I have visited all the preschool classrooms and the children easily interact with adults in these current settings. The risk that could occur is that your child may not wish to attend to the materials I am working with and choose to not participate, either by not responding or simply leaving the area. This risk will be minimized by first spending some time with your child to make myself familiar. If at any point your child wishes to leave my area, that will be acknowledged and the choice respected. If you later decide that you do not want your child to participate in this study, you may withdraw your consent by contacting me at the telephone number or email below.

I can be reached in person at the Early Childhood Services building, which houses the Head Start Administration Office or by telephone or email. The telephone number is 540-582-8818 ext. 8. Email is dmiller@spotsylvania.k12.va.us

The research described above has been approved by the University of Mary Washington IRB, which is a committee responsible for ensuring that research is being conducted safely and that risks to participants are minimized. For information about the review of this research, contact the IRB chair, Dr. Jo Tyler at jtyler@umw.edu.

Thank you very much,

Dawn Dacales Miller

Parent or Guardian: All of my questions and concerns about this study have been addressed. I choose, voluntarily, to allow my child to participate in this research project. I verify that I am 18 years of age or older.

_____

Print name of participant

_____ _____

Signature of participant's parent or guardian date

I give my child permission to be voice-recorded during the play period described above.

_____

Parent/Guardian Signature

_____

Print name of investigator

_____ _____

Signature of investigator date

Appendix B

Pre-Determined Questions for Action Research

Closed-ended questions:

1. Do you like to play with play dough?
2. What color is the play dough?
3. Does the play dough smell?
4. Is the play dough sticky?
5. What did you make?

Open-ended questions:

1. How did you make that?
2. What will you do if it gets smashed?
3. How do you think we make play dough?
4. Why do you think play dough feels squishy?
5. What else can you do with play dough?

Appendix C

Data Gathering Form

Child _____: ☐ Male ☐ Female Date collected: _____

Closed-Ended Questions:

1. Do you like to play with play dough?
   ☐ No Response ☐ Unintelligible Number of words spoken? _____
2. What color is the play dough?
   ☐ No Response ☐ Unintelligible Number of words spoken? _____
3. Does the play dough smell?
   ☐ No Response ☐ Unintelligible Number of words spoken? _____
4. Is the play dough sticky?
   ☐ No Response ☐ Unintelligible Number of words spoken? _____
5. What did you make?
   ☐ No Response ☐ Unintelligible Number of words spoken? _____

Open-Ended Questions:

1. How did you make that?
   ☐ No Response ☐ Unintelligible Number of words spoken? _____
2. What will you do if it gets smashed?
   ☐ No Response ☐ Unintelligible Number of words spoken? _____
3. How do you think we make play dough?
   ☐ No Response ☐ Unintelligible Number of words spoken? _____
4. Why do you think play dough feels squishy?
   ☐ No Response ☐ Unintelligible Number of words spoken? _____
5. What else can you do with play dough?
   ☐ No Response ☐ Unintelligible Number of words spoken? _____