

**EMERGENT LITERACY ACTIVITIES IN PRESCHOOL YEARS: THE
EFFECTS OF EXPLICIT INSTRUCTION ON RHYMING AND
NARRATIVE DEVELOPMENT**

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by

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ABSTRACT

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By Kristie Dawn Callihan

Reading, a vitally important skill, develops early in a young child's life. Research suggests that strong phonological awareness and narrative skills predict reading success. Using children's literature that emphasized either rhymes (one of the earliest phonological awareness skills to emerge) or narrative structure, this study examined the effect of explicit teaching of rhymes and narrative structure on young children's improvement in the ability to recognize and generate rhyming words and on improvement in the sophistication of narrative retellings. The results of this study, as well as the implications these findings have for speech-language pathologists and the need for further research, are discussed.

DEDICATION

I am dedicating this work to my family, for without them this would not have been possible. Their unfailing support of my decision first to seek an education, and then go on to improve upon that education, has been my motivation throughout the entire process. I am now and always will be grateful for their love, faith, friendship, comfort, and encouragement.

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CHAPTER I

Introduction

Overview of Reading and Processes Involved

Reading, the ability to recognize and manipulate words, phrases, sentences, and other elements of text (Vaughn, Bos, & Schumm, 1997) impacts children long before they enter school and continues throughout the rest of their lives. Children who are good readers enjoy reading and read more, further improving their reading skills and vocabulary knowledge. Without repeated reading experiences, children's vocabulary knowledge and overall learning ability often falls behind those of their reading-adept peers. This can adversely affect their academic success and their self-esteem (Jones et al., 2000; O'Shaughnessy & Swanson, 2000). In fact, it has been reported that children who begin school with limited reading-related abilities are at a higher risk of entering special education programs than their typically developing peers (Lonigan, Burgess, & Anthony, 2000).

Because difficulty learning to read usually does not become evident until first or second grade, by which time children are at risk for continuing reading difficulties (Snow, Burns & Griffin, 1998), it is important to identify early predictors of reading success. Research has consistently shown that one such early predictor is oral narrative ability (Boudreau & Hedberg, 1999; Paul & Smith, 1993; Roth & Speece, 1996). It has been speculated that this may be so because narration serves as a bridge between young children's oral language, which is highly contextualized, to their acquisition of reading, which is the ultimate form of decontextualized language (Kadervak & Sulzby, 2000; Paul & Smith; Roth & Speece). While contextualized language refers to objects, people, and events in the immediate present, decontextualized language refers to past and future events. Previous research also has found phonological

awareness (Badian, 2001; Bradley & Bryant, 1991; Catts, 1993; Ellis & Large, 1987; Hulme, 2002; Hulme et al., 2002; Lundberg, Frost, & Peterson, 1988; MacDonald & Cornwall, 1995; MacLean, Bryant, & Bradley, 1987; Singleton, Thomas, & Horne, 2000; Stanovich, Cunningham, & Cramer, 1984; Swank & Catts, 1994) to be among the strongest predictors of later reading ability. Children demonstrate phonological awareness through knowledge of the syllabic structure of words (the ability to segment words into syllables), onset/rime (the ability to perform alliteration and rhyming activities) and knowledge of the phonemic structure of words, often referred to as phonemic awareness (the ability to segment words into phonemes) (Yopp & Yopp, 2000).

Because narrative and phonological awareness skills are significant predictors of children's later success in learning to read, everything possible should be done to give young children the opportunity to develop these skills. Bellon and Ogletree (2000) found that repeated storybook reading during the preschool years helped to improve children's narrative development as well as phonological awareness skills, such as rhyming and knowledge of sound-symbol relationships. Many other studies have shown that children who are specifically taught phonological awareness skills during the preschool years, whether they be rhyming (Majsterek, Shorr, & Erion, 2000; Mitchell & Fox, 2001; van Kleeck, Gillam, & McFadden, 1998; Walton, Bowden, Kurtz, & Angus, 2001), syllable awareness (Mitchell & Fox), or phoneme awareness (Mitchell & Fox; van Kleeck et al.; Walton et al.), acquire them more quickly than do children who are not exposed to these skills.

There are two questions that remain to be answered, however. The first is the age at which narrative and phonological awareness training should begin. According to Applebee (1978), children begin telling true narratives between 5 and 7 years of age. Chaney (1992) showed that the ages between 2 and 4 are active periods of metalinguistic learning, including the acquisition of phonological awareness skills, and the findings of a study conducted by Lonigan et al. (2000) indicated that children's phonological awareness skills develop significantly between ages 3 and 4. Additionally, most children enter preschool programs by age 3. However, the majority of studies that have examined the efficacy of phonological awareness training have targeted children 4 to 6 years of age (Majsterek et al., 2000; Mitchell & Fox, 2001; vanKleeck et al., 1998; Walton et al., 2001). Therefore, I suggest that research on the effect phonological

awareness training that begins prior to the age of 4, and narrative training that begins before the age of 5, is needed.

The second question to be answered is which phonological awareness skills should be taught first. Stahl and Murray (1994) and Treiman and Zukowski (1991) suggested that children gain control over larger units of sound, such as onset (the part of a syllable that includes all consonants that precede the vowel) and rime (the part of a syllable that includes the vowel and consonants that follow the vowel), before smaller units such as individual phonemes. MacLean et al. (1987) showed that many children as young as 3:3 (years; months) successfully recited nursery rhymes and completed rhyme identification and production tasks. Furthermore, Yopp (1988) found that rhyme tasks were the easiest of the phonological awareness tasks for kindergarten children to perform. Based on this information it would seem advisable to teach the concept of rhyme before teaching children to identify individual phonemes.

There is some controversy, however, as to whether the component skills of phonological awareness represent a unified construct that develops progressively throughout the preschool and early school-aged years, or instead represent different underlying abilities. Results of a factor analysis conducted by Yopp (1988) suggested that rhyming tasks might tap a different underlying ability than other phonological awareness skills. Although some studies found that rhyme detection differentiated good from poor readers in first grade (Badian, 2001), at age 8 (Singleton et al., 2000) and in seventh grade (Badian), other studies found that phonemic awareness was a stronger predictor of later reading success than rhyming ability (Hulme, 2002; Hulme et al., 2002; Lundberg et al., 1988; Stanovich et al., 1984). Several researchers have suggested, however, that studies that failed to find significant relationships between rhyming and reading did so because they were conducted with older children, and ceiling effects were noted on the rhyming tasks used (Goswami, 2001; Lundberg et al.; Stanovich et al.; Yopp).

In contrast to the findings of Yopp (1988), the findings of other studies lend support to the theory that the component skills of phonological awareness represent a unified construct. For example, in a study undertaken to determine which factors contributed most strongly to children's ability to learn to read by analogy, Wood (2000) found that a subgroup of

participants (mean age 5:8), who performed poorly on a rhyme detection task also performed poorly on a phoneme deletion task. Furthermore, factor analyses conducted by Stahl and Murray (1994), Lonigan et al. (2000), and Anthony et al. (2002) suggested that the components of phonological awareness represented a single, underlying phonological ability. Anthony et al. found that children who demonstrated greater sensitivity to lower levels of phonological awareness, such as rhyme detection, also demonstrated greater sensitivity to higher levels of phonological awareness, such as phonemic awareness. Based on their findings, they argued that rhyme sensitivity (awareness) and phoneme sensitivity (awareness) do not have unique relationships to reading because they do not reflect different abilities.

There is considerable evidence to suggest that the use of children's literature during the preschool years enhances the development of phonological awareness and narrative skills. There is further evidence to suggest that narrative and phonological awareness are significantly related to success in learning to read, and that rhyming ability is one of the earliest developing components of phonological awareness. Little research, however, has been done on the effect of explicit instruction in narratives to improve narrative complexity during the preschool years and on the effect of explicit rhyming instruction on the ability of children younger than 4 to learn to rhyme. Therefore, the purpose of the present study was to assess the change in narrative and phonological awareness skills in young children following ten weeks of explicit instruction in each skill.

CHAPTER II

Review of Literature

Review of the Processes Involved in Promoting Success in Reading

Literacy is a comprehensive form of communication. It embodies communication in the forms of reading, writing, listening, and vocal/nonvocal speaking. Literacy has been defined many ways, as simply as just the ability to read and write, to as complicated as requiring active and self-directed involvement with print, and being able to send, receive and interpret the meanings of messages. It has been further characterized as including the processes of listening, speaking, reading, writing, thinking and numeracy (Indrisano & Chall, 1995). Children become literate through the use of decontextualized language in their interactions with adults (Daiute & Dalton, 1993; Reese & Cox, 1999). Preschool-aged children need to experience the precursors to reading and writing, referred to as emergent literacy, to progress as readers. Whitehurst and Lonigan (1998) defined emergent literacy as the skills, knowledge, and attitudes (i.e. interest and motivation to interact with printed materials (Whitehurst et al., 1999) that are developmentally necessary to promote reading and writing, as well as the environments that support these abilities. Whitehurst et al. (1994) asserted that exposure to preschool literacy activities (i.e shared-book readings between parent and child, learning of letters, and participating in rhyming activities) both in the home as well as in a preschool setting increased the child's likelihood of reading success in later years. These skills include, but are not limited to, decoding letters and their corresponding sounds and linking sounds to words (phonological awareness skills), extracting meaning from words, understanding print production, and using decontextualized language (narrative skills) (Whitehurst & Lonigan; Lonigan, et al. 2000). Whitehurst et al. (1994) separated emergent literacy skills into four categories, including language (i.e. vocabulary size), writing (i.e. ability to write one's name),

linguistic awareness (i.e. awareness of phonemic segments), and print concepts (i.e. naming letters). These skills are said to affect different areas of early reading, such as decoding and comprehension (see figure 2.1 for Whitehurst et al.'s (1994) conceptual model of literacy).

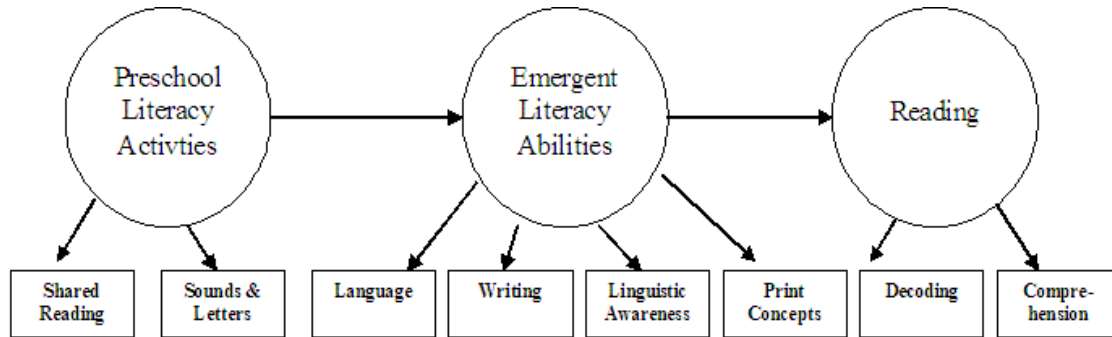


Figure 2.1 *Whitehurst, et al. (1994) model of relations between emergent literacy experience and literacy skills.*

One major component of literacy is reading. Swank and Catts (1994) noted that reading emerges due to a need to communicate. Understanding the printed word allows children to expand their knowledge of language and of the world, enabling them to communicate outside their immediate surroundings. Vaughn et al. (1997) further defined reading as the ability to decode written words and decipher their meanings, as well as the meaning of the sentence as a whole. Children must be able to think about how each sentence relates to its surrounding sentences and other parts of the text to find meaning in the whole text. Vaughn et al. described reading as a process that includes five concepts. First, reading involves three cue systems: grapho-phonetic (sound-symbol representation), syntactic (structure of language), and semantic (understanding). Used together, or interactively, these systems help children become better readers. Second, children require and use varying strategic processes to understand text. These strategies include recognizing words, understanding the meaning of words individually and in relation to surrounding words, and acknowledging when words are not understood. Third, reading is a search for meaning. While reading, children actively decode words and attempt to interpret the meaning of the text. Fourth, reading is constructing meaning. In conjunction with the search for meaning, children take the information and make associations with what they already know to construct meaning. Fifth, reading is a socially based language learning opportunity. In and of itself, reading is form of communication. Additionally, within

an academic or peer-mediated context, reading can provide an opportunity for children to interact with others, to discuss information learned through reading with others.

Reading is a process that continually develops throughout a person’s life, beginning before a child is familiar with the printed word, and continuing throughout adulthood (Snider & Tarver, 1987). Reading, much like many other behaviors, develops in stages. According to Indrisano and Chall (1995) there are six stages of reading (table 2.1). The first (stage 0), and the one with which this study is most concerned, is referred to as “prereading” (birth-6 years). During this stage, children learn about sounds, letters, words and books. They begin to develop prereading skills including rhyming, sound alliteration, and sound blending (phonological awareness skills). They also acquire the ability to interpret and comprehend language (narrative skills). During this stage, children develop the skills necessary to navigate the remaining stages of reading development. The remaining stages include (1) initial reading (ages 6-7; grades 1-2); (2) confirmation, fluency, ungluing from print (ages 7-8; grades 2-3); (3) reading for learning the new (ages 9-13); (4) multiple viewpoints (ages 14-18; high school); and (5) construction and reconstruction – a world view (age 18+). Cognitive and language abilities need to increase with each stage for children to move forward to the next; each stage depends upon mastery of the previous one (Indrisano & Chall; Snider & Tarver).

Table 2.1 Chall’s Stages of Reading Development

Stage	Age of Acquisition	Characteristic reading behaviors
Stage 0: Prereading	0-6	Inability to read, learn about rhyming, sound alliteration & blending, and develop decoding skills
Stage 1: Initial Reading	6-7	Learn to associate letters with words; fluency increases; focus on the act of learning to read rather than content
Stage 2: Confirmation	7-8	Can attend to printed words; use decoding skills and redundancies in language to understand the text
Stage 3: Reading for Learning	8-14	Move from “learning to read” to “reading to learn”; can relate via personal experienced to printed text
Stage 4: Multiple Viewpoints	14-18	Can process points of view outside their own; use previous knowledge to understand text
Stage 5: Construction & Reconstruction	18+	Can differentiate what to read and what not to read by skimming; have a more qualitative/conceptual understanding of the text and how it relates to outside world

Research has shown that phonological awareness and narrative development are significant predictors of later reading ability (Boudreau & Hedberg, 1999). Storch and Whitehurst (2002)

suggest that these skills may be related or even interdependent during development in the preschool years.

Phonological Awareness

Phonological awareness (table 2.2), one of the strongest predictors of reading ability (Badian, 2001; Bradley & Bryant, 1991; Catts, 1993; Ellis & Large, 1987; Hulme, 2002; Hulme et al., 2002; Lundberg et al., 1988; MacDonald & Cornwall, 1995; MacLean et al., 1987; Singleton et al., 2000; Stanovich et al., 1984; Swank & Catts, 1994), is a multidimensional task (Gillon, 2002) involving the ability to recognize and manipulate phonemes, syllables, and words. Children demonstrate phonological awareness through knowledge of the syllabic structure of words (the ability to segment words into syllables), knowledge of onset/rime (the ability to perform alliteration and rhyming activities), and knowledge of the phonemic structure of words, often referred to as phonemic awareness (the ability to segment words or syllables into phonemes) (Hesketh, Adams, & Nightingale, 2000; Yopp & Yopp, 2000).

Burt, Holm and Dodd (1999) stated that phonological awareness develops on a continuum, with children becoming aware of larger units of speech prior to small units. Researchers have shown that 3-year-old children were able to segment sentences into words with relative ease (Fox & Routh, 1975; Hesketh et al., 2000). It was further shown that many 3-year-old children experienced difficulty segmenting words into syllables, though some evidenced the developing skill (Bernhardt, Edwards, & Rempel, 1995) and by 4 years this skill had developed (Fox & Routh). Fox and Routh also demonstrated that most 5- and 6-year-old children performed at ceiling levels on sentences and word segmentation tasks, indicating that these skills had developed by the 4 to 5 year age range. At this point, researchers suggest that children develop a sense or awareness of syllables (Burt et al.; Fox & Routh), which leads to an awareness of onset and rime (Hesketh et al.). Major and Bernhardt (1998) suggested that rhyming (rime) and alliteration (onset) developed during early preschool years and were thought to be equally challenging tasks. However, Bernhardt et al. noted that, in groups of 3-year-old children, 50% produced rhymes, whereas only 10% produced alliterations. Hesketh et al. further stated that rhyming abilities develop between 3 and 4 years of age and MacLean et al. (1987) showed that children as young as 3:3 (years:months) successfully recited nursery rhymes and completed rhyme identification and production tasks. Major and Bernhardt suggested that children may

master rhyming before alliteration tasks because during rhyming tasks only the sound at the beginning of the word changes, whereas during alliteration tasks both the vowel and ending sounds change. Once children have an awareness of syllables and their subunits, they develop the ability to segment the syllables. This skill seemingly develops relatively close to those of rhyming and alliteration (Burt et al.) and children should be able to break down the syllable by 4 years of age (Fox & Routh). Finally, perhaps the most difficult phonological awareness skill develops: the awareness of phonemic structures and ability to segment words/syllables into phonemes (Burt et al.; Fox & Routh; Hesketh et al.). Researchers suggested that segmenting words/syllables into phoneme is particularly difficult because children are unable to perform these tasks until they are consistently exposed to printed words (Burt et al.; Fox & Routh).

Table 2.2 Phonological awareness tasks

Task	Examples of Phonological Awareness Tasks	
		Example
Segmenting Sentences into Words	“I want to play.”	I – want – to – play
Rhyming (rime)	Using same sounds at ending of words	<u>B</u> all – <u>M</u> all; <u>C</u> at – <u>H</u> at
Alliteration (onset)	Using same sounds at beginning of words	<u>C</u> up, <u>K</u> itten, <u>C</u> aterpillar
Segment Words into Syllables	Balloon	Ba – lloon
	Butterfly	Bu – tter – fly
Segment Words into Phonemes	Cat	/k/ + /a/ + /t/
	Ball	/b/ + /ɔ/ + /l/

Although phonological awareness skills develop along a continuum, there is controversy as to whether the component skills of phonological awareness represent a unified construct or instead represent different underlying abilities. Results of a factor analysis by Yopp (1988) suggested that rhyming tasks might tap a different underlying ability than other phonological awareness skills. Additionally, some researchers have argued that phonemic awareness is a much stronger predictor of reading success than is rhyming (Hulme, 2002; Hulme et al., 2002; Lundberg et al., 1988; Stanovich et al., 1984). Indeed, numerous studies have found significant relationships between phonemic awareness skills and reading skills. MacDonald and Cornwall (1995) performed a follow-up study of a 1983 MacDonald and Gates study, which indicated that a strong relationship between phonemic deletion abilities and word identification skills existed in kindergarten aged children, despite limited exposure to reading. Their findings in the follow-up study indicated that phonological awareness skills predicted spelling ability and

word identification success, both important in reading, for up to at least 11 years. Lonigan et al. (1999) further stated that phonological processing greatly impacted the development of decoding abilities in children, thus influencing their reading abilities. A longitudinal study by Bravo-Valdivieso (1995) revealed that the best predictor of reading ability in Hispanic children was their ability to decode, and that children with low phonological awareness skills were likely to have reading problems in school. Similarly, in the same study, first-grade children who were considered strong readers, performed better on phonological awareness tasks, including phoneme segmenting, than their peers (Denton, Hasbrouck, Weaver, & Riccio, 2000). Phonemic awareness skills may be highly correlated to later success in reading because, as suggested by Roth and Speece (1996), the phonological elements of the spoken word correspond to the orthographic symbols of the written language.

In contrast to the findings of Yopp (1988), factor analyses by Stahl and Murray (1994), Lonigan et al. (2000) and Anthony et al. (2002) suggested that all of the components of phonological awareness represented a single underlying phonological ability. Additionally, in a study undertaken to determine which factors contributed most strongly to children's ability to learn to read by analogy, Wood (2000) found that a subgroup of participants (mean age = 5:8), who performed poorly on a rhyme detection task, also performed poorly on a phoneme deletion task. Walton and Walton (2002) performed a study in which prereading kindergarten children were taught either rime analogy and/or prereading skills including rhyming, initial phoneme identity, and letter-sound knowledge. They found that children specifically taught all of these components were more successful than those taught one or the other in developing reading skills. Furthermore, they found that rhyming accurately distinguished readers from non-readers. Schneider, Ennemoser, Roth, and Küspert (1999) showed that phonological awareness tasks (e.g. phoneme analysis & synthesis, identification and deletion of initial phonemes, alliteration and rhyming) could be trained before children learned to read and spell. They also noted that children who were trained in these skills continued to benefit from such training at least four months later.

Additionally, researchers suggest that teaching phonological awareness skills, in addition to other early reading skills, to children at risk for reading disabilities may help more advanced reading skills develop later (O'Connor, Fulmer, Harty, & Bell, 2001). Majsterek et al. (2000)

asserted that because rhyming has been shown to develop earlier than most other phonological awareness tasks, and because it has been linked to success with reading, then training in that area should begin first and should help promote emergent literacy skills in children who are considered at risk for reading difficulties. Their study showed that, when four minutes of rhyming training was added to children's nine minutes of circle time, the children were able to perform better on rhyme detection tasks than their non-trained peers. Both groups were exposed to rhyming, but only one group received explicit training. Larrivee and Catts (1999) showed that, compared to phonologically normal peers, children with expressive phonological disorders (EPD) were at a greater risk for reading problems, as early as the end of first grade. They further examined the children with EPD and determined that those who performed more poorly during the study experienced greater difficulty with phonological awareness, had weaker language skills, and were likely to be more severely affected by their EPD. Additionally, Burt et al. (1999) demonstrated that children with normal intelligence who experienced difficulty with literacy tasks demonstrated difficulty with phonological awareness tasks, specifically at the onset and rime levels. They also showed that children could be taught phonological awareness skills, thus improving their success in learning to read.

Narrative Development

In addition to phonological awareness, the development of a child's oral narrative abilities can predict success in academics, especially in reading (Boudreau & Hedberg, 1999; Paul & Smith, 1993; Roth & Speece, 1996). Researchers have referred to narration as the bridge between oral language, which is highly contextualized, and the acquisition of reading, which is the basic form of decontextualized language (Kadervak & Sulzby, 2000; Paul & Smith; Roth & Speece). While contextualized language refers to objects, people, and events in the immediate present, decontextualized language refers to past and future events. Furthermore, narratives are similar to the decontextualized language used in classrooms and written academic material (Paul & Smith). Hayward and Schneider (2000) suggest that children who have difficulty producing oral narratives before beginning first grade will experience trouble when transitioning from oral to written texts. Narrative abilities begin to emerge during the preschool years, and by the time children enter school, they have a general range of narrative abilities (McGregor, 2000). Children will use their knowledge of narratives to later help decode and comprehend the text

while reading (Roth & Speece). Those who do not have these abilities when entering school may be at risk for difficulties with reading, classroom discourse, and academic success (McGregor).

There are four basic types of narratives. These include the account, where a child spontaneously shares a past personal event with someone who did not share the event, the recount, where a child recalls a past event with someone with whom he shared the event, usually at that person's request, the eventcast, where a child either narrates an event as it is happening, such as in pretend play, or plans a future event, and the fictionalized story, where a child tells a make-believe story (Owens, 2001).

Fictionalized stories usually follow a specific story grammar, which begins to emerge during the preschool years and continues to develop into the early school-age years (Nelson, 1998). Story grammar, according to Stein and Glenn (1979), consists of the setting statement (characters and various contexts of story) and the episode structure. The episode structure is further divided into the initiating event (an event or action out of the ordinary causing the characters to act differently), the internal response (the characters' reaction to the initiating event), the internal plan (the character's decision about what to do in response to an initiating event), the attempt (the characters' actions to bring about some end result), the consequence (the events or reactions which happen as a result of the characters' actions), and the reaction (the characters' response/s to the consequence) (Owens, 1991; Nelson). Additionally, when telling narratives, children learn to sequence events, use cohesive ties (Paul & Smith, 1993; Kaderavak & Sulzby, 2000), use lexically rich vocabulary, and demonstrate knowledge of cause/effect associations (Paul & Smith).

Young children telling fictionalized stories usually follow a developmental pattern, which becomes more complex as they age. Applebee (1978) identified five basic levels of narrative development, based on the theories of the Russian psychologist Lev Vygotsky regarding social and concept development (see table 2.3 for examples). These levels include heaps, sequences, primitive narratives, chains, and narratives (Paul, 2001). Heaps, developing in children 2-3 years of age (Paul), use a primitive organizational pattern. Concepts are seemingly unrelated and follow no particular time sequence (Applebee; Paul). At 3 years of age, sequences begin to

emerge. When telling stories a basic time line is followed, though no perceivable cause-effect relationships are observed. There may be a central theme or core idea, but no real plot is developed (Applebee; Paul). Between 4 and 4 ½ years of age, primitive narratives develop. These stories are outwardly well formed, usually involving a central theme or core idea, and are based on personal experience. Primitive narratives usually contain three story grammar elements (initiating event, attempt and consequence), with no true ending of the story (Applebee; Paul). From 4 ½ to 5 years of age, children develop chain narratives (Paul). Applebee originally identified this level with two subgroups: unfocused chains and focused chains. In unfocused chains, each individual part of the story shares a characteristic with the next part, but the main focus is constantly changing. The parts follow the structure of a narrative, but as a whole the story lacks a focused direction. These chains later develop into focused chains, in which there is a definitive process of what Applebee refers to as chaining and centering. Each element or attribute is linked together logically, usually centering around a main character or plot (Applebee). During the chain narrative stage, children typically use four story grammar elements, including an initiating event, attempt, and some kind of consequence (Paul). Last, between 5 and 7 years of age, true narratives develop. According to Applebee, true narratives develop as a result of expanding the centering process to encompass concepts joined together based on complimentary attributes. Each incident develops out of, elaborates upon, or introduces a new situation to the core characters or plot. Stories at this level have an overall broader theme or underlying moral (Applebee). True narratives usually include at least five story grammar elements, including the initiating event, attempt, and some kind of consequence. These stories typically are resolved by the story's end (Paul).

Table 2.3 Comparison of Applebee's and Vygotsky's developmental stages

Applebee	Vygotsky	Characteristics
Heaps	Heaps	Based on child's perception of the object; organization is undirected and unrelated to the material at hand
Sequences	Associative complex	Child groups concept based on concrete similarities; events in a story have a primitive sense of time, but overall sequencing is random
Primitive Narrative	Collection complex	Child groups concepts based on complimentary characteristics rather than just similarities; concepts rooted in practical experience; stories are well formed with a solid core to give them focus
Chain: Unfocused	Chain complex	Child's individual concepts each share an attribute with the next, but the overall focus of chaining is unclear; stories are more like a true narrative but overall lacks a clear direction
Chain: Focused	Pseudoconcepts	Child's concepts are seemingly similar to adult-like concepts but remain perceptually based; in stories, attributes are combined centering around one main core (i.e. main character; instigating event, etc.)
Narrative	True concepts	Stories develop a theme or moral; use of perceptual ideas shifts to

Applebee, A. N. (1978). The Child's Concept of Story: Ages 2 to 17.

According to Roth and Speece (1996), narratives develop from oral language abilities. Narratives are the form of oral language through which children bring together oral language and literacy (Kadervak & Sulzby, 2000; Paul & Smith, 1993; Roth & Speece). Paul & Smith state that the literary elements of narratives are examples of the discourse elements that appear in written texts. Furthermore, children use their knowledge of narratives to later help decode and comprehend the text while reading (Roth & Speece), as well as to develop two stages of understanding: knowledge of the way things work in the physical world and awareness of feelings and emotions (Amaro & Moreira, 2001). Finally, according to Amaro & Moreira, the development of narrative skills is related to the development of cognitive, emotional and social skills; and narrative language plays an important role in the incorporation of affection, cognition and action. That is, the development of narrative abilities helps children learn to manage social relationships, learn about their emotional selves, make connections to their cultures, solve problems, and express and pass on knowledge about personal experiences (Amaro & Moreira). These skills are important for academic success.

Narrative ability appears to be an especially strong predictor of academic success for children with language impairments (LI) and learning disabilities (LD) (Kaderavek & Sulzby, 2000). Paul and Smith (1993) compared children with slow expressive language development (SELD) to normally developing children. When looking at narrative skills, the children with SELD experienced trouble with encoding, organizing, linking propositions, and retrieving vocabulary. These characteristics are often identified in school-aged children with learning disabilities, leading one toward the conclusion that either (a) children with SELD may and/or will have learning disabilities at worst, or may experience difficulties with their academics at best; or (b) children with learning disabilities experience or had experienced difficulties with the development of their narrative skills. In another study, Storch and Whitehurst (2002) showed that narrative discourse skills, though not as important academically during first and second grades as in later grades, emerged as a strong predictor of reading development beyond second grade.

Research Questions

There is considerable evidence to suggest that the use of children's literature during the preschool years enhances phonological awareness and narrative abilities. There is also considerable evidence to suggest that phonological awareness and narrative skills are both significantly related to success in learning to read. However, few studies have examined the effect of explicit instruction in narratives on improvement of the sophistication of preschool-aged children's narrative macrostructures and their use of cohesive ties, lexically rich vocabulary, and cause/effect relationships. Furthermore, few studies have examined the effect of explicit instruction in phonological awareness skills on the improvement of these skills in children younger than 4 years. Since rhyming is one of the earlier phonological skills to develop in young children, I chose to teach this component of phonological awareness to participants in this study. The present study was designed to answer the following research questions:

1. Will children between the ages of 37 and 54 months, who participate in activities using children's literature designed to teach them to identify and produce rhyming words, make greater gains in their awareness of rhyme than a similar group of children, who participate in reading activities that emphasize narrative structure, as measured by their improvement in identifying and producing rhymes between a pretest and a post test?
2. Will two children, ages 50 and 53 months, who participate in reading activities using children's literature that emphasizes narrative structure, make greater gains in their lexical richness, use of cohesive ties, and narrative macrostructure, than two children ages 49 and 59 months, who participate in reading activities that emphasize rhyming, as measured by their improvement in the above language measures between a pretest and a post test?

CHAPTER III

Methods

Participants

To answer the first research question, sixteen children, enrolled in a local daycare center, participated in the study. Eight children (four male and four female) were randomly assigned to a group that received training in rhyming skills (experimental group), while the other eight children (six male, two female) were randomly assigned to a group that received training in narrative skills (control group). Children in the rhyming group ranged in age from 37 to 54 months ($M = 42.4$, $SD = 5.1$), while children in the narrative group ranged in age from 37 to 53 months ($M = 46.0$, $SD = 6.5$). The difference between these means was not statistically significant, $t(14) = 1.244$, $p > .05$.

To answer the second research question, a subgroup of two children (both male, ages 50 and 53 months at pretest; 52 and 56 months at posttest) were chosen from the group that received narrative instruction (experimental group) and one child (female, age 49 months at pretest; 56 months at posttest), was chosen from the group that received rhyming instruction (control group). To equalize the number of children between groups, I included data from a child who received instruction in rhyming, but whose data were not used in the rhyming component of the study due to his age, 59 and 62 months at pretest and posttest respectively.

Research Design

Studies to answer both questions used pretest-posttest control group designs (Hedge, 1994). For each study, the type of intervention (rhyming treatment/control and narrative treatment/control) was the independent variable, while the dependent variables were improvement in rhyming and narrative skills respectively, as determined by improvement between pretest and posttest on the informal rhyming assessment battery and the narrative assessment.

Setting and Procedures

The study was conducted by undergraduate students majoring in Communication Disorders (hereafter referred to as student clinicians) under the supervision of the author, her faculty advisor and an additional graduate student, at a local daycare center. Before beginning the study, student clinicians received two hours of training in the correct implementation of the research protocol. Following this training, rhyming pretest data were collected for each child participating in the study and narrative pretest data were collected from the four children whose data were analyzed for the narrative portion of this study. The rhyming pretest data consisted of informal rhyming assessments, modeled after the protocol used by van Kleeck et al. (1998). Specifically, children were asked to complete three rhyming tasks: one rhyme identification task, one rhyme decision task, and one rhyme generation task. Practice items were provided for each task so that the student clinician could be sure the children understood the directions before beginning the data collection. The tasks were administered in the following manner (see appendix A for sample data sheets):

Rhyme identification task: Each child was shown ten sets of pictures, three pictures per set. Two pictures in each set rhymed while the other did not. The student clinician named each picture and asked the child which picture did not rhyme with the other two.

Rhyme decision task: Each child was introduced to a puppet named Jed and was told that Jed liked words that rhymed with his name. The student clinician then said “Jed” following by another word. Some of the words rhymed with “Jed” and some did not. The child was required to tell the student clinician whether or not each word rhymed with “Jed”.

Rhyme generation task: The student clinician said a series of ten words. After each word, she asked the child to name a word that rhymed with the word the child had just heard.

Next, a narrative sample was obtained from four children (two who were to receive rhyming instruction and two who were to receive narrative instruction). First either the author or the second graduate (hereafter called examiners) told each child that she would read a story. The examiner also explained that after she finished reading the story, the child would be expected to tell the story to someone who had never heard it before, and it would be important for the

child to pay close attention so that the listener would not miss any details. After reading the story, *Just a New Neighbor* (Mayer & Mayer, 1999) the examiner introduced a puppet named “Susie,” and instructed the child to retell the story to Susie. Each story retelling was audio recorded for later analysis.

Following the collection of pretest data the children participated, twice a week for 10 weeks, in activities designed to improve either their rhyming skills or narrative skills. Each session lasted approximately 30-40 minutes. Children worked in small groups with two to three student clinicians. Each session began with one student clinician reading an appropriate children’s book. Books (see appendix B), appropriate for pre-school aged children (Gebers, 1995), that emphasized either phonological awareness or narrative skills, were used during treatment sessions. Books for the rhyming group emphasized rhyming words, with the exception of one book that emphasized letter/sound correspondence. Books for the narrative group were written in narrative structure, but did not emphasize rhyming words. Following the book reading, the student clinicians facilitated activities designed to improve either the children’s rhyming or narrative skills.

The following steps, partially modeled after the protocol used by van Kleeck et al. (1998), were included in activities for the rhyming group. One student clinician chose five rhyming pairs from the story, except in the case of the book that emphasized letter/sound correspondence, where five words were taken from the story and five rhyming words chosen to correspond with these words. She presented the children with cards, each of which had a picture with one of the ten words written beneath the picture. She pronounced each rhyming pair and asked the children to point to each picture as she said the word corresponding to it. After saying each rhyming pair, the student clinician emphasized to the children that the words rhymed, or sounded alike. The children were instructed to say each word in chorus after the student clinician had said it. The student clinician again emphasized that the word pairs rhymed. Next, the student clinician put one picture card from each rhyming pair on a game board or toy. She shuffled the remaining cards. One child chose a target picture on the game board or toy. Another child was asked to pick its rhyming match from among the shuffled cards. If the child was unable to do this, the other student clinicians in the group facilitated this step. When the correct picture card was found the child put it on the board or toy under the target picture.

The student clinician next added five pictures to the ten pictures already used. These pictures did not rhyme with any of the existing pairs. The student clinician named two pictures and the children took turns telling her whether or not the pictures named rhymed. Card pairs that rhymed were put into one container, while those that did not rhyme were put into another container. Next, the student clinician took each rhyming pair and had the children generate additional rhyming words. She did this by showing the children that the rhyming pairs had all sounds in common except the first sound. By placing different letters in front of the “rimes,” the children could generate new rhyming words.

The following steps were included in activities for the narrative group. The student clinician first showed the children a book, named it while pointing to the title, and asked the children what they thought the book would be about. After giving the children time to respond, she read the book to them. When she finished reading the book, she asked the children questions designed to elicit information about the elements of story grammar (setting, initiating event, internal response, internal plan, attempt, direct consequence, and reaction). For example, questions about the book, *Arthur's Nose* (Brown, 1976), were 1) Who was the story about? (Characters); 2) Where did the story happen? (Setting); 3) What happened to Arthur's nose? (Initiating Event); 4) How did this make Arthur feel about his nose? (Internal Response); How did Arthur plan to make his nose better? (Internal Plan); 5) What did Arthur try to do to make his nose better? (Attempt); What was Arthur's reaction to the new noses he tried? (Direct Consequence); and 6) How did the story end? (Reaction). After the children answered the story grammar questions the student clinician read the story again. This time she paused every time she came to a key word or phrase from the story and asked the children say it with her. Following this, the children acted out the story, sometimes using puppets to facilitate this activity. Student clinicians also helped children make up their own stories using the book read to them as a model. Following the 10-week intervention program, posttest data were collected in the same way that pretest data had been collected.

Scoring

The number of items answered correctly in the rhyme identification and decision tasks and the number of words generated during the rhyme generation task were totaled to arrive at a

composite rhyming score for each child. Each narrative transcript was analyzed to determine story grammar complexity, percentage of use of complete cohesive ties, lexical richness, and comfort level. Story grammar complexity was determined by identifying the elements of story grammar (Stein & Glenn, 1979) in each story retelling and assigning each to one of Applebee's (1978) levels. Percentage of use of complete cohesive ties was determined by examining each child's use of anaphoric pronouns, ellipsis, definite articles, conjunctions, and conjunctive adverbs during story retellings. For third person personal pronouns to be complete cohesive ties, they had to refer back to previously stated referents. However, since the story used for the retellings, *Just a New Neighbor*, (Mayer & Mayer, 1999) was written in the first person and the narrator (Little Critter) was never identified by name, I did not count "he," when the children used this pronoun to refer to the Little Critter as an incomplete tie because I felt it was pragmatically appropriate for the children to use this pronoun when referring to the picture of the Little Critter. Also, when children used the definite article to refer to pictures in this book, I counted this as a complete cohesive tie. Lexical richness was measured by counting the number of words children used during their story retellings that were not on the Wepman and Haas (1969) list of the 500 most frequently occurring words used expressively by 6-year-old children. Finally, I used mean length of turn and percentage of spontaneous productions to determine comfort level.

Interrater Reliability

A second rater independently scored the rhyming information after the faculty advisor had scored it. Using a unit-by-unit agreement ratio (Hedge, 1994) interrater reliability was 100% for both the pretest and posttest data. Each pretest and posttest narrative sample was entered into the *Systematic Analysis of Language Transcripts (SALT)* (Miller & Chapman, 1993) program to compute the mean turn length for each sample. The author analyzed each narrative sample and assigned each to a macrostructure stage according to Applebee's (1978) classification system, as well as determined the level of lexical richness and percentage of complete cohesive ties. The faculty advisor also analyzed each narrative sample. Disagreements were resolved through discussion until a consensus was reached.

CHAPTER IV

Results

The purpose of this study was to determine the effect of explicit instruction in rhyming and in narrative structure on gains made by preschool-aged children in these skills. Results are discussed in the following sections.

Rhyming

An alpha level of .05 was used for all statistical tests. Results indicated a significant main effect for time, $F(1, 14) = 35.773$, $p < .05$, indicating that rhyming skills improved for children who received both rhyming and narrative instruction between the pretest and the posttest. This result was qualified, however, by a significant time by group interaction, $F(1, 14) = 14.21$, $p < .05$. Examination of the mean differences in improvement for each group showed that rhyming scores improved significantly more for the children who received rhyming instruction (pretest $M = 4.63$, $SD = 3.66$; posttest $M = 16.75$, $SD = 7.68$) than they did for the children who received narrative instruction (pretest $M = 8.88$, $SD = 6.42$; posttest $M = 11.63$, $SD = 8.55$).

Narrative

Macrostructure Analysis

Applebee's Stages of Narrative Development

Each narrative was analyzed and assigned to a stage of development according to Applebee's (1978) protocol (described in chapter II). Please see appendix C for copies of narrative transcripts.

Narrative participant one (aged 50 months at pretest; 52 months at posttest) produced a true narrative during pretest and a chain narrative during posttest. Narrative participant two (aged 53 months at pretest and 56 months at posttest) produced a primitive narrative during pretest and a true narrative during posttest. Rhyming participant one (aged 59 months at pretest; 62 months at posttest) produced a sequence narrative during pretest and a chain narrative during

posttest. Last, rhyming participant two (aged 49 months at pretest; 55 months at posttest) produced a chain narrative during pretest and a primitive narrative during posttest.

Microstructure Analysis

Lexical Richness

To determine lexical richness pre- and post-test narratives were analyzed according to the procedure described by Paul (2001). Paul, Laszlo, and McFarland (1992, cited in Paul, 2001), found that, on average, stories of kindergarten children contained 15 (+/- 6) words that were not included on a list of words most commonly by 6-year-old children (Wepman & Haas, 1969) (appendix D). Using the Paul et al. norms, I converted each child's pre- and posttest raw scores to Z scores. Both raw scores and Z scores are given below:

	Narrative 1		Narrative 2		Rhyming 1		Rhyming 2	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
# of Words	5	18	22	19	9	13	8	12
Z scores	-1.67	+0.5	+1.17	+0.67	-1.0	-0.33	-1.17	-0.5
Gains as measured by z-scores	+2.17		-0.50		+0.67		+0.67	

Table 4.1 *Number of words occurring outside the Wepman & Haas (1969) list (see appendix D)*

Analysis of these children's vocabulary showed that lexical richness improved for each child except narrative child two, who scored more than one standard deviation above the mean when compared to the kindergarten children in the Paul et al. study, between the pretest and the posttest. Interestingly enough, most improvement was seen in narrative child one, with the following Z-Score gains between the pretest and the posttest:

$$N1 = +2.17, N2 = -0.5, R1 = +0.67, \text{ and } R2 = +0.67.$$

Use of Cohesive Ties

A cohesive tie analysis was completed to determine the number of complete cohesive ties the children used when retelling stories. Cohesive ties include conjunctions, conjunctive adverbs, anaphoric pronouns, ellipsis, and definite articles (Paul, 2001). The number of complete cohesive ties was compared to the total number of cohesive ties to yield the following results:

	Narrative 1		Narrative 2		Rhyming 1		Rhyming 2	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest

% of completed ties	17/18 94.4%	13/18 72.2%	22/37 59.4%	30/36 83.3%	14/18 77.8%	21/24 87.5%	25/29 86.2%	22/25 88.0%
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Table 4.2 *Percentage of completed cohesive ties used.*

According to Paul, the mean percentage of complete cohesive ties used by kindergarten aged children is 85 +/- 16, so 69 – 100% use of complete cohesive ties would be within the normal range for kindergarten aged children. She suggested that school-aged children should demonstrate appropriate use of at least 70% use of complete cohesive ties.

Additional Findings

Comfort Level – spontaneous responses and mean turn length

Each narrative was analyzed to determine a level of comfort. This level was determined by deciding into which of the following categories each statement within the narrative fell: direct response (response following a prompt from the examiner which led the child to answer questions about the story), indirect response (response following a prompt from the examiner which did not require an answer, such as “uh huh” or “oh!”), repetition (repetition of a statement made prior to the current statement by the subject) and spontaneous production (statement from the child was produced spontaneously, not preceded by a comment from the examiner). Additionally, the mean turn length (MTL) for each child during narrative retellings was used to determine comfort level. The MTL was calculated using the *SALT* (Miller and Chapman, 1993) program. The percentage of spontaneous productions and MTL were calculated to determine each child’s comfort level, yielding the following results:

	Narrative 1		Narrative 2		Rhyming 1		Rhyming 2	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
% of spontaneous productions	4/9 44%	9/23 39%	1/23 4%	18/26 69%	13/21 62%	14/17 82%	8/17 47%	15/18 83%
MTL	10.38	7.05	6.93	13.38	8.08	44.33	16.33	14.57

Table 4.5 *Comfort Level*

CHAPTER V

Discussion

This study asked two questions. First, it sought to determine whether children between the ages of 37 and 54 months, who for a ten-week period participated in activities using children's literature designed to teach them to identify and produce rhyming words, would make greater gains in their awareness of rhyme than a similar group of children who participated in children's literature activities that emphasized narrative structure. Second, it sought to determine whether a subgroup of two children, aged 50 and 53 months, who during the same period, participated in activities using children's literature that emphasized narrative structure would, during story retelling tasks, make greater gains in two areas of narrative analysis than two children aged 49 and 59 months who participated in activities that emphasized rhyming. The first narrative area examined was the sophistication of the children's narrative macrostructures, while the second area examined was improvement in their narrative microstructures, specifically improvement in lexical richness, use of complete cohesive ties, and comfort level when retelling narratives.

My results showed that, when children as young as 37 months were explicitly taught to rhyme, their rhyming abilities improved significantly more than those of similarly aged children who

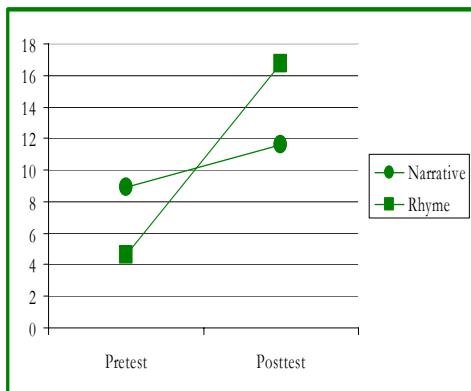


Figure 5.1 *Improvement in rhyming between the pretest and posttest.*

were not explicitly taught this skill. Although several researchers (Bernhardt et al., 1995; Hesketh et al., 2000; MacLean et. al., 1987) found that some 3-year-old children were able to identify and generate rhyming words, Norris and Hoffman (2002) suggested that most children do not begin to perform the task taught during this study until the ages of 4 to 5 years. Thus, explicit instruction appeared to foster earlier acquisition of the concept of rhyming than would be

likely to occur without such instruction.

The second part of this study examined how explicit instruction in the elements of story grammar, using children's literature rich in these elements, affected children's production of narratives, as measured using a story-retelling task. Each story retelling was first analyzed to determine the level of narrative macrostructure using Applebee's (1978) levels of narrative development. Results showed that narrative macrostructure improved significantly for two children and showed no improvement for two children. Interestingly, one child had received narrative instruction, while the other had received rhyming instruction in both the improved and non-improved groups. These results suggest that factors other than type of instruction affected the development of the children's macrostructure levels. Indeed, the children who showed improvement (each child advancing two macrostructures between the pretest and the posttest) demonstrated either age-appropriate (narrative child) or significantly delayed (rhyming child) narrative macrostructures at the pretest. The two children who showed no improvement (each falling one macrostructure between the pretest and the posttest) both demonstrated advanced narrative macrostructures at the pretest, with the narrative macrostructure used by the child who received narrative instruction remaining advanced at the posttest. I speculate that these children's narrative development was at ceiling and that the activities provided during the study were not sufficient to effect improvement in their narrative macrostructures.

Previous research has found that receptive vocabulary (Dickinson & Tabors, 2001) and the ability to provide definitions of words (Roth, Speece, & Cooper, 2002) are strong predictors of reading comprehension. An analysis of lexical richness, as measured by the number of words in the narrative retellings not included in Wepman and Haas (1969) list of the most commonly occurring words for 6-year-olds, was used to identify the diversity of participants' vocabulary use. Analysis of these children's vocabulary showed that lexical richness improved for each child except the second narrative child between the pretest and the posttest, with the

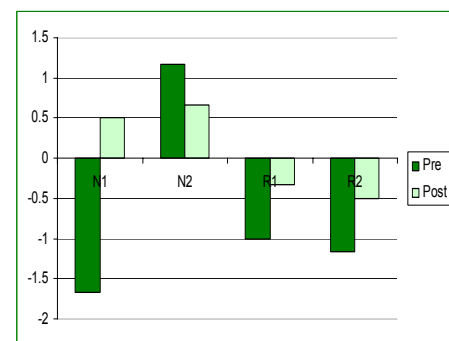


Figure 5.2 *Improvement, in Z-scores, of lexical richness between the pretest and posttest.*

greatest improvement being seen in the first narrative child. It should be noted that the second narrative child was more than one standard deviation above the mean for kindergarten aged children (Paul et al., 1992, cited in Paul 2001) at pretest and remained in the high average range at posttest. Therefore, lack of improvement in lexical richness for this child was probably due to ceiling effects. On the other hand, the first narrative child, who was close to two standard deviations below the mean at pretest improved his score to well within the average range when compared to kindergarten children at posttest. Although improvement was seen in both of the children who received rhyming instruction, their gains were much more modest. Due to the small number of participants in the present study, the results for lexical richness remain inconclusive, but suggest that children who are exposed to literature rich in the elements of story grammar may make substantial gains in their expressive vocabularies. More research, using larger numbers of children, needs to be conducted to answer this question.

Using complete cohesive ties helps to bind together sentences throughout the narrative,

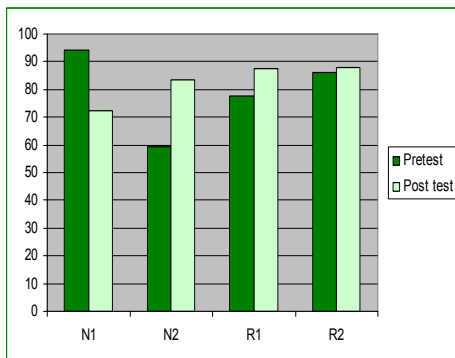


Figure 5.3 *Improvement in use of cohesive ties between the pretest and posttest.*

demonstrating the child's understanding of temporal and cause/effect relationships. Both of the rhyming participants in this study improved in their use of complete cohesive ties between the pretest and the posttest (rhyming participant one 77.8% - 87.5%; rhyming participant two 86.2% - 88.0%) and only narrative participant two improved between pretest and post test (narrative participant one 94.4% - 72.2%; narrative participant two 59.4% - 83.3%). As noted

earlier, (Paul et al, 1992, cited in Paul, 2001) found the mean percentage of complete cohesive ties used by kindergarten aged children to be 85 +/- 16, so 69 - 100% use of complete cohesive ties would be within the normal range for kindergarten aged children. Furthermore, Paul suggested that school-aged children should demonstrate at least 70% use of complete cohesive ties. Since my participants were not yet in kindergarten (at posttest their ages were 62 months [rhyming participant one], 55 months [rhyming participant two], 52 months [narrative participant one], and 56 months [narrative participant two]), they appeared to be performing at

least within the average range for use of cohesion. Indeed, the only participant who did not use complete cohesive ties within the average range for kindergarten children at pretest was the second narrative participant and he improved to well within the average range by posttest. Complete cohesive ties are used extensively in children’s literature regardless of the format of the books, and therefore rhyming and narrative books are likely to affect performance in this area in similar ways.

I decided to measure comfort level, which I defined as “a level of awareness of narrative structures, whether covert or overt,” by measuring participants’ spontaneous responses and mean turn length (MTL). In other words, I speculated that, after the children spent ten weeks listening to and retelling stories, they would be more comfortable retelling stories, needing little prompting. If this were the case, the result should be increased MTL and a greater number of

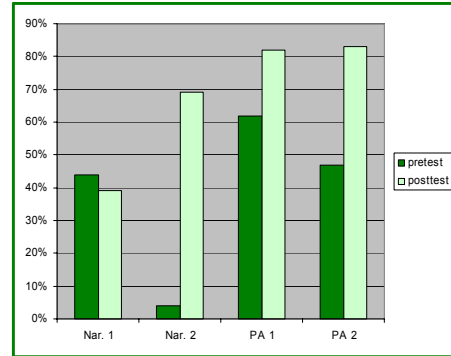


Figure 5.4 *Improvement in use of spontaneous responses between the pretest and posttest.*

spontaneous utterances (utterances produced without prompting, cuing, or other such behaviors) while retelling stories. Again, findings were mixed. Spontaneous utterances improved significantly for narrative participant two (4%-62%), but decreased slightly for narrative participant one (44% - 39%). Spontaneous productions increased for both rhyming participants (62% - 82% [rhyming participant one]; 47% - 83% [rhyming participant two]). MTL findings were mixed, with narrative participant two and rhyming participant one

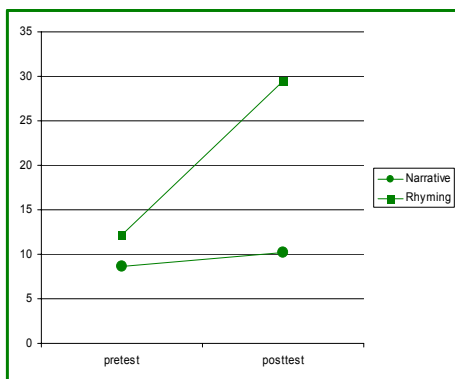


Figure 5.5 *Average MTL between pretest and posttest.*

improving (6.39 – 13.38 and 8.08 – 44.33 respectively), while narrative participant one and rhyming participant two did not improve (10.38 – 7.05 and 16.33 – 14.57 respectively). Although decreases in MTL between pre- and posttest is a possible indicator that participants’ comfort level in retelling stories had not improved during the ten-week period, the decreases seen for two of the participants probably show normal levels of variation. It also must be remembered that each

child's level of comfort with the examiners might contribute to improvement in these measures. Since, for this particular study, the student clinicians, rather than the examiners, interacted with the children during the ten-week intervention period, this might have influenced the outcome for this particular measure.

Summary and Conclusions

In summary, the study's major finding was that children between the ages of 37 and 54 months, who were explicitly taught to recognize and produce rhyming words during the ten-week intervention period, made greater gains in this ability than a similarly aged group of children who were not explicitly taught this skill. Although I did not have enough participants to conclusively show that instruction using children's books rich in the elements of story grammar results in greater gains in lexical richness than exposure to books that emphasize rhyming words, narrative participant two's significant improvement in this area suggests the need for further research.

The question remains, however, whether early instruction in rhyming and narratives eventually will result in enhanced reading ability. As noted earlier, some studies have reported significant relationships between early rhyming and later reading ability (Badian, 2001; Bradley & Bryant, 1991; Goswami & Bryant, 1990; MacLean et al., 1987; Walton et al., 2001), whereas others have failed to find these relationships (Duncan & Johnston, 1999; Stanovich et al., 1984; Yopp, 1988). Virtually all studies, however, have found significant relationships between phoneme awareness and later reading ability (Duncan & Johnston; Hulme, 2002; Hulme et al., 2002; Roth et al., 2002; Stanovich et al.; Walton et al., 2001). If, as hypothesized by several researchers (Anthony et al., 2002; Lonigan et al., 2000; Stahl and Murray, 1994), rhyming and phoneme awareness are part of a single construct of phonological awareness, with rhyming preceding phoneme awareness developmentally, it follows that young children who have mastered rhyming skills will learn phoneme awareness skills more efficiently than children who have not first mastered rhyming skills. Early acquisition of these skills should increase the likelihood of later proficiency in reading.

Although several researchers (Bishop & Edmundson, 1987; Paul, 2001; Snow & Dickinson, 1990; Synder & Downey, 1991) found that children's early experiences with narratives had a positive influence on their later acquisition of reading, Roth et al. (2002) found that children's early narrative experiences did not predict either word decoding or reading comprehension in second grade. However, several researchers (Dickinson, 2002; Roth et al.; Vellutino, Scanlon, Small and Tanzman; 1991) have found that strong vocabularies during the preschool years are strong predictors of reading comprehension during the school-age years. These findings suggest that the more extensive a child's vocabulary, the stronger his later reading comprehension skills are likely to be. Results of the present study suggest that narrative instruction may be an effective method of helping children expand their vocabularies during the preschool years, thus having a beneficial effect on later reading comprehension.

Therefore, I conclude that narrative experiences as well as explicit instruction of rhyming skills are both beneficial for young children and may have positive effects on reading comprehension and decoding during the school-age years. Indeed, studies have suggested that children who attend language-rich preschools that emphasize basic skills, such as phonological awareness and experience with narratives, have an advantage over their peers in later reading acquisition (Snow et al., 1998; Snow & Dickinson, 1990), and success in learning to read increases academic success.

These findings should be of special interest to speech-language pathologists. Previous research has shown that children with specific language impairment are at a significant risk for difficulty in learning to read (Snow et al., 1998). Furthermore, Aram and Nation (1980) showed that, when therapy designed to help these children improve their language skills without specifically addressing phonological awareness skills was administered during the preschool years, children with language impairment did not achieve better reading abilities upon school entry. Kaderavek and Sulzby (2000) demonstrated that 2- to 4-year old children diagnosed with specific language impairment produced narratives more lexically rich after repeated exposure to storybook readings. Given these findings, and findings that show that children with language impairment have significantly more difficulty with rhyming skills than either their chronological age or language age peers (Boudreau, & Hedberg, 1999; Fazio, 1997), it follows that early explicit instruction in phonological awareness and narrative skills, proceeding in a

developmentally appropriate fashion, is especially important for them. As researchers gain more knowledge about the developmental sequence of phonological awareness and narrative skills, they will be able to use this knowledge to enhance the early experiences of children with language impairment, as well as those of normally developing children.

Implications for Future Research

In light of the findings of this study, I suggest that further research be conducted to answer the following questions:

1. Will young children, both with and without language impairment, who are first taught rhyming skills, master phoneme awareness skills following explicit instruction more quickly than children who have not first been taught rhyming skills?
2. Will young children, both with and without language impairment, who are first taught rhyming skills, followed by instruction in phoneme awareness skills, acquire reading and spelling skills more easily upon school entry than children who have not explicitly been taught phonological awareness skills?
3. Will young children, both with and without language impairment, who are exposed to children's literature rich in the elements of story grammar, make greater improvements in receptive and expressive vocabulary than children not exposed to this type of literature?
4. Will young children, both with and without language impairment, who make significant improvements in receptive and expressive vocabulary following exposure to literature rich in story grammar elements, demonstrate improved reading comprehension during the school-age years?

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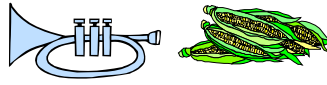
Appendix A

Pretest – Posttest Phonological Awareness Data Collection Sheets

Rhyming Pairs

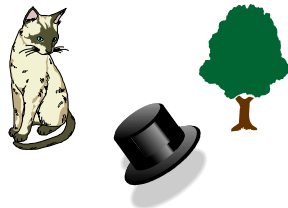
Tell the child you are going to show them some pictures. Show the child the first template. Name each picture on the sheet while pointing to the corresponding picture. Once completed, ask the child to point to the ones that rhymed. Tell the child we are going to practice the first time. Afterwards, tell them we are going to do it for real now so listen real good. Check the appropriate response in the table below.

Template	Correct	Incorrect
Ex. horn corn shirt		
1. cat hat tree		
2. cake rake dog		
3. box socks fork		
4. mouse house spoon		
5. rug bug cup		
6. car jar plate		
7. fan man moon		
8. goat boat sun		
9. bow toe hand		
10. nose rose nail		



Rhyming Pairs Example Sheet
(horn, corn, shirt)

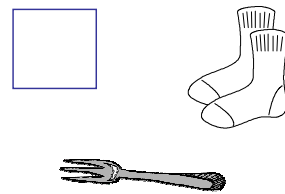
Example 1



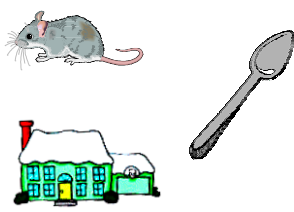
1. Rhyming Pairs (cat, tree, hat)

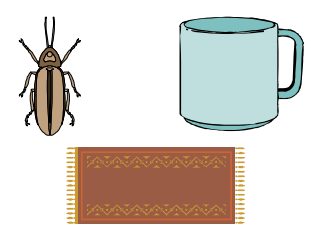


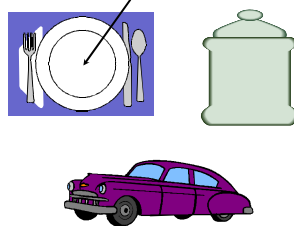
2. Rhyming Pairs (dog, cake, rake)

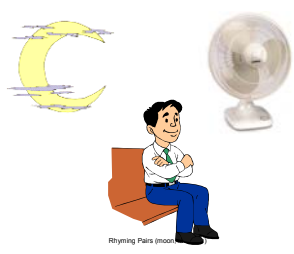


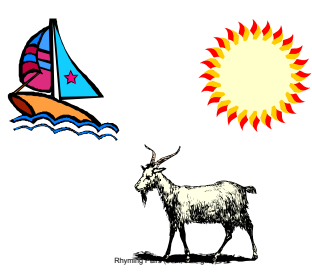
3. Rhyming Pairs (box, socks, fork)

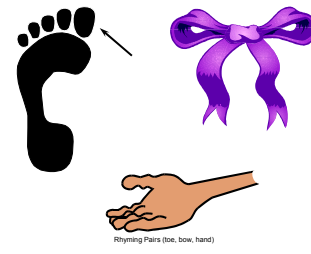
4.  Rhyming Pairs (mouse, spoon, house)

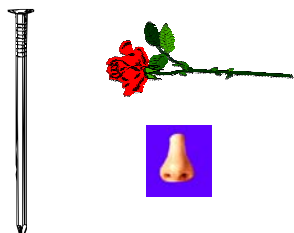
5.  Rhyming Pairs (bug, cup, rug)

6.  Rhyming Pairs (plate, jar, car)

7.  Rhyming Pairs (moon)

8.  Rhyming Pairs (goat)

9.  Rhyming Pairs (toe, bow, hand)

10.  Rhyming Pairs (nail, rose, nose)

Jed

Introduce a puppet/stuffed animal named Jed. Tell the child that Jed likes words that rhyme with his name. Say the following words preceded by "Jed" and ask the child to tell you if the word pair rhymed.

For example: "Jed fed" (rhymed) "Jed shoe" (did not rhyme)

Tell the child you are going to practice first. Use the first two word pairs as practice. Afterwards, tell the child you are going to do it for real now, so listen real hard. Record the appropriate response in the table below.

Word Pairs	Correct	Incorrect
Jed med		
Jed fall		
Jed bed		
Jed ball		
Jed red		
Jed head		
Jed jump		
Jed Ted		
Jed run		

Rhyme game

Tell the child that you are going to read a list of words. After each word ask the child to think of a word that rhymes: real or silly (made-up). Tell the child you are going to practice first. Use the first word for practice. Afterwards, tell the child you are going to do it for real now. Record their response below. Write "NR" for no response.

Word	Response
Bone	
Sun	
Can	
Grass	
Road	
Stars	
Wood	
Bag	
Mom	
Bowl	
Fight	

Appendix B

Books Used During 10 Week Training

Narrative Books	Phonological Awareness Books
<p>Alexander and the Terrible, Horrible, No Good, Very Bad Day (1972) <i>Judith Viorst; New York, NY: Atheneum</i></p> <p>Arthur's Nose (1976) <i>M. Brown; Boston, MA: Little, Brown, and Company.</i></p> <p>Corduroy (1968) <i>Don Freeman; New York, NY: Viking Press</i></p> <p>Henry's Awful Mistake (1980) <i>R. Quackenbush; New York, NY: Parents Magazine Press.</i></p> <p>The Housekeeper's Dog (1967) <i>Ezra Jack Keats; New York, NY: Harper & Row</i></p> <p>If I Had a Robot (1996) <i>D. Yaccarino; New York, NY: Puffin Books</i></p> <p>If You Give a Mouse a Cookie (1985) <i>Laura Joffe Numeroff; New York, NY: Harper & Row</i></p> <p>Owen (1993) <i>Kevin Henkes; New York, NY: Greenwillow Books</i></p> <p>Peter's Chair (1967) <i>E. J. Keats; New York, NY: Harper & Row.</i></p> <p>Swimmy (1973) <i>Leo Lionni; New York, NY: Random House</i></p>	<p>Alligator's All Around (1962) <i>M. Sendak; USA: HarperCollins</i></p> <p>Big Red Barn (1989) <i>Margaret Wise Brown; New York, NY: Harper & Row</i></p> <p>Chicken Soup with Rice (1962) <i>M. Sendak; USA: HarperCollins</i></p> <p>Green Eggs and Ham (1960) <i>D. Seuss; New York, NY: Random House</i></p> <p>Hop on Pop (1963) <i>D. Seuss; New York, NY: Random House</i></p> <p>In a People House (1972) <i>T. LeSeig; New York, NY: Random House</i></p> <p>One Fish Two Fish Red Fish Blue Fish (1960) <i>D. Seuss; New York, NY: Random House</i></p> <p>Pets I Wouldn't Pick (1982) <i>S. A. Schmelz; New York, NY: Parents Magazine Press</i></p> <p>Ride a Purple Pelican (1986) <i>Jack Prelutsky; New York, NY: Greenwillow Books</i></p> <p>There's a Wocket in my Pocket (1974) <i>D. Seuss; New York, NY: Random House</i></p>

Appendix C

Pre- and Post-test Narrative Transcripts

E = examiner and C = child

Narrative Child 1

Pretest

E1 What happened in the story?
C1 A little girl came.
E2 A little girl came.
E3 That's right.
C2 And he didn't want to play with her.
E4 And he didn't want to play with her,
right?
C3 So he run away.
E5 So he run away.
C4 XXXXX
C5 So he jumped over.
C6 And she did too.
E6 Mhmm.
C7 He went.
C8 What are these?
E7 It's called a briar patch.
C9 He went under the briar patch.
C10 And she did too.
E8 Mhmm.
C11 So he went in the apple tree and jumped
on the roof top house.
C12 And she did too.
E9 Okay.
C13 He was swinging away from her.
C14 And they went all down the grass.
C15 Hey.
C16 And they played after all.
C17 Want to do that again?

Post test

C1 This is the new neighbor.
C2 Momma was washing the dishes and he
was...
C3 What was this page called?
E1 Remember?
E2 What's he hoping for?
E3 He's looking for something because...
E4 What does his momma tell him here?
C4 Be good outside.
C5 I'm not reading it because I don't know
what the words are.
E5 Just make it up.
E6 You know it.
E7 We'll do it together.
E8 Look at the pictures.
E9 Look...what's he hiding for?
C6 The girl.
C7 Um.
C8 He's driving the koolaid.
E10 He's driving a what?
C9 A koolaid.
E11 A koolaid?
E12 He's driving koolaid?
E13 You're silly.
E14 Tell me what happens here.
C10 The girl's going to say he's pretty.
E15 Who is that girl?
C11 I don't know.
E16 Is she his what?
C12 Neighbors.
E17 His new neighbor.
C13 His new neighbor.
E18 And what did she tell him again?
C14 You're so cute.
E19 Oh, so what did he do then?
C15 Run away.
E20 Because why?
C16 'Cause he didn't like him.
E21 What's he do here?
E22 Now you know the rest of it.
C17 Jump over the gate.
E23 And?
E24 Jumped over the gate, and?
C18 She did too.
E24 Let's see what happens next.

E25 You can hold it.
C19 He crawled under the...
C20 What are these?
E26 Briar patch.
C21 What did he do?
E27 You just told me.
C22 He crawled under the briar patch.
E28 Uh huh, and?
C23 And you know, you say that one.
E29 She did what?
C24 She that one.
E30 She crawled right after him.
C25 She climbed up the apple tree.
C26 And she jumped over.
C27 He swunged over.
C28 And that's was no problem for her.
C29 He land on XXXXX.
C30 Rolled down the grass.
C31 And she jumped on him.
C32 The end.

Narrative Child 2

Pretest

- | | |
|--|--|
| <p>C1 Get ready to turn the page.
 E1 I've got to turn the page?
 E2 Want me to tell what happened here first and you can tell me the rest?
 E3 Okay.
 E4 Mom told me that new neighbors were moving in right next door.
 C2 My mom told me they was moving right next door.
 E5 That's right.
 E6 Now tell me what happens.
 E7 What's happening?
 C3 They're moving.
 E8 Now what?
 C4 Hey, they bringing out and back into the old house.
 E9 Yeah, that's what he's doing, isn't he?
 E10 They moved.
 C5 That's not fair.
 E11 Some people are crazy like that.
 E12 What's happened here?
 C6 He hiding in the bushes.
 C7 XXXXX
 C8 I can't do it.
 E13 Oh yes you can.
 E14 What's he doing?
 C9 Laying on the ground.
 E15 He's laying on the ground.
 E16 Why's he laying on the ground?
 C10 Watching.
 E17 What's he watching?
 C11 Work.
 E18 Work and all these guys are working?
 E19 What are they doing?
 C12 Carrying the whole house out.
 E20 See, that was easy.
 C13 Hey!
 E21 What?
 C14 She's in his house.
 E22 No, he's not moving.
 E23 She's moving.
 E24 Remember?
 E25 Because his mom told him they were getting new neighbors.
 C14 Is that his new house?
 E26 This is his house.
 E27 Yeah
 E28 This is her house.
 C15 But why were they taking the furniture out of it?
 E29 He's not.
 E30 He's watching.
 C16 But why were they taking the furniture out of her house?</p> | <p>E31 Are they taking it out or are they bringing it in?
 C17 They're taking it out.
 E32 Well I don't know then.
 E33 Maybe they're cleaning.
 E34 Cleaning all the floors and the walls.
 C18 Yeah, maybe.
 E35 That could be.
 E36 Let's find out.
 E37 You tell me.
 E38 What happened here?
 C19 Uh.
 C20 She stand there and looked at him.
 E39 What's happening here?
 C21 She stand there and looked him.
 E40 Some more, huh?
 E41 Okay, now what?
 C22 Then he crawled through the these.
 C23 And she crawled through.
 E42 What are these?
 E43 What's he crawling through?
 C24 Vine.
 E44 Vine.
 E45 Now what?
 C25 He climbed the apple tree and jumped on the clubhouse.
 C26 And so she did.
 E46 She did too, huh?
 E47 Now what?
 C27 And he jumped off of there.
 C28 And he swunged over there and...
 C29 Hey!
 C30 Look at doggy!
 E48 He's swinging too, isn't he?
 C31 XXXXX
 E49 Then what happened after that?
 C32 I like when the doggy rolls down.
 C33 And he show his utters.
 E50 Oh.
 E51 That's his feet.
 C34 No.
 C35 I mean you can't see his utters.
 E52 Oh, okay.
 E53 Well what's happening?
 C36 She swung over it too.
 C37 And she (he) rolled down.
 C38 And she rolled down.
 C39 And they landed in the mud puddle and got all soaking wet.
 E54 Then what?
 C40 They won.</p> |
|--|--|

Post test

- E1 Alright.
E2 You're turn.
C1 I think the dog...
C2 I think the girl is catching the boy.
C3 And the dog is catching the girl.
E3 Oh.
E4 Okay you tell me.
C4 You have to hold it.
E5 Okay, I'll hold it.
E6 You tell me the story.
C5 I can't tell the whole story.
E7 Try.
C6 No.
E8 What's this story?
C7 You have to tell me.
E9 Okay.
E10 This story is called...
C8 A new neighbor.
E11 Mhmm.
C9 Mom said a new neighbor is moving in.
C10 I hide in the bushes
C11 I stand and watch them.
C12 I don't know this part.
E12 Oh.
E13 They are unloading the truck.
C14 They are unloading the truck.
C15 Pew!
C16 The truck stink.
C17 Yuck!
C18 And he turned around.
C19 And it was a girl.
C20 And she said you're kinda cute.
C21 And she said you wanna play?
E14 And what'd he do?
C22 Ran.
- E15 Why did he run?
C23 'Cause.
E16 'Cause why?
C24 'Cause he thought it was a boy.
C25 And he wanted it to be a boy.
C26 And it was a girl.
E17 Oh.
C27 And he jumped over the fence.
C28 And she jumped over the fence
C29 He went through the briar patch.
C30 And she went through the briar patch.
C31 He climbed the apple tree.
C32 And she climbed the apple tree.
C33 I jumped on the clubhouse roof.
C34 I swing...
C35 I don't know this one.
E18 Yes you do.
C36 No I don't.
E19 You started it.
E20 Say the whole thing.
C37 No.
E21 What's he doing?
E22 Tell me 'cause I don't know what page
you're on.
C38 He's swinging over the...
C39 I don't know this one.
E23 Swinging over the?
E24 Stream.
C40 Stream.
C41 And she swing over too.
C42 He tumbled down.
C43 And she tumbled down.
C44 And she land right on him.
C45 And she said do you want to do that?
C46 You want to play that again?
C47 And they did.
E25 Good job!

Rhyming Child 1

Pretest

E1 Would you like me to start the first page?
 C1 Um huh.
 E2 Ok, this is just a new neighbor, the title
 of the story, just a new neighbor.
 E3 Now, you go ahead and tell the rest.
 C2 He's yelling.
 E4 He's yelling, isn't he?
 E5 Wow!
 C3 And he hiding.
 E6 Oh.
 C4 Look.
 E7 Oh, what is that?
 C5 The dog.
 E8 The dog...what's he doing?
 C6 He looking in too.
 C7 And they're watching.
 C8 And they're putting a piano in.
 E9 They are, you are right.
 C9 The girl is behind him.
 C10 He turned around.
 C11 And running.
 E10 Why's he running?
 C12 Away.
 E11 Away.
 C13 He's climbing a fence.
 C14 And she jumped on the fence.
 C15 And climb through briars
 C16 And she did too.
 C17 He was climbing a tree.
 C18 He jumped on a clubhouse.
 C19 She was climbing a tree and jumped on a
 clubhouse.
 C20 And she broke.
 C21 She swung.
 E12 Oh, goodness.
 C22 And rolled down.
 C23 And she fell in the mud.
 E13 Oh [laughs]
 E14 And, so...

C24 They did it again.

Post test

C1 Just a new neighbor.
 C2 What?
 C3 What does he do?
 E1 Look's like he's happy to me.
 E2 Why don't you tell me what happens on
 this page.
 E3 What does his mom tell him?
 C4 Just a new neighbor is moving in.
 C5 And he watched her.
 C6 And he hiding in the bushes.
 C7 And it almost took the whole day.
 C8 And I...
 C9 And...
 E4 Who was it?
 C10 Was the new neighbor.
 C11 And he (she) XXXXX said you wanna
 play?
 C12 And he said no.
 C13 And he ran.
 C14 He climbed over the fence.
 C15 And the new neighbor did too.
 C16 He climbed under the briar patch.
 C17 She did too.
 C18 I climbed the apple tree.
 C19 And she was right behind.
 C20 And I jumped on the roof.
 C21 And she did too.
 C22 And I jumped...
 C23 I swung onto the ground.
 C24 And she did too.
 C25 And her jumped.
 C26 I rolled down the hill.
 C27 And I landed in the mud.
 C28 And she landed on top of me.
 C29 And he said I think we play afterall.
 C30 Want to do that again?

Rhyming Child 2

Pretest

C1 He said there's grownup in there.
E1 Then what happened?
C2 He went to the place.
C3 He saw a man.
E2 Then what happened?
C4 He went to the thing.
E3 He went to the thing?
E4 Okay.
E5 Then what happened?
C5 H went out and was watching his dog.
C6 He was watching a man, then a "pop".
C7 A big something.
C8 XXXXX
E5 Let's finish the story.
C9 There was a girl behind me.
C10 And she said he was really pretty.
C11 Then he ran away.
C12 And she said do you want to play?
C13 And he said no.
C14 And he ran away.
E6 That's right.
C15 He jumped over the fence.
C16 And she jumped over the fence too.
E7 Okay.
C17 He went under there.
C18 And he (she) went under the bushes too.
E8 Right.
C19 Then she went to the apple tree too.
E9 Okay.
C20 Then he jumped onto a rope.
C21 She did too.
C22 Then he rolled down.
C23 Did it again.
C24 Then he...
C25 They jumped through mud.
C26 Then he (she) want to do that again.
C27 Then they did.

Post test

E1 Okay.
E2 Now you tell me that story.
C1 I don't know how.
E3 Oh, just look at the pictures and tell me what's going on.
C2 Okay.
E4 And talk loudly.
C3 His mom said new neighbors were coming next door.
E5 Good job.
E6 Keep going.
C4 They had to get the truck unloaded.
E7 Uh huh.
E8 What did he hope?
C5 XXXXX to see that brontosaurus.
E9 Oh.
C6 They had to get the truck unloaded so they...
C7 There's a girl behind me.
C8 And she said hello.
C9 Then she said you're kinda cute.
C10 Want to play?
C11 And then he said no and ran away.
C12 He jumped over the fence.
C13 She jumped too.
C14 And crawled through the patch.
C15 She did too.
E10 Hold on.
E11 Don't skip the page.
E12 There we go.
C16 I climbed the apple tree.
C17 She did too.
C18 I crossed the river.
C19 She did too.
C20 I rolled down the hill in the mud.
C21 Played again.
E13 Good job, R---!

Appendix D

List of the 500 Most Common Words in 6-Year-Olds' Expressive Vocabularies

(Wepman & Hass, 1969)

A	Bought	Cry	Fix	Her
About	Box	Cut	Floor	Here
Across	Boy	Dad	Flower	Herself
After	Brick	Dance	Food	High
Again	Bridge	Dark	For	Hill
Against	Bring	Daughter	Forest	Him
All	Broke	Day	Forget	Himself
Almost	Broken	Dead	Forgot	High
Already	Brother	Dear	Found	Hill
Always	Brought	Decide	Four	Him
Am	Bug	Did	Friend	Himself
An	Bump	Die	From	His
And	Burglar	Dinosaur	Funny	Hold
Animal	Burn	Do	Game	Hole
Another	Bury	Doctor	Garden	Home
Ant	But	Does	Gave	Horse
Any	Buy	Dog	Get	Hospital
Anybody	By	Doll	Girl	Hot
Anything	Cabin	Done	Give	House
Are	Call	Door	Go	How
Arm	Came	Down	Gone	Hundred
Army	Can	Dry	Good	Hurt
Around	Car	Each	Got	Husband
As	Card	Early	Grandfather	I
Ask	Care	Eat	Grandma	If
Asleep	Carry	Else	Grandmother	In
At	Castle	End	Grass	Inside
Ate	Cat	Even	Grave	Instrument
Away	Catch	Ever	Great	Into
Baby	Caught	Every	Ground	Is
Back	Cause	Everybody	Grow	It
Bad	Cave	Everyone	Guess	Its
Bag	Cemetery	Everything	Guitar	Jump
Barn	Chair	Except	Gun	Just
Be	Child	Eye	Guy	Keep
Because	Children	Face	Had	Kept
Bed	Chop	Faint	Hair	Kid
Bedroom	Clean	Fall	Hand	Kill
Been	Climb	Farm	Happen	Kind
Before	Close	Fast	Happily	Kind-of (kinda)
Behind	Clothes	Father	Happy	Kiss
Below	Coal	Feel	Hard	Knife
Better	Coat	Fell	Hardly	Knock
Big	Cold	Field	Has	Know
Bird	Come	Fight	Hat	Lady
Bit	Corn	Find	Have	Lake
Black	Couch	Finish	Hay	Lamp
Blank	Could	Fire	He	Land
Boat	Country	First	Head	Lay
Book	Couple	Fish	Heard	Lear
Both	Cross	Five	Help	Left

Lesson	Off	Rope	Storm	Us
Let	Oh	Run	Story	Use
Light	Okay	Sad	Stuff	Very
Like	Old	Said	Summer	Violin
Line	On	Sail	Sun	Wait
Listen	Once	Same	Swim	Wake
Little	One	Saw	Table	Walk
Live	Only	Say	Take	Wall
Log	Open	School	Talk	Want
Long	Or	Sea	Teach	War
Look	Other	See	Tell	Was
Lot	Out	Seed	Ten	Watch
Love	Outside	Sent	That	Water
Lunch	Over	She	The	Way
Mad	Own	Shine	Their	We
Made	Paint	Shoe	Them	Wear
Make	Painting	Shot	Then	Well
Man	Paper	Should	There	Went
Marry	Part	Shut	These	What
May	Pay	Sick	They	Whatever
Maybe	People	Side	Thing	When
Me	Pet	Sister	Think	Where
Mean	Pick	Sit	This	While
Men	Picture	Six	Those	White
Might	Piece	Sky	Thought	Who
Minute	Place	Sleep	Thousand	Why
Mom	Plant	Snake	Three	Wife
Money	Play	Snow	Through	Will
Monster	Plow	Snowy	Tie	Window
More	Police	So	Till	Winter
Morning	Pond	Some	Time	With
Mother	Practice	Somebody	Tired	Woke
Mountain	Pray	Someone	To	Wolf
Move	Pretty	Someplace	Together	Woman
Much	Probably	Something	Told	Won
Must	Pull	Sometimes	Too	Wonder
Mustache	Put	Somewhere	Took	Wood
My	Rain	Soon	Top	Work
Name	Ran	Sort-of (sorta)	Tornado	Would
Near	Read	Stair	Tree	Wreck
Never	Ready	Stand	Try	Wrong
New	Real	Star	Tune	Yeah
Next	Really	Start	Turn	Year
Nice	Rest	Statue	Turtle	Yes
Night	Ride	Stay	TV	Yet
No	Right	Step	Two	You
Not	River	Stick	Under	Your
Nothing	Robber	Stone	Until	
Now	Rock	Stop	Up	
Of	Room	Store	Upon	

Wepman, J. and Hass, W. (1969. A Spoken Word Count: Children 5, 6, and 7. Chicago: Language Resource Association.

Appendix E

Cohesive Ties Used in Each Narrative

Narrative Child 1					
Pretest		Post test			
Cohesive tie	Tied To		Cohesive tie	Tied To	
c2/her	c1/girl	C	c1/the	c1/neighbor	C
c3/so		C	c6/the	c6/girl	I
c5/so		C	c8/the	c8/koolaid	I
c5/ellipsis		I	c10/the	c10/girl	I
c6/she	c1/girl	C	c14/you	e18/him	C
c7/ellipsis		C	c16/him	e18/him	C
c9/the	c9/briar patch	C	c17/the	c17/gate	C
c10/she	c1/girl	C	c18/she	c6/girl	C
c10/ellipsis		C	c18/ellipsis		C
c11/so		C	c22/the	c22/briar patch	C
c11/the	c11/apple	C	c25/she	c6/girl	C
c11/the	c11/roof	C	c25/the	c25/apple	C
c12/she	c1/girl	C	c26/she	c6/girl	C
c12/ellipsis		C	c26/ellipsis		I
c13/her	c1/girl	C	c27/ellipsis		I
c14/they	c1/girl & c2/he	C	c28/that	c27/swinged	C
c16/they	c1/girl & c2/he	C	c28/her	c6/girl	C
c17/that	c16/played	C	c31/she	c6/girl	C
94.4% complete			72.2% complete		

Narrative Child 2					
Pretest		Post test			
Cohesive tie	Tied To		Cohesive tie	Tied To	
c2/they	e4/neighbors	C	c11/them	c9/neighbor	C
c3/they	e4/neighbors	C	c14/they	c9/neighbor	C
c4/they	e4/neighbors	C	c14/the	c14/truck	C
c4/ellipsis		I	c16/the	c16/truck	C
c5/that	e10/moved	C	c19/it		I
c8/ellipsis		I	c20/she	c19/girl	C
c12/the	c12/house	C	c20/you	narrator	C
c14/she		I	c21/she	c19/girl	C
c14/that	picutre in story	C	c21/you	narrator	C
c15/they	e4/neighbors	C	c24/'cause		C
c15/it	e28/house	C	c24/it		I
c16/they	e4/neighbors	C	c25/it		I
c16/her		I	c26/it		I
c17/they	e4/neighbors	C	c27/the	c27/fence	C
c17/it	c15/furniture	C	c28/she	c19/girl	C
c20/she		I	c28/the	c28/fence	C
c21/she		I	c29/the	c29/briar patch	C
c22/then		I	c30/she	c19/girl	C

c22/the	c22/these	C	c30/the	c30/briar patch	C
c23/she		I	c31/the	c31/apple tree	C
c23/ellipsis		C	c32/she	c19/girl	C
c25/the	c25/apple	C	c32/the	c32/apple tree	C
c25/the	c25/clubhouse	C	c33/the	c33/clubhouse	C
c26/so		C	c41/she	c19/girl	C
c26/she	c25/climbed & jumped	I	c41/ellipsis	e24/stream	C
c26/ellipsis		C	c42/ellipsis		I
c27/there	c25/clubhouse	C	c43/she	c19/girl	C
c28/there		I	c43/ellipsis		I
c32/the	c32/doggy	C	c44/she	c19/girl	C
c33/he	c30/doggy	C	c45/she	c19/girl	C
c33/his	c30/doggy	C	c45/you	c2/boy	C
c35/his	c30/doggy	C	c45/that	story	C
c36/she		I	c46/you	c2/boy	C
c36/it		I	c46/that	story	C
c38/she		I	c47/they	c19/girl & c2/boy	C
c39/they		I	c47/ellipsis	c46/play	C
c40/they		I			
59.4% complete			83.3% complete		

Rhyming Child 1

Pretest			Post test		
Cohesive tie	Tied To		Cohesive tie	Tied To	
c5/the	c5/dog	C	c2/her	c2/neighbor	C
c6/he	c5/dog	C	c7/it		I
c2/ellipsis		I	c10/the	c10/neighbor	C
c7/they	e2/neighbor	C	c11/she	c2/neighbor	C
c8/they	e2/neighbor	I	c11/you	main character	C
c9/the	picture in story	C	c14/the	c14/fence	C
c14/she	c9/girl	C	c15/the	c15/neighbor	C
c14/the	c14/fence	C	c15/ellipsis	c14/climbed	C
c16/she	c9/girl	C	c16/the	c16/briar patch	C
c16/ellipsis	c15/climb	C	c17/she	c2/neighbor	C
c19/she	c9/girl	C	c17/ellipsis	c16/climbed	C
c20/she	c9/girl	C	c18/the	c18/apple tree	C
c20/ellipsis		I	c19/she	c2/neighbor	C
c21/she	c9/girl	C	c20/the	c20/roof	C
c22/ellipsis		I	c21/she	c2/neighbor	C
c23/she	c9/girl	C	c21/ellipsis	c20/jumped	C
c24/they	c9/girl & main character	C	c22/ellipsis		I
c24/it	story	C	c24/she	c2/neighbor	C
			c24/ellipsis	c23/swinged	C
			c25/her		I
			c26/the	c26/hill	C
			c28/she	c2/neighbor	C
			c29/we	c2/neighbor & main character	C
			c30/that	c29/play	C

77.8% complete

87.5% complete

Rhyming Child 2

Pretest			Post test		
Cohesive tie	Tied To		Cohesive tie	Tied To	
c2/the	c2/place	I	c4/they	c3/neighbor	C
c4/the	c4/thing	I	c4/the	c4/truck	C
c10/she	c9/girl	C	c5/that		I
c11/then		C	c6/they	c3/neighbor	C
c12/she	c9/girl	C	c6/so		I
c12/you	main character	C	c6/they		C
c15/the	c15/fence	C	c6/ellipsis		I
c16/she	c9/girl	C	c8/she	c7/girl	C
c16/the	c16/fence	C	c9/then		C
c17/there		I	c9/she	c7/girl	C
c18/she	c9/girl	C	c9/you	main character	C
c18/the	c18/bushes	C	c11/then		C
c19/then		C	c12/the	c12/fence	C
c19/she	c9/girl	C	c13/she	c7/girl	C
c19/the	c19/apple tree	C	c13/the	c12/over fence	C
c20/then		C	c14/the	c14/patch	C
c21/she		C	c15/she	c7/girl	C
c21/ellipsis	c20/jumped	C	c15/ellipsis	c14/crawled	C
c22/then		C	c16/the	c16/apple tree	C
c22/ellipsis		I	c17/she	c7/girl	C
c23/it	story	C	c17/ellipsis	c16/climbed	C
c24/then		C	c18/the	c18/river	C
c25/they	c9/girl & main character	C	c19/she	c7/girl	C
c26/then		C	c19/ellipsis	c18/crossed	C
c26/she	c9/girl	C	c20/the	c20/hill	C
c26/that	story	C			
c27/then		C			
c27/they	c9/girl & main character	C			
c27/ellipsis	c26/do that	C			
86.2% complete			88% complete		

Appendix F

“Just a New Neighbor” by Mercer Mayer

1. Mom told me that new neighbors were moving in right next door. [IE]
2. I really hoped they had a kid my age. [IR]
3. I hid in the bushes and watched. [IP]
4. It took almost the whole day to unload the big truck and get everything inside.
5. Someone behind me said “Hi.” [IE] I quickly turned around. [IR]
6. It was a girl. A girl was my new neighbor.
7. She said, “You’re kinda cute. Want to play?” [IE]
8. I said, “No,” and ran. [A] I was embarrassed. [IR]
9. I jumped over the fence. [A]
10. She jumped over the fence, too. [C]
11. I crawled through the briar patch. [A]
12. She crawled right after me. [C]
13. I climbed the apple tree. [A] She followed right behind. [C]
14. I jumped onto the clubhouse roof. [A] So did she. [C]
15. I jumped to the ground. [A] She wasn’t even afraid. She jumped too. [C]
16. I swung across the stream on the big rope. [A]
17. That was no problem for her.
18. I tumbled down the grassy hill. [A]
19. I landed in the mud. [A] She tumbled, too, and fell right on top of me. [C]
20. “I guess we played, after all,” she said. “Want to do that again?” I asked. [R]
21. And we did. [E]

***S – setting; IE – initiating event/problem; IR – internal response; IP – internal plan;
A – attempt; C – consequence; R – resolution/reaction; E – ending [RED = optional]***

Curriculum Vitae

EDUCATION

Masters of Science in Communication Disorders

Marshall University Graduate College
Expected graduation: December 2003
Current GPA: 3.39

August 1999-present

Bachelors of Arts in Communication Disorders

Second major in Psychology
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Overall GPA: 3.26 Major GPA: 3.4

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CLINICAL EXPERIENCE

CD 670/671 Advanced Clinical Practicum

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Engaged in supervised clinical experience at Cabell Huntington Hospital.

Experience included:

- Performing speech and language screenings on adults and children.
- Performing Bedside Swallow Evaluations and Passey-Muir speaking valve assessments.
- Evaluating adults and children suspected of having dysphagia, and speech & language difficulties.
- Working with adults and children who had dysphagia, and speech & language difficulties.
- Working with adults and children who have experienced traumatic injuries from motor vehicle accidents, environmental accidents, and CVAs.

CD 672/672 Clinical Practicum in the Schools

Spring 2003

Engaged in supervised clinical experience in a public elementary school.

Experience included:

- Performing speech/language and hearing screenings of preschool children
- Evaluating children suspected of having speech, language, fluency, and/or voice difficulties
- Working with children who had speech, language, and/or fluency difficulties
- Working with a child who has autism; included working on figurative language and preparing him to move on to middle school
- Working with a child who was diagnosed with dyspraxia; included working with a picture system and the DynaMite augmentative device to communicate with peers, educators, and other individuals
- Arranging a portfolio demonstrating achievements and accomplishments during all clinical experiences
- Organizing and performing in class language stimulation activities for all children in the classroom

CD 670/671 Advanced Clinical Practicum

Spring 2002

Engaged in supervised clinical experience at Sybene Head Start and the Marshall University Speech and Hearing Center Voice Clinic

Experience included:

- Working at River Cities ENT with various voice clients (under the supervision of a Marshall University supervisor)
- Performing speech/language and hearing screenings of preschool children
- Speech and language therapy for preschool children
- Working with a child who was suspected to have autism; participated in the diagnostic process
- Organizing and performing in class language stimulation activities for all children in the classroom

CD 570/571 Clinical Practicum

Spring 2001

Engaged in supervised clinical experience at the Marshall University Speech and Hearing Center

Experience included:

- Working with a child recently diagnosed with Autism

- Participating in an Aphasia support group
- Performing speech/language and hearing screenings of preschool children
- Participating in a “dialect group” with two adults from Asian countries

CD 427L Therapeutic Procedures Laboratory II **Spring 1999**
Engaged in supervised observation and in-depth analysis of the clinical process.

CD 426L Therapeutic Procedures Laboratory I **Fall 1998**
Engaged in supervised observation of individuals with communication disorders and introduction to the analysis of the clinical process.

CD 424L Diagnostic Processes with Communication Disorders Laboratory **Fall 1998**
Engaged in supervised observation and practice in evaluation of children suspected of having communication disorders

CD 422L Field Experience: Speech and Language **Fall 1997**
Experience with preschool aged children; planning and implementing speech and language stimulation activities.

EMPLOYMENT

IT Consultant: Computing Facilities Manager **March 1998-present**
Marshall University Computing Services
Responsibilities include:

- Management of 12 computing facilities, with 500+ personal computers and other equipment
- Management of 40-50 student employees
- Program and project organization and implementation
- One-on-one training for employees, faculty, staff, and students

Student Assistant, MU Computing Facilities **September 1996-March 1998**
Marshall University Computing Services
Responsibilities included:

- Operating a cash register
- Providing assistance to students, faculty, and staff on software and hardware

Mentor, Energy Express/Americorps **Summers of 1995, 1996, 1997**
WVU Extension Services
Responsibilities included:

- Organization of classroom of 6-10 children
- Writing and implementation of daily lesson plans
- Organization and implementation of programs rich in literature and art
- Promoting nutritional values
- Promoting personal hygiene

PUBLICATIONS

Reynolds, Mary E, Ph.D., Callihan, Kristie, and Browning, Erin. (2003). Effect of Instruction on the Development of Rhyming Skills in Young Children. *Contemporary Issues in Communication Science and Disorders*, 30, 41-46.

PRESENTATIONS

American Speech/Language Hearing Association 2003 Convention

Chicago, IL

Poster session: Enhancing Narrative Skills During the Early Preschool Years.

41st West Virginia Speech/Language Hearing Association 2003 Convention

Flatwoods, WV

Poster Session: Effect of Instruction on the Narrative Skills of Young Children

American Speech/Language Hearing Association 2002 Convention

Georgia World Congress Center, Atlanta, GA

Poster Session #230, Saturday morning: Enhancing Phonological Awareness Skills During the Early Preschool Years

40th West Virginia Speech/Language Hearing Association 2002 Convention

Radisson Hotel, Huntington, WV

Poster Session: Effect of Instruction on the Development of Rhyming Skills in Young Children