ABSTRACT

Title of dissertation: THE EFFECTS OF PARENT-LED READ-ALOUDS OF NONFICTION BOOKS ON FIRST-GRADERS' VOCABULARY ACQUISITION AND MOTIVATION TO READ

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This study investigated the effects of parent-led interactive read-alouds of nonfiction books on first-graders. Evidence suggests that nonfiction read-alouds in the classroom can improve children's vocabulary and motivation to read. This study used a pre/post experimental design to investigate whether parent-led read-alouds can lead to similar gains. Parents of first-grade students were invited to participate in the study. Half of the pool of interested parents was randomly assigned to the intervention group. The intervention group parents attended a training session on how to engage their children in interactive read-alouds. Children of consenting parents then had access to a lending library of 500+ nonfiction books, containing 10 target books with selected target vocabulary (32 words). First-graders whose parents were not randomly assigned to the intervention group, became the control group. Control group parents and children had access to an identical intervention after data were collected.

Treatment fidelity measures included Parent and Child Title Recognition Tests. Statistically significant Time X Treatment Interaction effects were found for both the Parent and Child Title Recognition Tests. These findings indicate that intervention group parents and children recognized a greater number of target books than control group parents and children after the intervention occurred.

Receptive and expressive measures of the children's knowledge of the target vocabulary, as well as a motivation to read measure, were used to measure effects. Initial analyses showed the control and intervention group were equivalent on pretest measures. The results for the receptive vocabulary showed a main effect for Time, with students in both groups increasing in receptive vocabulary; however the Time X Treatment Interaction was not statistically significant. Nor was the Time X Treatment Interaction for the motivation to read measure statistically significant. However, the analysis revealed a statistically significant Time X Treatment Interaction, with a very large effect size, for expressive vocabulary. This finding indicates that the intervention group was able to produce more accurate verbal definitions of target vocabulary after the intervention than the control group. Thus, children's expressive vocabulary benefited from parent-led nonfiction read-alouds.

THE EFFECTS OF PARENT-LED READ-ALOUDS OF NONFICTION BOOKS ON FIRST-GRADERS' VOCABULARY ACQUISITION AND MOTIVATION TO READ

by

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Chapter I. Introduction

Purpose of the Study

The purpose of this study was to investigate the effects of parent-led interactive read-alouds of nonfiction books on first-graders' vocabulary acquisition and motivation to read. A large body of research literature suggests vocabulary knowledge is not only a potent predictor of linguistic ability, but also that word knowledge is strongly related to reading comprehension (Anderson & Freebody, 1981; Purcell-Gates & Dahl, 1991). Additionally, research has shown that large-scale vocabulary growth in children is due to learning incidentally from oral and written contexts (Nagy, Herman, & Anderson, 1987; Nagy & Herman, 1987; Sternberg, 1987). The unique context of nonfiction read-alouds appears to offer a rich opportunity for introducing new vocabulary, concepts, and text structures to children (Smolkin & Donovan, 2003). Evidence suggests that nonfiction read-alouds in the classroom can improve children's vocabulary and motivation to read. This study used a pre/post experimental design to investigate whether *parent-led* read-alouds can lead to similar gains.

Rationale

Why should educators be concerned with vocabulary acquisition? Most importantly, it has been established by the research community that vocabulary growth is closely linked to reading proficiency in particular (Anderson & Freebody, 1981, Sternberg, 1987) and to school achievement in general (Walker, Greenwood, Hart, & Carta, 1984; Wells, 1987). In fact, Dickinson, Cote, and Smith (1993) have argued that if one were to select a single variable to measure aspects of children's cognitive functioning

related to school success, vocabulary would be a likely candidate. Specifically, it has been shown that students' knowledge of word meanings is an important factor in their performance on reading comprehension tasks (Mezynski, 1983). In addition, it has been shown that children who arrive in first grade with larger vocabularies are more likely to read without difficulty (Purcell-Gates & Dahl, 1991), and children with underdeveloped vocabularies, even if they possess proficient decoding skills, can encounter difficulty with comprehension in the intermediate grades (DeJong, & Leseman, 2001; Roth, Speece, & Cooper, 2002). Although a strong link between vocabulary knowledge and reading comprehension may seem obvious, there remains much to learn about the actual process of acquiring word knowledge and the most effective ways for educators to increase this acquisition and translate it into enhanced reading comprehension achievement.

An important motivation for providing experiences that may increase students' vocabulary stems from the huge individual differences that exist in children's vocabulary sizes. Unquestionably, many children come to school with well-developed oral language. They can speak in sentences, understand simple narratives, and probably know more than one thousand root words (Biemiller, 1999). However, there is an enormous discrepancy between high and low vocabulary growth rates (Hart & Risley, 1995). Why do these differences exist and what can educators do to equal the playing field?

The research community agrees that most vocabulary knowledge is probably obtained through incidental learning based on oral and written context (Nagy, Herman, & Anderson, 1985; Sternberg, 1987). Thus, a nature/nurture argument comes into play when examining oral language vocabulary differences in young children. Constitutional

factors such as phonological skills and strength and growth of "working memory" can influence the rate and ease of word learning; in other words, some children may have a genetic "talent" for acquiring new vocabulary. However, these constitutional factors are mediated a great deal by the opportunities children have to encounter new language vocabulary and structures (Biemiller, 1999). Differences in home environments have been linked to differences in early reading achievement and later school success (Heath, 1983). Linguistically-rich home environments contribute significantly to the development of early literacy skills (Beals, DeTemple, Snow, & Tabors, 1991; Bus, van Ijzendoorn, & Pellegrini, 1995; Scarborough & Dobrich, 1994). Observational studies that examine parent/child interaction and oral language vocabulary growth, such as Hart and Risley's (1995) account, maintain that children who grow up in low-income families are likely to have less well-developed vocabularies than their more advantaged peers. Thus, when considering school/home interventions, it may be important to encourage experiences at home that up the ante of rich vocabulary exposure, such as interactive read-alouds.

There is a well-established research base, as well as a widespread general public consensus, that reading aloud to children should be a highly recommended activity for encouraging language and literacy (Adams, 1990; Anderson, Hiebert, Scott, & Wilkinson, 1985; Goldfield & Snow, 1984). It makes sense that reading aloud to children may increase vocabulary development – young children's aural comprehension ability outstrips their word recognition competence greatly, and thus challenging content can be presented to young children through listening to books read aloud (Beck & McKeown, 2001). But what specifically makes read-aloud experiences effective for enhancing children's vocabulary development? One theory is that children's oral language

vocabularies benefit from adult interaction that *extends* children's language (Wells, 1985). Opportunities for children to interact and dialogue with the "reader" seem to have an effect on vocabulary development. In fact, there is some evidence to support the notion that occurrences of extended discourses have a direct impact on literacy outcomes and also provide opportunities for exposure to more sophisticated vocabulary, which, it could be argued, predict later vocabulary and reading scores (Wiezman, 1995). One could argue which read-alouds provide the catalyst for adults to present challenging vocabulary which indeed extends children's language.

Studies conducted in school settings have shown that the language of the classroom environment can impact children's oral language and vocabulary development. For example, researchers have examined how whole group storybook reading can promote vocabulary development. Simply put, read-alouds can promote vocabulary development by *incidental acquisition* (Eller, Pappas, & Brown, 1988; Elley, 1989; Henderson, 2001; Leung, 1992; Leung & Pikulski, 1990; Nicholson & Whyte, 1992; Senechal, Thomas, & Monker, 1995; Stahl, Richek, & Vandevier, 1991). Generally, when teachers provide definitions and clarifications during the reading, vocabulary development is further enhanced (Biemiller, 1999, Elley, 1989). Dickinson, Cote, and Smith (1993) asserted that teachers can enhance their students' vocabularies and provide a foundation for subsequent reading achievement by engaging them in discussions that include low-frequency words.

Storybooks (narrative texts) are the most common type of text found in early childhood classrooms (Duke, 2003). Traditionally, narrative texts have predominated in elementary classrooms because they have been viewed as more aesthetically pleasing and

more easily comprehended than nonfiction texts (Doiron, 1994). However, are narrative read-alouds the only viable context to increase incidental vocabulary development in the primary grades? Some researchers, most notably Pappas (1991), have challenged the idea that narrative texts should play such a dominant role in literacy programs. In fact, Pappas (1991) argued that educators could create "a barrier to full access to literacy" (p. 461) by providing children with little experience interacting with expository text. Furthermore, nonfiction is not "incomprehensible" to young children; Duke (2003) argued that young children can interact successfully with nonfiction texts when given the opportunity and supported by more knowledgeable persons. Duke (2003) also maintained there are powerful benefits of having nonfiction texts accessible to children. There is evidence to support that many children show a preference for nonfiction texts, thus these types of books may increase motivation to read (Duke & Kays, 1998; Moss, 1997; Pappas, 1993). For these reasons, as Dreher (2000) has maintained, "there appears to be no compelling reason that the elementary school experience should be mainly narrative" (p. 71); cases for engagement and achievement benefits can clearly be made for including nonfiction in the classroom.

Increased reading engagement, perhaps leading to increased reading achievement, is a compelling aspect to look at in an intervention-type study. Motivation to read can be a challenging research topic to pursue, especially when examining motivation to read in "just-beginning" readers. However, motivation is part of the reading achievement puzzle that cannot be ignored. In fact, teachers in a national survey listed motivation as a major concern in reading education (O'Flahavan, Gambrell, Guthrie, Stahl, & Alvermann, 1992). When one considers the glaring differences that exist between good and poor

readers in the amount of in-school reading they engage in (Allington, 1984; Nagy & Anderson, 1984) and even more glaring differences in the amount of out-of-school reading being done, (Anderson, Wilson, & Fielding, 1988) it becomes clear that continuing to explore aspects of children's motivation to read is an important pursuit.

Research supports the notion that parents sharing books with their children can have an impact on children's motivation to read. McKenna (1994) noted that the attitudes of children who cannot yet read for themselves are molded by the experiences in which others read aloud to them; and that when children have enjoyable interactions with books, they realize the intrinsic satisfaction that can be derived from reading. Of course, researchers realize that there is more to "enjoyable interactions with books" than just simply reading aloud the text. Snow (1994) pointed out that it is not only the act of reading that is important, but the kinds of conversations that take place, and the affective quality of those interactions that can impact children's motivation to read.

Of particular interest in this study, when discussing children's motivation to read, is the role of parents and home literacy. This study includes an intervention which relies on parent-child interactions that occur within a home context in partnership with the school. Prior research suggests that such an intervention may play a part in influencing motivation to read. In an article reviewing the literature on home and family influences on children's motivation for reading, Baker, Scher, and Mackler (1997) stated that, "the socioemotional context of early literacy experiences is particularly influential; children whose early encounters with literacy are enjoyable are more likely to develop a predisposition to read frequently and broadly in subsequent years" (p. 69).

Thus, this study takes a cue from Saracho and Dayton (1991) who stated that children's reading attitudes should improve in an environment in which adults model their reading engagement with interesting books as they are reading aloud to children. Scarborough and Dobrich (1994) suggested that if the long-term goal is to increase reading achievement in children, then an early interest in reading should lead to greater experience with books, which in turn should contribute to more skilled reading. Using nonfiction books as read-alouds led by parents may help children become skillful, motivated readers.

Nonfiction read-alouds, therefore, are a feasible read-aloud context for young children; nonfiction books may be particularly motivational, and the parental read-aloud experience may increase motivation to read as well. Interestingly, nonfiction books may also provide an advantage for vocabulary learning over narrative read-alouds. By definition, nonfiction text is written to convey information about the world around us and contains specialized vocabulary to accomplish that goal. Moreover, adults may interact more around vocabulary and concepts while reading aloud nonfiction text than fiction text (Duke, 2003). In addition to contributing to children's development of vocabulary and world knowledge, exposure to nonfiction books allows children to become familiar with linguistic features and text structures more similar to texts they will encounter in the upper elementary grades and beyond (Duke, 2003). Most importantly, and pertinent to this study, it has been shown that gains in vocabulary can be made from listening to nonfiction books read as few as two times (Brabham, Boyd, & Edginton, 2000).

How can interacting with nonfiction texts increase young children's oral language vocabulary, and successively, reading comprehension? During an interactive reading

event, the more knowledgeable peer aids the child's meaning making. As in Krashen's (1983) language acquisition period, the role of the adult in this acquisition period is important. By scaffolding and modeling, the adult helps to clarify and promote understanding of events (text reading) that are not accessible to the child on his/her own (Smolkin & Donovan, 2004). Smolkin and Donovan (2003) describe *comprehension acquisition* as the instructional period that precedes actual comprehension strategy instruction. Through the adult's interaction with the text and the child, the adult is able to bring previously inaccessible vocabulary into the child's zone of proximal development by explaining terms and helping the child make connections to prior knowledge. Therefore, interactive read-alouds of nonfiction books conducted by parents in the home may have the potential to effect vocabulary growth.

Statement of the Problem

Educators, researchers, the U.S. government, and the general population have put increasing the educational success of our nation's children high on their priority lists. Often, improving reading skills receives a large share of this attention. The question of how to improve reading skills has been perennially complex and is continually influenced by research as well as policy. There is a community of researchers and educators who believe that increasing reading and school success will involve increasing reading comprehension by elevating the oral language competence of students during the elementary school years (Biemiller, 1999).

Within the last few years, much attention has been given to the National Research Council's synthesis of research *Preventing Reading Difficulties in Young Children* (Snow, Burns, & Griffin, 1998). This summary of reading research has greatly influenced

the No Child Left Behind Act of 2001 and the federally funded Reading First program. Some researchers point out that while some aspects of oral language development were highlighted in the summary (for example, phonemic awareness) others were excluded or given minimal emphasis, such as vocabulary development (Gambrell, 2004). Gee (1999) in his review of the National Research Council's Committee on the Prevention of Reading Difficulties publication, also stated the link between oral language and reading is equally important as the influence of phonological awareness, but not as recognized. Several studies have shown that while phonemic awareness is a strong predictor of word and pseudoword reading, it cannot predict later reading comprehension. In contrast, strong skills in oral definitions and word retrieval may correlate positively with later reading comprehension (Roth, Speece, & Cooper, 2002). Thus, the oral language vocabulary of children is an educational issue that should not be overlooked.

Learning new vocabulary is a significant part of acquiring language (Clark & Clark, 1977), however individual differences in vocabulary growth can exist to a startling degree. Children whose vocabulary growth is weak or delayed may face long-term consequences in their literacy development (Hargrave & Senechal, 2000). Upon children's entrance the school system, there is a well-documented difference in the language and vocabulary skills of children. In fact, Biemiller (1999) stated that "advanced" children are about a year ahead of "average" children, while "delayed" children are about a year behind in language skills. In addition, the gap between children with advanced language and children with delayed language widens during the elementary years. Furthermore, when children with delayed language (those with significant vocabulary deficits) enter fourth grade, problems with reading comprehension

increase even if they have good word identification skills (Biemiller, 1999). This problem is critical because it renders the content area reading in the intermediate grades less accessible to children with restricted vocabulary, thus their comprehension decreases, leading to a lesser amount of new vocabulary being learned. As the difficulty of reading increases, the amount of reading in turn, decreases, and the reduced amount of reading may cause continued restriction of vocabulary development – an unfortunate cycle (Biemiller, 1999).

Researchers involved in studying oral language vocabulary often argue that school experience does little to foster language growth in the elementary years; the bulk of Kindergarten through second grade reading instruction focuses on decoding and sight word reading (Biemiller, 1999). However, Smolkin and Donovan (2003) reviewed several research studies showing that efficient word recognition skills are a necessary, but not sufficient condition for good comprehension. Since we know children entering school come with a wide range of oral language skills, what can schools provide as support to those students with oral language deficits? If educators are charged with increasing all students' ability to profit from education, they must find a way to enrich children's oral language development in the early years before reading comprehension is severely affected. A partnership with home and school, parents and teachers, could be a powerful asset in working toward accomplishing this objective. Schools can support effective at-home interventions by encouraging parent involvement, providing training, and supplying high quality materials for use at home. Parent-led interactive read-alouds with nonfiction texts show promise in helping educators reach the goal of boosting children's oral language vocabulary.

Research Questions

This study investigated whether there are differences in first-grade students' vocabulary acquisition and motivation to read between a control group and an intervention group exposed to interactive read-alouds. Two specific research questions were: (1) What effects do parent-led interactive read-alouds of target nonfiction books have on selected target vocabulary acquisition? (2) What effects do parent-led interactive read-alouds of nonfiction books have on motivation to read?

Significance of the Study

The results of this study may provide evidence to encourage the use of parent-led nonfiction interactive read-alouds as a way to stimulate vocabulary development and increase motivation to read in beginning readers. A parent involvement program, such as the one described in this study, would be a relatively simple, inexpensive, intervention that would occur primarily outside of the school day, and could positively impact students' motivation to read and vocabulary development. Beginning readers with strong motivation to read and well-developed vocabulary knowledge may have increased reading comprehension in later grades.

Definitions of Key Terms

Expository texts, according to Weaver and Kintsch (1991), have the goal of communicating information so that the audience might learn something. Psychological models of text comprehension have traditionally focused on two types of texts:

expository and narrative. A narrative text's main focus is to tell a story, to entertain, while an expository text's focus is to inform. Weaver and Kintsch (1991) explained that the crucial difference between these two text types is at the level of rhetorical structure. Expository texts are typically described in terms of such schemata as classification, illustration, comparison and contrast, and procedural description.

Following Weaver and Kintsch's definition, the texts used in this study could be classified as expository, because their main focus is to inform the audience. The books in the lending library, as well as the target books are texts with an early elementary school grade level of interest. As a result, many of the texts possess text features that may not look, on the surface, to be typically "expository." For example, they may have features more commonly found in narrative texts such as dialogue, personification, a story-like sequence, even characters; however, they are still essentially vehicles to convey information. In order to increase young children's engagement, comprehension, and enjoyment of expository text, authors have incorporated narrative features and structures that they believe will make informative texts more accessible to younger learners.

Incidental vocabulary acquisition describes the developing knowledge of the meaning of a word occurring through contexts other than the direct teaching of the specific word. In the case of the current study, interactive read-alouds are the vehicle through which knowledge of word meanings may be developed incidentally. Incidental vocabulary acquisition is derived from opportunities for incidental teaching: teaching based on the assumption that learning is enhanced through the use of the child's spontaneous interest to select instances of instruction (Valdez-Menchaca & Whitehurst, 1988). In other words, incidental vocabulary acquisition occurs as a result of teaching

interactions that follow the child's expression of interest, not an arbitrary or pre-selected sequence or subject.

Informational text is described by some experts in the field as "a *type* of nonfiction" (Duke & Bennett-Armistead, 2003, p. 16). According to this view, while informational text is nonfiction, not all nonfiction is informational text. For example, according to Duke and Bennett-Armistead (2004), "The primary purpose of informational text is to convey information about the natural or social world, typically from someone presumed to know that information to someone presumed not to, with particular linguistic features such as headings and technical vocabulary to help accomplish that purpose" (p. 16). With such a variety of nonfiction books now beginning to enter the market, this definition of informational text may be too narrow to include all the varieties of nonfiction texts. In this study, while the target books themselves could be described as "informational texts," other books contained in the lending library for students to borrow during the intervention would not fit into this category, but rather under the broader "nonfiction" term defined later.

In contrast to Duke and Bennett-Armistead, Kletzien and Dreher (2004) equate informational text with nonfiction. According to Kletzien and Dreher, informational text can be narrative, expository, or a combination of the two. For example, Kletzien and Dreher (2004) described three types of informational text: Narrative-Informational Text, which conveys factual information, but used a story format: Expository-Informational Text, which do not include traditional story elements, but use expository text structures, such as cause-effect, sequence, problem-solution, description, and compare-contrast: and Mixed Text, which combine aspects of both narrative and expository writing.

Since there is some disagreement in defining "informational text" in the field and there is not a universally agreed upon method for determining what is and is not "informational text," in my study, I chose to use the term only when referencing texts where that specific term was used in the original literature.

Interactive read-aloud is a style of reading in which there is considerable discussion of the text as the story is read (Dickinson & Keebler, 1989). Kerr and Mason (1994) defined "interactive story reading" as the joint use of picture books to talk about the pictures, read the text, and discuss the story ideas. Central to their definition is the idea that the adult and child construct an understanding of the book together. Kerr and Mason's (1994) definition does not seem to include the use of nonfiction, specifically, though the basic tenet certainly extends to nonfiction read-alouds. Snow (1983) suggested that during an interactive reading event, parents should use extensions and ask clarifying questions to continue discussion on topics introduced by the child, and structure their dialogue to facilitate comprehension. In the current study, a parent training session included direction and modeling of interactive read-alouds based on these suggestions.

Motivation to read can be defined as children's "reasons for reading" (Guthrie & Anderson, 1996). In goal-oriented theories of motivation, motivations are internalized goals and beliefs leading to strategies for learning and choices of activities that are consistent with the goals and purposes of the learner. Intrinsic motivations can include involvement, curiosity, social interaction, challenge, perceived importance, and perceived efficacy. External motivations can include recognition, competition, and grades (Guthrie & Anderson, 1996). Motivation to read, in this study, was measured by a survey modeled after Gambrell, Palmer, Codling, and Mazzoni's (1996) Motivation to Read Profile

(MRP). The MRP includes a survey which assesses two dimensions of a student's reading motivation: his/her self-concept as a reader, and his/her perceived value of reading. I created a survey to measure "interest/value of reading/books" and assess "interest/value of nonfiction reading/books" modeled after the survey portion of the MRP for use in the current study. Motivation to read is recognized as correlated with reading achievement (Gambrell, Palmer, Codling, & Mazzoni, 1996).

Narrative texts are texts centered in setting, characters, and plot. The story is located within a certain frame of time and is focused on a particular goal (Smith, 2003). Narrative texts can encompass many types of fiction genres such as storybooks, folk tales, fables, myths, fantasy, modern fiction, and historical fiction (Kletzien & Dreher, 2004). According to Graesser, Golding, and Long (1991), there are many components, levels, dimensions, and perspectives of narrative. However, narrative texts are generally expressions of event-based experiences that (a) are either stored in memory or cognitively constructed, (b) are selected by the writer to transmit to the reader, (c) are organized in knowledge structures that can be anticipated by the audience (Graesser, Golding, & Long, 1991).

Since the texts used in this study are aimed to appeal to an audience of first-grade children, even though they are nonfiction texts, some texts include elements of narrative texts. Some educators believe that factual information can be conveyed to an audience by using narrative text features that may in fact make the nonfiction text more comprehensible to young readers, and perhaps provide a bridge between narrative texts they are familiar with, and nonfiction texts which they most likely don't have as much experience with.

Nonfiction includes any type of literature that is factual (Duke & Bennett-Armistead, 2003). In much of the literature reviewed for this study, the terms *nonfiction*, *informational texts*, and *expository texts* are admittedly used interchangeably. Historically, the study of text was seen as divided into two major types of text structures: nonfiction (expository) and fiction (narrative) (Weaver & Kintsch, 1991). However, as more attention is given to using nonfiction books with primary students and within elementary school contexts, some refinement of terms is surfacing. For example, according to Kletzien and Dreher (2004), "nonfiction (informational text) can be narrative, expository, or a combination of the two" (p. 12).

In this study I use the term "nonfiction" as an umbrella term to describe the entire lending library of books that is available for the students to self-select from during the intervention period. Although the target books used in this study could be further classified as "informational text," by some experts in the field, there were books in the lending library, such as biographies, and narrative format nonfiction that fit the broader "nonfiction" description. I also chose to use the term "nonfiction" when describing the study books to the parents and students, since the term is commonly used in the classroom and familiar to the parents. Therefore, "nonfiction" books are how I chose to describe the texts I used in this study.

Limitations of the Study

This study had several limitations. The relatively small number of prospective participants reduces the ability to generalize to other populations. Also, even though random selection was used and statistical measures were taken to insure the relative equivalence of the intervention and control groups, differences could exist between the

two groups. In addition, even though target vocabulary rather than general vocabulary growth was measured, and even though it is unlikely that the target books were encountered outside of the parameters of the study, it was not be possible to control the participants' chance exposure to target vocabulary. It was also beyond the scope of this study to measure how much interaction occurred between parents and children around the target vocabulary words. Additionally, although parents and children acknowledged in writing that target books were read at home, there was no direct observation of the interactive read-alouds, and thus no irrefutable validation of the event.

Assumptions

This study relied on several assumptions. Primarily, it was based on the hypothesis that incidental vocabulary acquisition can occur as a result of parent-led interactive read-alouds. I hypothesized that motivation to read may increase due to the appeal of the nonfiction books and increased parent/child interaction with these books. Additionally, I assumed that many parents will consider attending the training session and find the instruction valuable enough to carry through with the interactive read-alouds at home. It was also my assumption that the intervention group children would find the activity enjoyable and would participate without hesitation. This study relied, to some extent, on the Vygotskian assumption that parents can quite easily and naturally operate in their children's zone of proximal development (Vygotsky, 1978) and with the training provided to them, would be able to conduct effective interactive read-alouds.

Chapter II. Review of the Literature

The purpose of this study was to investigate the effects of parent-led interactive read-alouds of nonfiction books on first-graders' vocabulary acquisition and motivation to read. This review of the research literature will demonstrate the link between vocabulary knowledge and reading comprehension. This review will also illustrate how large-scale vocabulary growth in children can occur incidentally within the context of shared reading experiences, and specifically how nonfiction read-alouds, with their exceptional platform for introducing new vocabulary, concepts, and text structures to children, may further enhance vocabulary growth.

The goal of this literature review is to explore some important issues in vocabulary acquisition and examine one way in which vocabulary acquisition seems to be actively enhanced- through using shared reading experiences. The review is organized in two major sections: an outline of the theoretical base, and a summary of pertinent research studies.

This review will begin with an examination of the theoretical base which undergirds the proposed study. Three central theories will be described. First, a discussion of the Vygotskian perspective provides insight into a certain view of cognitive development that complements the aims of the proposed study. Second, a brief synopsis of schema theory and the "knowledge hypothesis" will illustrate how vocabulary knowledge maps onto reading comprehension skills. Lastly, the theory behind reading attitude acquisition and motivation to read will be discussed.

The review of the literature will continue with an examination of research studies influential to the proposed study. The rationale for the selection of the studies in this review is fairly straightforward. I selected research studies from peer reviewed journals that contained information that would inform a particular facet of my own study. I included studies that informed the theory supporting my study, as well as studies that had similar methods, and goals. Seven main areas of research will be discussed. At the outset, an inspection of vocabulary growth and its relation to reading achievement will be detailed. Next, research will be reviewed concerning children's definitional skill; its relationship with vocabulary and emergent literacy, as well as characteristics of its growth in specific situations. Third, research involving vocabulary acquisition will be examined in depth; a meta-analysis of vocabulary training studies will be considered through the lens of different perspectives on the vocabulary-reading comprehension connection, and issues surrounding incidental vocabulary acquisition will be explored. Next, it will be necessary to look at the literature focusing on the use of nonfiction texts with young children, since nonfiction materials exclusively were used in the proposed study. In addition, since this study investigated the intervention's effect on motivation to read, pertinent research on the relationship parent involvement and children's motivation to read will be reviewed. After that, research within the context of home literacy experiences and parent/child interaction during book reading will be examined. Finally, studies focusing on the facilitation of vocabulary acquisition through shared reading experiences will be reviewed.

Theoretical Base

This study is based in three theories: 1) the Vygotskian perspective of cognitive development, 2) schema theory, and 3) motivation to read theory. The theoretical base of this study has guided every aspect of the study, from the design of the intervention, to the development of the measurement tools. The Vygotskian perspective explains not only why the dialogic process surrounding interactive read-alouds is important to a child's cognitive development, but also why parents should be successful in this process. Schema theory and the "knowledge hypothesis" provide the basis for understanding how vocabulary knowledge affects the meaning-making process during the act of reading. And, lastly, motivation to read theory helps underscore the importance of one of the possible outcomes of this study – increased motivation to read due to a parent-led read-aloud intervention.

The Vygotskian Perspective

This study draws upon the Vygotskian perspective of cognitive development, specifically that socially meaningful activities lead children to higher planes of mental functioning (Vygotsky, 1978). The Vygotskian perspective of language and concept development informs the theoretical base of this study. Speech, first used for contact and interaction with others, is mediated through continued social interaction and begins to facilitate cognitive development. Children progress through stages of concept development on their way to higher mental functioning, and concepts develop through verbal interaction with more knowledgeable others. Thus, adults bridge the gap between the child's level of actual language and concept development, and their level of potential language and concept development. During interactive reading, the Vygotskian

assumption would be that parents can quite easily and naturally operate in their children's zone of proximal development (Vygotsky, 1978) and thus will provide them with the amount of support necessary to move their children's understanding of vocabulary and concepts beyond where they would be independently.

The significance of dialogue in Vygotskian theory is central to the theoretical base of this study as well. Just as Vygotsky was concerned with how inner speech provides the opportunity for a distinctive form of collaboration with oneself, one could argue that social dialogue permits a distinctive opportunity to collaborate with others. Wertsch (1980) has explicated this aspect of Vygotskian thinking by stating that social dialogue provides children with an "initial point of entry" into the process of learning a strategy or concept that they will only *subsequently* understand. In other words, through social dialogue, it is possible for a child to participate in a strategic activity without understanding it completely. By participating in a dialogue with a more knowledgeable other, children can carry through with appropriate behaviors even though they may not understand how the behaviors fit into a larger, coherent, framework of meaning. In this way, Wertsch (1980) argued, children's initial participation in a problem solving effort often necessarily involves a dialogic process. In the context of parent-led interactive read-alouds, the dialogic process may enable first-graders to behave in a way that leads to more engaged reading, for example by asking parents for clarifications of terms or extensions of ideas. These "engaged reading" behaviors may have been modeled by parents, as they are certainly present during an interactive read-aloud, and may subsequently be adopted by children.

Schema Theory and the "Knowledge Hypothesis"

Nagy and Herman (1987) contended that at least some of the correlation between vocabulary knowledge and reading comprehension is due to the relationship each of these has with a third construct – background knowledge. Vocabulary knowledge is highly correlated with general knowledge; a person who knows more word meanings, knows more about the world in general. Thus, knowledge of the subject matter of a text affects the comprehension of the text, above and beyond the effects of knowing individual word meanings. This explanation of the relationship between vocabulary size and reading comprehension has been determined the *knowledge hypothesis* by Anderson and Freebody (1983).

A schema-theoretic view of reading comprehension maintains that knowledge does not simply exist as an unstructured set of individual facts, but instead, as an organized, interrelated, set of structures or schemata. Thus, in regard to vocabulary knowledge, determining what a word contributes to the overall meaning of a text may depend on information that is not specifically included in the definition of the word, but rather in information beyond or between the meaning of the individual word. It is precisely this view that contrasts incidental vocabulary acquisition occurring in the context of dialogue around books with the vocabulary acquired through the traditional drill of vocabulary training through memorizing definitions.

In the current study, children had the occasion to acquire more than solely word definitions. Through an interactive dialogue with a parent around a nonfiction book, the child was afforded the opportunity to incorporate new word meanings with the knowledge beyond, and between the word meanings – each child, in a sense, was assisted

in incorporating new vocabulary into his or her existing schematic framework. This schematic framework is the foundation on which future reading comprehension may be based.

Reading Attitude Acquisition and Motivation to Read Theory

We know from research that children in elementary school with stronger reading motivation spend more time reading than do students with lower motivation (Wigfield & Guthrie, 1997). Thus, it would make sense that all models of the reading process would include motivation variables; however, this has not traditionally been the case. This study is based on a theoretical model of reading that does consider the significance of motivation issues. According to Gambrell, Palmer, Codling, and Mazzoni (1996), a number of current reading motivation theories suggest that self-perceived competence and task value are major determinants of motivation and task engagement.

The "motivation to read" aspect specific to this study is based on a theoretical model of reading attitude acquisition – that beginning readers acquire attitudes about reading that influence the cognitive aspects of reading (McKenna, 1994). Therefore, this intervention in the current study that occurs early in the participants' academic careers, may influence their just-developing reading ability. Matthewson's (1994) model sets forth an explanation of how affective factors interact with cognitive processes during reading. The Matthewson model represents attitude as one of three principal factors influencing one's **intention to read**, the other factors being external motivators and one's emotional state. Thus, an intervention such as parent-led interactive read-alouds, that could have an effect on children's motivation to read, may subsequently influence their intention to read in the future, which may lead to increases in reading achievement.

Vocabulary and the Relationship with Reading Achievement

The connection between oral language skills and reading is undeniably complex. The complexity arises from the dynamic nature of the language acquisition process and the actuality that the link between oral language skills and reading skills is not uniform over time, but evolves throughout early literacy acquisition. Despite the complexity, many researchers have attempted to clarify the relationship due to its possible predictive ability of reading success and failure. In order to support the rationale underlying my study, I feel it is necessary to review some seminal research concerning vocabulary and its relationship with reading achievement.

Roth, Speece, and Cooper presented findings from the first three years of a longitudinal study in their 2002 article. Their purpose was to clarify the relationship between oral language and early reading acquisition in normally developing children. The authors hoped the resultant clarification would advance theoretical constructs of the oral language-reading connection. The researchers followed a group of normally developing kindergarten children for three years and measured structural language, metalinguistics, narrative discourse, and information about background variables. Additionally, in kindergarten and first and second grade, reading measures were collected.

The initial sample for the kindergarten analysis consisted of 88 children who attended a public elementary school in a mid-Atlantic state. The study sample was diverse economically and racially, and 25% of the children spoke English and a second language. The mean age of the children at the time of testing was 5 years, 6 months, there were 38 boys and 28 girls. The first grade follow-up study located 48 of the children, and

the second grade follow-up located 39 of the original kindergarten children. No significant differences were found between the original sample and the sample remaining after second-grade attrition.

Four main categories of information were gathered from the participants; oral language skill, metalinguistic skills, background measures and reading measures. Three domains of oral language were measured: semantics, syntax, and morphology. These domains were measured by the Peabody Picture Vocabulary Test-Revised, the Oral vocabulary subtest of the Test of Language Development, the Boston Naming Test, the Test of Auditory Comprehension of Language-Revised, and the Formulated Sentences subtest of the Clinical Evaluation of Language Fundamentals-Revised.

The metalinguistic skills (phonological awareness and metasemantics) were measured by blending and elision tasks, the Ambiguous Sentences and Figurative Language subtests of the Test of Language Competence-Expanded, and a narrative discourse task. Information concerning the background variables of race, gender, SES, IQ, and family literacy was collected as well. Finally, the reading measures consisted of the TERA-2 (print awareness), a letter ID task, and word attack task in kindergarten, and in first and second grade a passage comprehension subtest was added to the kindergarten measures.

Many conclusions were reached at the completion of the study, however, several in particular are of importance to this literature review. Roth, Speece, and Cooper (2002) found, as expected, that phonological awareness skill measured in kindergarten predicted psuedoword reading in first and second grade. However, the major finding of the study was what phonological skill did *not* predict: reading comprehension in first and second

grade. Thus, the authors concluded that oral language ability contributed to early reading skill in ways other than through the influence of phonological awareness. Specifically, semantic knowledge, as measured by word definitions and word retrieval, in combination with kindergarten print-awareness, was a more potent predictor of reading comprehension than phonological awareness in first and second grade. Thus, one could argue that vocabulary knowledge (word definitions and word retrieval) are important factors in later reading success.

The statistical analysis in this study relied on multiple regression techniques to explain significant variance in early reading. The parsimonious regression modeling permitted an examination of the roles that different oral language domains may play in relation to reading development. The detailed statistical procedures strengthened this predictive longitudinal study. The number and variety of measures, as well as the diverse participant base added to its depth. However, the number and variety of measures, without thick description of the actual tasks of the measures, could be confusing to readers of this research.

The conclusion reached by the authors of the study aligns closely with the rationale behind this dissertation study; if certain oral language skills, for example, word definitions/vocabulary, predict later reading comprehension success, educators could provide early interventions, such as at-home reading programs with nonfiction books, to capitalize on the relationship.

A study that also shared this rationale was conducted by Craig, Conner, and Washington (2003). These researchers hoped to find early positive predictors of later reading comprehension for African-American students. The authors referred to NAEP

data which showed African-American students are much more likely to read below basic levels than their majority peers: 63% compared to 27% on the 1999 administration. In their opinion, in order to close the "black-white" test score gap, effective early prevention is a necessity.

The longitudinal study examined 50 African American children, two groups of students who were either in pre-school or kindergarten at the beginning of the study. The preschoolers came from low-income homes whereas the kindergarteners came from middle-income homes. All students came from an urban setting and were speakers of "African American English".

At the start of the study language samples were collected from the students and transcribed orthographically using the segmentation criteria for communication units. The samples were scored for the amount of complex syntax, number of different words, and mean lengths of communication units. The students were also administered the Triangles subtest of the K-ABC to assess nonverbal cognition. The authors chose this assessment because it was free from "racial and cultural biases". The study finally collected information from the reading comprehension portion of the MAT in scaled scores format.

The researchers examined scores from the beginning of the study and the later achievement outcomes for the participants in grades 1-3 using hierarchical linear modeling. This multi-level analysis with HLM allowed the researchers to observe increases in skills over time (growth curves) while controlling for individual student characteristics.

The authors reported two major findings of the study. First, they found that performance on the MAT increased significantly across the time period studied, from first to third grade. There were, however, important differences between the achievement levels of the preschool and kindergarten group: the growth in reading comprehension was significantly greater for the preschoolers as compared to the kindergarteners. Second, they found that performance on the Triangles subtest and amounts of complex syntax positively predicted MAT outcomes.

When discussing the first major finding, the authors suggested the preschoolers' apparent advantage over the kindergarten group stemmed from the emphasis of the preschool program on early literacy development. The state-funded preschool program was designed for children considered at risk for academic failure. Regarding the second major finding, the authors propose that not all early measures of oral language predict later reading comprehension performance, however it was beyond the scope of this study to determine why certain tasks are positive predictors. They suggest perhaps some tasks' effects may not have been grade sensitive and therefore not pertinent to the grades examined in this study. Craig, Conner, and Washington (2003) acknowledged the findings of this investigation are a very preliminary step in improving knowledge of the skills that African-American children bring to schooling and the potential relationships of these skills to later achievement.

If this study had included more detailed descriptions about the preschool and kindergarten classroom settings and instruction, its results may have seemed more grounded. Also, if examples of the children's speech were included, the reader would

have a more complete view of the type of "complex syntax" in spontaneous discourse that was predictive of later reading comprehension achievement.

Anderson and Roit's (1996) article summarizes findings the authors have synthesized from seven years of classroom observational research in the United States (grades 1-6) and Canada (grades 6-8). Specifically, the researchers examined classrooms that had high percentages of language-minority students, and examined how teachers provided these students with strategy instruction in reading comprehension and oral language development. The authors focused their rationale around the potential reciprocity between learning to read and reading to learn, and the implications for developing oral language skills in language minority students.

The data collection procedures included information gathered from classroom observations, analyses of videotapes of literacy teaching, conversations with teachers and administrators, and observations from demonstration lessons the researchers taught. The authors then developed six categories of "prevalent instructional issues" related to reading comprehension and in turn, oral language development. It was the goal of the authors that by identifying these instructional issues, educators would begin to view them as "teachable abilities" and their practice would become informed and expanded.

The first category involved "English language flexibility". According to the researchers, if language minority students are given the flexibility to respond to text in their first language, even if their teacher and peers are not proficient, comprehension may be enhanced. Next, the authors promoted the use of abstract and less imageable basic vocabulary. They observed advantages in the teaching of abstract words such as "few", "some", or "several", and noted that most teachers of language minority students stressed

only the surface aspects of language. The third category involved considering the larger context of texts used for instruction; the authors warned that depriving students of whole texts can make comprehension more difficult. Next, the authors suggested that language-minority students benefited from instruction in recognizing important and unimportant text segments (text structure strategies). The fifth category focused on elaboration of responses; the authors noted that in classrooms where teachers stressed being grammatically *right*, there were less risk-taking behaviors and thus less elaborate responses to texts by language- minority students. Finally, the authors observed that engagement in natural conversations seemed to facilitate English-language proficiency and literacy generally. These categories are of interest to this dissertation study because they are somewhat similar to strategies encouraged through the use of interactive read-alouds. Interactive read-alouds would satisfy the instructional needs of the "teachable abilities" high-lighted in this research.

This study is placed in the continuum of qualitative research at the extremely "qualitative" end. Although, there is some practical description of the classroom instruction, there seems to be no detailed information about how the categories were formed or specific "counts" of instances to back up the existence of the instructional issues. The established categories would be a good beginning point for a rigorous observational study.

Another study focusing on early oral language vocabulary observed at home and later literacy outcomes was conducted by Beals, De Temple, Snow, and Tabors (1991). The authors stated their concern about the well-documented finding that children from low-income families do not achieve in school at the rate of their middle-class peers. It

was their argument that some low-income children, because of their home-literacy environments, have a greater chance at success in school. The authors cited previous research and hypothesized early development of skill with decontextualized language (language used to convey new information) may be connected to reading comprehension ability later in school.

The researchers gathered data from the homes of 39 children whose families were recruited from the Boston area. The talk that took place between mothers and the target children at ages three and four was recorded and later analyzed during three specific activities; book reading, mealtime, and an elicited report task. Later, when the children turned five, a battery of standardized tests and early literacy measures were administered. For the book reading activity, the talk was coded to indicate whether the comments or questions were immediate or non-immediate, and additionally, an information index was created to show the number of times children gave information to mothers' requests for information. The elicited report task required the mother to elicit a report of an event that the child had participated in ("what did we do yesterday?"). This exchange was coded in the same way as the book reading task. The mealtime conversations were recorded without an experimenter present, and provided the researchers with more naturalistic talk. These conversations were analyzed to compute the proportion of narrative and explanatory talk.

The researchers used correlation matrixes to examine associations between the pre-school observational measures and the kindergarten battery. Many associations were reported, but three findings are central to this review. One finding was that how much the child was able to contribute on the elicited report task predicted how well the child did on

a definitions test and narrative construction task. Another finding centered on the proportion of mealtime talk that was explanatory in nature. The greater the amount of explanatory talk, the better the child performed on tests of vocabulary development. One further finding focused on the book reading task: mothers who were evaluated to have conducted high quality interactions during book reading had children who scored highest on print, emergent literacy, and comprehension tasks in kindergarten. In a broad sense, this study's results are clearly linked to the current study. There may be benefits to children's early literacy achievement stemming from high quality oral language interactions with adults. Activities that encourage interactive conversations around texts with challenging vocabulary, such as interactive read-alouds with nonfiction books, may provide contexts that have benefits for children and the current study examines aspects of this hypothesis.

The Beals et al. (1991) study reviewed here had a longitudinal goal of following the sample through their later elementary years. This plan would hopefully support the preliminary evidence the authors reported. A clear limitation of studies of this kind centers around the authenticity of the observational data. Parents' interactions with their children may be affected by the presence of the researcher.

Beals et al. (1991) stated their belief that the relationships between early language skills and higher level school abilities like reading comprehension and writing expository text would emerge. The authors concluded language and literacy skills are related, but not identical.

Definitional Skill and Vocabulary Growth

Children's language development is shaped by numerous intricacies of cognitive and environmental influence. One aspect of language ability, definitional skill, seems to be highly valued in classroom settings and by intelligence tests. It is therefore of no surprise that many researchers have been interested in children's production of definitions in relation to word concept, vocabulary acquisition, and other social and cognitive facets of language development. In regard to the current study, one measure in particular, the expressive measure, is a verbal definition production task. For this reason, it is important to examine some literature concerning definitional skill and vocabulary growth.

Snow, Cancini, Gonzalez, and Shriberg (1989), conducted a study based on their hypothesis that decontextualized language skill (as in giving definitions) becomes increasingly important in predicting reading performance as children get older. They examined the relationship between performance on a formal definitions task and a standardized reading achievement test, the California Achievement Test (CAT), for 137 second-fifth grade students. The children attended the United Nations International School in New York City. Snow et al. (1989) were able to show that the children's scores on tests of school literacy (the CAT) were strongly related to their tendencies to perform in a decontextualized way on an open-ended language task (giving formal definitions). Snow et al. recommended that schools adhere to a model of fostering oral language proficiency that pays attention to practicing decontextualized tasks such as giving definitions.

Some researchers have been interested in examining the variation in definitional skills across age groups and socioeconomic groups. Longitudinal studies, though costly and labor intensive, provide us with the most detailed pictures of growth in children's definitional skills in a particular environment.

Kurland and Snow's (1997) longitudinal study examined growth rates in definitional skill over a period of three to six years for a sample of 68 low-income children. In order to identify actual growth in definitional skill, the same children were administered definition tasks multiple times. The researchers goals were threefold: they wanted to study the growth trajectory for children between ages five and ten, specifically looking at "formal" definitional skill; they wanted to determine if fourth grader's definitions could be "adult-like"; and they wanted to establish which factors in children's home and school environments predict differences in growth rates.

The participants in the Kurland and Snow (1997) study were selected based on Head Start eligibility. The definitions task, along with a battery of other measures of literacy skills, was first given to the participants in kindergarten, and then repeated once a year through when the subjects were in fourth grade. Another aspect of the study consisted of a home visit when the mothers of the participants were administered the definitions task as well. The definition task consisted of asking the participant, "This is a thinking game with words. When I read a word to you, I want you to tell me what it means." The researchers sought oral definitions for 10 nouns at each administration of the task.

The participants' definitions were categorized as either formal or informal and analyzed and scored. Several features of formal definitions Kurland and Snow (1997)

looked for included; relative clauses, subordinates, definitional features, functions descriptions, and synonyms. Inter-rater reliability was calculated and found to be “almost perfect”. In order to determine the growth rates of the children’s definitional skill, Kurland and Snow (1997) used hierarchical linear models. In addition to the definitional tasks, this involved study examined home influence variables and school influence variables. The home influence variables were based on a home visit that occurred when the participants were 3-4 years old. Mother-child interactions were elicited from a joint book-reading task and analyzed for the child’s mean length utterances, and the mother’s percentage of decontextualized talk as well as her “rare word usage density”. School influence data was gathered from two observations carried out when the participants were in pre-school. As large-group sessions were observed, teacher’s talk was audiotaped and later analyzed for percentage of “extending talk” and decontextualized talk.

In a study of this magnitude, a multitude of results were imparted. There were, however, several key results that are of prime interest to the goals of this paper. First, there was evidence of individual differences of growth trajectory of definitional skills. This means that definitional skill, although there are trends in its development such as a general plateau around age 9-10, is undeniably influenced by individual factors. Kurland and Snow (1997) found they could predict that children with high word knowledge in kindergarten (which they linked to the home influences in vocabulary development) and children who came from a pre-school environment with a high percentage of decontextualized talk, would score higher on the definitions task. Kurland and Snow (1997) stated a surprising finding of their study was that the fourth graders out-performed

their mothers on the definitions task! The researchers attributed this result to the influence of the "school culture" that the children were immersed in.

Kurland and Snow (1997) concluded that there is a relationship between growth in definitional skill and the quality of home and early schooling verbal interactions. They noted the importance of their conclusion by maintaining that definitional skill as an oral language skill reflects participation in and access to the literate register. The longitudinal nature of the study and the complex statistical procedures lend much credibility to Kurland and Snow's (1997) findings. However, it's difficult to translate the findings into practical applications for educators. Further studies are necessary to determine the importance of definitional skill to other literacy skills, as well as whether definitional skill can be enhanced effectively. Nonetheless, Kurland and Snow's work supports the use of a definitional task in the current dissertation study. Definitional skill can be enhanced from home and school activities, and may have an impact on reading achievement.

Vocabulary Acquisition

Increasing students' ability to comprehend text is arguably a prominent educational goal. Increasing the size of students' overall vocabulary has been shown by researchers as a possible way to affect the achievement of that goal (Nagy & Herman, 1985). One thesis proposed by Nagy and Herman (1985) and embraced in the rationale of this dissertation study is that explicit vocabulary instruction, even at its most effective, is not useful in producing substantial gains in overall vocabulary size or in reading comprehension – the size of the task is simply too large to be met with the teaching of

individual word meanings out of context. Researchers in the field know that the bulk of children's vocabulary growth comes through incidental learning (Nagy & Herman, 1985).

Nagy and Herman (1985) asserted that learning word meanings from oral context, most significantly from the speech of parents and peers, is a child's major mode of vocabulary acquisition. So, then, what role can schools play in fostering incidental acquisition? Certainly, vocabulary training and explicit word meaning instruction has a place in today's classrooms and is under the control of teachers, but can schools also play a part in influencing incidental vocabulary acquisition in classrooms and at home? The following studies shed light on this question.

Vocabulary Training

Mezynski's (1983) review of eight studies centering on the effects of vocabulary training on reading comprehension highlights several issues concerning the acquisition of knowledge that should be understood if one wants to critically read or develop research in this area. It seems that Mezynski's main concern in her review was that although all eight studies succeeded in increasing word knowledge, the connection to improving reading comprehension was quite tenuous.

In the first part of Mezynski's (1983) review she detailed four theoretical perspectives on the vocabulary-reading relationship through which she looked at the eight reviewed studies. The first perspective was labeled "aptitude". Researchers who adhere to this perspective see correlations between vocabulary skills and reading comprehension to be due to an underlying third factor: verbal aptitude. Basically, the metal agility that allows a student to acquire vocabulary easily is the same mental agility that facilitates text to be comprehended without difficulty. Researchers with this view may accept the

possibility that increasing vocabulary with quality training can occur for all students, but the prospects for significantly improving reading comprehension for all students would be a stretch – aptitude cannot be changed.

The second perspective was termed “access”. In this view, vocabulary acquisition is less of a fixed capacity than in the “aptitude” perspective. Researchers adhering to this perspective are interested in the automaticity of word knowledge. They may see that the amount and quality of *practice* is essential to acquiring and using vocabulary to aid reading comprehension.

The third perspective, “instrumental”, is straightforward in that the position claims that knowledge of individual word meanings is the *primary* factor responsible for reading comprehension – to improve reading comprehension, teach vocabulary.

The final perspective is the “knowledge hypothesis”. The knowledge hypothesis position views knowledge of a word as more than just knowledge of **a** word. This position implies that knowing a word well, really means knowing lots of words and ideas related to the word; knowing vocabulary actually means knowing the big ideas and chunks of knowledge surrounding the word. It is a constructivist and schema-theoretic viewpoint that would suggest vocabulary training be interactive and taught in the context of learning new subject matter. This theoretical view is most closely aligned with the theoretical view of the current study, and is reflected in the study’s intervention. Interactive read-alouds of nonfiction books may encourage vocabulary growth by constructing meaning around concepts and big ideas organized by the text.

Four of the eight studies that Mezynski (1983) reviewed failed to affect reading comprehension measures significantly, although all of the studies did increase vocabulary

knowledge. For example, Tuinman and Brady's (1974) study of 210, 4th, 5th, and 6th graders used various self-guided lessons in vocabulary usage to increase scores on experimenter-designed pre/post tests. The 11 sessions over 5 weeks of 45-minute periods, increased the students' knowledge of 60 words, however scores on the reading comprehension subtest of the California Achievement Test were not affected. Pany and Jenkins' (1977) study's 4th and 5th grade learning disabled students participated in two instructional conditions for 27 lessons over an eight week period. Students were taught the meanings of 54 words in one condition, and in another condition were taught the meanings and practiced them with flashcards. On the experimenter-designed vocabulary test, the students who practiced their new vocabulary meanings with flashcards made the greatest gains, but the meaning-only group also made significant gains when compared to the control group. However, once again, no effect was found for the experimenter-designed story comprehension task. Jenkins et al. (1978) found similar results in a similar study, this time with 4th grade below-average readers. These students either practiced vocabulary meanings with flashcards or received no instruction. This time, only 12 words were targeted during the eight 30-minute sessions. Again, there was a treatment effect for vocabulary tasks, but no effect on story comprehension. Jackson and Dizney's (1963) study examined older students, 12th graders, exposed to self-guided workbook lessons over 27 week. Classroom tests and standardized measures showed very small gains at the end of the instruction period.

Although the description of the preceding studies is extremely brief, there are instructional variables, as well as theoretical and assessment issues, that they have in common, and when compared to the studies that *did* affect reading comprehension, these

issues may help explain the results. The preceding four studies all taught word meanings in isolation, not in context. In two of the studies, students were not even instructed by a teacher, they were simply given materials to learn the word meanings from, while in the other two studies there was some actual teaching occurring, though not much interaction, save the drill of the flashcard procedure. Mezynski (1983) proposed that the vocabulary learned in these studies was learned at a surface recall level only; it was not learned well or "richly" enough to be applied to more complex tasks, like reading passages.

The remaining four studies Mezynski (1983) reviewed did show some effect for vocabulary training on reading comprehension measures. For instance, Kameenui and Carnine (unpublished manuscript, University of Oregon) used one session with 60 4th and 5th graders with four instructional conditions. The instructional conditions varied in their engagement of the students. One condition consisted of meaning explanation and flashcard practice, one involved prompting students about word meanings during the reading of a text, one consisted of teaching vocabulary by using easy synonym substitutions in context, and one used redundant definitional information. The first three conditions described produced increased comprehension scores on passages that contained the 6 target words. Both free-recall of the story and correct answers to comprehension questions were enhanced by those instructional conditions.

The 42 5th graders in Lieberman's (1967) study were instructed in 200 vocabulary terms over 19 weeks in conjunction with their social studies and English curriculum and texts. The two treatment groups learned the vocabulary by "traditional" instruction, *or* "direct experience" (more interactive) instruction. Both groups improved on the Iowa Test of Basic Skills vocabulary and reading comprehension subtests. The "direct

experience" condition students' scores were significantly higher on the vocabulary subtest than the "traditional" condition students' scores.

Draper and Moeller's (1971) study also situated the learning of their 1800 words in a specific context; Greek and Roman myths or folktales. The 24,000 4th, 5th, and 6th graders who participated in the study, made significant gains on the vocabulary, spelling, and reading comprehension subtests of the Iowa Test of Basic Skills for all grade levels. Beck et al.'s (1982) findings also showed gains on the vocabulary and reading comprehension subtests of the Iowa Test of Basic Skills as well as experimenter-designed stories with comprehension questions. These 27 4th graders were trained in 104 vocabulary terms in a treatment group where various teaching techniques were used. For example, words were grouped by semantic categories, many different types of interactive exercises were employed, and the training also required the students to use the words in many contexts.

Mezynski (1983) drew several conclusions about the type of studies that seemed to succeed in using vocabulary training to increase reading comprehension. First she observed that the amount of practice given to the word study had a positive effect. Second, she referred to the "breadth" of training which occurred in the study, the exposure to different kinds of learning experiences seemed to enhance general transfer of new vocabulary to comprehension of passages. Lastly, Mezynski (1983) noted that the degree to which students were encouraged to actively process word meanings during training had a positive effect. It would seem that based on Mezynski's (1983) meta-analysis, that the studies examined which adhered to the "knowledge hypothesis" theoretical perspective; the constructivist, schema theory, approach, were the studies that

could claim a positive effect on reading comprehension measures from vocabulary training.

Another important meta-analysis of the effects of vocabulary instruction was conducted by Stahl and Fairbanks (1986). Fifty-two studies were included in this exhaustive meta-analysis. Studies were identified by ERIC searches and past reviews and bibliographies, and then included only if they used a control group design and provided the statistical information needed to derive an effect size. Stahl and Fairbanks (1986) wanted to investigate if vocabulary instruction has a significant effect on children's comprehension of text, and what types of vocabulary instruction are most effective.

The meta-analysis showed that on word-specific comprehension measures, vocabulary instruction produced a statistically significant mean effect size of .97. Stahl and Fairbanks (1986) also concluded that there were three factors that were involved in effective vocabulary instruction. First, a "mixed" method of vocabulary instruction, one that uses both definitional and contextual information to teach word meanings, appeared to be more effective than methods providing only definitional information. This harkens back to Mezynski's (1983) findings and also is reflected in the design of the current study's intervention. Second, programs that involved students in deeper cognitive processing were found to be highly effective. Lastly, instructional programs that gave students more than one or two exposures to the words to-be-learned had a greater degree of effectiveness. Stahl and Fairbanks (1986) concluded that the results of their meta-analysis suggested that vocabulary instruction can be a useful adjunct to the natural learning of vocabulary from context.

Incidental Vocabulary Acquisition

There is ample research which shows high correlations between students' vocabulary knowledge and their general reading skills (Anderson & Freebody, 1981). Therefore, encouraging vocabulary growth is of particular interest to researchers and educators. How do children learn new words? Elley (1997) asserted that there are five main contenders for an answer to this question: children learn new words by regular silent reading, by listening to stories read aloud, by frequent conversation with mature language users, by watching television, and by explicit study of word lists and dictionaries. Elley (1997) examined the literature about each of these contexts and concluded 1) that studies have ruled out television as a major source of new word learning because the range of vocabulary of most children's programs is so limited, 2) that typical conversations in the home do not extend children's word knowledge greatly after children have learned to read, 3) deliberate study of word lists and dictionaries do not occur frequently enough to have an impact on vocabulary growth. Therefore, by default, it seems that most children learn most new vocabulary by silent reading and by listening to stories read to them. Benefits from silent reading of course only favor the proficient and avid reader- not good news for emergent or reluctant readers (Elley, 1997). Thus, reading aloud to children to increase vocabulary growth seems to be a context worthy of careful examination and study, and this was a major catalyst behind the rationale for the current study.

Dickinson (1984) studied children's knowledge of words gained from a single exposure in an oral context in order to examine the natural process of word learning in school-aged children. Dickinson (1984) used 39 first-graders and 23 sixth-graders as

participants to investigate if school-aged children form fast-mapping of words heard only once in a conversation, in a story, and with definitions. The three experimental oral contexts- conversations, stories, and oral definitions, were investigated in regard to how children performed on three tasks after a single exposure to target words. The tasks included recognizing test words as "words", recognizing correct usage of test words, and orally defining test words.

The study revealed that school-aged children are able to form initial partial representations of words heard only one time. Children at the two ages benefited differently from two of the presentation contexts. First-graders did equally well when they heard words in stories and in oral definitions, while sixth-graders did better when they had been given oral definitions of words. A second important result from an extension of this study was that children tested several days after they first heard the new words were as likely as children who heard the words recently to perform successfully on the usage and word recognition tasks. Therefore, Dickinson (1984) asserted that there could be evidence that new words were mapped onto existing conceptual structures instead of solely existing as isolated bits of new information.

The results of Dickinson's (1984) study support aspects of the proposed study. First, that the time lapse between exposure to target vocabulary and assessment may not have a negative influence on the measurement of the effectiveness of the intervention. Second, providing children with definitions during interactive read-aloud conversations is a viable mode of fostering vocabulary acquisition. Third, that as few as two exposures to target words could produce a measurable effect.

Senechal's (1997) study also centered on incidental vocabulary acquisition as a result of exposure to an oral context, in this case, storybook reading. Senechal wanted to assess the effect of didactic techniques used during storybook reading on three- and four-year old children's acquisition of new vocabulary introduced in the storybooks. The study included three book reading conditions: a single reading, repeated readings, and repeated readings with the researcher using a questioning technique. Each condition used 30 children recruited from middle-class daycares in Ottawa, Canada.

The researcher used an expressive vocabulary measure and a receptive vocabulary measure in a pre/post test design in order to assess the effects of the three conditions. The receptive measure was constructed using a four-panel illustrative design similar to the Peabody Picture Vocabulary Test-Revised, while the expressive measure consisted of a labeling task where children were asked to orally label the target items pictured in the storybook. Ten target words were selected from the storybook used in each condition. Senechal selected the target words based on the assumption that they would not be known by preschool children, although the concepts represented by them would be known by the children. The target words were also represented by illustrations in the book, and as the experimenter read-aloud the book she pointed to the illustrations.

Senechal found that the questioning condition was the most effective for expressive vocabulary acquisition in her study. As expected, increased exposure to book reading events enhanced children's receptive and expressive vocabulary similarly whereas active responding (as a result of the experimenter questions during the reading) during book reading events enhanced children's expressive vocabulary more than their receptive vocabulary. Therefore, asking labeling questions during repeated readings of

the storybook was a particularly powerful didactic technique for the acquisition of expressive vocabulary.

Another study conducted by Ewers and Brownson (1999) further supports the idea that active participation during read-aloud events can increase vocabulary acquisition. Ewers and Brownson (1999) hypothesized that the use of what/where questions during storybook reading would result in greater target word acquisition than use of recast only. Therefore in the Active Participation treatment condition, the reader asked the child a question after a sentence containing a target word, in the Passive Participation treatment, the reader gave a recast substituting a familiar synonym for the target word.

This study is in part a replication of the Senchal (1997) study mentioned previously; the same target book, words, and vocabulary measurements were employed. However, this study used 66 kindergarten-aged participants drawn from four suburban schools in Central New York. The reader in each treatment read the storybook to each child individually a single time, pointing to pictorial representations of the target words in both the “active” and “passive” treatment conditions.

As hypothesized, an ANOVA revealed that children in the Active Participation group acquired significantly more words than peers in the Passive Participation group, $F(1,62) = 19.59$, $p < .01$. The researchers concluded that the finding that kindergarteners were able to learn a significant number of new vocabulary words as a result of listening to a single storybook reading provides additional pedagogical support for using read-aloud activities at school and at home with young children, especially while using

methodology which elicits active participation from the listener (Ewers & Brownson, 1999).

A study conducted by Brett, Rothlein, and Hurley (1996) was based on similar hypotheses and methodology focusing on vocabulary acquisition from listening to stories and explanations of target words as the previous studies reviewed, but with participants a few years older. A total of 175 fourth graders from 6 classrooms in 2 urban elementary schools participated in this study. This study was set in a classroom context, instead of an individualized, reader/child setting. The stories were longer also, requiring the classroom teacher to read the two stories over a five-day period. The participants were assigned to three conditions in the pre/post-test design study; a control condition with no exposure to the stories, a listening only condition, and a condition in which a brief explanation of the 25 target words was given by the teacher as they were encountered in the reading of the story. The pre/post-test measure consisted of a multiple choice test that was group administered to the students by the classroom teacher. Six weeks after the post-test was given, a delayed post-test was administered to gauge the retention of the newly learned vocabulary.

As expected, students in the story-with-word-explanation-group made significantly more progress from the pre-tests to the post-tests than the other two groups. That group also scored significantly higher on the delayed post-test. Therefore, the researchers concluded that the results of this study indicate that fourth-graders can acquire new vocabulary from listening to stories if there is a brief explanation of new words as students encounter them in stories. Brett, Rothlein, and Hurley (1996) did not find that oral presentation of words in the context of a story by itself resulted in increased

vocabulary knowledge, however they hypothesized that since learning from context may occur incrementally, students in this condition may have learned something about the unfamiliar target words, but not enough to show on their measure. For example, perhaps more than a single reading may have produced a measurable increase, as has been shown in other studies with two or three repeated readings of the same story.

These studies reveal that there is adequate support that children can acquire vocabulary incidentally through read-aloud events. During an interactive read-aloud event, where a parent is encouraging their child to become engaged in the text, active participation may result in increased acquisition of new vocabulary.

The Use of Nonfiction Texts with Young Children

In the past, experts in the field of literacy have acknowledged that expository text presents particular difficulties in elementary children's literacy development. Studies have shown that some children who read narrative texts with ease, struggle when encountering expository text. Some scholars blame difficulties with expository texts for being a partial cause of a "fourth-grade slump" in literacy (Duke & Kays, 1998). Some researchers have argued that the time has come to challenge the general assumption that expository text is not appropriate for young children, and furthermore, assert that information books may have some positive effects on vocabulary acquisition and reader motivation (Pappas, 1993). This dissertation study adds to the literature concerning using nonfiction texts with young children, and specifically the use of nonfiction texts to encourage vocabulary acquisition.

One study that sought to assess young children's knowledge of information book language was conducted by Duke and Kays (1998). These researchers were looking for

support that pre-literate children could comprehend the structure and vocabulary of informational books. Kindergarteners were asked to pretend-read an unfamiliar informational book and narrative book at two points during the school year and their responses were analyzed.

The study took place in a single kindergarten classroom in a public school, in a large city in New England. The 20 children included in the final analysis were fluent speakers of English and included 10 boys and 10 girls with a mean age of 5 years, 7 months. The ethnically diverse sample came from low-income homes. The classroom studied used information books as read-alouds on a regular basis.

One information book, *I Can Be a Firefighter*, and one narrative book, *There's a Nightmare in My Closet*, were chosen for the children to pretend-read in the study. The running text in the books was covered. The children were removed from the classroom individually, taken to a quiet testing room, and introduced to the book and asked to look through the pictures. Then they were instructed to pretend-read the book to the researcher. Two elicitation sessions were held; one in September, and one in December.

The children's pretend readings were audio-recorded and transcribed. Then the transcripts were parsed into intonation units. The transcripts were also coded for major linguistic features characteristic of exposition: timeless verb constructions, generic noun constructions, repetition of the topical theme, characteristic information book openings, classificatory structures, and comparative/contrastive structures. All transcripts were reviewed twice, once by a second coder, and then again by the original coder.

Duke and Kays (1998) found that features of information book language were found in both the September and December information book readings. When examining

change from the first to the second reading, the kindergarteners produced significantly more timeless verb and generic noun constructions. The children's repetition of a topical theme increased by 61%, December pretend readings were substantively longer than September readings, and more technical vocabulary was used by more children.

One of the authors of the study was the classroom teacher and she was able to observe the children's naturally occurring interactions with information books in the classroom setting. She noticed children often selected information books for their "reading" material, students were observed discussing and debating topics and facts from information books, students wrote about information book topics in their journals, and requested that particular information books be read aloud. The researchers concluded the children were not only capable of interacting with expository text, but enjoyed doing so.

Duke and Kays (1998) acknowledged that the design of the study and sample size does not allow a causal conclusion to be reached. Without a large number of children assigned randomly to read-aloud and control conditions, there is no basis to claim that read-alouds of information books *cause* an increase of expository text characteristics in pretend-readings of informational books. However, the authors argued that the children in the study did make substantial gains in their knowledge of several key features of information book language in a very short timeframe. A replication study with another group of learners and the addition of a control classroom would further clarify the nature of young children's knowledge of information book language.

Pappas's (1993) study was part of the research base that Duke and Kays (1998) sought to extend. Pappas's study hypothesized that children were just as successful in reenacting information books as they were narrative stories. Pappas used analysis of

pretend-readings with kindergarteners to illustrate her contention. Pappas's study's sample was made up of 20 kindergarteners from two classes at a suburban school located outside a large Midwest urban city. The diverse sample came from a range of socioeconomic backgrounds. The pretend reading session procedures were almost identical to those described in the Duke and Kays (1998) study. Pappas's session took place in October and January with one information book and one narrative book being pretend-read each session.

Like the Duke and Kays (1998) study, all sessions were audio taped and analyzed. Pappas parsed the transcripts into complex clause units called T-units (a single independent clause together with any subordinate clauses grammatically related to it). The T-units were coded and examined for co-referentiality (a feature common to narrative texts) and co-classifications (a feature common to expository texts), as well as occurrences of lexical knowledge items. The children were also asked to indicate which book they preferred.

The author found that for both sessions, the children showed an overwhelming preference for the informational books. The author also concluded that this study shows that, in general, educators may have underestimated young children's sensitivity to written language registers, since the children in this study were able to sustain co-referentiality in stories and co-classification in information books, and were able to show instances where lexical knowledge for each type of text had been acquired. Thus, Pappas (1993) argued the kindergarteners in this study were just as successful in reenacting or taking on the discourse properties of the information books as they were of stories.

Once more, the small sample size and lack of experimental design, makes it impossible to generalize this study to other populations. However, studies like Pappas's (1993) and Duke and Kays' (1998), that describe children's language so thoroughly, can lead the way for other researchers to use similar parsing methods of pretend-readings of texts to confirm the findings of oral language reenactments of written text structures.

Moss's (1997) study of first graders' retelling of expository texts, also cited Pappas as an influence. Moss referred to previous research that has suggested that comprehension of expository text is *not* beyond the reach of young children, contrary to traditional beliefs. This qualitative study employed retellings to examine children's comprehension of expository text.

A first grade classroom in rural northeastern Ohio was the setting for Moss's (1997) study. The 20 children in her sample were from a range of socioeconomic levels as well as a range of ability levels. Twenty pre-service elementary teachers served as research assistants and collected data for the study. The information book selected for the study was *How Kittens Grow*. The reasons for selecting the book were stated by the researcher: the subject was familiar and interesting to first-graders, it had an identifiable expository pattern, it had a sequential pattern, was clearly written in an understandable style, and contained appealing photographs which accurately reflected text content.

Each research assistant completed a retelling with one first-grade child after being thoroughly trained by the researcher. The research assistant introduced the book, asked the child to briefly make a prediction, and informed the child that after the book was read to them, they would be retelling the story as if telling it to a friend who had never heard it before. The children were also asked four follow-up questions. The retellings were audio

taped and transcribed, and then assessed and assigned a score based on Irwin and Mitchell's 5-point Scale for Judging the Richness of Retellings. Each retelling was scored "blindly" three times. The children's responses to the questions were analyzed qualitatively.

The results of the holistic scoring of the retellings showed that 18 out of 20 first-graders received a score of 3 or better (at level 3 the retelling purportedly recounted the main ideas accurately and completely). Nine out of 20 students received a score of 4, indicating their responses inferred beyond the text and were related to their own lives. Moss (1997) concluded from these findings that young children are capable of comprehending expository text when it is presented orally through an informational trade book, and furthermore, that retelling appears to be a useful strategy for eliciting children's recall of such text.

This small-scale study had several limitations. Although this qualitative study did provide some excerpts of transcripts of retellings, more extensive examples of each rating category, for instance, would have given a reader a more complete picture of a "comprehensive" retelling. Also, description of the classroom environment and everyday teaching practices were absent and may have impacted the results. With one text, and one retelling session, we have only a snapshot of the children's comprehension of a single information book. Nonetheless, Moss's (1997) study does lend support to the growing confidence that young children are able to comprehend expository text. If exposition is able to be understood and enjoyed by young children, what other benefits might read-alouds of information books have for primary students?

Brabham, Boyd, and Edgington, represented their 2000 study as a descriptive, developmental study of elementary children's acquisition of vocabulary, comprehension of content area concepts in science and social studies, and ability to distinguish between fact and fiction in informational books read aloud. The texts used in this study were "informational storybooks"; books that mix fact and fiction, like the popular *Magic School Bus* series, for example. The informational books selected for this study were, *Call Me Ahnighito* by Pam Conrad, and *Everglades* by Jean Craighead George. These books contained challenging vocabulary, and factual science and social studies content embedded in fictional narratives. The estimated readability level for both books was between fifth and sixth grade.

There were a total of 239 students in second, third, and fourth grades from two elementary schools located in the southeastern United States in this study. The schools were situated in a suburban community representing a wide range of socioeconomic conditions. Roughly two-thirds of the participants were Caucasian.

In order to assess vocabulary acquisition, a pre/posttest was constructed for each book. The multiple choice tests contained 20 vocabulary items with three phrases or words from which the student chose the meaning of the target word. In addition to the vocabulary tests, a test with 22 items measuring general comprehension and students' responses to the mixture of facts and fiction was developed for each book.

Pre-service teachers from a close-by university were used as research assistants and read the books aloud to groups of students in their classrooms. The research assistants used a standard set of procedures, and scripted comments they had practiced in their reading methods class. The pre-service teachers administered the pretest and then

read the story aloud. Vocabulary words were discussed before and after the reading, but research assistants were asked to refrain from discussing them during the reading. Three days after the first reading, the book was read aloud and discussed again. Immediately after the second reading, the vocabulary posttest and comprehension test was given.

A 3 X 3 multivariate analysis of variance was used to examine the effects of gender, book, and grade level on the students' vocabulary gains, general comprehension, and ability to distinguish between fact and fiction in the two texts. The authors found significant effects for grade and book, but not gender. Interestingly, neither grade nor book significantly affected the vocabulary gains for the students in the study. Average vocabulary gains were significant at 21.58% for *Everglades* and 22.16% for *Call Me Ahnighito*. The authors suggested the most important finding of the study was the evidence for significant gains in vocabulary from as few as two opportunities for students to hear a book with unknown words read-aloud.

As far as student preferences of text type, averages across grade levels showed that both girls and boys preferred factual books over fiction, and the overwhelming majority of students indicated they preferred information books with both facts and fiction more than either of the other two types of literature. The researchers also found that both comprehension and ability to differentiate between fact and fiction increased with age.

This study was one of the few reviewed with a relatively large sample size. Other strengths were that the study included participants in three different grades, and used two different texts. The concrete measures and statistical analyses lent support for the conclusions of the researchers. However, the design did not allow for comparisons of

results of students exposed to fiction and straight non-fiction as well as informational storybooks. Another weakness of the study might be the rather restricted format for the testing instruments. The multiple-choice format was a narrow measure of vocabulary acquisition and reading comprehension. Despite the limitations, Brabham, Boyd, and Edgington (2000) provide support for including information book read-alouds in classrooms – they are enjoyable to students, promote vocabulary acquisition, and are able to be comprehended by the majority of students in several primary grades.

Based on this brief review of studies using information books with primary students, it is clear that young children are capable of understanding, enjoying, and even learning new vocabulary from expository texts. Much research is needed before educators know the most effective way to use information book read-alouds in their classrooms, but if these studies are any indication, the instructional value of nonfiction book read-alouds should not be ignored. The current study seeks to extend the research base focusing on the benefits of parent-led nonfiction read-alouds.

Parent Involvement and Children's Motivation to Read

It is widely accepted that children's first encounters with literacy can have lasting effects on later reading frequency and achievement. When literacy experiences in the home before formal education begins are enjoyable, children are more likely to develop an inclination to read often and widely later in their school career. Reading frequency and breadth is related to reading achievement (Baker, 2003). It stands to reason that the role parents play in early literacy experiences is key. Because the current study relies heavily on parent at-home involvement to carry out the intervention, and because it hypothesizes that parent-led read-alouds may have positive effects on children's vocabulary acquisition

and motivation to read, it is reasonable to review the literature concerning parent involvement and motivation to read here.

Baker (2003) in her synthesis of research on home influences of reading motivation, noted that parents who believe that reading is a source of entertainment have children with more positive beliefs about reading that parents who focus on the skills facet of the reading act. Baker (2003) also found that shared storybook reading plays a central part in fostering reading motivation. Specifically, when the affective conditions around this type of event are positive, children have been seen as more interested in reading and more likely to perceive it as an enjoyable activity. Another effective approach for increasing motivation to read in children that Baker (2003) described, is sending a wide variety of books home from school in order to increase access to books. The proposed study, through training parents in conducting interactive read-alouds, and through providing high-quality nonfiction books sent home from school, incorporates aspects of proven conditions that foster motivation to read in children.

Baker and Scher (2002) examined children's motivation for reading in relation to parental beliefs and home literacy experiences in a study conducted with 65 first-graders and their mothers. Baker and Scher (2002) used a "motivations for reading scale" to assess four different aspects of reading motivation: enjoyment of reading, perceived value of reading, perceived competence in reading, and interest in library-related situations. They found that the children in the study demonstrated a fairly strong motivation for reading, and that no differences seemed to exist in the motivation of boys and girls or across the four sociocultural groups; low-income African American, low-income

European American, middle-income African American, and middle-income European American.

Baker and Scher (2002) also had the parent participants complete an inventory of children's home reading activity, as well as be interviewed about their beliefs about the importance of reading and their perceptions of their child's interest in reading. One important finding was that parents who viewed reading as an actual source of entertainment were more likely to have children who scored higher on the enjoyment, value, and competence subscales of the motivation questionnaire and even on the questionnaire as a whole. Therefore, they concluded that parents who believe reading to be an enjoyable activity convey a specific view that is taken up by their children.

Home Literacy Experiences and Parent/Child Interaction During Reading

The relationship between home literacy and early reading acquisition has been a fairly well-established research topic. The first of the studies reviewed next, focuses on oral language skill development in a pre-school home environment and the associations with later reading development, specifically reading comprehension. Once again, these researchers highlighted the importance of clarifying the relationship between oral language skills and later reading achievement so that early interventions and instruction could be informed and made more effective.

De Jong and Leseman (2001) studied the home literacy of 69 children in the Netherlands for their longitudinal study. The study began when the children (original sample was 166) entered kindergarten (age 4 in the Netherlands) and this phase of the study concluded when the children were in third grade. The purpose of the study was to

examine the effects of pre-school home literacy on the development of reading, primarily reading comprehension, from the end of first grade to the end of third grade.

The children were from 28 inner-city primary schools; 36 were native Dutch, 17 were immigrant Surinamese, and 16 were immigrant Turkish. The home literacy measures were taken before the children entered kindergarten, and at the end of each kindergarten year (2 years of kindergarten in the Netherlands). At the end of grade 1 the researchers assessed linguistic comprehension and reading achievement. At the end of grade 3 reading achievement was assessed once more.

The researchers examined five facets of home literacy. The first, opportunity for literacy interactions, was assessed by a structured interview with the mothers indicating the frequency with which they conducted literacy related activities. The second, opportunity for problem-solving interactions, was assessed by the same 7-point scale used in the first facet. Next, the socio-emotional quality of book reading and problem solving was evaluated by observations of parent-child interactions during joint book reading and solving of a categorization task. The fourth facet, instruction quality of book reading, was videotaped and the parent-child interactions were coded by two observers independently. The final facet, instruction quality of problem solving (puzzle task), were coded following similar protocol for the book reading task.

At the end of first grade, the children were given two tests of receptive vocabulary, a test of listening comprehension, a word decoding task, and a reading comprehension task. At the end of third grade, two tests of reading comprehension were administered; a cloze task, and a comprehension question task after passage reading. The

researchers conducted descriptive statistics tests and regression analyses to examine the relationships between home-literacy and reading achievement measures.

The authors presented several important findings; one was that the relationships of the home literacy facets with word decoding and reading comprehension changed differentially over time. For example, the size of the relationship between home literacy and word decoding declined from the end of first grade to the end of third grade. In contrast, the relationship between home literacy, in particular the instruction and socio-emotional quality facets, and reading comprehension increased from first to third grade. So, in the case of reading comprehension, according to the regression analyses, home literacy had a significant effect on third-grade reading comprehension after first grade word-decoding ability and reading comprehension were controlled. According to De Jong and Leseman (2001), the results indicated the acquisition of reading comprehension may be dependent on the development of pragmatic oral language skills (vocabulary and listening comprehension), which, in this study, seemed to be facilitated by high-quality literacy and problem solving "instruction" at home by parents before formal schooling occurred.

Although this study does not provide evidence of a causal relationship between home literacy skills such as interactive read-alouds and later reading comprehension, it does provide a base for further research on the lasting effects of home literacy and how it may encourage the development of oral cognitive pragmatic skills. Studies that employ different types of measures would help to bring about a convergence of evidence. The longitudinal nature of the study and the fairly large sample size, as well as the detailed description of the analysis of the data, serve to strengthen the study.

Pellegrini, Galda, Jones, and Perlmutter (1995) examined the ways in which Head Start children's vocabulary was developed when they and their mothers engaged in joint reading contexts. The 19 mothers and children who participated in the study were recruited from Head Start programs in a small city and were paid $40 in exchange for their participation. The children had a mean age of 51 months. Four different expository texts were used in this study for the mothers to read to their child. All read aloud sessions were observed in the homes of the target families, videotaped and later transcribed. Children were also tested individually on the Peabody Picture Vocabulary Test, and immediately after the mother/child reading event, the child was asked a series of word identification questions taken from the text that was just read. They were specifically asked to identify objects shown in 10 pictures taken from the book that was read.

The researchers found from their observations that the mothers talked more than their children, and that more total utterances were generated around the unfamiliar texts than the familiar texts (two texts were researcher created with photographs of the child's home and day care center = familiar texts). The researchers hypothesized that since the unfamiliar texts were written in a decontextualized style, the mother needed to help the child negotiate the meaning of the texts by discussing them in more detail. Another finding centered around the word identification task the children engaged in. Interestingly, when mothers encouraged children to verbalize around labeling objects in the texts, they were more able to identify the labels later when asked by a researcher. Thus, it would seem that shared reading events with genres and methods that maximize verbal interactions between parents and children should continue to be studied in order to

provide practical recommendations for real-world programs and interventions. The current study falls into the category that would extend this field of research.

Verbal interactions between parents and children during reading experiences at home were also examined by Baker, Mackler, Sonnenschein, and Serpell in their 2001 study. This study investigated the interactions that took place between mothers and their first-grade children during shared storybook reading, focusing both on what was said and the affective atmosphere during the event. One goal of the Baker et al (2001) study was to examine how the storybook interactions contributed to growth in reading activity and achievement.

Sixty-one first-grade children and their mothers who were taking part in a longitudinal study of children's literacy development were used as participants in the 2001 study. Participants were visited in their homes by research assistants for the observations that were conducted in the spring of the children's first-grade year. The mother and child were instructed to choose a book from the two that the research assistant offered to them and read the book as they normally would. The interactions between mother/child dyads during reading were then videotaped and audiotaped. The verbal interactions were coded from transcriptions of the taped observations, and the affective quality of the storybook interactions was coded directly from the videotapes, focusing on the participants' expressions while reading, parent-child physical contact, and parent and child involvement.

The researchers made some interesting conclusions based on the finding of this study. They found that the more talk about nonimmediate content and the more talk about illustrations, the more positive the affective environment. However, the more talk that

concerned strategies for recognizing words, the poorer the affective quality of the interaction. Additionally, parental provision of the word (if the child was reading) and parental strategic support was negatively related to concurrent Grade 1 performance on the Woodcock-Johnson Basic Reading Skills composite.

Furthermore, looking longitudinally, the more talk about nonimmediate content and the more positive the affective environment, the more children read challenging chapter books in Grades 2 and 3. In general, the researchers concluded that the talk that occurs during shared book reading and the affective climate around the interaction, are more closely related to children's future home reading activity than to their future reading achievement. Of course, home reading activity may be related to reading achievement indirectly. In addition, the researchers emphasized that nonimmediate talk provides for a more stimulating and enjoyable shared reading experience, which in turn, fosters the motivation for further reading. The shared read-aloud events that took place in the dissertation study, most likely had aspects of the nonimmediate talk described in the Baker et al. (2001) study, and the parent training during the dissertation study did emphasize the importance of a positive affective shared reading experience.

A study by Sonnenschein and Munsterman (2002) came to a similar conclusion as did the study described above. Sonnenschein and Munsterman's (2002) research explored the relation between characteristics of home-based dyadic book reading interactions and children's early literacy skills as well as their self-reported motivations for reading. The mean age of the focal children in the study was 5.21 years, and the study took place in the summer after their completion of preschool. Storybook reading interactions took place in

the homes of the children. Parent/child dyads read a familiar book of their own selection followed by an unfamiliar one the research assistant provided.

Interactions during reading were videotaped and videotapes were transcribed and the written transcriptions were used for coding. Talk, as well as affective quality was coded. Coding categories of observable behaviors included reading expression, physical contact, child's involvement with the task, and adult's sensitivity to the child's involvement. Additional information gathered by the researchers included a storybook reading frequency scale completed by parents, and measurements for the children assessing emergent literacy skills, phonological awareness, orientation towards print, story comprehension, and motivation for reading.

Some conclusions reached by the researchers pertinent to the interests of this dissertation study include results of the affective qualities observed. The affective quality in the observed interactions was quite high and, interestingly, affective quality was a significant predictor of children's motivations for reading. Children who experienced more positive reading interactions at the start of kindergarten reported more positive motivations towards reading when they were in first grade. In contrast, neither the type of utterance (talk) nor the affective quality was significantly related to any of the literacy-related skills assessed. Thus, in conclusion, the researchers stated that the affective quality of reading interactions with young children may be important for fostering their interest in reading, and such an interest may spark the actual desire to engage in activities that lead to future reading development.

Home literacy experiences and parent/child interactions during reading, according to the research reviewed here, can have an effect on children's future reading motivation

which may influence home reading activity which may influence reading achievement indirectly. Next, literature focusing on shared reading experiences and possible effects on vocabulary acquisition will be reviewed.

Shared Reading Experiences and Effects on Vocabulary Acquisition

Thus far this paper has examined a basic aspect of vocabulary development, definitional skill, and has also looked at a review of studies which used direct instruction (training) to increase vocabulary growth with hopes of enhancing reading comprehension. But, beyond direct instruction, there exists another way in which children's home and school experiences may contribute to growth in their vocabularies: through incidental learning from verbal contexts (Penno, Moore, & Wilkinson, 2002). This view, like the "knowledge" perspective explained in the previous section, sees the contexts in which words are encountered as contributing to children's understanding of the word. Shared reading experiences, like interactive read-aloud events, are one example of a situation in which such a verbal context is found.

Senechal and Cornell's (1993) study focused on shared reading experiences that occurred in a preschool setting. These researchers observed joint-reading experiences between an adult and a preschool child. The purpose of the study was to ascertain if a single reading of a storybook could be sufficient to produce vocabulary growth. Senechal and Cornell (1993) also wanted to investigate whether certain conversational devices used during joint book reading could facilitate children's vocabulary development.

Senechal and Cornell (1993) used a storybook which originally did not have text; they created a narrative which fit with the pictures and embedded 10 target words that were typically unfamiliar to children of 4-5 years within the text. The 80 preschool

children, ages 4-5, were recruited from local daycares, nursery schools and kindergartens. Parents of the children were interviewed to determine the extent of home literacy experiences and also the family's SES level. The sample was determined to be middle to upper-middle class, and mostly Caucasian.

The design of the experiment was a 2 (age 4 and 5) X 4 (reading conditions) factorial design. The four reading conditions represented a continuum requiring decreasing amounts of participation from the children. The most interactive approach was "questioning" in which the experimenter asked the children 'what' and 'where' questions when target words were introduced. Next, in the "recasting" condition, the experimenter repeated the phrase with the target word, using a more commonly known synonym. In the less supportive "word repetition" condition, the adult simply repeated the sentence containing the target words. The "verbatim" reading condition was of course, the least interactive.

Senechal and Cornell (1993) used pre and post receptive and expressive vocabulary measures in this study. The receptive tasks were similar to those used in the Peabody Picture Vocabulary Test-Revised: each target word was represented by a picture and shown in a plate with three other "distracter" pictures. The child was asked to point to the picture which represented the target word. In the expressive task, the same illustrations of the target words were used, but without the distracter panels. The children were asked to identify the word and their responses were scored based on correct (target word) responses as well as some lesser credit given for synonyms.

Senechal and Cornell (1993) found that the single reading episode was sufficient to boost young children's receptive vocabulary. Through statistical procedures, the

authors concluded the participant's vocabulary acquisition was superior to the reasonable estimate of guessing. The 5-year-old children made greater vocabulary gains than did the 4-year-old children on both posttests. Surprisingly, Senechal and Cornell (1993) did not find that requesting active participation from the children or providing explanations of the target words increased vocabulary acquisition. The researchers provided several explanations for why increased interaction did not produce increased vocabulary knowledge. First, the context of the story itself may have been sufficient in providing explanation of the target words, thus active participation may not have been needed for children to comprehend word meanings. Another explanation offered by Senechal and Cornell (1993) was that it is possible that active participation is only effective when the child, not the adult, initiates the interaction. The researchers also stated that active participation serves other purposes than learning vocabulary; primarily increasing motivation to read – undeniably an important goal.

The Senechal and Cornell (1993) study illustrated how effective even single shared reading experiences can be in "teaching" new vocabulary to young children. However, many questions were left unanswered and point to promising directions for future research. The measurements used in the Senechal and Cornell (1993) study were researcher-designed and only used in one pilot study, thus biases may have existed. For example, though the target word pictures were taken from the text read, the distracter pictures were not. Also, could some of the gains made be due to testing effects? Perhaps the assessment tasks themselves added to the knowledge from the shared reading experience. Similar studies with different age groups, types of stories and assessment tasks, would help inform the line of inquiry in this area.

Penno, Moore, and Wilkinson (2002) also conducted a study that centered on children's vocabulary acquisition from the verbal contexts of shared storybooks. The purpose of the study was to further continue the research surrounding the effects of listening to stories on young children's vocabulary growth and to see if listening to stories would overcome the Matthew Effect. Specifically, this study addressed the effects of frequency of story reading, and teacher explanation of target words on vocabulary learning. Also, particular attention was given to children's differing language abilities and their influence on the incidental acquisition of vocabulary.

Penno et al (2002) drew their sample from two classrooms in a suburban school in Auckland, New Zealand. The 47 children who completed the study had a mean age of 5 years, 8 months. Within the two classrooms the children were randomly assigned to two groups, vocabulary *with* explanation, or *without* explanation. Two stories that were judged to be above the reading level of the children, and "unseen", at least at school, were used in the study. The stories were similar in layout and style. Penno et al (2002) administered pretreatment measures of language and vocabulary skills that consisted of an expressive language test and a vocabulary test that did not have term overlap with the target vocabulary test administered later in the study. Also before the treatment conditions occurred, a researcher designed target word multiple-choice pretest was given in order to measure gains after the treatments. This pre-test seemed similar in design to the pretest described in the Senechal and Cornell (1993) study; it used four pictures, and the child was asked to point to the representation of the target word. In addition to the posttest after the story reading, Penno et al. (2002) designed a retelling task to measure the children's use of the target words.

The researchers designed the study to include multiple readings of both stories. Each story was read three times. At the end of each story reading, the children returned to their classrooms and were randomly called back to the examiner to complete the retelling task individually. The post-test was administered one week after the third reading-retelling of the story. The same procedure was repeated for the second story. The children's retellings were transcribed and coded. They were then analyzed and scored based on a 5 point scale used to measure the children's depth of word knowledge from the story retellings.

Multiple regression analyses allowed Penno et al (2002) to reach several conclusions after completion of their study. First, they determined that the accuracy of use of the target words progressively increased across time (the three retellings of the story). Second, they found that the group receiving explanations of the target words during reading significantly helped increase the children's use of target words across the retelling tasks. Children who listened to the stories with explanations also scored significantly better on the multiple-choice posttest. As predicted, there were significant gains from pretest to posttest, regardless of the story reading condition. Interestingly, exposure to the test, as well as the explanations of words, benefited the higher ability children more than the lower ability children – the Matthew Effect was not overcome.

Penno et al. (2002) asserted their findings have several implications for classroom practice. Foremost, it seems clear that young children can learn vocabulary from listening to stories and that this can be further enhanced by repeated readings and teacher explanation of novel or difficult vocabulary. However, Penno et al. (2002) caution that lower ability students need additional support and strategies if they are to benefit as much

as their higher ability peers from these types of activities; thus they viewed the Matthew Effect as a formidable obstacle.

Another shared reading experience study reviewed is quite different from both the Penno et al. (2002) and the Senechal and Cornell (1993) study; mostly because its design is qualitative. Oyler's (1996) ethnographic study sought to examine the discourse that occurred during teacher-led read-alouds of information books. Oyler was especially interested in how teachers and students "shared authority" during the interactive read-alouds that were observed; and how students initiated "expert talk". Oyler situated her research in the theoretical view that students need to be encouraged to become producers of knowledge, not just consumers of knowledge. The researcher saw interactive read-alouds as vehicles for opportunities for children to speak and act as experts.

Oyler's (1996) year-long study took place in a city school building where all students qualified for free federal lunch. Almost all of the children were Mexican-American, Puerto Rican, or African American. The teacher of the first-grade classroom where Oyler conducted her observations was white and did not speak much Spanish, in contrast to the majority of the students in her room. This 20-year veteran of the Chicago Public School system centered the literacy instruction in her classroom around her teacher-led read-alouds.

Oyler audio-recorded 31 sessions of read-alouds, 14 of which were of information books. Read-alouds occurred everyday in the study classroom. The audio-recordings were transcribed and data from the researcher's field notes were added. From this collection of data, Oyler derived 6 categories of types of student initiations that occurred during the read-alouds. It is through these categories of student initiations that Oyler is

able to describe how children, who may be labeled by some as “experientially deprived”, develop the motivation and vocabulary necessary to speak as “experts” during interactive read-alouds.

The first category of initiation described is “directing process”; referring to instances where children attempted to take control of the activity that was taking place or suggested where the activity should lead. For example, there were times when children directed how the teacher was to hold the book, turn pages, or show something from the book again. The other prominent “directing” example was when children suggested specific book extension activities. “Questioning for understanding” was a category where Oyler (1996) found multiple examples during every observation. In this classroom, the privilege of interrupting the read-aloud to ask clarifying questions was evenly distributed among students and did not seem to hold any stigma. Also important to note was that student questions were often answered by other students. Many student questions stemmed from misunderstandings of vocabulary, often due to being English language learners. Rather than being disengaged when comprehension was disrupted because of language issues, the students seemed willing to interrupt the reading and admit to confusion. Oyler saw this as an authoritative move; the students controlled the discourse of the classroom by asking understandings to be clarified.

Students also took control in the “understanding text” category. These initiations were very similar to the “questioning for understanding” category except that these initiations were *statements* made by students as they interpreted the text. Often these statements were made in reference to the pictures or photographs in the information books, and interestingly did not seem to follow the topic line of the teacher. The teacher

did not redirect the comments, but usually chose to respond to them conversationally, thus Oyler saw the children as co-constructing knowledge in the classroom. Another initiation category that seemed to lead away from the text was “personal experience”. This type of initiation was prevalent during all read-alouds. When students shared personal connections, the teacher often followed their statement with a question, encouraging more elaboration. At times one student’s personal experience sparked other children to comment and a dialogue occurred. As the year progressed, Oyler observed that statements about personal experiences lessened and statements about group (classroom) experiences increased.

Students not only made links to personal experiences, but to other texts as well, as described by the “intertextual link” category. Oyler (1996) stated this type of initiation happened frequently in all read-alouds, but most commonly during the reading of information books. It was during this type of initiation that students often displayed the actions and speech of “experts”. For example, students were observed leaving the “circle” to retrieve other books which they connected to the book being read in order to validate or refute the information in the current read-aloud. Oyler (1996) viewed this action as a step towards critical literacy, the students showed that they did not believe one text to be the ultimate authority on a subject, but demonstrated that they could compare texts and generate their own interpretations of information. One step beyond the “intertextual link” category is the “claming expertise” category. During these types of initiations, students shared their expertise by disagreeing with the teacher or text directly with a statement that stemmed from knowledge *outside* the text. At times, especially later in the year, if the teacher was to correct a student’s inaccurate claim, the student would attempt to find

another text to back themselves up. These types of negotiations became increasingly complex as the year progressed. Interestingly, there was not a single instance of a girl claiming expertise; when girls initiated with information outside the text, they did so by making links to personal experience or intertextual links. The final category, "affective response" was one category were girls were much more heavily represented. Affective response initiations were not as prevalent during information books, however, when they did occur, they were only made by girls.

Oyler (1996) concluded that the children in her study, though they lived in a neighborhood where nearly 70% of all students never graduate from high school, had come to share authority in their classroom and act as "experts" through the interactions that took place during read-alouds. Oyler viewed her study as evidence that all students, whether poor and minoritized or not, can actively contribute to the work of the classroom in ways of process and content. Oyler argued that the many instances she described of student initiations during information book read-alouds points to the deep interest children bring to the genre as well as the rich opportunities for increasing vocabulary and comprehension that exist. By conducting interactive read-alouds, this teacher gave her students the tools they needed to feel like, talk like, and act like "experts", even if they were children!

Elley's research has been very influential to this current study, as well as many other interested in this field of research. Elley (1989) back-grounded his research by stating that it is almost universally accepted that story-book reading is an activity that promotes general literacy. He further stated that children who have been read to regularly before formal school instruction make large gains in their reading and language

development at school. However, he argued that more specific research is needed to investigate one important potential benefit of story reading – the acquisition of new vocabulary. As was described at the beginning of this paper, several researchers have traced a link between oral language vocabulary and later reading comprehension, thus focusing on vocabulary acquisition is a valuable pursuit in educational research. Senechal, Thomas and Monker (1995) also focused on vocabulary acquisition during storybook reading, but with pre-school age children. Henderson, (2001) as well, was interested in vocabulary acquisition, and studied incidental vocabulary acquisition through silent and teacher-read stories in third grade.

Senechal, Thomas, and Monker (1995) carried out two experiments examining how four-year-olds who differ in vocabulary knowledge, under several conditions of story-book reading, learn vocabulary incidentally while listening to adults read to them. In the first experiment, 32 children were classified as either high or low in word knowledge based on the Peabody Picture Vocabulary Test-Revised. A parent survey detailing home literacy habits was also administered. The children were read two picture books by adults containing 13 target words in each selection. A comprehension vocabulary test was constructed for each book in order to measure learned vocabulary. Two reading conditions were established: one group listened passively as an adult read a book two times, while another group of children (labeling condition) was asked questions requiring them to label illustrations representing the target words during the two readings.

The children's posttest performance was analyzed by a mixed-factorial analysis of variance (ANOVA). The authors found that children who answered questions (labeling condition) performed better on the comprehension vocabulary posttests than did children

who passively listened to the story. They also found that children with larger vocabularies produced more words than children with smaller vocabularies. When examining the home literacy surveys, they found that more frequent at-home reading was associated with higher scores on the PPVT-R. In fact, at-home reading frequency made a significant contribution to vocabulary acquisition over and above the influence of SES level.

The goal of the second experiment was to clarify the role of the vocabulary retrieval process. In the second experiment the researchers adding a "pointing" (non-verbal response) condition to the other reading conditions; listening passively and responding to questions by labeling. Forty-eight children participated in a testing situation identical to the first experiment conducted. Again, the researchers found that children with larger vocabularies performed better overall, and that frequency of book reading at home was positively correlated with higher PPVT-R scores. Interestingly, no significant difference was found for the pointing and labeling conditions; although children in both conditions did perform significantly better on the vocabulary comprehension test than did those in the listening only group.

The authors contended that storybook reading with opportunities for children to interact with a supportive adult is beneficial for children who differ in vocabulary knowledge. They encouraged parents and preschool educators to ask young children to participate during repeated readings of storybooks. The authors did admit that there is a paucity of research examining cognitive skills involved in vocabulary acquisition, and that much is yet to be investigated and learned.

The fact that this study included two experiments, the second to expand on a finding in the first, is a clear strength. The second experiment not only replicated findings

of the first experiment, but produced a new, related finding, that may lead further research in interesting directions. More information about the texts that were used in the reading conditions would have been helpful. This study did not seem to address the issue of the text and any effect the text may have had on the experimental task.

Elley's (1989) study also used a dual experiment model to investigate the hypothesis that children would learn the meanings of many new words that they heard in stories read aloud. The participants included 157 seven-year-olds from seven classrooms in seven schools in New Zealand. The children spoke English as their first language and came from a cross-section of urban and suburban backgrounds. There were also seven teachers who were participants and they each had at least seven years of teaching experience. In the first experiment, the children were given a pretest of 20 vocabulary items derived from a book that would be read to the classes. The vocabulary pretest had been piloted previously to ensure the target words were of sufficient difficulty. The test consisted of 10 picture items and 10 verbal synonym items, with 4 options for each item.

Seven days after the pretest was administered, the story was read to the children for the first time. The story was read three times to the classes, over a one week period; first by the participating teachers, then by the classroom teachers, and once more by the participating teachers. Although, no definitions or explanations were given during the reading, the teachers did allow some time for predictions and remarks by the children. Two days after the third reading, the same vocabulary test was given to the children. The authors stated that no control group was used in this experiment, since prior pilot studies had shown no effects attributable to the administration of a pretest.

A further goal of this study was to examine if certain word-related and subject-related factors would correlate with any gain in vocabulary. The word-related variables examined were: number of text occurrences, number of times word was pictured, helpfulness of verbal meaning cues, importance of word to the development of the plot, vividness, and familiarity of the concept. The participating teachers evaluated each of the target words in each of the above categories, on a 6-point scale. The subject-related variables referred to four ability groups that were derived from the students' pretest scores.

The results showed that students scored higher on most of the target words on the posttest; there was a mean increase of 15.4% overall. When word-related variables were entered into a multiple regression analysis, all six variables showed positive correlations. Three variables showed significant positive correlations: number of text occurrences, number of times word was pictured, and helpfulness of verbal meaning cues. Interestingly, the lowest ability group showed the most gain, they gained at least as much vocabulary knowledge as their more knowledgeable peers.

Elley (1989) designed a second experiment to confirm the findings of the first, and to explore the effects of teacher explanation of unfamiliar vocabulary words. For this experiment Elley used six classes of 8-year-olds from six schools which equaled 127 children spilt into two experimental groups. In addition 51 children of similar age and background from two of the schools were included as a control group. This time two contrasting storybooks were used; a humorous animal story and a more serious translated Japanese folktale. The vocabulary measure consisted of a 36-item multiple choice test in which 5 control words were included.

The two experimental groups consisted of one group in which the stories were read by the teacher in an unembellished, straight way. The other group's teachers read the stories and explained the meanings of the target words as they occurred. Again, each story was read three times. The posttest occurred 7 days after the third reading, and a delayed posttest was given (without additional story reading) 3 months later.

The author found that for the humorous story vocabulary gains in the reading only group were made at 14.8%. However, for the reading with explanations group, the gains jumped to 39.9%. The control group showed less than a 2% gain. The mean gain for the control words (words that did not appear in either story) was close to zero for all groups. The more serious story showed less impressive gains; the reading only group gained 4.4% new vocabulary meanings. However, the group that heard explanations of new vocabulary gained 17.1%. When examining word-related variables, similar results to the first experiment were found. Also similar to the first experiment, the lowest ability group made the biggest gains. The results from the delayed posttest showed that there was almost no decline in vocabulary knowledge; a negligible 2%.

Elley (1989) concluded that children can learn new vocabulary incidentally from having illustrated storybooks read to them, and furthermore, that explanations of unknown words as they are encountered, can more than double such vocabulary gains. He also construed that students who start out with less vocabulary knowledge gain at least as much from the readings as other students, and that this learning appears to be relatively permanent. Interestingly, this contradicts the findings of the Penno et al. (2002) study, where the Matthew Effect was not overcome – higher ability students benefited more than lower ability students from explanations of word meanings from stories read.

Perhaps the age of the participants could have been a contributing factor accounting for this difference. The text features seemed to have an impact on vocabulary learning, and Elley hypothesized student engagement was lower with the more serious story, and thus the motivation for learning new vocabulary was lessened.

Like the Senechal, Thomas, and Monker study, the use of two experiments served to strengthen this study. Additionally, the researcher referred to many pilot studies that he had employed to hone his choice of measurement tools and procedural set-up. The inclusion of a control group in the second experiment also added to the study's validity. More exploration of the effects of the text characteristics and structure, and student motivation are certainly called for in future research.

In Henderson's (2001) study, the focus was also on incidental vocabulary acquisition through story reading. The researcher wanted to determine if third-grade students could learn vocabulary incidentally through silent reading and listening to stories read aloud as well as which method would produce the greater gain.

The participants in Henderson's (2001) study were 17 students from a self-contained third grade public school classroom in a suburban town in northern New Jersey. Over 80% of the children were white, the remaining were of Asian descent. By examining report card data, the researcher found 15 of the 17 students were rated as average to above average readers by their teachers.

Henderson (2001) chose 16 books for the study – 8 to be read orally and 8 to be read silently by the students. The stories were chosen using criteria of length, interest, and possession of some difficult vocabulary. The researcher chose books from a pool of 50 that had been either recommended by a local librarian, was the recipient of a reward,

or was recommended in a teacher publication. The books represented a range of genres and according to Fry's Readability Graph, were at an approximate 3rd grade reading level. The researcher chose 7 or 8 words per book as the target vocabulary for the study; 101 words in all.

The study was conducted over four weeks using four books per week. At the beginning of each week the participants took a 30 question pretest. The pretest included 15 sentences (each containing one target word), that required the students to choose the word (from 4 choices) that meant the same as the underlined target word. The remaining 15 items consisted of 15 cloze sentences for which the students chose one word from four choices. Students read or heard each set of four books twice over the course of the week. None of the target words was discussed. On Friday afternoons the students took the posttest.

Henderson (2001) confirmed that the students in the sample were able to learn new vocabulary incidentally through reading silently and listening to stories read aloud. The average student learned about 23 new words during the total study; according to *t* tests, a significant difference between pre and posttest scores. Which learning condition was more effective? The researcher found that the participants learned more than double the amount of vocabulary from listening to stories read aloud (30.9%) than from reading the selected stories silently (13.3%). Some analysis was conducted on the target words also, as in the Elley (1989) study. Interestingly, over 80% of the target words occurred only once in the texts. This finding led the author to believe that students can learn words from a single exposure. Henderson (2001) encouraged educators to put increased

emphasis on more widespread oral and independent reading, both in and outside of the classroom.

The most severe limitation of this study is found in its small, homogeneous sample size. Only 17, white, mostly average to above average students were used. Again, as in the two previous studies, there was limited discussion of the texts used and how the students interacted with them. A discussion of the rationale behind the creation of the pre/post tests would allow the reader more insight into the measurement tool; why were cloze sentences used for example? Despite the small scale of the study, it could be replicated in different settings with more diverse students (and larger samples) to help support the basic conclusions made.

Leung and Pikulski (1990) studied incidental learning of word meanings by kindergarten and first-grade children through repeated shared read aloud events. This study used an experimental pre/post test design with 48 participants from four kindergarten classrooms and four first-grade classrooms in a middle-class suburban school in Delaware. The researchers used two storybooks for the read aloud events. These two books were read individually to the participants in the experimental group three times over a two week period. No discussion of the target vocabulary occurred during the read aloud events.

Ten target words selected from the books were used in an expressive measure of incidental vocabulary acquisition similar to the task I included in my study. Children in both the control and experimental group were asked to tell the meaning of the target words following a free recall format as the pre/post test. Participant responses were recorded through examiner notation.

Although the overall experimental group did score higher than the control group, differences between the groups only *approached* significance. Interestingly, the researchers found a general lack of differences in the performance between the two age groups; kindergarteners and first-graders had similar gain scores. Leung and Pikulski (1990) hypothesized that the lack of statistically significant gains for the experimental group could be attributed to the relative difficulty of the expressive nature of the target word meaning free recall task for this age child. They noted that previous research using this type of experimental read aloud event had measured incidental acquisition of target word meanings by using multiple-choice tasks, which may be a less demanding task, thus showing gains more easily.

Whitehurst, Arnold, Epstein, Angell, Smith, and Fischel (1994) examined a shared reading intervention that occurred in day care centers and in the homes of low-income families in New York. Seventy-three three-year-olds were randomly assigned within three conditions: a school condition in which children were read target books by their teacher in a group setting, a school plus home condition in which children were read to at home by their parents in addition to the school intervention, and a control condition. Both parents and teachers were trained by videotape to employ a dialogic reading style, an interactive technique where the adult may ask questions, add information, and elicit feedback from the children while reading to them. The interventions lasted six weeks.

Whitehurst et al (1994) administered four assessments to provide information about the effectiveness of their interventions: the Peabody Picture Vocabulary Test – Revised, the Expressive One-Word Picture Vocabulary Test- Revised, the expressive subscale of the Illinois Test of Psycholinguistic Abilities, and the *Our Word*, which the

researchers created to essentially measure target vocabulary acquisition from the target books used in the interventions. Each child was tested individually in a pre/post test design. The researchers found that, as predicted, day-care teachers and parents can produce significant increments in the language development of low-income preschoolers through a few weeks of dialogic reading. The effects were demonstrated on two different measures of expressive vocabulary (the One Word and Our Word measures). The two reading conditions, school, and home plus school, were significantly different from the control condition at posttest, but were not significantly different from each other. Six months after the intervention ended, the researchers administered the assessments again to examine if there was a lasting effect and found that the effect was still present according to one measure, the One Word assessment.

A replication of the above study was carried out by Lonigan and Whitehurst (1998) a few years later in Nashville, Tennessee, with a larger sample size- one-hundred fourteen children. Again, the participants were preschool children from low-income families who attended one of four child care centers in a metropolitan area. Once again, teachers and parents were trained by videotape in the dialogic read aloud style, for interventions that lasted six weeks. However, in this study, one more condition was added; a "home only" reading condition. This study employed the same standardized measures as the previously described study.

Lonigan and Whitehurst (1998) found the results of this study to be similar to those of the previous study. Yet again, the results demonstrated that both child care teachers and parents can produce significant positive changes in the development of oral language of low-income children using a relatively brief dialogic reading intervention.

The effects were most apparent on the two standardized measures of expressive language, the Expressive One-Word Picture Vocabulary Test, and the verbal expression subtest of the Illinois Test of Psycholinguistic Abilities. These two measures showed results to be statistically significant and relatively large in absolute terms when comparing the interventions to the control condition. Again, the differences between the school plus home group, the school group, or the home group were not significant from each other, only with the control group.

A dialogic shared reading context was again part of the intervention design used by Hargrave and Senechal (2000) to investigate the effects on preschoolers' vocabulary acquisition. These researchers selected 36 preschool children from two day-care centers in Ottawa, Canada, who had poor expressive vocabulary skills, averaging 13 months behind chronological age. A classic pre/post test experimental design was utilized, with an expressive (Expressive One Word Picture Vocabulary Test-Revised) and a receptive (Peabody Picture Vocabulary Test-Revised) vocabulary assessment, as well as an experimenter-designed "Book Vocabulary Test" of selected target words, used to measure effects. One day-care center utilized a dialogic reading method, while the other day-care center used a "regular" read-aloud method with the same materials.

The teachers at one day care center were trained in the dialogic reading technique by the researchers who used role-playing activities and discussions as well as the videotape mentioned in some of the previous literature discussed in their training. The teachers read ten target books provided by the experimenter over four weeks to a small group consisting of eight of the participants at a time. Twenty-eight of the 36 children's parents agreed to also participate in an at-home component of the study. Hargrave and

Senechal (2000) referenced other studies had shown larger benefits in a day-care-plus-home intervention. The books available for parents to read to their children at home were different titles than the ones used at the preschools, although parents did receive identical dialogic reading training. The parents were instructed to read to their child for a minimum of ten minutes each session and to read each book provided (a maximum of four books) at least five times during the week.

The results of the study revealed that children with poor vocabulary skills learned new vocabulary from shared reading episodes. This was evidenced by the results of the gains shown for the "Book Vocabulary Test". Also, children in the dialogic reading condition made significantly greater gains in language than did children in the regular reading condition. According to Hargrave and Senechal (2000), the results provide further support for the efficacy of a dialogic reading program on the development of expressive language. In fact, on the standardized measure of expressive vocabulary the difference between pre and posttest corresponded to an increase of four months growth – which occurred during a four *week* intervention.

Even by examining a small number of studies, one can conclude that incidental vocabulary acquisition does occur as a result of texts being read aloud to students. There seems to also be adequate support for the use of dialogic or interactive read aloud methods to increase the effectiveness of shared reading events. Thus, this dissertation study is grounded in a research base that reinforces the possible positive benefits of interactive read-alouds for incidental vocabulary acquisition.

Summary of Literature Reviewed

This literature review's purpose has been to create a chain of reasoning through a brief literature review to answer the question: Does scaffolding oral language vocabulary during read-alouds impact text comprehension? Why is this question important? First, researchers agree that U.S. students' reading comprehension must be elevated in order to increase reading and school success (Biemiller, 1999). Second, there is a community of researchers that suggests if students' oral language vocabulary is deficient in their early years, later reading comprehension could be severely affected.

In this review of literature, the relationship between oral language vocabulary and reading comprehensions has been traced. The differences in children's' oral language vocabularies due to the effects of home literacy have been examined. Finally, the effects of read-alouds, both narrative and expository, on vocabulary acquisition, motivation, and comprehension were explored.

Several studies revealed the relationship between oral language vocabulary and later reading comprehension ability, to be predictive in nature. Studies of home literacy illustrated that certain pragmatic oral language skills, such as vocabulary and listening comprehension, are affected by the quality of scaffolding and adult interaction. Furthermore, facets of home literacy may be positively related to later reading comprehension. Classic, as well as recent, studies centering on the ability of read-alouds to encourage vocabulary acquisition were reviewed. These studies clearly demonstrated that incidental vocabulary acquisition as a result of read-alouds does occur and can be greatly facilitated by adult scaffolding of new words. Finally, several studies examined information book read-alouds. Researchers in the studies reviewed here, would agree that

the traditional claim that young children are not able to comprehend or benefit from expository texts, could be refuted based on their findings. Young children were observed to comprehend information books and retell them successfully. The participants demonstrated, through pretend-reading, that information book language structures could be learned through classroom exposure and reproduced orally. Again, incidental vocabulary acquisition was an observed result of read-alouds, and also the overwhelming majority of students in the studies preferred information books to fiction.

It should not be overlooked that this paper reviewed only a small number of studies; within each category of studies reviewed, many more studies would need to be included to make claims of causal relationships or irrefutable evidence. Also, as with any studies in educational research, the studies reviewed here contained several limitations. Many researchers admitted the small sample size and limited population representation made generalization to other populations difficult. Several of the studies were qualitative and/or descriptive and thus were not designed to test a hypothesis. Even though qualitative studies often provide the thick description on which future experimental studies find topics to explore, some of the studies reviewed were lacking in rich descriptions of the procedures, the materials, or the results. Most studies alluded to the need to replicate findings with other age or ability groups and follow participants longitudinally. Some studies employed measures that could be seen as narrow, and inclusion of multiple measures or triangulation techniques would have strengthened the studies. Nonetheless, the studies reviewed here provide a solid research base to support the further exploration of the topic of incidental vocabulary acquisition and motivation to read fostered by interactive parent-led read-aloud events.

Chapter III. Method

The purpose of this study was to investigate the effects of parent-led interactive read-alouds of nonfiction books on first-graders' vocabulary acquisition and motivation to read. Evidence suggests that nonfiction read-alouds in the classroom can improve children's vocabulary and motivation to read. This study used a pre/post experimental design to investigate whether parent-led read-alouds can lead to similar gains.

The study sought to determine if differences in first-grade students' vocabulary acquisition and motivation to read exist between a control group and an intervention group exposed to interactive read-alouds. (1) What effects do parent-led interactive read-alouds of target nonfiction books have on selected target vocabulary acquisition? (2) What effects do parent-led interactive read-alouds of nonfiction books have on motivation to read?

Research Design

The study used a pre/post experimental design to investigate whether parent-led interactive read-alouds can increase children's vocabulary and motivation to read. The first-grade student population in one elementary school (49 students) was invited to participate in either a "Fall"(intervention group) or "Spring" (control group) "Book Club". All parents who were interested in participating in the "Book Club" were then members of the pool from which I randomly selected half to be assigned to the intervention group and half to the control group. It was made clear to parents that there would need to be two "Book Clubs" in order to insure that the children would have an adequate number of books from which to select books to take home. Interested parents were then given further information about how the "Book Club" would work and what

would be involved as a participant. Seventeen children and parents became the intervention group and 19 children and parents made up the control group for a total of 36 student participants.

Parents were invited to attend a training session on how to engage their children in interactive read-alouds. Children of consenting parents then had access to a lending library of 500+ nonfiction books, which contained 10 target books with selected target vocabulary (32 words). Target books were cycled to children's homes along with other nonfiction books self-selected by the students. The intervention period lasted for 11 weeks, allowing each intervention group participant to have two exposures to the target books at home. The design of the target book cycle allowed for each participant's first exposure and second exposure to each target book to be staggered in a way as to minimize the possible effect of a time lapse between exposure and assessment of incidental vocabulary acquisition. For example, participant 1 would have an exposure to target book 1 during week 1 and again during week 5.

First-graders whose parents were not randomly selected to participate in the "Fall" (intervention) "Book Club" training, became the control group participants. The control group participants had access to identical parent training and the lending library after all data has been collected after the 11 week intervention – they became the Spring "Book Club." Receptive and expressive measures of the children's knowledge of the target vocabulary, as well as a motivation to read measure were used to determine effects of the intervention.

Participants

All parents of first-grade students (49) in one elementary school building were invited to participate in the study, which included one training session (multiple time/day choices were given) conducted by the researcher, a reading specialist at the school. The elementary school in this study generally houses 350 K-6 students. The school, one of 8 elementary schools in the district, is located in a rural/suburban school district in a mid-Atlantic state. The population is mostly middle-class; the free/reduced lunch rate in the district is approximately 16%.

A flyer was sent home from school, to all first-grade parents, advertising an information session about the benefits of conducting interactive read-alouds with children. It was my hope that by offering many opportunities to attend the training, "advertising" the book club to students in order to encourage them to persuade their parents to attend, and calling parents to follow-up on their attendance plans, I would have most parents who were invited, attend a training session. Originally, 40 parents were interested in participating, and I randomly selected half to form the intervention group. However, between the time I randomly assigned participants to the groups and the time the parent training occurred, 4 parents (1 control and 3 intervention) reconsidered their interest in participating in the study and withdrew. Thus, in reality, 73% of all parents and students (36 out of 49) were interested in participating in the "Book Club," consented to the study, and were able to attend the training and follow-through with the requirements of the study. These 36 parents and their first-grade children made up both the intervention group and control group for this study.

The parents of first-graders who were not randomly selected to form the intervention group ("Fall Book Club"), were sent an informational letter and consent form specific to their control group participation ("Spring Book Club"). If these parents expressed interest in their children having access to the nonfiction lending library after the data collection phase of the study was completed, they signed consent forms, and when their children gave their assent, these children became the control group.

Implementation Procedures

There were three main components of the proposed study. The first was the parent training session. The second component was the intervention period, and the third component was pre/post testing.

Parent Training

A flyer (Appendix A) was sent home from school advertising a new "first-grader book club" to the entire parent population of first-grade students two weeks before the initial parent information (training) session was scheduled to take place. I visited the three first-grade classrooms right before the flyers went home, in order to "advertise" the book club, encourage the students to make sure their parents see the letter and sign up for the training, and explain that there would be two clubs, one in the Fall semester and one in the Spring semester, so that everyone could have a chance to be in the club. I explained that there simply weren't enough books for every first-grader to be in the club at once, and that this way everyone will get a chance to take home lots of fantastic books. The flyer detailed that parents would learn how to do interactive read-alouds with their children, how their children may benefit from them, and how their child could take home books from a fantastic new lending library of nonfiction books. Choices of weeknight

evenings, and during the school day times were offered. Children who accompanied their parents were treated to a program with activities and a snack. I recruited my mother and my husband to read a story and play games with the children in a nearby classroom, while I trained parents in the school library. Free give-aways of books and pencils were given to participants as incentive for attending the session.

The remaining members of the parent population who were not randomly assigned to become the intervention group received a letter (Appendix B) inviting them and their children to join the Spring section of the "book club" and borrow books from the nonfiction take-home library at that time. The letter explained that the number of books in the take-home library can support only half of the first-graders at a time. The letter also briefly explained my research interests and invited parents to take part in the study. A consent form for control group parents (Appendix C) was included with the letter. As consent forms were returned, parents were sent the home literacy questionnaire and title recognition test to complete and return.

Table 1 shows the format for the intervention training session. At the training session, the intervention parents were informed of the potential benefits of interactive read-alouds, how the lending library would work, and what would be required of them in order to participate in the "book club" program. I also informed the parents, at this time, of my research interests and affiliation with the University of Maryland.

Parents were then trained in conducting interactive read-alouds with nonfiction books. The training I gave focused on finding and capitalizing on opportunities to engage children in conversation while reading aloud to them. I gave examples to illustrate strategies such as asking questions, clarifying challenging concepts, making connections

to children's prior knowledge, encouraging children's comments and extending their language, using "think-aloud" techniques while reading, and highlighting new or interesting vocabulary. Even though one of the research questions I was exploring was specifically focused on target vocabulary acquisition, I did not explicitly instruct parents to focus on identifying or explaining unknown vocabulary, I simply presented that interactive read-alouds may include conversation about interesting words or concepts. I did not give parents instruction in recasting difficult vocabulary, or using any other techniques to foster vocabulary acquisition in children. My goal was to have parents interact naturally with their children while reading nonfiction books.

After I briefly went over some guidelines of interactive read-alouds, parents watched a video of an adult reading a nonfiction book interactively with a 7-year-old girl. This video was researcher-made, and was an informal example of the researcher's mother reading a short, nonfiction book similar to those found in the take-home library, to a child she regularly babysat. I gave my mother the same instructions I gave the parents, and shot the video in one take. A transcript of the video is found in Appendix D. Parents then had a chance to do some role-playing with some sample nonfiction books. Parents were matched with a partner and took turns page by page, practicing interactive reading techniques. I circulated and then asked for questions and comments. At each training session held (multiple times for sessions were offered, but parent participants each attended only one) at least one parent commented that she/he was happy they got to see a video because she/he would not have known how to engage her/his child while reading aloud to them. Parents were given information packets to take home. After thanking parents for coming and calling the room to send the children to the library, I made sure I

had each parent's consent form (Appendix E), home literacy questionnaire (Appendix F) and Title Recognition Test (Appendix G) before she/he left the session. Appendix H contains a detailed summary of the information presented during the parent training session.

Table 1

Parent Training Session Schedule

o Welcome/Introduction o Personal anecdotes/ the importance of nonfiction read-alouds o Background information/rationale shared with parents o What an interactive read-aloud IS and ISN'T o Watch a video of an interactive read-aloud o Role-play interactive read-alouds o Describe how the take-home library will work o Questions/comments o Bring children back to meet with parents and receive give-aways

Pre-Testing

Pre-testing began as soon as all control group parent consent forms were returned. I arranged times with the participants' teachers during the school day that were minimally disruptive. The pre-testing took place in a quiet room, close to the participants' classrooms, my own room. I gave the assessments to the children individually, and believe their familiarity with me as the building reading specialist allowed for a comfortable and valid testing environment. None of the participants seemed unwilling to participate or distressed during any part of the testing. Generally, they seemed pleased with the individual attention and novelty of the tasks.

The average time to explain the assent form (Appendix I), and administer the pretests (receptive and expressive vocabulary tasks and motivation to read measure) was 15-20 minutes.

Intervention Period

Once the pre-testing was completed, the "nonfiction lending library" cycle was initiated. The intervention group students came to the reading room with me at the end of the school day during dismissal time. Each of the three first-grade classrooms was assigned days of the week, twice per week, to come trade their books. This way, the size of the group was kept small (4-10 students) and I could keep an observational log and help with book selection and time management. The participants were given "book club bags" to keep their borrowed books safe on their trips to and from school. I showed the participants how the 500+ nonfiction books were organized (in magazine holders with picture and word descriptions of contents, e.g. "weather, dinosaurs, etc.") and let them browse for several minutes independently. I then assisted them with selecting a few books and also periodically "recommended" the target books to the participants. Participants traded books twice a week for 11 weeks. Each week, each participant took home two of the target books, along with a few student-selected books. I kept a chart logging which target books were taken home by each participant to ensure that each target book is taken home by each participant two times (Appendix J). The length of the intervention period, 11 weeks, was determined based on the logistics of providing two exposures to the 10 target books for a maximum of 20 participants, as well as providing an approximately equal amount of time for the control group to have access to the treatment during the same academic year. Previous research has shown that gains in vocabulary can be made from listening to nonfiction books read as few as two times (Brabham, Boyd, & Edginton, 2000). Furthermore, results from a pilot study (Appendix K) indicated slight gains (although not statistically significant) on all three measures for

the intervention group even though the pilot study allowed for only a single exposure during an eight week period with a very small sample size (seven intervention participants).

Because the main action of the intervention (parents conducting interactive read-alouds with nonfiction books with her/his child at home) was not observed firsthand, I put several treatment fidelity measures in place in order to obtain information about how reliably the intervention procedures were followed. A response slip was one example of a treatment fidelity measure I used in this study. A brief response slip (Appendix L) was included in each participant's bag when she/he borrowed books. The response slip had a space for parents to indicate that they did read the books to their child and the date. There was also a space for the child to dictate to their parents something cool they learned and what they might want to learn more about, and a space for the child's name. I expressed to the participants that the books they were taking home were to be shared with their parents, and were not required "homework." A similar response slip was sent home during the pilot study and came back to school at a return rate of 67%. I revised the response slip slightly from the one used in the pilot study and added a parent signature and date line, as well as a space to acknowledge the book titles read, in order to increase the likelihood of the slip being a true representation of what occurred at home. When students came to the reading room to return their books, I collected the response slips and asked the students if their parents read the books they took home to them. I recorded the students' comments on the cycle chart beside their student numbers as additional treatment fidelity information. In addition I sent home a note (Appendix M) with the intervention students after week five and week ten to check in with parents as to how they

thought the book club was going. This "check in" note served to remind parents of their commitment, thank them for participating, and encourage them to keep reading at home, as well as provide me with some information about how much interacting they were doing with their child around the nonfiction books. Table 2 shows the procedures I put in place to help evaluate treatment fidelity.

Table 2

Treatment Fidelity Measures

Procedure	Purpose
Response slips with books read, date, and parent signature	To help verify that books are being read to students at home
"Check-in" Notes to parents at week 5 and week 10	To help verify that books are being read to students at home and also provide information about the amount of interaction occurring around the books
Charting of participants' verbal responses when asked if their parents read the books to them	To provide a triangulation "check" with the response slips being completed by parents
Parent Program Evaluation Survey	To provide information about the quality of the program and information about the effects parents have seen at home in regard to their children's motivation to read
Parent and Child Title Recognition Tests given pre/post intervention	To help verify that the target books were in fact read at home to the students

Post-Testing

Post-testing took place after the 11 weeks of the intervention came to a close and only after each participant had two exposures to each target book. Post-testing procedures were identical to the pre-testing procedures. The motivation to read measure, and the expressive and receptive target vocabulary tasks were re-administered at this time to both intervention and control group participants. Parents and children in both groups also took the Title Recognition Tests after the intervention period.

Control Group Participation

After post-testing was completed, the control group parents and participants had access to the same "Book Club" program that was available to the intervention parents and participants. Parents were invited to attend a parent training session, and any student who was not included in the Fall "Book Club" subsequently had the opportunity to borrow books from the nonfiction lending library. Each child was given a "Book Club" bag, and borrowed books using the same procedures as the intervention group.

There were two students whose parents did not want to participate in any way in the study, but still wanted their child to be part of the "Book Club," their children were included in the Spring Book Club.

Materials and Instruments

Target Books

I selected ten target books from a collection of new primary level nonfiction books purchased by the school. This collection of approximately 500 nonfiction book titles made up the lending library from which students borrowed books to share with their parents at home. The collection included books from a variety of publishers such as: Rigby, Scholastic, Wright Group, and Zoobooks. When I began to select the target books, I used Chambliss and Calfee's (1989) general guidelines for text characteristics that can affect comprehension: Text Familiarity, Text Interest, and Text Structure. According to Chambliss (1994), "Readers, particularly those who have less well developed reading skills, seem to comprehend textbook materials better that have familiar content, are interesting, and are obviously well organized than texts that are unfamiliar, boring, and ill-structured" (p. 4). Even though parents did the actual reading in the study, it was

important that the texts they had available to them to read to their children had characteristics that foster comprehension, not impede it. Thus, I selected the target books from this large pool of books based on three main characteristics: first, my belief that these books would appeal to this population of first-graders (have familiarity and interest); second, the books used some vocabulary that I believed would not be well-known by this first-grade population; and third, the books had features that were consistent with the current research about what constitutes "friendly" or "considerate" expository text (text structure).

According to Armbruster and Anderson (1984), "considerate" texts enable the reader to gather information with minimal cognitive effort. Dreher and Singer (2001) define a friendly text as one that has features that facilitate learning from it. Slater's (1988) review of theory and research on attributes of considerate text provides description of the four main features of "good expository text." I looked for representations of these features as I selected the target books for the study.

According to Slater (1988), good expository text is informational, and the authors present information in an illuminating way, taking into consideration the needs of their readers. For example, in the following passage in *Giant Pandas* (Gibbons, 2002), the author gives information, but also provides some additional details to support understanding: "Normally giant pandas are shy and tend to stay by themselves. When they want to communicate with one another, they use about eleven different kinds of sounds. They bark, growl, squeal, and make other sounds to mean different things" (p. 9).

Good expository text, as maintained by Slater (1988) is also explanatory in nature. It includes meaningful explanations that conveys to the reader why and how certain

information is important. In *Beacons of Light: Lighthouses* (Gibbons, 1990), the author explains the significance of the first lighthouse lens; "At that time, signals from lighthouses were visible only a few miles, even on a clear night. Then, in 1822, the first modern lighthouse lens was invented by a Frenchman named Augustin Fresnel, who found a way to increase the light by using prisms. The prisms of the lens bent the light beam and concentrated it, making the light visible for many miles" (p. 12).

Good exposition also possesses a directive quality whereby the author establishes a dialogue with the reader – showing, telling, and guiding the reader to information that is important (Slater, 1988). An example of an author's dialogic presence is seen in this excerpt from *Boom!* (Gutner, 2002), a nonfiction book about volcanoes: "New volcanoes don't happen very often. **So don't worry about a volcano coming.** People who study volcanoes are careful. They give warning if they think people may be in danger" (p. 16).

A final attribute of good expository text is narrativity – when authors include narrative elements such as brief anecdotes, myths, or stories, in order to make their point more comprehensible and interesting to readers. In *The Statue of Liberty* (Recht Penner, 1995), the author uses narrativity to help convey the symbolic importance of the statue to immigrants coming to the United States in the early 1900's; "People came by ship. The trip took many days. Men, women, and children were crowded together. They were tired, hungry, and scared. Suddenly they saw the lady! They had reached America at last. Now they knew they were free. People cried for joy" (pp. 7-9).

Even though, in this study, children listened as their parents read the nonfiction texts to them, considerate, or friendly, nonfiction books should help facilitate effective interactive read-alouds. In fact, evidence exists that vocabulary learning can be enhanced

in elementary students by using friendly exposition in the classroom. Gordon, Shay-Schumm, Coffland, and Doucette (1992) found a friendly text condition to improve vocabulary learning in fifth-graders when compared to an "unfriendly" text condition. The target books I selected for use in the study are detailed in Table 3 below.

Table 3

Target Books

Animals on the Move (2000) by Allan Fowler, New York: The Children's Press
Beacons of Light: Lighthouses (1990) by Gail Gibbons, New York: Scholastic, Inc.
The Biggest Animal on Land (1996) by Allan Fowler, New York: The Children's Press
Boom! (2002) by Howard Gutner, New York: Scholastic, Inc.
Giant Pandas (2002) by Gail Gibbons, New York: Scholastic, Inc.
Hot and Cold (1994) by Allan Fowler, New York: The Children's Press
Liftoff! (2003) by Carmen Bredson,. New York: The Children's Press
Looking Through a Microscope (2003) by Linda Bullock, New York: The Children's Press
Please Don't Feed the Bears (1991) by Allan Fowler, New York: The Children's Press
The Statue of Liberty (1995) by Lucille Recht Penner, New York: Scholastic, Inc.

Target Vocabulary

I selected specific target vocabulary from each of the ten target books. In total, I chose 32 words from the target books. Because the target books are books that are appropriate to be read-aloud to first-graders, the texts are relatively short and the target vocabulary I selected readily stood out as terms and concepts that could be unknown to

the average first-grader in the population I was using. These target words were measured by either a receptive (16 words) or expressive (16 words) vocabulary task. Some target vocabulary words lent themselves to graphic depictions, and others were more difficult to represent clearly by an illustration. In much of the literature I reviewed in which a receptive vocabulary task was given to assess vocabulary acquisition, researchers used a four-panel design akin to those used in the widely-known Peabody Picture Vocabulary Test. Following such examples in the research, I chose 16 of the 32 terms that could be shown clearly by illustrations in order to include them in the receptive vocabulary task.

Because the nature of the two vocabulary tasks was qualitatively different and required the participants to demonstrate knowledge of vocabulary in two different ways, the terms themselves are qualitatively different as well. For example, all target vocabulary words used in the receptive task are nouns, which are easier to depict graphically than verbs, for instance. The target vocabulary words used in the expressive verbal definition production task included 7 nouns, 7 verbs, and 1 adjective and 1 adverb. When examining the range of "difficulty" of the target words, I utilized Dale and O'Rourke's (1981) *Living Word Vocabulary*, a list of age-leveled vocabulary, which is described in depth later. This source showed all target vocabulary "unknown" by average children below the fourth grade level. Twenty-three of the 32 target words were known at the fourth-grade level, 6 at the sixth-grade level, and one each at the eighth, tenth, and sixteenth-grade level. The 9 most challenging target words, those above the fourth-grade level, were relatively balanced between the receptive and expressive tasks. Five of these terms were assessed with the expressive measure, and four were assessed with the receptive measure.

Target books and the target words I selected from them are listed in Table 4 along with the assessment task I assigned to each target word.

Table 4

Relationship of Target Books, Target Vocabulary, and Assessment Task

Target Book	*Target Vocabulary*	*Assessment Task*
Animals on the Move By Allan Fowler	• migrate	expressive
	• flock	receptive
The Biggest Animal on Land By Allan Fowler	• herd	expressive
	• tusks	receptive
Boom! By Howard Gutner	• erupt	expressive
	• crater	receptive
	• lava	receptive
The Statue of Liberty By Lucille Recht Penner	• statue	receptive
	• torch	receptive
	• pedestal	receptive
Looking Through a Microscope By Linda Bullock	• germs	expressive
	• microscope	receptive
Beacons of Light: Lighthouses By Gail Gibbons	• guide	expressive
	• lens	receptive
	• warn	expressive
	• tower	receptive
Please Don't Feed the Bears By Allan Fowler	• den	expressive
	• cub	expressive
	• grizzly	receptive
Hot and Cold By Allan Fowler	• thermometer	receptive
	• tropics	expressive
	• expand	expressive
	• steam	receptive
Giant Pandas By Gail Gibbons	• communicate	expressive
	• bamboo	receptive
	• athletic	expressive
	• gently	expressive
	• habitat	expressive
Liftoff! By Carmen Bredson	• launch	expressive
	• fuel	expressive
	• astronaut	receptive
	• shuttle	receptive

After I selected target books, I examined the books for examples of words that I believed were not part of the average first-grader's oral vocabulary. For the initial selection process, I relied on my eight years experience in working closely with this age group as a reading specialist. Another prerequisite for the words I selected was the manner in which they were employed in the text. I chose words which were presented in a way within the text that supported the comprehension of the term: the word was either defined by recasting the term in simpler language, explained by the use of an example, or

demonstrated or shown by a visual representation in the text. For example, in *Please Don't Feed the Bears* (1991), the target word **den** is explained in language and illustrated in photographs, "A bear family's home, or **den**, might be a cave, or a snow den, or a hollow tree (pp.7-9). Another example of a target word definition being supported by the text is for the word **expand** in *Hot and Cold* (1994), "A high, or warm, temperature causes many things to **expand**, or grow bigger. On bridges, a little space is left between the steel beams. This gives the beams room to **expand** on hot days" (p.18). A photograph of a bridge with an inset close-up of the spaces between steel beams on the bridge's road surface accompanies the text on the facing page to illustrate the definition.

In order to validate my professional judgment that the initial target words were in fact not words an average first-grader would know, I consulted Dale and O'Rourke's (1981) reference book of age-leveled vocabulary, *Living Word Vocabulary*. Even though the norms given in this reference book are more than three decades old, it is considered to be an authoritative source for researching age-leveled vocabulary. In fact, Biemiller and Slonim (2001) stated that the *Living Word Vocabulary* (LWV) is the only relatively comprehensive assessment that has been made of words known by children. The research behind the LWV was carried out over two decades during which 44,000 individual word meanings were tested to determine the grade level at which they were known by 67-80% of the children tested. In the LWV "known" meant a correct response on a three-choice multiple choice test. Words were assigned grade levels on the basis of the lowest grade at which a sample of 200 or more children passed the words at the criterion 67-80%. Biemiller and Slonim (2001) sought to evaluate the validity of the LWV in term of current populations. They randomly selected between 19 and 25 children per grade level

K-5, from three schools in a mid-sized Ontario city to be tested. Biemiller and Slonim's (2001) data showed a strong relationship between average knowledge of words in their study and LWV levels, providing substantial evidence of the validity of the LWV for current populations. Still, it should be acknowledged that word meaning in our language is not static, but fluid, and the norms used in the LWV give a valid, general idea of age-leveled word knowledge, that is still useful for research carried out today.

Table 5 shows the target words for this study and the grade levels and percentage of children tested at that level that knew the word meaning according to the LWV. The range of grade levels the target words were known at is grades 4- 16: 72% of the target words are known at the 4^{th} grade level, 19% at the 6^{th} grade level, and 3% each at the 8^{th}, 10^{th}, and 16^{th} grade level.

Table 5

Grade Level Knowledge of Target Words According to the LWV

Target Word	Grade Level	% of children that knew word meaning
astronaut	4	85%
athletic	4	77%
bamboo	4	70%
communicate	4	69%
crater	4	71%
cub	4	81%
den	4	81%
erupt	6	77%
expand	6	84%
flock	4	89%
fuel	4	87%
gently	4	82%
germs	4	73%
grizzly	4	95%
guide	4	79%
habitat	8	78%
herd	4	79%
launch	4	69%
lava	4	67%
lens	4	72%
microscope	4	70%
migrate	6	82%
pedestal	16	70%
shuttle	10	77%
statue	4	83%
steam	4	78%
thermometer	4	80%
torch	6	77%
tower	4	67%
tropics	6	88%
tusks	6	72%
warn	4	68%

Vocabulary Measures

Receptive vocabulary measure. I selected 16 target words to be assessed by a receptive vocabulary measure. According to Kameenui, Dixon, and Carnine (1987), receptive vocabulary knowledge is demonstrated when one is able to associate meanings with labels that are given. The receptive vocabulary measure (Appendix N; a-p) consists of sixteen 4-panel cards displaying graphic representations of the target vocabulary term and three other terms that I deemed to be somehow syntactically, semantically, or aurally related to the target vocabulary term. I asked the students to "point to the box which shows a _____". Elley (1989) used "picture vocabulary items" similar to the receptive

vocabulary task described above in his classic studies on vocabulary acquisition from listening to stories.

In order to assess the internal consistency of this measure, I ran a reliability analysis to find the Cronbach alpha coefficient. The Cronbach's alpha for the receptive measure was .794. According to Pallant (2005), ideally, the Cronbach alpha coefficient of a scale should be above .7

Data from the pilot study showed a small difference in the mean post-test scores of the receptive vocabulary subtest. An ANOVA was conducted with the pre-test scores of the intervention and control groups. The non-significant F ratio showed that the two groups were equivalent before the intervention period for this measure. Although a small difference in favor of the intervention group was found in the mean post-test scores, an ANCOVA found the difference was not statistically significant.

Expressive vocabulary measure. Sixteen of the 32 target vocabulary words were selected to be measured with an expressive vocabulary task. Expressive vocabulary knowledge is demonstrated when one is able to produce labels for meanings (Kameenui, Dixon, & Carnine, 1987), in this case by giving oral definitions. The expressive vocabulary measure consists of a verbal definition task (Appendix O) of 16 target vocabulary words. The instructions informed the participants to answer questions such as, "What does it mean to _____?", "What is a _____?" or "What are _____ (s)?" I then transcribed the participants' responses verbatim as they answered. I coded the responses by student number and two raters were trained to rate the responses using the following 5-point scale: 1= not able to define term, 2=defines term minimally with some inaccuracy, 3=demonstrates minimal understanding of term,

4=demonstrates some understanding of term, 5= demonstrates understanding of term. Beck and McKeown (1991) maintained that an individual's knowledge of a word falls along a continuum from no knowledge to a rich, decontextualized knowledge of a word's meaning. In other words, "knowing a word is not an all-or-nothing proposition; it is not the case that one either knows or does not know a word" (p. 791). The rating scale reflects this assertion and was the theoretical basis for the training session the two raters attended. I selected two fellow reading specialists in my school district as raters. They taught at two different elementary schools and therefore had no contact with the participants. They each have over 15 years experience as a reading specialist and have solid professional knowledge of first-grade age children. The raters were given the pre and post test papers for both the intervention and control group, in one packet. The paper had no marking designating their status as for group of test, only codes and participant numbers.

I ran a reliability analysis to find the Cronbach alpha coefficient in order to assess the internal consistency of the measure. The Cronbach's alpha for the expressive measure was .816. According to Pallant (2005), ideally, the Cronbach alpha coefficient of a scale should be above .7

After pilot study data were collected, I conducted an ANOVA with the expressive vocabulary pre-test scores of the intervention and control groups. The non-significant F ratio again showed that the two groups were equivalent before the intervention period for this measure. A small difference in favor of the intervention group was found in the mean post-test scores. An ANCOVA indicated that the difference was approaching statistical significance.

Motivation to Read Measure

Gambrell, Palmer, Codling, and Mazzoni's (1996) *Motivation to Read Profile* (MRP) is a public domain instrument that I used as a model to create an assessment tool to measure the participants' motivation to read and attitude toward reading and nonfiction books before and after the intervention period. There is robust research literature to suggest a link between reading motivation and reading achievement (Walberg & Tsai, 1985; Wigfield, 1984). Thus, I was interested to learn if motivation to read would increase after the participants took part in an intervention where they shared nonfiction books with their parents and interacted with them while they were read to.

The MRP consists of two basic instruments: The Reading Survey, and the Conversational Interview. Only The Reading Survey was used as a model instrument in this study, and this study's Motivation to Read Measure was administered individually. The MRP survey assesses two specific aspects of reading motivation; self-concept as a reader and value of reading. I chose to eliminate the questions concerning self-concept as a reader, as this was outside the main interests of the present study. I created 10 additional survey items that focused on the students' perceived value of reading nonfiction books. I field-tested these new survey items with two children in October of their second-grade year in order to ascertain if the new survey statements were readily understood, and encountered no problems or questions from these students. Thus, the instrument I created, the Motivation to Read Measure (Appendix P) consists of 20 items and uses a 4-point response scale. In order to assess the internal consistency of this measure, I ran a reliability analysis to find the Cronbach alpha coefficient. The

Cronbach's alpha for the Motivation to Read Measure was .660. According to Pallant (2005), ideally, the Cronbach alpha coefficient of a scale should be above .7.

The original MRP survey, according to Gambrell, Palmer, Codling, and Mazzoni (1996), contains items are designed to elicit information about students' self-perceived competence in reading and self-perceived performance relative to peers, as well as the value students place on reading tasks and activities, particularly in terms of frequency of engagement and reading-related activities.

The MRP was developed to be used with students in grades 2-6. The instructions require the survey to be read-aloud by an adult while the students mark their responses in a classroom, small group, or individual setting. Because I used this survey with first-graders, I chose to not only administer the survey individually and orally, but also to mark the students' responses. I judged that beginning readers would be challenged by the task of first scanning the response choices, and then selecting the choice they intended. The pilot study showed that this alteration of the administration for first-graders worked well. Students rarely needed the response choices repeated, and responded within seconds of the choices being stated.

Gambrell et al. (1996) took measures to ensure that the MRP was valid and reliable. In order to address the construct validity of the items in the survey, Gambrell et al. had experienced classroom teachers examined the items and decided if they concurred that the items did indeed measure self-concept and value of reading. Gambrell et al. included only items that received 100% trait agreement in the final survey. Gambrell et al. also looked at information about the relationship between level of motivation and level of reading achievement as a further test of validity. Teachers rated students as having

low, average, or high reading performance, and Gambrell et al. found statistically significant differences in the mean scores of the self-concept subscale related to these groups. Additionally, statistically significant differences were found between mean scores of third and fifth grade students – younger students scored more positively than older students, which corresponds to established literature that shows that attitude towards reading decreases with age.

When examining questions of reliability of the instrument, Gambrell et al. (1996) looked at the internal consistency of the survey and found a moderately high reliability for both subscales when they calculated Cronbach's alpha statistic (Self-concept = .75; value = .82). Additionally, pre- and posttest reliability coefficients were determined for the subscales (self-concept = .68; value = .70), substantiating the moderately high reliability of the instrument.

In the pilot study, although I found a small difference in favor of the intervention group in the mean post-test scores of the MRP (I had not revised the instrument at this point), the difference was not statistically significant. An ANOVA using the pre-test scores of the intervention and control groups showed that the two groups were equivalent before the intervention period. Next, I used an ANCOVA with the pre-test scores as the covariate. Sufficient correlation was found between the covariate and dependent variable (post-test scores).

Title Recognition Tests

I used Parent and Child Title Recognition Tests with both the intervention and control groups of parents and students before and after the intervention took place as a treatment fidelity measure. My purpose was to provide information about the exposure of

the intervention students to the target books used in the study which contained the target vocabulary terms measured by the receptive and expressive vocabulary measures. Thus, a list of 30 book titles were included in the tests, 10 titles of the actual target books, 10 foils, and 10 nonfiction book titles that do exist. The inclusion of the foils adjusts the scores and serves as a correction term for false positive responses. I created the foil titles to sound like they could exist as "real" titles of nonfiction books; however, I then used internet resources such as amazon.com and scholastic.com in order to confirm that these "fake" titles I created were not actually real books that could be available for purchase or circulating in libraries.

Parent Home Literacy Questionnaire

The parents of both the intervention and control group students completed a brief home literacy questionnaire (Appendix F) at the onset of the study. The questionnaire included six questions about literacy activities that occur in the home, such as what kinds of literacy materials are available at home, and how often an adult reads to the child. This questionnaire was adapted from a survey Jordan, Snow, and Porche (2000) used in their study on the effect of a family literacy project on kindergarten students' early literacy skills. I adapted the survey to include items I judged to be most applicable to the population of families in the setting where the study was conducted. For example, it is common for many families in this elementary school to have electronic educational tools such as Leap-Pads in their homes, and I added this item to the questionnaire.

From the information gathered in the pilot study, I was able to alleviate some concerns I had about the intervention group's home literacy environment being more supportive than that of the control group's. In a one-way ANOVA comparing the mean

scores of the Home Literacy Questionnaires for the intervention group (M= 16.36, SD= 3.17) and the control group (M= 13.28, SD= 2.69), I found no statistically significant differences between the groups.

Parent Program Evaluation Survey

At the completion of the study, parents of intervention participants completed a ten-item evaluation survey of the "Book Club" program (Appendix Q). Parents were directed to circle a number (1-5) on a Likert scale to describe how they felt about statements related to the program. They were also provided space to make additional comments.

At the completion of the pilot study, out of the seven surveys that were sent home to evaluate the "Book Club" program, only four were returned. The results of these surveys indicated a very positive view of the program. All parents agreed that they enjoyed learning how to do interactive read-alouds, and that their children enjoyed the read-alouds of nonfiction books at home. All parents also agreed that they have seen their child become more interested in reading in general. Three of the four parents reported seeing their children become interested in learning more about a topic they read about; one parent somewhat agreed with this observation. Interestingly, three out of four parents reported they hear their children use words they encountered during their book reading at other times after they read. All parent responses indicated that their children see themselves as good readers. All four surveys showed that the parents found participating in the program easy, that the books were of high quality and interesting to read, and that they planned to continue to do interactive read-alouds after the program came to an end.

Half of the surveys indicated that their family's library visitation had increased since taking part in the program.

The pilot study ran right up until the end of the school year, and thus I did not follow-up with parents concerning unreturned surveys. For this study, I took steps to ensure full participation in completing the surveys from parents in the intervention group, making multiple written and phone contacts. Appendix K contains a detailed summary of the pilot study which has informed the current study in numerous ways.

Data Analysis

This study investigated whether there are differences in first-grade students' vocabulary acquisition and motivation to read between a control group and an intervention group exposed to interactive read-alouds. In order to answer my two research questions: (1) What effects do parent-led interactive read-alouds of target nonfiction books have on selected target vocabulary acquisition? (2) What effects do parent-led interactive read-alouds of nonfiction books have on motivation to read? I conducted mixed ANOVAs with Time (pretest vs. posttest) as the within-subjects factor and Treatment (control vs. intervention) as the between-subjects factor were conducted to compare scores on the expressive and receptive vocabulary measures, the Motivation to Read Measure, and the parent and child Title Recognition Tests, at Time 1 (prior to the intervention = pretest), and Time 2 (following the intervention = posttest).

Additionally, I used a mixed ANOVA with the scores of the parent and child Title Recognition Tests in order to help determine treatment fidelity. Descriptive statistics procedures also examined in detail the results of the Home Literacy Questionnaire and the "Book Club" Program Evaluation Survey. I conducted a one-way between groups

ANOVA with the scores on the Home Literacy Questionnaire in order to determine group equivalence on this measure. Table 6 shows the relationship between the study's research questions, data sources, and data analysis.

Table 6

Relationship Between Research Questions, Measures, and Analysis

Research Questions	Measures	Analysis
1) What effects do parent-led read-alouds of target nonfiction books have on selected target vocabulary acquisition?	• Receptive Vocabulary Measure • Expressive Vocabulary Measure	• Mixed ANOVA
2) What effects do parent-led interactive read-alouds of nonfiction books have on motivation to read?	• Motivation to Read Measure	• Mixed ANOVA
Additional data collected in order to describe research setting/ context/ procedures	• Home Literacy Questionnaire	• One-way between groups ANOVA
	• Title Recognition Tests	• Mixed ANOVA
	• Response Slips	• Qualitative descriptions
	• "Check-in" Notes	• Qualitative descriptions
	• Program Evaluation Survey	• Qualitative descriptions

a. all measures are pre/posttest except the Home Literacy Questionnaire, response slips, "check-in" notes, and the Program Evaluation Survey

Implications

The findings of this study provide additional support for the practice of using interactive read-alouds with children as a way to foster vocabulary development and motivation to read. Undoubtedly, this study will lead to more refined research questions concerning read-alouds and vocabulary acquisition. Since the results indicated positive outcomes for the intervention group, there may be further school support of future parent training interventions. Future research may focus on specific aspects of nonfiction text structures or parent/child interactions that encourage vocabulary acquisition and motivation to read.

Chapter IV. Results

This study investigated whether there are differences in first-grade students' vocabulary acquisition and motivation to read between a control group and an intervention group exposed to interactive read-alouds. The two research questions examined in this study were: (1) What effects do parent-led interactive read-alouds of target nonfiction books have on selected target vocabulary acquisition? (2) What effects do parent-led interactive read-alouds of nonfiction books have on motivation to read?

In this chapter, I will first describe any initial differences between the control and intervention groups at the outset of the study by analyzing the groups' pretest data. Then I will put forward findings from several treatment fidelity measures that were put in place in order to provide information about the trustworthiness of the integrity of the intervention itself. Next, I will present the results pertinent to the above research questions. Following this analysis, I will illustrate the findings from the Parent Home Literacy Questionnaire which provides some important contextual information concerning the participants in this study. Finally, I will submit findings from the parent evaluation survey that was given upon completion of the intervention.

Initial Differences between Groups: Pretest Results

The control and intervention groups in this study were randomly selected from a pool of first-grade students whose parents consented to participate in this study. Random selection strengthened the experimental design of the study, but would not have automatically guaranteed group equivalence. An analysis of pretest measure results yielded information about initial differences between the control and intervention groups.

Vocabulary Measures

I examined the question of target vocabulary acquisition primarily through the use of two separate measures: (1) a receptive measure which required participants to indicate which single graphic representation out of four possible illustrative plates corresponded with the target vocabulary term orally presented to them, and (2) an expressive measure (verbal definition production task) which required participants to verbally define a target vocabulary term to the best of their ability.

The means and standard deviations of the Receptive Vocabulary Measure at pretest are presented in Table 7. The range of pretest scores on this measure was a low score of 6 and a high score of 16 with the highest possible score being 16.

Table 7

Means and Standard Deviations for Receptive Vocabulary Measure at Pretest

Group	***Pretest Mean (SD)***
Intervention (N=17)	12.41 (2.55)
Control (N=19)	13.32 (1.67)

The means and standard deviations for the Expressive Vocabulary Measure at pretest are shown in Table 8. The range of pretest scores on this measure was a low score of 23 and a high score of 59 with the highest possible score being 80.

Table 8

Means and Standard Deviations of Expressive Vocabulary Measure at Pretest

Group	*Pretest Mean (SD)*
Intervention (N=17)	37.65 (9.69)
Control (N=19)	39.68 (9.98)

Motivation to Read Measure

The Motivation to Read measure required participants to listen to 20 statements or questions about how they felt about reading and nonfiction books. Participants then responded orally by choosing the one of four statements that most closely matched how they felt. Table 9 shows the means and standard deviations for the Motivation to Read Measure at pretest.

Table 9

Means and Standard Deviations for Motivation to Read Measure at Pretest

Group	*Pretest Mean (SD)*
Intervention (N=17)	60.53 (8.67)
Control (N=19)	61.21 (8.21)

The range of pretest scores on this measure was a low score of 44 and a high score of 76 with the highest possible score being 80.

Parent and Child Title Recognition Tests

I used title recognition tests with both groups of parents and students before and after the intervention took place as a treatment fidelity measure. My purpose was to

provide information about the exposure of the intervention students to the target books used in the study which contained the target vocabulary terms measured by the receptive and expressive vocabulary measures. Thus, a list of 30 book titles were included in the tests, 10 titles of the actual target books, 10 foils, and 10 nonfiction book titles that do exist. The inclusion of the foils adjusts the scores and serves as a correction term for false positive responses. A detailed discussion of the creation of these tests and the scoring protocols used will follow in the posttest results section. Table 10 shows the means and standard deviations for the Child Title Recognition Test (C-TRT) at pretest, while Table 11 shows the means and standard deviations for the Parent Title Recognition Test (P-TRT).

Table 10

Means and Standard Deviations for C-TRT at Pretest

Group	***Pretest Mean (SD)***
Intervention (N=17)	-.0065 (.05465)
Control (N=19)	.0253 (.06389)

Table 11

Means and Standard Deviations for P-TRT at Pretest

Group	***Pretest Mean (SD)***
Intervention (N=17)	.022 (.039)
Control (N=19)	.016 (.043)

The range of scores for these pretests was a low score of -.10 and a high score of .10 with the highest possible score being .33. A score of .33 would indicate that participants had prior exposure to the target books, while a score of a negative number would indicate that the participant checked more foils (false positives) as being recognized than actual titles of existing books.

Group Equivalence Analysis

In order to determine if the control and intervention groups began with statistically significant differences at the beginning of the study, before the intervention took place, I conducted a one-way MANOVA. The five pretests described above were used as dependent variables: Receptive Vocabulary Measure, Expressive Vocabulary Measure, Motivation to Read Measure, C-TRT, and P-TRT. The independent variable was "group." Preliminary assumption testing was conducted to check for normality, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity, with no serious violations found. There was no statistically significant difference for "group" on the combined dependent variables: F (5, 30)= .984, p=.44; Wilks' Lambda=.859; partial eta squared=.141. Since the significance value is greater than .05, there were not significant group differences, the control group and intervention groups were equivalent on pretest measures.

Treatment Fidelity Measures

Several treatment fidelity measures were put in place to help establish that the intervention was carried out as closely as possible as it was intended to be by the parents and children involved in the study. Response slips with books read, date, and parent signature were sent home with the nonfiction lending library books with the intervention

participants to help verify that books were being read to students at home. “Check-in” notes were sent to parents at week 5 and week 10 requiring a brief response in order to help verify that books are being read to students at home and also provide information about the amount of interaction occurring around the books. I charted participants’ verbal responses during the times when they traded their book club books as I asked if their parents read the books to them. My goal with this task was to provide a triangulation “check” with the response slips being completed by parents. Parent and Child Title Recognition Tests, given to both control and intervention groups pre/post intervention, were administered to help verify that the target books were recognizable to the intervention parents and students, thus allowing further confidence that the target books were, in fact, read at home to the intervention students. Results from the treatment fidelity measures suggest the intervention was carried out closely as it was conceived to be carried out.

Parent Title Recognition Test

The titles of books used on the Parent Title Recognition Test (P-TRT) are identical to the titles used on the Child Title Recognition Test (C-TRT). I used the titles of the ten target books, plus the titles of ten real books that were included in the nonfiction take-home library, plus ten fictional titles I created as foils. The purpose of title recognition tests, according to Cunningham and Stanovich (1990) is to measure exposure to reading materials without the subjective response problems inherent in self-report methods such as surveys or diaries in which responses from the participants may be influenced by feelings of perceived social desirability. TRT measures use a strategy borrowed from signal detection theory whereby participants who “check” many correct

responses falsely due to the perceived social desirability of answering positively, will also "check" the foils. Therefore, in scoring TRT measures, researchers can take this into consideration and adjust the number of actual titles checked based on the number of foils checked.

In this study, the "adjustment scoring" procedure for the TRT measures followed Snodgrass and Corwin's (1988) Two-High Threshold of recognition performance. Per these recommendations, I calculated the proportion of correct responses minus the proportion of foils checked. Cunningham and Stanovich (1991), who used TRT measures in several studies, found that using this formula was necessary in tasks where other "correction for guessing" model procedures were too insensitive to differential guessing rates when target detection probability nears 1.0. In Cunningham and Stanovich's 1991 study concerning measuring children's exposure to print using TRT measures, this Two-High Threshold of recognition performance successfully adjusted the number of actual titles checked based on the number of foils checked.

Table 12 shows the means and standard deviations for the P-TRT measure.

Table 12

Means and Standard Deviations for Parent Title Recognition Test Measure

Group	***Pretest Mean (SD)***	***Posttest Mean (SD)***
Intervention (N=17)	.022 (.039)	.138 (.082)
Control (N=19)	.016 (.043)	.001 (.050)

I conducted a mixed ANOVA with Time (pretest vs. posttest) as the within-subjects factor and Treatment (control vs. intervention) as the between-subjects factor to

compare scores on the P-TRT measure at Time 1 (prior to the intervention = pretest) and Time 2 (following the intervention = posttest).

Table 13 summarizes this analysis.

Table 13

ANOVA for Parent Title Recognition Test

Between-Subjects Effects

Source	*Sum of Squares*	*df*	*Mean Square*	*F*	*P*	*Partial Eta Squared*
Intercept	.14	1	.14	39.14	.000	.535
Treatment	.09	1	.09	25.31	.000	.427
Error	.12	34	.00			

Within-Subjects Effects

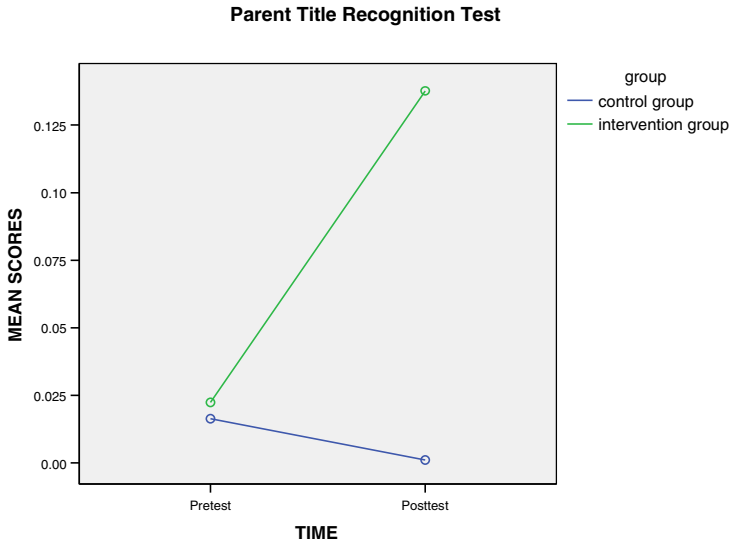
Source	*Sum of Squares*	*df*	*Mean Square*	*F*	*P*	*Partial Eta Squared*
Time (pre/posttest)	.05	1	.05	17.49	.000	.340
Time * Treatment	.08	1	.08	29.80	.000	.467
Error	.09	34	.00			

This statistical analysis shows that both the main effects for Treatment [$F(1, 34) = 25.31$, p =.000, partial eta squared = .427] and for Time [$F(1, 34) = 17.49$, p =.000, partial eta squared = .340] were statistically significant. In addition there was a significant interaction for Time X Treatment group [$F(1, 34) = 329.80$, p =.000, partial eta squared = .467]. The effect size for Time X Treatment Interaction, indicated by the

Partial Eta Squared at .467, indicates a large effect size. According to guidelines set out by Cohen (1988), an effect size of .14 equals a large effect.

The statistically significant interaction of Treatment X Time indicates that the change in Parent Title Recognition Test scores from pretest to posttest was not the same for the two groups. As can be seen in Figure 1, parents in the intervention group increased in title recognition from Time 1 to Time 2, whereas scores for the control group parents appear to have changed very little.

Figure 1. **Parent Title Recognition Test Interaction Effect**



The large effect size for the Treatment X Time Interaction suggests that the intervention group parents did, in fact, recognize a greater number of target book titles than did the control group parents after the intervention had been completed. This result lends credibility to the fidelity of the intervention – parents in the intervention group were interacting with their children while reading aloud the target books.

Child Title Recognition Test

The results for the Child Title Recognition Test (C-TRT) were similar to the results for the Parent Title Recognition Test, providing support for the fidelity of the execution of the intervention. The range of scores for the Parent and Child TRT pretests was a low score of -.10 and a high score of .10 with the highest possible score being .33. The range of scores for the Parent and Child TRT posttests was a low score of -.20 and a high score of .27 with the highest possible score being .33. A score of .33 on a pretest would indicate that participants had prior exposure to the target books, while a score of a negative number would indicate that the participant checked more foils (false positives) as being recognized than actual titles of existing books. Table 14 shows the means and standard deviations for the C-TRT.

Table 14

Means and Standard Deviations for Child Title Recognition Test Measure

Group	***Pretest Mean (SD)***	***Posttest Mean (SD)***
Intervention (N=17)	-.007 (.055)	.098 (.109)
Control (N=19)	.025 (.064)	-.002 (.072)

Again, a mixed ANOVA with Time (pretest vs. posttest) as the within-subjects factor and Treatment (control vs. intervention) as the between-subjects factor was conducted to compare scores on the C-TRT measure at Time 1 (prior to the intervention = pretest), and Time 2 (following the intervention = posttest). Table 15 summarizes the findings from this analysis.

Table 15

ANOVA for Child Title Recognition Test

Between-Subjects Effects

Source	*Sum of Squares*	*df*	*Mean Square*	*F*	*P*	*Partial Eta Squared*
Intercept	.05	1	.05	7.24	.011	.175
Treatment	.03	1	.03	5.01	.032	.128
Error	.21	34	.01			

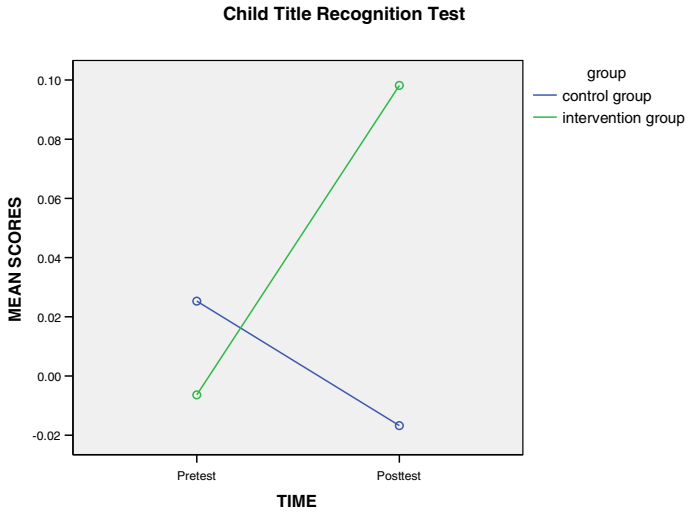
Within-Subjects Effects

Source	*Sum of Squares*	*df*	*Mean Square*	*F*	*P*	*Partial Eta Squared*
Time (pre/posttest)	.02	1	.02	3.08	.088	.083
Time * Treatment	.10	1	.10	16.93	.000	.332
Error	.19	34	.01			

This statistical analysis shows that the main effect for Time [$F(1, 34) = 3.08$, p =.088, partial eta squared = .083] was not statistically significant, however the main effect for Treatment was significant[$F(1, 34) = 5.01$, p =.032, partial eta squared = .128]. Additionally, the analysis showed there was a significant interaction for Time X Treatment group, [$F(1, 34) = 16.93$, p =.000, partial eta squared = .332]. The statistically significant interaction of Treatment X Time indicates that the change in Child Title Recognition Test scores from pretest to posttest was not the same for the two groups. As can be seen in Figure 2, children in the intervention group increased in title recognition

from Time 1 to Time 2, whereas scores for the control group children appear to have changed little.

Figure 2. **Child Title Recognition Test Interaction Effect**



The significant Time X Treatment Interaction suggests that the intervention group students did recognize a significantly greater number of target book titles than did the control group students after the intervention had been completed. The effect size for Time X Treatment Interaction, indicated by the Partial Eta Squared at .332, proposes a large effect size.

"Book Club" Response Slips

"Book Club" response slips were sent home with each intervention group student each time they took home one or more nonfiction books from the take-home library. The intervention lasted approximately 12 weeks and participants took home books an average of twice a week, thus participants brought home response slips an average of 24 times during the intervention. The response slip provided space for the child's name, books titles, a parent signature, the date, and a place to write something "cool" that was learned

and what they might want to learn more about. When students came to the reading room to return their books, I collected the response slips and asked the students if their parents read the books they took home to them. The students' comments were recorded on the cycle chart beside their student numbers as a way to triangulate evidence of treatment fidelity. During the parent training I informed parents that although the response slips would help me keep track of how the program was progressing, they were not to be viewed as "extra homework" and the important part of the program was conducting interactive read-alouds at home, not filling out response slips if they were a hardship to complete. Participants often would let me know if they didn't have time to complete the slips, but would tell me that the books were read to them at home.

If participants had returned the response slips 100% of the time they went home, I would have received 408 response slips. The final count of response slips from the intervention group students was 222 response slips; a return rate of 54%. This could be viewed as participants averaging returning one response slip per week. Most response slips seemed to be a joint effort between parent and child, with the child doing some of the writing on the slip.

"Check-in" Notes

As an additional treatment fidelity measure, I sent home a note with the intervention students after week five and week ten to check in with parents as to how they think the book club was going. This "check in" note served to remind parents of their commitment, thank them for participating, and encourage them to keep reading at home, as well as provide me with some information about how much interacting they are doing with their child around the nonfiction books. There were two questions on the note, 1)

Have you been able to find time to read the books that come home with your child?, and 2) How much talking do you do with your child during the reading of the books. For the first question there were lines to check "yes" or "no", and for the second question there were lines for three responses: "hardly any", "a little", "a lot". There was also a space for the parent's signature.

The week 5 check-in note was returned at a 100% completion rate (all 17 intervention students). 100% of the parents answered that "yes" they were able to find time to read the books coming home for the "Book Club" to their child. No parents indicated that they were doing "hardly any" talking with their child about the books, while 29% of the responses reflected they were doing "a little" talking and 71% of the responses specified they were doing "a lot" of talking around the nonfiction books that were coming home.

The week 10 check-in note had a slightly different introductory paragraph from me, but the response questions remained the same. At week 10, 15 out of 17 check-in notes were returned, bringing the return rate down to 88%. Again, all responses indicated that, "yes" parents were finding time to real aloud the books coming home to their child. Again, no parents indicated that they were doing "hardly any" talking with their child about the books, while 33% of parents specified they were doing "a little" talking around the books, and 67% of parents stated they were doing "a lot" of talking around the "Book Club" books. Many check-in notes had positive comments about how much their child was enjoying being in the "Book Club".

Posttest Results: Vocabulary Measures

As stated at the beginning of this chapter, I examined the question of target vocabulary acquisition primarily through the use of two separate measures; 1) a receptive measure which required participants to indicate which single graphic representation out of four possible illustrative plates corresponded with the target vocabulary term orally presented to them, and 2) an expressive measure (verbal definition production task) which required participants to verbally define a target vocabulary term to the best of their ability.

Receptive Vocabulary Measure

The control and intervention groups' mean posttest scores and standard deviations are shown in Table 16.

Table 16

Means and Standard Deviations for Receptive Vocabulary Measure

Group	***Pretest Mean (SD)***	***Posttest Mean (SD)***
Intervention (N=17)	12.41 (2.55)	13.41 (2.03)
Control (N=19)	13.32 (1.67)	13.37 (1.34)

I conducted a mixed ANOVA with Time (pretest vs. posttest) as the within-subjects factor and Treatment (control vs. intervention) as the between-subjects factor to compare scores on the receptive vocabulary measure. Table 17 summarizes this analysis.

Table 17

ANOVA for Receptive Vocabulary Measure

Between-Subjects Effects

Source	*Sum of Squares*	*df*	*Mean Square*	*F*	*P*	*Partial Eta Squared*
Intercept	12368.49	1	12368.49	1980.94	.000	.983
Treatment	3.32	1	3.32	5.01	.471	.015
Error	212.29	34	6.24			

Within-Subjects Effects

Source	*Sum of Squares*	*df*	*Mean Square*	*F*	*P*	*Partial Eta Squared*
Time (pre/posttest)	4.97	1	4.97	4.18	.049	.109
Time * Treatment	4.03	1	4.03	3.38	.075	.090
Error	40.47	34	1.19			

The mixed ANOVA showed that there was a statistically significant main effect for Time [$F(1, 34) = 4.18$, p=.049, partial eta squared = .109] However, the main effect for Treatment was not statistically significant. Further, there was not a statistically significant interaction for Time X Treatment group [$F(1, 34) = 3.38$, p= .075, partial eta squared = .090]. Thus, Receptive Vocabulary Measure scores improved from pretest to posttest, with the partial eta squared value of .109 indicating between a moderate and large effect size according to Cohen's (1988) guidelines for effect size.

Expressive Measure: Verbal Definition Production Task

As stated earlier, the expressive measure required participants to verbally define a target vocabulary term to the best of their ability. The participants' responses were transcribed and later scored by two trained raters on a Likert-type scale with scores ranging from 1-5. These two raters scored the responses with a high degree of consistency. The high inter-rater reliability was determined by calculating a correlation coefficient for rater 1's and rater 2's scores. The Pearson Correlation was .941 ($p<.01$). After the inter-rater reliability was established, I compared each score given for each item for each participant, and arbitrated any conflicting scores between rater 1 and rater 2. The arbitrated scores were then used to further explore the results from the expressive measure.

I then used the same statistical procedures with the data from the expressive vocabulary measure as with the receptive vocabulary measure. The means and standard deviations for the control and intervention groups' scores after the intervention had been completed are shown in Table 18.

Table 18

Means and Standard Deviations of Expressive Vocabulary Measure

Group	***Pretest Mean (SD)***	***Posttest Mean (SD)***
Intervention (N=17)	37.65 (9.69)	49.12 (12.55)
Control (N=19)	39.68 (9.98)	40.26 (10.96)

A mixed ANOVA with Time (pretest vs. posttest) as the within-subjects factor and Treatment (control vs. intervention) as the between-subjects factor was then

conducted to compare scores on the expressive vocabulary measure at Time 1 (prior to the intervention = pretest), and Time 2 (following the intervention = posttest). Table 19 displays these results.

Table 19

ANOVA for Expressive Vocabulary Measure: Verbal Definition Production Task

Between-Subjects Effects

Source	*Sum of Squares*	*df*	*Mean Square*	*F*	*P*	*Partial Eta Squared*
Intercept	124682.11	1	124682.11	592.65	.000	.946
Treatment	208.50	1	208.50	.99	.327	.028
Error	7153.00	34	210.38			

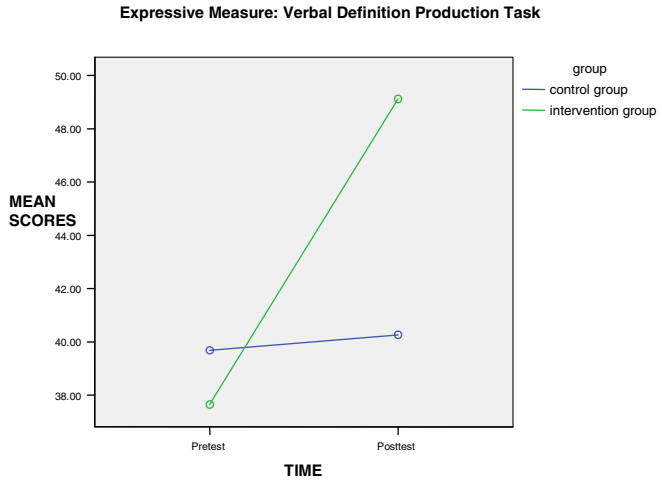
Within-Subjects Effects

Source	*Sum of Squares*	*df*	*Mean Square*	*F*	*P*	*Partial Eta Squared*
Time (pre/posttest)	651.34	1	651.34	26.93	.000	.442
Time * Treatment	532.18	1	532.18	22.00	.000	.393
Error	822.43	34	24.19			

The analysis showed that there was a statistically significant main effect for Time [$F(1, 34) = 26.93$, p=.000, partial eta squared = .422] The main effect for Treatment was not statistically significant. However, the interaction for Time X Treatment group was significantly significant [$F(1, 34) = 22.00$, p =.000, partial eta squared = .393].

The significant Time X Treatment Interaction indicates that the intervention had a positive impact on target vocabulary acquisition as measured by the Expressive Measure: Verbal Definition Production task. The Partial Eta Squared of .393 for the Time X Treatment Interaction represents a very large effect size according to Cohen's (1988) guidelines for effect size. Figure 3 illustrates the interaction.

***Figure 3*. Verbal Definition Production Task Interaction Effect**



Motivation to Read Measure

The second research question, "What effects do parent-led interactive read-alouds of nonfiction books have on motivation to read?" was informed by a Motivation to Read measure which required participants to listen to 20 statements or questions about how they felt about reading and nonfiction books. Participants then responded orally by choosing the one of four statements that most closely matched how they felt. Table 20 shows the means and standard deviations for the Motivation to Read Measure.

Table 20

Means and Standard Deviations for Motivation to Read Measure

Group	*Pretest Mean (SD)*	*Posttest Mean (SD)*
Intervention (N=17)	60.53 (8.67)	62.24 (7.27)
Control (N=19)	61.21 (8.21)	59.84 (9.13)

Table 21 shows the results of the mixed ANOVA with Time (pretest vs. posttest) as the within-subjects factor and Treatment (control vs. intervention) as the between-subjects factor that was conducted to compare scores on the Motivation to Read measure at Time 1 (prior to the intervention = pretest), and Time 2 (following the intervention = posttest).

Table 21

ANOVA for Motivation to Read Measure

Between-Subjects Effects

Source	*Sum of Squares*	*df*	*Mean Square*	*F*	*P*	*Partial Eta Squared*
Intercept	266685.37	1	266685.37	2576.67	.000	.987
Treatment	13.15	1	13.15	.13	.724	.004
Error	3519.00	34	103.50			

Within-Subjects Effects

Source	*Sum of Squares*	*df*	*Mean Square*	*F*	*P*	*Partial Eta Squared*
Time (pre/posttest)	.51	1	.51	.02	.903	.000
Time * Treatment	42.40	1	42.40	1.24	.273	.035
Error	1159.98	34	34.12			

The mixed ANOVA showed there was not a significant interaction for Time X Treatment group, [$F(1, 34) = 1.24$, p =.273, partial eta squared = .035]. There was also no significant main effect for Time [$F(1, 34) = .02$, p =.903, partial eta squared = .000] or Treatment [$F(1, 34) = .127$, p =.724, partial eta squared = .004].

Parent Home Literacy Questionnaire

The purpose of administering a home literacy questionnaire to all parents involved in the study was to help establish that the intervention group's home literacy environment and the control group's home literacy environment were equivalent. The

questionnaire consisted of six questions and a checklist of 14 literacy-related materials that could be found in the homes of participants. I assigned point values for each item, with the maximum number of points possible at 25 points. The mean score on the Home Literacy Questionnaire for the intervention group was 19.30 (SD= 2.91) while the mean score for the control group was19.37 (SD= 4.15). A one-way ANOVA showed that there was no statistically significant difference between the control and intervention groups [$F(1, 34)=.00$, $p>.05$] when comparing the scores of the Home Literacy Questionnaire.

Individual parent responses to questions on this measure also helped to provide information about the home environmental context where this study took place. Table 22 shows a picture of some aspects of the participants' home literacy environments.

Table 22

Parent Home Literacy Questionnaire Responses

Question or Statement	Affirmative Parent Response Percentage
Do you read to your child?	94%
Yes, every day	26%
Yes, a few times a week	50%
Yes, a few times a month	24%
Do you and your child go to the library?	67%
Yes, every week	21%
Yes, every month	25%
Yes, a few times a year	54%
Do you and your child do any other literacy activities together?	89%
Yes, frequently	66%
Yes, every once in a while	28%
Yes, a few times	6%
At home we have…	
Books that adults read	94%
Children's books	100%
Library books	64%
Nonfiction books	89%
Magazines	86%
Children's magazines	64%
Newspapers	72%
Writing materials	94%
Computer	92%
Reading themed computer games	67%
Electronic educational tools (like "leap-pad")	92%
School supplies	97%
Magnetic letters, letter/word tiles, etc.	58%
Educational games (Boggle Jr., Sight Word Memory/Bingo, etc.)	72%

Self-report measures such as questionnaires are always susceptible to inflated participant responses perhaps created by a pressure to adhere to perceived social desirability norms. However, I believe this questionnaire does provide a picture of parents of first-graders who are interested in promoting literacy in their homes and have the means to provide materials that support the means to that end.

Parent Program Evaluation Survey

The purpose of the Parent Program Evaluation Survey was to provide information about the quality of the program and also information about the effects parents have seen at home in regard to their children's motivation to read. The survey contained 10 statements with a four point likert-type response scale, responses ranging from disagree, to somewhat disagree, to somewhat agree, to agree. There was also a space for parents to write additional comments. All parents of intervention students returned a completed survey. Table 23 shows the percentage of parents who responded to each descriptor for each question on the Parent Program Evaluation Survey.

Table 23

Parent Program Evaluation Survey Responses

Survey statement	Disagree	Somewhat disagree	Somewhat agree	Agree
1. I enjoyed learning how to do interactive read-alouds with my child.	-	-	12%	88%
2. My child enjoyed the read-alouds of the nonfiction books sent home.	-	-	24%	76%
3. I have seen my child become more interested in reading in general.	-	6%	70%	24%
4. I have seen my child become interested in learning more about a topic we read about.	-	12%	59%	29%
5. I have heard my child use words we encountered during our book reading at other times after we read.	-	18%	41%	41%
6. My child sees him/herself as a good reader.	6%	-	35%	59%
7. We have visited the library more often since taking part in this program.	35%	29%	36%	-
8. Participating in this program was easy.	-	12%	24%	64%
9. I plan to continue to do interactive read-alouds with my child after the program ends.	-	-	41%	59%
10. The books my child brought home were interesting, of high quality, and promoted lots of interaction.	-	-	24%	76%

The results of the parent program evaluation survey revealed that the parents who participated in the "Book Club" program enjoyed the experience. All parents acknowledged that they and their children enjoyed reading and listening to nonfiction books at home. The nonfiction books that came home with the participants were seen by all parents as interesting, high quality books. Most parents, 88%, thought participating in the program was easy.

All parents also stated that they planned to continue to do interactive read-alouds with nonfiction books after the program ended, to some extent. Most parents, 94%, indicated that they had seen their child become more interested in reading in general, with 88% of parents stating that they believed their child became interested in learning more about a specific topic as a result of something they read about in a "Book Club" book. A majority of parents, 82%, indicated they observed some instances of their child using words they encountered in the books they read outside of the read-aloud context. Library visitation increased for 36% of the participant families as a result of the program. Most parents, 94%, felt that their child views her/himself as a good reader. The findings from the parent survey provide support for the feasibility of similar programs in similar settings.

Pearson Correlations among Pre and Post Test Measures

In order to describe the strength and direction of the relationships between the resulting scores from all pre and post test measures administered to both the intervention and control group participants, I ran a Pearson product-moment correlation coefficient analysis. Table 24 shows the results of this analysis. There were several statistically significant correlation values, primarily the scores of each of the specific pretest measures correlating significantly with its own specific posttest measure.

Table 24

Pearson Correlations among Pre and Post Test Measures

Pearson Correlations among Pre and Post Test Measures (N=36)

Variables	Variables									
	Receptive pre	Receptive post	Expressive pre	Expressive post	MTR pre	MTR post	PTRT pre	PTRT post	CTRT pre	CTRT post
Receptive pre	1	.678(**)	.294	.420(*)	.128	-.243	-.080	-.123	-.054	-.107
		.000	.081	.011	.457	.154	.642	.473	.753	.536
Receptive post	.678(**)	1	.176	.414(*)	.172	.013	-.193	-.009	-.060	.020
	.000		.304	.012	.316	.939	.259	.961	.729	.909
Expressive pre	.294	.176	1	.709(**)	.247	.216	-.093	-.031	.051	-.188
	.081	.304		.000	.147	.206	.591	.856	.766	.271
Expressive post	.420(*)	.414(*)	.709(**)	1	.271	.144	-.077	.334(*)	-.204	.074
	.011	.012	.000		.109	.401	.656	.047	.232	.666
MTRpre	.128	.172	.247	.271	1	.492(**)	.033	-.044	-.038	-.118
	.457	.316	.147	.109		.002	.850	.798	.827	.493
MTRpost	-.243	.013	.216	.144	.492(**)	1	.164	.079	.153	.154
	.154	.939	.206	.401	.002		.339	.648	.374	.371
PTRTpre	-.080	-.193	-.093	-.077	.033	.164	1	.185	.269	.069
	.642	.259	.591	.656	.850	.339		.279	.112	.688
PTRTpost	-.123	-.009	-.031	.334(*)	-.044	.079	.185	1	-.039	.236
	.473	.961	.856	.047	.798	.648	.279		.819	.167
CTRTpre	-.054	-.060	.051	-.204	-.038	.153	.269	-.039	1	-.105
	.753	.729	.766	.232	.827	.374	.112	.819		.542
CTRTpost	-.107	.020	-.188	.074	-.118	.154	.069	.236	-.105	1
	.536	.909	.271	.666	.493	.371	.688	.167	.542	

Note: Receptivepre = Receptive Measure Pretest Scores; Receptivepost =Receptive Measure Posttest Scores; Expressivepre = Verbal Definition Production Task Pretest Scores; Expressivepost = Verbal Definition Production Task Posttest Scores; MTRpre = Motivation to Read Measure Pretest scores; MTRpost = Motivation to Read Measure Posttest Scores; PTRTpre = Parent Title Recognition Test Pretest Scores; PTRTpost = Parent Title Recognition Test Posttest Scores; CTRTpre = Child Title Recognition Test Pretest Scores; CTRTpost = Child Title Recognition Test Posttest Scores

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed)

Summary of Results

In this chapter, I began by describing initial differences between the control and intervention groups at the outset of the study by analyzing the groups' pretest data. I also presented the findings from the treatment fidelity measures, Parent Home Literacy Questionnaire, and the Parent Program Evaluation Survey; all measures that helped illustrate the context in which the study took place. I then presented the results pertinent to my research questions: (1) What effects do parent-led interactive read-alouds of target nonfiction books have on selected target vocabulary acquisition? (2) What effects do parent-led interactive read-alouds of nonfiction books have on motivation to read?

In the next chapter, I will discuss the findings revealed by the data analyses presented in this chapter, share implications for education and future research, and put forth the conclusions I arrived at at the completion of the project.

Chapter V. Discussion

The purpose of this study was to investigate the effects of parent-led interactive read-alouds of nonfiction books on first-graders' vocabulary acquisition and motivation to read. Since research has shown that large-scale vocabulary growth in children is due to learning incidentally from oral and written contexts (Nagy, et al., 1987; Nagy & Herman, 1987; Sternberg, 1987), I chose to use the unique context of nonfiction read-alouds as a possible vehicle for introducing new vocabulary to children. Evidence suggests that nonfiction read-alouds in the classroom can improve children's vocabulary and motivation to read. This study used a pre/post experimental design to investigate whether *parent-led* read-alouds conducted at home could lead to similar gains.

Choice of Problem

I was led to my research questions by the large body of research literature which suggests that vocabulary knowledge is not only a potent predictor of linguistic ability, but also that word knowledge is strongly related to reading comprehension (Anderson & Freebody, 1981; Purcell-Gates & Dahl, 1991). Research suggests that parents sharing books with their children can impact children's motivation to read. McKenna (1994), for example, in his article describing his model of reading attitude acquisition, noted that the attitudes of children who cannot yet read for themselves are molded by the experiences in which others read aloud to them; and that when children have enjoyable interactions with books, they realize the intrinsic satisfaction that can be derived from reading. Furthermore, simply put, motivation to read is recognized as correlated with reading achievement (Gambrell, Palmer, Codling, & Mazzoni, 1996).

Research examining the events in the lives of beginning readers that have the potential to make them better readers, such as interactive parent-led read-alouds, is an investigative pursuit that should continue to be explored. If interactive parent-led read-alouds can increase vocabulary and subsequently boost reading comprehension, they deserve the research community's interest. Moreover, if interactive parent-led read-alouds can possibly increase motivation to read and thereby create readers who read more frequently and widely, educational researchers have ample reason to continue to learn more about this topic.

Research Question 1: What Effects do Parent-led Interactive Read-alouds of Target Nonfiction Books Have on Selected Target Vocabulary Acquisition?

This study investigated whether there are differences in first-grade students' vocabulary acquisition and motivation to read between a control group and an intervention group exposed to parent-led interactive read-alouds. Based on a review of the pertinent literature and a smaller scale pilot study investigating similar research questions, I hypothesized that the intervention group would acquire a greater knowledge of target vocabulary words than the control group. I acknowledged that statistically significant differences in favor of the intervention group would perhaps be difficult to detect due to the small sample size (N=36) used in this study, and the unproven sensitivity of the measurements. The measures were largely researcher-created and, though field-tested, not extensively tested outside the context of the pilot and current study.

The pilot study, conducted during the previous school year, yielded much anecdotal evidence from parents, teachers, and students that showed a home-based,

nonfiction interactive read-aloud program was feasible to carry out, and was enjoyed by the participants. In fact, student participants from the pilot study approached me the following year about having a "second-grader book club" like the "first-grader book club" they had had the previous year. It was my goal with this study to add to the richly developing research base and inform future research pursuits concerned with this important aspect of incidental vocabulary acquisition.

Support for my hypothesis concerning incidental target vocabulary acquisition was found in the results of one of the vocabulary measures used in this study. The Expressive Vocabulary Measure: Verbal Definition Production Task produced a result in favor of the intervention group.

Receptive Vocabulary Measure

Two separate measures were used to assess target vocabulary acquisition; a receptive measure and an expressive measure. The Receptive Vocabulary Measure assessed 16 of the target vocabulary words. According to Kameenui, Dixon, and Carnine (1987), receptive vocabulary knowledge is demonstrated when one is able to associate meanings with labels that are given. The Receptive Vocabulary Measure consisted of sixteen 4-panel cards displaying graphic representations of the target vocabulary term and three other terms that I deemed to be somehow syntactically, semantically, or aurally related to the target vocabulary term. I asked the students to "point to the box which shows a _____".

The results showed that there was a statistically significant main effect for Time; but not for Treatment. In addition, there was not a statistically significant interaction for Time X Treatment. Thus, Receptive Vocabulary Measure scores, in general, improved

from pretest to posttest, with the partial eta squared value of .109 indicating between a moderate and large effect size according to Cohen's (1988) guidelines for effect size. However, there was no difference in performance between the intervention and control groups.

I viewed the receptive vocabulary task to be the least demanding task for the participants. Children needed only to listen and respond nonverbally by pointing to a picture. Since the target vocabulary terms selected were terms that were graphically represented in the target books themselves, albeit with different illustrations or photographs, I had expected that this task would produce a difference in favor of the intervention group.

There could be several reasons why the scores of the two groups were not statistically significantly different. First, even though I had assumed that graphic representations for target vocabulary terms would be undemanding for students to identify, perhaps I underestimated the ability of first-graders to, in effect, "translate" what an image means in the context of a book, to a different image on the testing panel itself. In other words, the understanding of the image of a "pedestal" in the target book referring to the pedestal of the statue of liberty, may have been difficult for a first-grader to apply to an image of a pedestal in a museum-type setting on the 4-panel card. Another explanation for the lack of difference between the groups may be that too many of the target words were already a part of the participants' visual vocabulary before the intervention occurred. At pre-testing, an average of 12.89 target vocabulary images were correctly identified out of 16; therefore, there was not a large threshold for improvement to occur during the intervention. Lastly, it could be the case that the target vocabulary

words chosen for the receptive task simply were not the most salient or novel words in the target books and therefore not as memorable for the intervention students.

Expressive Vocabulary Measure

The remaining 16 of the 32 target vocabulary words were assessed with an expressive vocabulary task. Expressive vocabulary knowledge is demonstrated when one is able to produce labels for meanings (Kameenui, Dixon, & Carnine, 1987), in this case by giving oral definitions. The Expressive Vocabulary Measure consisted of a verbal definition task for 16 target vocabulary words. The instructions informed the participants to answer questions such as, "What does it mean to _____?", "What is a _____?" or "What are _____ (s)?" Responses were transcribed verbatim and then scored by two raters using a 5-point Likert-type scale.

The results for the Expressive Vocabulary Measure showed that there was a significant interaction for Time X Treatment group. Thus, the intervention had a positive impact on target vocabulary acquisition as measured by the expressive task.

Although I had anticipated that the Expressive Vocabulary Measure would be a more demanding task for the participants and, therefore, perhaps the participants would provide responses that were not extensive enough to show a difference between the two groups, I found that this measure provided the most compelling findings of the study. The intervention group's mean posttest score after the intervention increased by 11.47 points, over their pretest scores, while the control group's mean pre and posttest scores were virtually identical.

There may be several reasons behind the large increase in the intervention group's posttest scores on the Expressive Vocabulary Measure. First, since this task

required the participant to verbally explain what a term means, the task itself may have been quite in synch with the actual context of the intervention as it was carried out at home. Parents were trained to dialogue with their child about terms and concepts that may be unfamiliar to their child. It may have been that parents and children did converse about some of the actual terms that were included in the expressive vocabulary task. If this was the case, it would not be unexpected for those interactions to be recalled by students, when they were asked to define the target vocabulary word, and use the memory of those interactions to successfully define the term. This reasoning is most closely aligned to the goal of the intervention and purpose of the study – interacting with children around a nonfiction text could provide a uniquely supportive context for incidental vocabulary acquisition.

There are some examples of children's responses to the verbal definition production task after the intervention took place that seem to point to parent/child interaction that could be traced to the context of the target book that was read-aloud. Although interactions were not directly observed, it seems unlikely that first-graders would make connections like those described below on their own, without some support from a more knowledgeable peer, in this case, a parent using a nonfiction text. For example, one intervention child participant defined the word "habitat" during his/her pretest as "like someone is attacking someone," but after the intervention he/she defines the same term during the posttest as "like water for fish, or a pond for frogs." Another intervention participant did not attempt to define the target word "fuel" during the pretest, but during the posttest was able to define the term as "something astronauts use in the space shuttle to make it fly." This example is clearly influenced by the nonfiction read-

aloud, Liftoff! Bredeson, 2003) in which the text explains that fuel gives the space shuttle the power it needs in order to be launched into space. Another example from a different participant traced to the same target book is found for the target word "launch". For the pretest response he/she defined "launch" as "like launch something to you", and at posttest said, "like a rocket, you start counting down and it blasts off into the sky." In the text, the countdown to launch time is described, as well as descriptions of how the space shuttle prepares for launch day. In this participant's posttest definition he/she is able to provide a synonym for "launch" ("blast"), as well as a common context in which you would use the word (counting down a rocket launch). The target word "expand" proved to be difficult for most participants to define. However, some responses from intervention participants indicate they may have discussed the term during the interactive read-aloud. For instance, one participant at posttesting defined the term "expand" as "like stretch something out, like a ponytail holder expands so you can put your hair in it", and another participant said, "it gets bigger and bigger, just like a bridge when it's hot." The second example makes more sense when the text Hot and Cold (Fowler, 1994) is examined and the term located. The text explains, "A high, or warm, temperature causes many things to expand, or grow bigger. On bridges, a little space is left between the steel beams. This gives the beams room to expand on hot days." Clearly, this participant's posttest response was influenced by the nonfiction read-aloud event.

A second reason for the large increase in expressive vocabulary task scores for the intervention group, in comparison for the receptive task scores, may have to do with another aspect of the design of the expressive task. Children were able to use their language capabilities to elaborate on and explain their responses as they attempted to

define the vocabulary term. Since the response was open-ended in nature, children had more opportunity to use their language to negotiate a response they felt comfortable with. In contrast, the receptive measure allowed the participants only to choose a single correct or incorrect response. In that context, the participants were not able to express any reasons choosing an image or what thinking was behind their selection. Because the expressive task was scored on a continuum from "not able to define a term" to increasing degrees of "demonstrates understanding of a term," participants were able to receive credit for partially accurate responses. This scoring may more accurately match how new vocabulary is acquired. Beck and McKeown (1991) asserted an individual's knowledge of a word falls along a continuum from no knowledge to a rich, decontextualized knowledge of a word's meaning. In other words, "knowing a word is not an all-or-nothing proposition; it is not the case that one either knows or does not know a word" (Beck & McKeown, 1991, p. 791).

Research Question (2) What Effects do Parent-led Interactive Read-alouds of Target Nonfiction Books Have on Motivation to Read?

The Motivation to Read (MTR) Measure consisted of a 20-item survey instrument that uses a 4-point response scale. Ten survey items assessed the value students place on reading tasks and activities, particularly in terms of frequency of engagement and reading-related activities, and 10 survey items focused on the students' perceived value of reading nonfiction books. The survey statements and responses were read aloud individually to each student participant.

The results of the MTR Measure's mixed ANOVA showed that there was not a statistically significant difference between the groups. The finding of no statistically

significant interaction could be due to a number of reasons. The relatively short length of the intervention itself may not have provided enough time for shifts in reading attitude and motivation to occur. Also, the age of the participants may have been a factor. As first-graders, many of the participants are just beginning their development as readers and are still learning what it means to "be a reader." On one hand, this is why I believed it important to include the motivation to read aspect in this study – just developing readers may be more easily impacted by the types of positive reading experiences I hoped would occur as a result of the intervention. On the other hand, just developing readers may not have been able to identify easily with the statements in the survey because of their relative inexperience as readers. The instrument itself might have been a more effective measure of reading attitude and motivation if it had been tailored more specifically to the experiences of first-graders in the specific context of the study. However, modifying the instrument might have decreased the usefulness of the tool for future research needs. The modified instrument could be used for a range of elementary grade level participants. There is some literature to support that beginning readers have generally positive views about reading (Baker & Scher, 2002), so perhaps, like the receptive vocabulary measure, there might not have been a large threshold for improvement to occur during the intervention.

There is also the question of the verbal responses from the participants. I judged that it was most appropriate to verbally administer the survey statements and response choices and mark the participant responses on the form myself, as this could be a difficult and frustrating task for first-graders. However, this being the case, an argument could be made that perhaps the participants' responses could have been influenced by the fact that

their answers were not anonymous, and would be known by a person they knew viewed reading as important – their school's reading specialist.

Despite of not finding statistically significant results for the Motivation to Read measure, I was able to document some behavioral evidence of intervention participants' motivation to be a member of the "book club", and to continue to take books home to have parents read to them, as well as their interest in finding other books about a certain subject that was sparked by a book from the take-home library. I kept a notebook to record anecdotal comments from participants each day as they came to my room to trade their books. One of the first entries noted that many participants found it difficult to wait until the end of the day to trade their books and often would stop by my room first thing in the morning with their "book club" bag, ready to select books. Classroom teachers commented on how students did not need to be told when it was their day to trade, they made sure the teachers knew it was their day, so they wouldn't forget! When students were absent, or a trading time needed to be changed because of a schedule conflict I had, students often took it upon themselves to inquire of my assistant (with whom I share a room) or myself when they could come trade books. Also, the control group participants, who would be "book club" members after the intervention period, often asked when their turn was coming up, how many days they had left to wait, etc. Fortunately, control group participants did receive equal access to the intervention after posttest data was collected. The design of the study provided the control group with an ethically responsible opportunity for positive enrichment activities equivalent to those the intervention group was provided.

I also noted instances when participants interacted with their peers around books during their book selection time. Students often asked their classmates to help them locate books about popular subjects, or about books they had just returned. If one student commented positively about a particular book, that book was often sought after by other students who heard the comment.

There were also instances where I noted that students commented that there were parts of some of the books that they could read all by themselves. I noted that students seemed surprised and delighted by this fact. This struck me as important when exploring the motivation question because I knew the participants' exposure to nonfiction texts (especially nonfiction books that could be read at home) was limited, and that participants' realization that they could actually read a new genre of books may increase motivation to read by expanding the options of books available to them.

Discussion of Results of Treatment Fidelity Measures

One of the limitations of this study that I sought to minimize was the fact that the intervention was unsupervised and carried out in the homes of the participants. It was outside the scope of the study to observe the actual parent/child interactions important to the quality of the intervention; however, I did developed and administered treatment fidelity measures that would help provide verification that the intervention did occur as it was designed to occur.

Response Slips

Response slips with spaces for books read, date, and parent signature were sent home with the nonfiction lending library books with the intervention participants to help verify that books were being read to students at home. Two-hundred twenty-two response

slips were returned by participants: a return rate of 54%. This return rate could be viewed as participants averaging returning one response slip per week. Most response slips seemed to be a joint effort between parent and child, with the child doing some of the writing on the slip. Returned response slips provided possible evidence that the intervention was being conducted by parent participants with the child participants in the home. The joint parent/child writing on the slips could provide evidence of the interactive reading task merging into an interactive writing task, perhaps indicating the authenticity of the intervention event.

Check-in Notes

"Check-in" notes were sent to parents at week 5 and week 10 requiring a brief response in order to help verify that books are being read to students at home and also provide information about the amount of interaction occurring around the books.

The week 5 check-in note was returned at a 100% completion rate with 100% of the parents answering that "yes" they were able to find time to read the books coming home for the "Book Club" to their child. Overall, 71% of the responses specified they were doing "a lot" of talking around the nonfiction books that were coming home.

At week 10, 15 out of 17 check-in notes were returned, bringing the return rate down to 88%. But again, all responses indicated that, "yes" parents were finding time to real aloud the books coming home to their child, with 67% of parents stating they were doing "a lot" of talking around the "Book Club" books. Many check-in notes had positive comments about how much their child was enjoying being in the "Book Club." The return of the "check-in" notes provides some additional information concerning treatment fidelity. The notes suggest that parents not only were not having difficulty caring out the

intervention at home, but that they perceived that they were "interacting" successfully around the texts; they were doing "a lot" of talking around the books.

Parent and Child Title Recognition Tests

Parent and Child Title Recognition Tests, given to both control and intervention groups pre/post intervention, were administered to help verify that the target books were recognizable to the intervention parents and students, thus allowing further confidence that the target books were, in fact, read at home to the intervention students. The purpose of title recognition tests, according to Cunningham and Stanovich (1990) is to measure exposure to reading materials without the subjective response problems inherent in self-report methods such as surveys or diaries in which responses from the participants may be influenced by feelings of perceived social desirability. TRT measures use a strategy borrowed from signal detection theory whereby participants who "check" many correct responses falsely due to the perceived social desirability of answering positively, will also "check" the foils. Therefore, in scoring TRT measures, researchers can take this into consideration and adjust the number of actual titles checked based on the number of foils checked.

The results of both the Parent and Child Title Recognition Tests showed a statistically significant Time X Treatment Interaction. This suggests that the intervention group students and parents did recognize a significantly greater number of target book titles than did the control group students after the intervention had been completed. Thus, the title recognition tests provide evidence of the fidelity of the intervention.

The response slips, "check-in" notes, and parent and child TRTs, all served to provide some "checks" on treatment fidelity. In summary, they provided information

about how faithfully the intervention was carried out and how parents perceived their competence at conducting interactive read-alouds.

Parent Program Evaluation Survey

The Parent Program Evaluation Survey also provided some information regarding how the intervention was carried out in the homes of participants. The results of the parent program evaluation survey demonstrated that the intervention group parents who participated in the "Book Club" program enjoyed the experience. Each intervention group parent returned a survey at the end of the intervention. All parents acknowledged that they and their children enjoyed reading and listening to nonfiction books at home. The nonfiction books that came home with the participants were seen by all parents as interesting, high quality books, and 88% of parents thought participating in the program was easy.

All parents also stated that they planned to continue to do interactive read-alouds with nonfiction books after the program ended, to some extent, indicating there may be a lasting effect encouraged by the intervention. Most parents, 94%, indicated that they had seen their child become more interested in reading in general, with 88% of parents stating that they believed their child became interested in learning more about a specific topic as a result of something they read about in a "Book Club" book. Thus, this parent survey provided some insight into the students' motivation to read that perhaps the Motivation to Read Measure could not.

Implications for Education

The most practical application of the findings from this study would be for educators to use the framework of the intervention used in this study to build

interventions that could be effective in their own settings with their own unique populations of students.

The "Book Club" program proved to be simple to administer and maintain, especially considering that positive results were produced. Because this study was conceived to be carried out by one person who was working full-time at the elementary school setting with full teaching duties, and with quite limited resources (no outside funding), it is encouraging that the framework of the "Book Club" program was manageable for the researcher and well-received by the participants. Also, the time-frame for the program was relatively short, basically half of an academic year, January through June, from initially inviting families to participate to ensuring that the control group received a comparable opportunity after the actual intervention was completed. Therefore, in the span of 10-12 weeks, it was shown as possible to produce positive results for acquiring new vocabulary knowledge incidentally from nonfiction read-alouds from an intervention that was mostly carried out in the homes of participants. Findings from this study revealed that measurable positive differences in incidental target vocabulary knowledge could be found as a result of solely two exposures to a target book being read aloud by a parent to their child at home. Perhaps the positive effects of this study shown by the results on the expressive vocabulary measure could be used as a rationale for finding funding to initiate a similar project or simply exploring options for other school-home-based read-aloud "book club" programs.

Also, classroom applications of the findings of this study are not difficult to envision. An argument for supplying nonfiction books and nonfiction interactive read-

alouds for elementary students in today's schools could be supported using the results of this study.

Finally, a more widespread communication with parents and families about their integral role in the vocabulary development of young children, perhaps facilitated by the use of nonfiction read-alouds, would be a valuable application of the study's findings. During my training of parents in the use of nonfiction read-alouds, I was struck by how many parents commented that they had never thought that talking and interacting during read-aloud events was important. I believe the information garnered from the parent survey provides support for the feasibility of similar programs in similar settings. A similar program, conducted within a similar context could be viewed positively by the parent participants.

Implications for Research

Future research in this line of inquiry could branch out from several aspects of this study. First and foremost, replication of this study as a whole or in part would be very informative. Since this was a small-scale study with a fairly homogeneous population, multiple replications with populations with different characteristics would help create some generalizability if similar results were found. Replication studies that used the same instruments would aid in assessing the validity and reliability of the instruments used in this study.

Comparison studies that used identical materials, but changed the context of the intervention, perhaps basing the intervention setting in the classroom with larger group instead of individual read-aloud events, may provide meaningful information for educators. In contrast, comparison studies that used a similar parent-led read-aloud

program intervention with different materials and target vocabulary may help answer questions about the relative effectiveness of the intervention. Similar studies that used either shorter or longer time periods for the intervention would lead to a more refined view of the maximum return for vocabulary development and motivation to read on the length of the intervention. Also, studies in which a follow-up component is used would be able to examine if positive results found for vocabulary growth and motivation to read persist beyond the initial length of the intervention. A longitudinal aspect to a similar study, if gains were maintained by participants over time, would greatly add to the argument that non-fiction read-aloud events can offer students and educators a big payoff for a relatively unobtrusive intervention.

Future research could also be designed to examine how individual differences correlate with the results of the measurements used in the intervention. For example, it was beyond the scope of this study to examine how participants' academic skills or general vocabulary knowledge correlated, if at all, with their incidental target vocabulary acquisition rates. Previous studies such as Elley's (1989), found that children with lower general vocabulary knowledge made more significant gains than the children with higher general vocabulary knowledge as a result of the classroom read-aloud events. Thus, exploring questions of participants' characteristics in light of their performance on vocabulary acquisition and motivation to read measures may be important in tailoring interventions to best suit students' needs. Along the lines of examining individual participant differences, the gender as well as the age of the participants could be important variables that could be investigated.

It would be also valuable to look at the question of using a general vocabulary measure in addition to the target vocabulary measures. In Hargrave and Senechal's (2000) study, which used both target vocabulary measures and general standardized vocabulary measures, the standardized measure of expressive vocabulary showed the difference between pre and posttest scores in the experimental group corresponded to an increase of four months growth – which occurred during a four *week* intervention. Because the number of participants in this study was small, I judged that growth on a general vocabulary measure as a result of the intervention would be very difficult to detect. However, in a study with a larger N, if growth on a general vocabulary measure was found and attributed to the intervention, a strong argument could be made for the significant contribution of interactive read-aloud events on vocabulary acquisition.

A final area of research that needs continued exploration is motivation to read in young children. It could be the case that beginning readers with strong motivation to read and well-developed vocabulary knowledge may have increased reading comprehension in later grades. Thus, more information about what kind of literacy events motivate and engage beginning readers would aid educators in designing interventions that could have long lasting effects.

Limitations

This study had several limitations. The number of participants was limited by the number of first-graders available in the school. With a small sample size it can also be difficult to show statistical differences between two experimental groups. In addition, even though target vocabulary and not general vocabulary growth was measured, and even though it is unlikely that the target books were encountered outside of the

parameters of the study, it was not possible to control the participants' chance exposure to target vocabulary.

It was also beyond the scope of this study to measure how much interaction occurred between parents and children around the target vocabulary words. Since the actions of the parents reading the books to their children were essential to the intervention, and since the researcher was in essence "blind" to these actions, it could be seen as a major limitation that not much is known about the read-aloud event itself. Thus, no conclusions can be drawn about specific actions taken by parents that may have made the read-aloud event more or less effective. However, measures of treatment fidelity suggest that the parent-led read-alouds did occur. Although there was no direct observation of the interactive read-alouds, parents and children acknowledged in writing that target books were read at home. Furthermore, treatment fidelity measures, such as the parent and child title recognition tests, response slips, and "check-in" notes provided some reassurance that the intervention occurred as it was designed to be accomplished.

As a first step, in this specific line of inquiry, the primary research questions that were examined, did provide a stepping stone to future research that may focus on the aspect of effective parent-child interactive during nonfiction read-aloud events not studied in this case.

Conclusions

In summary, this study found strong effects of the intervention for the Expressive Vocabulary Measure. Intervention children having two exposures to target nonfiction books through parent-led interactive read-alouds acquired statistically significantly more target vocabulary knowledge than the control group children.

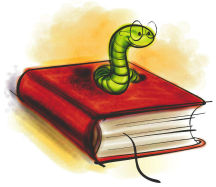
The results of this study provide evidence to encourage the use of parent-led nonfiction interactive read-alouds as a way to stimulate vocabulary development in beginning readers. A parent involvement program, such as the one described in this study, would be a relatively simple, inexpensive, intervention that would occur primarily outside of the school day, and could positively impact students' vocabulary development.

Additionally, the results of this study add to the research base concerned with incidental vocabulary acquisition as a result of read-aloud events. Specifically, this study used a combination school-home-based intervention with nonfiction books to examine the effects of interactive read-alouds with a first-grade population. An established research base exists supporting the assertion that nonfiction read-alouds in the classroom can improve children's vocabulary and motivation to read. The importance of the findings of this study is grounded in the demonstration of these phenomena as a result of nonfiction read-alouds at home. In an already overly-crowded school-day schedule, additional instructional time for nonfiction read-aloud events may not be a practical addition to everyday classroom routines. However, since this study shows that positive effects can be garnered in children's vocabulary development as a result of a home-based intervention, perhaps this option will be more readily explored by elementary schools. Ideally, a school-home partnership in which nonfiction interactive read-alouds are carried out both in school **and** at home, could provide an effective synergy for even greater increases in vocabulary acquisition.

Appendix A
Letter of interest for all parents of first-graders

Wow! A "Book Club" just for First-Graders and their Parents!

From Mrs. Gibson
Reading Specialist



You know me as a teacher at "school name", but I'm also a student. As part of my graduate work at the University of Maryland, I'm conducting a study on the benefits of reading nonfiction books to children. My study involves having parents of first-graders learn about how to do "interactive read-alouds" of nonfiction books with their first-grade child. Their first-graders would then be part of a "Book Club" and would get to choose books to bring home for their parents to read with them. To see if this kind of program is enjoyable and beneficial, I will be asking you and your child questions. Parents will receive two brief surveys to fill out at home, and children will meet with me during the school day to answer some questions orally. I'll arrange a time with their teachers so they'll miss a minimum of instructional time.

I hope that every first-grader gets an opportunity to participate in this project. Last year's book club was very popular, so this year I'm planning to have two "rounds" of the club, giving everyone a chance to have a great selection of books to choose from. If you are interested, you'll be randomly assigned to either the first or second "round" of the "Book Club."

"school name" has a fantastic lending library of new nonfiction books for first-graders to take home to share with their parents! Please consider joining our "Book Club." Reading to children when they are young can lead to later school success!

- ❒ Parents will receive training about interactive read-alouds
- ❒ First-graders will get to choose from fabulous books to borrow

If you are interested in joining this "Book Club" send this slip back to Mrs. Gibson ASAP!

****

Yes! My first-grader and I would like to join the "Book Club".

First-grader's name:_____

Parent's name:_____

Appendix B
Control group parent letter

Dear Parents,

You expressed interest in joining our new "school name" Book Club! There were so many interested parents, we will have two clubs – one this Fall, and one this Spring. I randomly assigned parents and their children to one of the "clubs." You and your first-grade child have been selected to participate in the "Spring Book Club;" we only have enough books for half of the first-graders to be in the club at once, so we're having a Fall and Spring club.

In order for me to collect information to see if this program is enjoyable and beneficial to students and parents, I need to ask for your consent. If you would like your child to participate in the "book club" later in the year, please read, sign and return the Consent Form I included.

If you give your consent, I will be collecting some information from your children during brief interviews at school, and I'll be sending you two brief surveys as well. This information will be kept confidential, and will only be accessible to me. It will in no way affect your children's classroom instruction or grades. Later in the year, you can attend a session to learn how to do "interactive read-alouds", and your child will have access to a lending library of fabulous nonfiction books to borrow each week! Last year's first-graders loved this program!

I feel so lucky to be part of such a great school community.

Thank you for considering this project.

Sincerely,

Mrs. Gibson 

Appendix C
Control parent consent form

PARENT INFORMED CONSENT FORM

Initials_____ Date_____

Project Title	The Effects of Parent-led Read-Alouds of Nonfiction Books on First-Graders' Vocabulary Acquisition and Motivation to Read
Why is the research being done?	This is a research project being conducted by Rebecca Gibson, a graduate student at the University of Maryland, under the direction of Dr. Mariam Jean Dreher in the Department of Curriculum and Instruction at the University of Maryland, College Park. We are inviting you to participate in this research project because you are a parent of a first-grade student. The purpose of this research project is to investigate the effects of parent-led read-alouds of nonfiction books on first-graders' vocabulary and motivation to read.
What will I be asked to do?	**What I will do on my own:** • At the beginning of the study, I will complete a brief survey about what reading and writing activities we do at home. This will take about 2-5 minutes. • At the beginning and end of the study, I will complete a brief survey about which titles of children's books I recognize. This will take about 2-5 minutes. **What my child will do on his or her own at school:** At the beginning and end of the program: • Mrs. Gibson will ask my child about how he or she feels about reading and books. For example, one question Mrs. Gibson will ask is; " When I grow up I will spend, a) none of my time reading, b) very little of my time reading, c) some of my time reading, d) a lot of my time reading. Mrs. Gibson will work with my child individually and read 20 multiple choice response questions to my child. This will take between 5-7 minutes. • Mrs. Gibson will ask my child if he or she recognizes any book titles from a list of 30 titles. This will take between 3-6 minutes. • Mrs. Gibson will ask some questions about words my child may know the meanings of. Mrs. Gibson will do this by asking my child to tell about what he or she thinks 16 words mean, and asking my child to point to a picture showing 16 more word meanings. This will take between 12-17 minutes, once at the beginning and once at the end of the program. My child will miss between 30-40 minutes of classroom time over the 15 week time period of the study. Mrs. Gibson will arrange times with my child's classroom teacher which will cause the least amount of disruption possible.
What about confidentiality?	We will do our best to keep your personal information confidential. To help protect your confidentiality, your name, your child's name, the school's name, and school system's name, will not be identified at any time. All data will be labeled with an identification number to retain anonymity. The master list of names and identification numbers will be accessible only to Mrs. Gibson and will be kept in a locked fire-proof cabinet at her home. The data will be kept in the cabinet for a period of five years after its collection. At the conclusion of this time this information will be shredded. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if your child or someone else is in danger or if we are required to do so by law. In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning child abuse or neglect or potential harm to you or others.

Initials_____ Date_____

Project Title	The Effects of Parent-led Read-Alouds of Nonfiction Books on First-Graders' Vocabulary Acquisition and Motivation to Read
What are the risks of this research?	There may be some risks from participating in this research study. I understand my child may miss some instructional time at school; but Mrs. Gibson will work with my child and his or her teacher to schedule times that do not disrupt his or her work.
What are the benefits of this research?	Your child will have the opportunity to borrow nonfiction books from the lending library after the completion of the study. The benefits to you include participation in activities with your child that can be enjoyable and that may increase reading motivation and world knowledge. We hope that, in the future, other people might benefit from this study through improved understanding of the effects of parent-led interactive read-alouds on children's vocabulary and motivation to read. The results of this study may advance our knowledge about what children gain from listening to nonfiction books.
Do I have to be in this research? May I stop participating at any time?	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.
What if I have questions?	This research is being conducted by Rebecca Gibson, a graduate student at the University of Maryland, under the direction of Dr. Mariam Jean Dreher in the Department of Curriculum and Instruction at the University of Maryland, College Park, MD, 20742. If you have any questions about the research study itself, please contact Rebecca Gibson at: Dr. Mariam Jean Dreher EDUC – Curriculum and Instruction 2311F Benjamin Building University of Maryland College Park, MD 20742-1175 1-301-405-3158 mjdreher@umd.edu If you have questions about your rights as a research subject or wish to report a research-related injury, please contact : Institutional Review Board Office University of Maryland College Park, MD 20742 (301) 405-0678 irb@deans.umd.edu This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.

Initials_____ Date_____

Project Title	The Effects of Parent-led Read-Alouds of Nonfiction Books on First-Graders' Vocabulary Acquisition and Motivation to Read
Statement of Age of Subject and Consent	Your signature indicates that: you are at least 18 years of age; the research has been explained to you; your questions have been fully answered; and you freely and voluntarily choose to participate and to allow your child to participate in this research project.
Signature and Date	NAME OF SUBJECT
	SIGNATURE OF SUBJECT
	DATE

Appendix D
Parent Training Video Transcript
Busy, Buzzy, Bees by Allan Fowler

Adult: Busy, Buzzy, Bees… that bee looks all fuzzy, doesn't he?
Child: yeah, he does
Text: When an office or store, or perhaps a classroom is very very busy, people say it's a beehive of activity.
Adult: Did you ever hear that phrase before?
Child: Yeah
Adult: What do you think that means?
Child: There's a lot of things going on
Adult: Right
Text: So you can imagine how busy it is inside a beehive. Especially in the summer.
Adult: That's when all the flowers bloom, so it's busy for bees.
Text: A hive is like a city of honeybees. Each hive has one queen bee,
Adult: Does she look different from the rest?
Child: Yeah
Adult: She looks bigger.
Text: Several hundred drones, and as many as 50,000 worker bees.
Adult: Wow! That's a lot of bees!
Child: Yep!
Text: The queen lives three or four years. She mates just once with a drone, or male bee, and after that all she does is lay eggs. Sometimes more than a thousand a day.
Adult: A thousand a day? A thousand babies! A thousand baby bees! See those eggs? Look at that one. That one looks different than that one. Why do you think that is?
Child: Well, it's kind of bigger, filled up...
Adult: Maybe it's a little bit older…
Text: She doesn't even have to look for food, the workers feed her.
Adult: She's pretty lucky, huh? Well, she is the queen!
Text: Most worker bees live only about six weeks, but they certainly keep busy. For two or three weeks they work inside the hive. Worker bees have different jobs.
Adult: I wonder what they do inside the hive…
Child: Maybe just watch TV!…
Adult: You think they have little tiny TVs in there?
Child: Probably not.
Text: They keep the hive clean and they guard it. Or they're feeding the queen and the newly hatched larvae,…
Adult: Which are? I wonder what larvae means… newly hatched larvae… they must be…
Child: The little bees
Text: or adding new cells to the honeycomb. Worker bees build the cells out of wax which comes from their own bodies.
Adult: What do you think the cells are? What are the cells?

Text: Finally they leave the hive and fly out into the fields to look for flowers. Bees are attracted to blue, purple, or yellow flowers that smell sweet. Not red ones so much because bees can't recognize the color red.
Adult: They can't see the color red! I didn't know that! Did you know that?
Child: No!
Text: The workers suck nectar, a sugary liquid, from the flowers. And while a bee is gathering nectar, a powder called pollen sticks to their legs and body.
Adult: Look at that bee! What's all over it?
Child: Pollen!
Adult: Pollen. And look, what does the pollen look like?
Child: Balls
Adult: Little tiny yellow balls, huh? And it's sticking all over her.
Text: Some of it comes off when the bee visits the next flower and by carrying pollen from one flower to another, bees help the flowers produce seeds. New plants or flowers grow from seeds. The worker bees bring the nectar back to the food-storer bees at the hives. Those bees deposit in the cells of the honeycomb where it turns into honey.
Adult: Look at that. What do you think this is?
Child: Honey!
Adult: Yeah, honey.
Text: When a bee returns to the hive she sometimes seems to start dancing.
Adult: Did you know that? Does it look like she's wiggling around there?
Child: Yes
Text: The dance is really the bee's way of telling the other bees that she's found a good place for gathering nectar or pollen and where that nectar or pollen is.
Adult: So, she's telling them, this is her way of communicating, because she can't really speak, so she's telling them where to go by how she's moving.
Text: People known as beekeepers set up boxes for the bees to use as hives. The beekeepers collect honey and wax from the hives.
Adult: What do you think they do with the honey and the wax from the hive? What do we know that's made from wax?
Child: Crayons.
Adult: What else? Is there anything else we use wax for?
Child: You put it on your teeth when you have braces.
Adult: Oh, you can put it on to protect your gums so the braces don't cut into them. That's a good, different use for wax!
Text: Honeybees aren't the only kind of bees. There are other bees that don't live in hives and bees that don't sting.
Adult: They look a little different don't they? Why?
Child: They aren't fuzzy and they aren't yellow and black.
Adult: What color are those?
Child: Green and black.
Adult: Green and black, I don't think I've ever seen green and black bees before
Text: But honeybees have two special gifts for us, we can thank them for giving us honey and for helping flowers grow. As for bee stings, no thank you!
Adult: And what is he eating?
Child: Honey, honey bread.

Adult: That looks pretty good. And do you know what that is? That's beeswax, and it's a honeycomb. It still has the honey in it.

Appendix E
Intervention Parent Consent Form

PARENT INFORMED CONSENT FORM

Initials_____ Date_____

Project Title	The Effects of Parent-led Read-Alouds of Nonfiction Books on First-Graders' Vocabulary Acquisition and Motivation to Read
Why is the research being done?	This is a research project being conducted by Rebecca Gibson, a graduate student at the University of Maryland, under the direction of Dr. Mariam Jean Dreher in the Department of Curriculum and Instruction at the University of Maryland, College Park. We are inviting you to participate in this research project because you are a parent of a first-grade student. The purpose of this research project is to investigate the effects of parent-led read-alouds of nonfiction books on first-graders' vocabulary and motivation to read.
What will I be asked to do?	**What my child and I will do together:** • I will read and my child will listen to books that my child brings home in a "book club" pouch. This will amount to an average of 4 books each week. • I will fill out a brief response slip each time we read. The reading and response will take between 20-60 minutes per week. • We will keep the new books safe at home and we will remember to bring them back to school so my child can trade them for more books. **What I will do on my own:** • At the beginning of the study, I will complete a brief survey about what reading and writing activities we do at home. This will take about 2-5 minutes. • At the beginning and end of the study I will complete a brief survey about which children's book titles I recognize. This will take about 2-5 minutes. • At the end of the study, I will complete a brief survey asking my opinion of the "book club". The survey will have 10 questions and use a 5-point scale, it will take about 3-7 minutes to complete. **What my child will do on his or her own at school:** At the beginning and end of the program: • Mrs. Gibson will ask my child about how he or she feels about reading and books. For example, one question Mrs. Gibson will ask is; " When I grow up I will spend, a) none of my time reading, b) very little of my time reading, c) some of my time reading, d) a lot of my time reading. Mrs. Gibson will work with my child individually and read 20 multiple choice response questions to my child. This will take between 5-7 minutes. • Mrs. Gibson will ask my child if he or she recognizes any book titles from a list of 30 titles. This will take between 3-6 minutes. • Mrs. Gibson will ask some questions about words my child may know the meanings of. Mrs. Gibson will do this by asking my child to tell about what he or she thinks 16 words mean, and asking my child to point to a picture showing 16 more word meanings. This will take between 12-17 minutes, once at the beginning and once at the end of the program. My child will miss between 30-40 minutes of classroom time over the 15 week time period of the study. Mrs. Gibson will arrange times with my child's classroom teacher which will cause the least amount of disruption possible. During the program: • My child will come to Mrs. Gibson's room twice a week during dismissal time to pick a few books to take home.

	Page 2 of 3 Initials_____ Date_____
Project Title	The Effects of Parent-led Read-Alouds of Nonfiction Books on First-Graders' Vocabulary Acquisition and Motivation to Read
What about confidentiality?	We will do our best to keep your personal information confidential. To help protect your confidentiality, your name, your child's name, the school's name, and school system's name, will not be identified at any time. All data will be labeled with an identification number to retain anonymity. The master list of names and identification numbers will be accessible only to Mrs. Gibson and will be kept in a locked fire-proof cabinet at her home. The data will be kept in the cabinet for a period of five years after its collection. At the conclusion of this time this information will be shredded. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if your child or someone else is in danger or if we are required to do so by law. In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning child abuse or neglect or potential harm to you or others.
What are the risks of this research?	There may be some risks from participating in this research study. Reading aloud to children can be enjoyable and increase world knowledge, but there will be some increased parent/child "homework" time each week during the study. Your child may miss some instructional time; but Mrs. Gibson will work with your child and his or her teacher to schedule times that do not disrupt his or her work.
What are the benefits of this research?	The benefits to you include participation in activities with your child that can be enjoyable and that may increase reading motivation and world knowledge. We hope that, in the future, other people might benefit from this study through improved understanding of the effects of parent-led interactive read-alouds on children's vocabulary and motivation to read. The results of this study may advance our knowledge about what children gain from listening to non-fiction books.
Do I have to be in this research? May I stop participating at any time?	Your participation in this research is completely voluntary. You and your child may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

	Page 3 of 3 Initials_____ Date_____
Project Title	The Effects of Parent-led Read-Alouds of Nonfiction Books on First-Graders' Vocabulary Acquisition and Motivation to Read
What if I have questions?	This research is being conducted by Rebecca Gibson, a graduate student at the University of Maryland, under the direction of Dr. Mariam Jean Dreher in the Department of Curriculum and Instruction at the University of Maryland, College Park, MD, 20742. If you have any questions about the research study itself, please contact Rebecca Gibson at: Dr. Mariam Jean Dreher EDUC – Curriculum and Instruction 2311F Benjamin Building University of Maryland College Park, MD 20742-1175 1-301-405-3158 mjdreher@umd.edu If you have questions about your rights as a research subject or wish to report a research-related injury, please contact : Institutional Review Board Office University of Maryland College Park, MD 20742 (301) 405-0678 irb@deans.umd.edu This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.
Statement of Age of Subject and Consent	Your signature indicates that: you are at least 18 years of age;, the research has been explained to you; your questions have been fully answered; and you freely and voluntarily choose to participate and to allow your child to participate in this research project.
Signature and Date	NAME OF SUBJECT
	SIGNATURE OF SUBJECT
	DATE

Appendix F
Home Literacy Questionnaire

Parent Home Literacy Questionnaire

Do you read to your child? ____yes ____no

If yes, how often? ____every day ____a few times a week ____a few times a month

Do you and you child go to the library? _____yes _____no

If yes, how often? ____every week _____every month ____a few times a year

Do you and your child do any other literacy activities together? (Such as: play word or reading games, write together, use magnetic letters, etc.) ____yes ____no

If yes, how often? ____frequently ____every once in a while ____a few times

What materials do you have at home? (check all that apply)

____books that adults read

____children's books

____library books

____nonfiction books

____magazines

____children's magazines

____newspapers

____writing materials

____computer

____reading themed computer games

____electronic educational tools (like "Leap-Pad", etc.)

____school supplies

____magnetic letters, letter/word tiles, etc.

____educational games (Boggle Jr., Sight Word Memory/Bingo, etc.)

Appendix G
Title Recognition Test

Child Directions:

Which Books Do You Know?

I am going to read you a list of book titles. Some of the titles are the names of real books and some are not. Listen to the titles and say "yes" if you know it is a real book, and say "no" if you don't **know** it is a real book. Please don't guess. Just say "yes" to the titles you know are real books.

Parent Directions:

Which Books Do You Know?

Below is a list of book titles. Some of the titles are the names of actual books and some are not. Please read the titles and put a check by the titles that you recognize and know are actual books.

_____ Giant Pandas
_____ Weather Words
_____ Food Trappers
_____ Beacons of Light: Lighthouses
_____ Looking Through a Microscope
_____ The Biggest Animal on Land
_____ Tunnels and Bridges
_____ Animals on the Move
_____ Pyramids: How Were They Built?
_____ The Life Cycle of a Kangaroo
_____ Lightning
_____ Lions, Tigers, Bears, Oh My!
_____ Please Don't Feed the Bears
_____ Liftoff!
_____ Farm Equipment
_____ Nature's Camouflage
_____ Backyard Insects
_____ Pond Predators
_____ Zoobooks: Nocturnal Animals
_____ Hot and Cold
_____ Animals that Roar
_____ The Amazing Book of Mammal Records
_____ Growing a Garden
_____ The Statue of Liberty
_____ Boom!
_____ Can Snakes Crawl Backward?: Questions and Answers About Reptiles
_____ The First St. Patrick's Day
_____ These Birds Can't Fly
_____ A Spider's Web
_____ What Lives On The Tundra?

Appendix H
Parent Training Session Information
(contents of overheads used)

1. Welcome/Introduction (my research interests)

Why Are We Here???

- I'm a teacher, but I'm a student, too

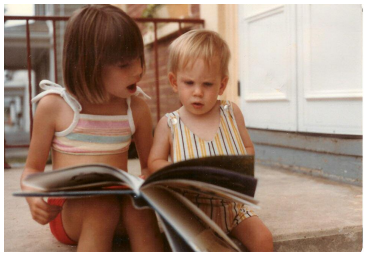
UNIVERSITY OF MARYLAND

- I've been interested in reading aloud to kids and using nonfiction books for quite a while
- If I ever want to finish this degree, I need to gather information about this topic in depth (this is where I need your and your children's help!)
- And… I really want to help kids be successful in school and be lifelong learners!

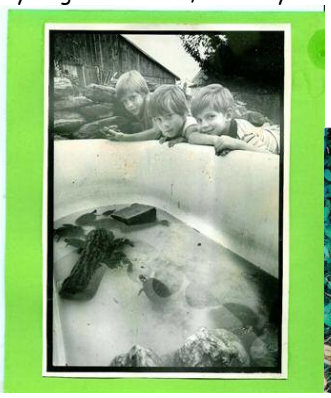
2. Personal anecdotes ("A Tale of 4 Siblings")/ the importance of nonfiction read-alouds

Why Are We Really Here???

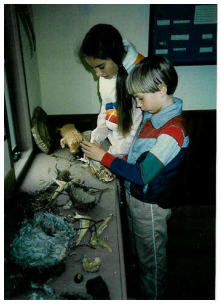
I was the kind of kid that was a born reader…



I have 3 younger brothers, and they were another



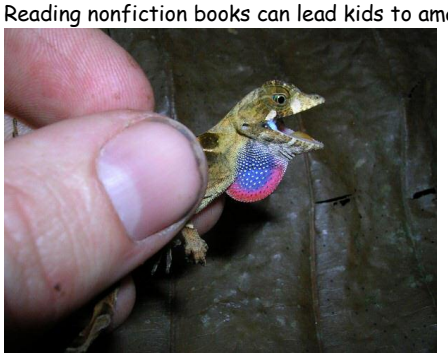
story...

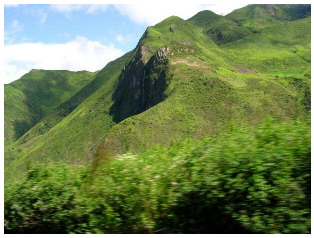


But... somewhere along the line they hooked into nonfiction books about the very things they were so interested in – they pursued their interests through elementary school, high school, college, and graduate school... and look at them now!

* show clip from news broadcast featuring my brother Ben, being interviewed about his work with rare frogs at the Atlanta Botanical Gardens*

Reading nonfiction books can lead kids to amazing places – even if they weren't "born readers"…





3. Background information/rationale of interacting with children around nonfiction books; why do it?

"Let's Read about it, Let's Talk about it!"

Why reading non-fiction books to your child and talking with them while you read can make a difference!

So… why nonfiction!??

- Our world is changing – FAST! Advances in technology and information put additional literacy demands on all readers.
- Most of what children read outside of "reading workshop" is informational, and what they will need to read as adults is informational text.
- State and national standards call for even young children to be effective readers of information.
- Whoa! Guess what? 50-85% of reading passages on standardized tests are informational passages…
- And how much do we use nonfiction text in elementary classrooms? Across the U.S., we use fiction books 90% of the time in our classrooms…

OK… so how will reading nonfiction help our kids?

- Children who read more than one type of text have higher reading achievement – bottom-line!
  - Nonfiction reading helps students acquire information, build background knowledge, understand new concepts, make sense of the world, and **expand their vocabulary (wide reading is the best way to do this – you could never teach that same amount of vocabulary directly)**

  - Nonfiction text requires sustained attention centered on a single topic. Thus, nonfiction introduces rare and specific words that help develop children's vocabulary and develop scientific concepts.

- Children who have larger vocabularies are more likely to read without difficulty, and in the intermediate grades, large vocabularies help with reading comprehension. (helps kids escape the "4th grade slump")

- Nonfiction text will be a predominant style of text used in the upper grades.
- Curiosity about the world around them encourages children to be lifelong learners.
- Children ***LIKE*** informational text!!! Informational text has major motivational potential.
- For some children, informational text provides a way into literacy that stories cannot.

Why is YOUR role as PARENTS so important?

- Parents are the first source of vocabulary development for their children, and they continue to be a critical source for verbal interactions.
- Parents can influence and broaden their child's vocabulary by the kinds of interactions they have at home.
- Activities that help broaden a child's vocabulary are...
  - Book reading
  - Extended conversations
  - Discussions about events or concepts that go beyond the here and now

4. What is an interactive read-aloud?

What is an Interactive Read-Aloud?

It IS:

- A fun, relaxed, reading of a book to a child when you stop periodically and **interact**
- When you might ask a question and clarify something if needed: "Do you know what that means? It just means..., it's like..."
- When you might make connections from something in your own lives that is related to what you're reading about: "Oh, we saw those at the beach, remember?, You know, Uncle Bob knows a lot about this...,
- When you allow your child to chime in with his/her comments and even extend the conversation.
- When you make "I Statements"; make comments that start like, "I wonder..., I wish..., I didn't know..., I would like to know..., etc.
- When you point out specific vocabulary that is new and interesting while you're reading

It ISN'T:

- A rushed, quick, reading, so you can sign the form and finish the "homework"
- A long, drawn-out, lesson about a topic
- An assessment to see what your child knows about a topic, or a test to see how much your child remembers

5. Video of an interactive read-aloud

- ❒ I am using a self-made video to demonstrate what an interactive read-aloud could look like
- ❒ I trained a non-educator using the same tools in my parent training session and videotaped her conducting an interactive read-aloud of a non-fiction book with a 7-year-old girl
- ❒ The video is about 10 minutes long. It looks very natural, and is not rehearsed or perfect. My intent was that it look "doable" and non-threatening.

7. Describe how the take-home library will work, highlight some books

How does the take-home library work?

- Each child will be given a special "pouch" to transport his/her books and keep them safe
- Twice a week, your child will select 2 (or more) new books to take home
- You can read and discuss the books as many times as you and your child would like
- Fill out the brief response slip in the pouch each week

Please fill out this response slip before you take back these books to get your new books!
Thanks, Mrs. Gibson



I was able to read these books aloud to my child.

Parent Signature:_____
Date:_____

Wow! I learned something cool!:

I might want to learn more about:

STUDENT NAME:

8. Explain consent forms, take questions

9. Administer home literacy survey to consenting parents

Appendix I
Assent Form

ASSENT FORM

Initials_____Date_____

Page 1 of 2

The Effects of Parent-led Read-Alouds of Information Books on First-Graders' Vocabulary Acquisition and Motivation to Read	
Statement of Age of Subject	I am a first-grader willing to help Mrs. Gibson with a "book club" project she is working on at the University of Maryland. I understand that I must get my parent/guardian's written permission in order to work on this project with Mrs. Gibson.
Purpose	Mrs. Gibson wants to see what happens when first-graders and their parents read nonfiction books at home.
Procedures	Mrs. Gibson will ask me some questions about how I feel about reading. She will also ask me some questions about what some words mean. Mrs. Gibson will ask me the questions in the reading room and take me back to my classroom. I understand that I can skip questions that are too difficult for me, or that I don't want to answer. I will be in a "book club." I will choose some new books to take home to share with my parents twice a week. I will take them home in a special "book pouch" and bring them back to school after my parents read them to me. My parents and I will fill out a paper after reading each set of borrowed books and we will put the paper in the pouch to take back to Mrs. Gibson.
Confidentiality	All the questions I answer and notes that Mrs. Gibson takes won't have my name on them. Mrs. Gibson will keep all of the notes in a locked fire-proof cabinet at her home. Mrs. Gibson will keep the notes safe for five years and then she will destroy them.
Risks	I understand that I might have more "homework" time each week during the study. I understand that I might miss what is happening in my classroom for a few minutes while I'm answering Mrs. Gibson's questions. But Mrs. Gibson will check with my teacher and make sure that it is an OK time to leave.

Benefits, Freedom to Withdraw, & Ability to Ask Questions	The project will help Mrs. Gibson learn about what happens when parents read nonfiction books to their kids at home. Listening to nonfiction books can be fun and I can learn lots of interesting things. I can ask questions or decide I don't want to help Mrs. Gibson with her project anytime. There will not be a penalty if I decide not to help.
Page 2 of 2	Initals_____Date_____
Contact Information of Investigators	Rebecca Gibson Dr. Mariam Jean Dreher Department of Curriculum and Instruction 2311F Benjamin Building University of Maryland College Park, MD 20742-1175 (301) 405-3158 mjdreher@umd.edu
Contact Information of Institutional Review Board	*If you have questions about your rights as a research subject or wish to report a research-related injury, please contact :* Institutional Review Board Office University of Maryland College Park, MD 20742 (301) 405-4212 irb@deans.umd.edu
I want to help Mrs. Gibson with her "book club" project	☐ Check box
My Name	
Date	

Appendix J
Target Book Cycle Log

	Monday	Tuesday	Wednesday	Thursday	Friday
1/30-2/3	Macey (Animals-1) Jamie (Biggest-1) John (Boom!-1) Katie (Statue-1)	Shana **(Animals-1)** David **(Biggest-1)** Evan **(Boom!-1)** Kellie **(Statue-1)** Faith (Micro-1) Cody (Light-1) Brielle (Bears-1)	Macey **(Micro-1)** Jamie **(Light-1)** John **(Bears-1)** Katie **(Hot-1)** Jayden (Hot-1) Cynthia (Pandas-1) Dillion (Lift-1) Josiah **(Pandas-1)** Quincey **(Lift-1)** Kristin (Animals-1)	Shana (Biggest-1) David (Boom!-1) Evan (Statue-1) Kellie (Micro-1) Faith (Light-1) Cody (Bears-1) Brielle (Hot-1)	Jayden (Pandas-1) Cynthia (Lift-1) Dillion **(Animals-1)** Josiah **(Biggest-1)** Quincey **(Boom!-1)** Kristin **(Statue-1)**
2/6-2/10	Macey **(Light-1)** Jamie **(Micro-1)** John **(Hot-1)** Katie **(Bears-1)**	Shana **(Pandas-1)** David **(Liftoff-1)** Evan (Animals-1) Kellie (Biggest-1) Faith (Boom!-1) Cody (Statue-1) Brielle (Micro-1)	Macey (Bears-1) Jamie (Hot-1) John (Light-1) Katie (Pandas-1) Jayden (Lift-1) Cynthia **(Animals-1)** Dillion **(Biggest-1)** Josiah **(Boom!-1)** Quincey **(Statue-1)** Kristin **(Micro-1)**	Shana **(Light-1)** David **(Bears-1)** Evan **(Hot-1)** Kellie **(Pandas-1)** Faith **(Lift-1)** Cody (Animals-1) Brielle (Biggest-1)	Jayden (Boom!-1) Cynthia (Statue-1) Dillion (Micro-1) Josiah (Light-1) Quincey (Bears-1) Kristin (Hot-1)

2/13-2/17	Macey (Pandas-1) Jamie (Lift-1) John **(Animals-1)** Katie **(Biggest-1)**	Shana **(Boom!-1)** David **(Statue-1)** Evan **(Micro-1)** Kellie **(Light-1)** Faith **(Bears-1)** Cody **(Hot-1)** Brielle **(Pandas-1)**	Macey **(Lift-1)** Jamie (Animals-1) John (Biggest-1) Katie (Boom!-1) Jayden (Statue-1) Cynthia (Micro-1) Dillion (Light-1) Josiah (Bears-1) Quincey (Hot-1) Kristin (Pandas-1)	Shana (Lift-1) David **(Animals-1)** Evan **(Biggest-1)** Kellie **(Boom!-1)** Faith **(Statue-1)** Cody **(Micro-1)** Brielle **(Bears-1)**	Jayden **(Light-1)** Cynthia **(Hot-1)** Dillion **(Pandas-1)** Josiah **(Lift-1)** Quincey (Animals-1) Kristin (Biggest-1)
2/20-2/24	No school	Macey (Boom!-1) Jamie (Statue-1) John (Micro-1) Katie (Light-1) Shana (Bears-1) David (Hot-1) Evan (Pandas-1) Kellie (Lift-1) Faith **(Animals-1)** Cody **(Biggest-1)** Brielle **(Boom!-1)**	Jayden **(Micro-1)** Cynthia **(Light-1)** Dillion **(Statue-1)** Josiah **(Hot-1)** Quincey **(Pandas-1)** Kristin **(Bears-1)**	Macey (Biggest-1) Jamie (Boom!-1) John **Lift-1)** Katie (Animals-1) Shana (Statue-1) David (Micro-1) Evan (Light-1) Kellie (Bears-1) Faith (Hot-1) Cody (Pandas-1) Brielle (Lift-1)	Jayden **(Animals-1)** Cynthia **(Biggest-1)** Dillion **(Boom!-1)** Josiah **(Statue-1)** Quincey **(Micro-1)** Kristin **(Light-1)**

2/27-3/3	Macey **(Hot-1)** Jamie **(Bears-1)** John **(Pandas-1)** Katie **(Lift-1)**	Shana (Micro-1) David (Light-1) Evan (Bears-1) Kellie (Animals-1) Faith (Biggest-1) Cody (Boom!-1) Brielle (Statue-1)	Macey **(Statue-1)** Jamie (Pandas-1) John Katie **(Micro-1)** Jayden **(Biggest-1)** Cynthia **(Boom!-1)** Dillion (Hot-1) Josiah **(Animals-1)** Quincey **(Light-1)** Kristin (Lift-1)	Shana **(Hot-1)** David **(Pandas-1)** Evan **(Lift-1)** Kellie (Hot-1) Faith (Pandas-1) Cody (Lift-1) Brielle (Animals-1)	Jayden **(Bears-1)** Cynthia (Light-2) Dillion (Bears-1) Josiah (Micro-1) Quincey (Biggest-1) Kristin (Boom!-1)
3/6-3/10	Macey **(Animals-2)** Jamie **(Biggest-2)** John (Statue-1) Katie **(Boom!-2)** Jayden **(Statue-2)** Cynthia **(Bears-1)** Dillion **(Light-2)** Josiah **(Micro-2)** Quincey **(Hot-2)** Kristin **(Pandas-2)**	Shana **(Lift-2)** David (Animals-2) Evan (Biggest-2) Kellie (Boom!-2) Faith (Statue-2) Cody (Micro-2) Brielle (Light-2)	Macey (Bears-2) Jamie (Hot-2) John (Pandas-2) Katie (Lift-2) Jayden **(Animals-2)** Cynthia **(Biggest-2)** Dillion **(Boom!-2)** Josiah **(Statue-2)** Quincey **(Micro-2)** Kristin **(Light-2)**	Shana **(Bears-2)** David **(Hot-2)** Evan **Pandas-2)** Kellie **(Lift-2)** Faith (Animals-2) Cody (Biggest-2) Brielle (Boom!-2)	No School

3/13-3/17	Macey (Statue-2) Jamie (Micro-2) John (Light-2) Katie (Bears-2)	Shana (Hot-2) David (Pandas-2) Evan (Lift-2) Kellie **(Animals-2)** Faith **(Biggest-2)** Cody **(Boom!-2)** Brielle **(Statue-2)**	Macey **(Micro-2)** Jamie **(Light-2)** John **(Bears-2)** Katie **(Hot-2)** Jayden **(Pandas-2)** Cynthia **(Lift-2)** Dillion (Animals-2) Josiah (Biggest-2) Quincey (Boom!-2) Kristin (Statue-2)	Shana (Micro-2) David (Light-2) Evan (Bears-2) Kellie (Hot-2) Faith (Pandas-2) Cody (Lift-2) Brielle **(Animals-2)**	Jayden **(Biggest-2)** Cynthia **(Boom!-2)** Dillion **(Statue-2)** Josiah **(Micro-2)** Quincey **(Light-2)** Kristin **(Bears-2)**
3/20-3/24	Macey **(Hot-2)** Jamie **(Pandas-2)** John **(Lift-2)** Katie (Animals-2)	Shana (Biggest-2) David (Boom!-2) Evan (Statue-2) Kellie (Micro-2) Faith (Light-2) Cody (Bears-2) Brielle (Hot-2)	Macey (Pandas-2) Jamie (Lift-2) John **(Animals-2)** Katie **(Biggest-2)** Jayden **(Boom!-2)** Cynthia **(Statue-2)** Dillion **(Micro-2)** Josiah **(Light-2)** Quincey **(Bears-2)** Kristin **(Hot-2)**	Shana **(Pandas-2)** David **(Lift-2)** Evan (Animals-2) Kellie (Biggest-2) Faith (Boom!-2) Cody (Statue-2) Brielle (Micro-2)	Jayden (Light-2) Cynthia (Bears-2) Dillion (Hot-2) Josiah (Pandas-2) Quincey (Lift-2) Kristin **(Animals-2)**

3/27-3/31	Macey **(Biggest-2)** Jamie **(Boom!-2)** John **(Statue-2)** Katie **(Micro-2)**	Shana **(Light-2)** David **(Bears-2)** Evan **(Hot-2)** Kellie **(Pandas-2)** Faith **(Lift-2)** Cody (Animals-2) Brielle (Biggest-2)	Macey (Boom!-2) Jamie (Statue-2) John (Micro-2) Katie (Light-2) Jayden (Bears-2) Cynthia (Hot-2) Dillion (Pandas-2) Josiah (Lift-2) Quincey **(Animals-2)** Kristin **Biggest-2)**	Shana **(Boom!-2)** David **(Statue-2)** Evan **(Micro-2)** Kellie **(Light-2)** Faith **(Bears-2)** Cody **(Hot-2)** Brielle **(Pandas-2)**	Jayden **(Lift-2)** Cynthia (Animals-2) Dillion (Biggest-2) Josiah (Boom!-2) Quincey (Statue-2) Kristin (Micro-2)
4/3-4/7 Send control group sign-up slips	Macey (Light-2) Jamie (Bears-2) John (Hot-2) Katie (Pandas-2)	Shana **(Animals-2)** David **(Biggest-2)** Evan **(Boom!-2)** Kellie **(Statue-2)** Faith **(Micro-2)** Cody **(Light-2)** Brielle (Lift-2)	Macey **(Lift-2)** Jamie (Animals-2) John (Biggest-2) Katie (Statue-2) Jayden **(Hot-2)** Cynthia **(Pandas-2)** Dillion **(Bears-2)** Josiah *** Quincey (Pandas-2) Kristin (Boom!-2)	Shana **(Statue-2)** David (Micro-2) Evan (Light-2) Kellie (Bears-2) Faith (Hot-2) Cody *** Brielle ***	Jayden **(Micro-2)** Cynthia ** Dillion (Lift-2) Josiah **(Animals-2)** Quincey **(Biggest-2)** Kristin ***

4/10-4/14 Last week for intervention Control Post-Test Spring Parent Training	Kellie (get Bears) David (get Micro) Macey (get **Lift)**	*John* **(Boom!-2)** *Brielle* **(Bears-2)** *Josiah* **(Hot-2,** Bears-2**)** *Cody* **(Pandas-2)** *Kristin* **(Lift-2)** *Cynthia* (Micro-2)		Return all books	No School
4/17-4/21 Begin Spring Book Club					

Appendix K
Pilot Study

Abstract

This study investigated the effects of parent-led interactive read-alouds of nonfiction books on first-graders. Evidence suggests that nonfiction read-alouds in the classroom can improve children's vocabulary and motivation to read. This study used a pre/post experimental design to investigate whether parent-led read-alouds can lead to similar gains. Parents of 7 first-graders attended a training session on how to engage their children in interactive read-alouds. Their children then had access to a lending library of nonfiction books, among which were target books with selected target vocabulary. Target books were cycled to children's homes along with other nonfiction books. Seven first-graders whose parents did not participate in the initial training, but who expressed an interest in their children borrowing books, after the study, became the control group participants.

The purpose of this pilot study was to investigate the effects of parent-led interactive read-alouds of nonfiction books on first-graders' vocabulary acquisition and motivation to read. A large body of research literature suggests vocabulary knowledge is not only a potent predictor of linguistic ability, but also that word knowledge is strongly related to reading comprehension (Anderson & Freebody, 1981; Purcell-Gates & Dahl, 1991). Additionally, research has shown that large-scale vocabulary growth in children is due to learning incidentally from oral and written contexts (Nagy, Herman, & Anderson, 1987; Nagy & Herman, 1987; Sternberg, 1987). The unique context of nonfiction read-alouds appears to offer a rich opportunity for introducing new vocabulary, concepts, and text structures to children (Smolkin & Donovan, 2003). Evidence suggests that nonfiction read-alouds in the classroom can improve children's vocabulary and motivation to read. This study used a pre/post quasi-experimental design to investigate whether **parent-led** read-alouds can lead to similar gains.

Rationale

Why should educators be concerned with vocabulary acquisition? Most importantly, it has been established by the research community that vocabulary growth is closely linked to reading proficiency in particular (Anderson & Freebody, 1981, Sternberg, 1987) and to school achievement in general (Walker, Greenwood, Hart, & Carta, 1984; Wells, 1987). In fact, Dickinson, Cote, and Smith (1993) have argued that if one were to select a single variable to measure aspects of children's cognitive functioning related to school success, vocabulary would be a likely candidate. Specifically, it has been shown that students' knowledge of word meanings is an important factor in their

performance on reading comprehension tasks (Mezynski, 1983). In addition, it has been shown that children who arrive in 1st grade with larger vocabularies are more likely to read without difficulty (Purcell-Gates & Dahl, 1991), and children with underdeveloped vocabularies, even if they possess proficient decoding skills, can encounter difficulty with comprehension in the intermediate grades (DeJong, & Leseman, 2001; Roth, Speece, & Cooper, 2002). Although a strong link between vocabulary knowledge and reading comprehension may seem obvious, there remains much to learn about the actual process of acquiring word knowledge and the most effective ways for educators to increase this acquisition and translate it into enhanced reading comprehension achievement.

An important motivation for providing experiences that may increase students' vocabulary stems from the huge individual differences that exist in children's vocabulary sizes. Unquestionably, many children come to school with well-developed oral language. They can speak in sentences, understand simple narratives, and probably know more than one thousand root words (Biemiller, 1999). However, there is an enormous discrepancy between high and low vocabulary growth rates (Hart & Risley, 1995). Why do these differences exist and what can educators do to equal the playing field?

The research community agrees that most vocabulary knowledge is probably obtained through incidental learning based on oral and written context (Nagy, Herman, & Anderson, 1985; Sternberg, 1987). Thus, a nature/nurture argument comes into play when examining oral language vocabulary differences in young children. Constitutional factors such as phonological skills and strength and growth of "working memory" can influence the rate and ease of word learning; in other words, some children may have a

genetic "talent" for acquiring new vocabulary. However, these constitutional factors are mediated a great deal by the opportunities children have to encounter new language vocabulary and structures (Biemiller, 1999). Differences in home environments have been linked to differences in early reading achievement and later school success (Heath, 1983). Linguistically-rich home environments contribute significantly to the development of early literacy skills (Beals, DeTemple, Snow, & Tabors, 1991; Bus, van Ijzendoorn, & Pellegrini, 1995; Scarborough & Dobrich, 1994). Observational studies that examine parent/child interaction and oral language vocabulary growth, such as Hart and Risley's (1995) account, maintain that children who grow up in low-income families are likely to have less well-developed vocabularies than their more advantaged peers. Thus, encouraging experiences at home that up the ante of rich vocabulary exposure, such as interactive read-alouds, is important to consider for school/home interventions.

There is a well-established research base, as well as a widespread general public consensus, that reading aloud to children should be a highly recommended activity for encouraging language and literacy (Adams, 1990; Anderson, Hiebert, Scott, & Wilkinson, 1985; Goldfield & Snow, 1984). It makes sense that reading aloud to children may increase vocabulary development – young children's aural comprehension ability outstrips their word recognition competence greatly, and thus challenging content can be presented to young children through listening to books read aloud (Beck & McKeown, 2001). But what specifically makes read-aloud experiences effective for enhancing children's vocabulary development? One theory is that children's oral language vocabularies benefit from adult interaction that **extends** children's language (Wells, 1985). Opportunities for children to interact and dialogue with the "reader" seem to have

an effect on vocabulary development. In fact, there is some evidence to support the notion that occurrences of extended discourses have a direct impact on literacy outcomes and also provide opportunities for exposure to more sophisticated vocabulary, which, it could be argued, predict later vocabulary and reading scores (Wiezman, 1995). One could argue that read-alouds provide the catalyst for adults to present challenging vocabulary that indeed extends children's language.

Studies conducted in school settings have shown that the language of the classroom environment can impact children's oral language and vocabulary development. For example, researchers have examined how whole group storybook reading can promote vocabulary development. Simply put, read-alouds can promote vocabulary development by **incidental acquisition** (Eller, Pappas, & Brown, 1988; Elley, 1989; Henderson, 2001; Leung, 1992; Leung & Pikulski, 1990; Nicholson & Whyte, 1992; Senechal, Thomas, & Monker, 1995; Stahl, Richek, & Vandevier, 1991). Generally, when teachers provide definitions and clarifications during the reading, vocabulary development is further enhanced (Biemiller, 1999). Dickinson, Cote and Smith (1993) asserted that teachers can enhance their students' vocabularies and provide a foundation for subsequent reading achievement by engaging them in discussions that include low-frequency words.

Storybooks (narrative texts) are the most common type of text found in early childhood classrooms (Duke, 2003). Traditionally, narrative texts have predominated in elementary classrooms because they have been viewed as more aesthetically pleasing and more easily comprehended than nonfiction texts (Doiron, 1994). However, are narrative read-alouds the only viable context to increase incidental vocabulary development in the

primary grades? Recently, some researchers, most notably Pappas (1991), have challenged the idea that narrative texts should play such a dominant role in literacy programs. In fact, Pappas (1991) argued that educators could create "a barrier to full access to literacy" (p. 461) by providing children with little experience interacting with expository text. Furthermore, nonfiction is not "incomprehensible" to young children; Duke (2003) argued that young children can interact successfully with nonfiction texts when given the opportunity and supported by more knowledgeable persons. Duke (2003) also maintained there are powerful benefits of having nonfiction texts accessible to children. There is evidence to support that many children show a preference for nonfiction texts, thus these types of books may increase motivation to read (Duke & Kays, 1998; Moss, 1997; Pappas, 1993). For these reasons, as Dreher (2000) maintains, "there appears to be no compelling reason that the elementary school experience should be mainly narrative" (p.71); cases for engagement and achievement benefits can clearly be made for including nonfiction in the classroom.

Nonfiction read-alouds, therefore, are a feasible read-aloud context for young children and may also provide an advantage for vocabulary learning over narrative read-alouds. By definition, nonfiction text is written to convey information about the world around us and contains specialized vocabulary to accomplish that goal. Moreover, adults may interact more around vocabulary and concepts while reading aloud nonfiction text (Duke, 2003). In addition to contributing to children's development of vocabulary and world knowledge, exposure to nonfiction books allows children to become familiar with linguistic features and text structures more similar to texts they will encounter in the upper elementary grades and beyond (Duke, 2003). Most importantly, for this proposed

study, it has been shown that gains in vocabulary can be made from listening to nonfiction books read as few as two times (Brabham, Boyd, & Edginton, 2000).

How can interacting with nonfiction texts increase young children's oral language vocabulary, and successively, reading comprehension? Smolkin and Donovan (2003) describe *comprehension acquisition* as the instructional period that precedes actual comprehension strategy instruction. During an interactive reading event, the more knowledgeable peer aids the child's meaning making. As in Krashen's (1983) language acquisition period, the role of the adult in this acquisition period is important. By scaffolding and modeling, the adult helps to clarify and promote understanding of events (text reading) that are not accessible to the child on his/her own (Smolkin & Donovan, 2004). Through the adult's interaction with the text and the child, the adult is able to bring previously inaccessible vocabulary into the child's zone of proximal development by explaining terms and helping the child make connections to prior knowledge. Therefore, interactive read-alouds of nonfiction books conducted by parents in the home may have the potential to effect vocabulary growth.

Research Hypothesis, Research Design, and Research Questions

This pilot study was based on the hypothesis that incidental vocabulary acquisition could occur as a result of parent-led interactive read-alouds. I hypothesized that motivation to read would increase due to the appeal of the nonfiction books and increased parent/child interaction with these books. I trained parents to conduct interactive read-alouds, and the first-grade children of these participating parents joined a "Book Club" in which they took home nonfiction books to share with their parents. First-graders whose parents did not participate in the initial training, but whose parents

expressed an interest in their children bringing home books, became the control group participants. Children in the control group also had a chance to take home books from the nonfiction library after the pilot study was completed.

I used an intervention and control group experimental design, using pre and post tests to measure the acquisition of selected target vocabulary as well as the first-graders' motivation to read.

This pilot study investigated whether there are differences in first-grade students' vocabulary acquisition and motivation to read between a control group and an intervention group exposed to interactive read-alouds. Two specific research questions are: (1) What effects do parent-led interactive read-alouds of target nonfiction books have on selected target vocabulary acquisition? (2) What effects do parent-led interactive read-alouds of nonfiction books have on motivation to read?

Method

Participants

Participants in the intervention group of this study were 7 parents, who attended a parent-training session, and their first-grade children. I then randomly selected he same number of control group children from the remaining pool of first-grade students.

I invited parents of first-grade students in one elementary school building to participate in an evening training session conducted by myself, a reading specialist at the school. The elementary school in this study housed 350 K-6 students. The school, one of 8 elementary schools in the district, is located in a rural/suburban school district in a mid-Atlantic state. The population is mostly middle-class, the free/reduced lunch rate in the district is approximately 14%. I selected he first-grade participants from a pool of 44

first-grade students. I sent a flyer home from school, to all first-grade parents, advertising an information session about the benefits of conducting interactive read-alouds with children.

I sent the parents of first-graders who did not attend the information session a letter and consent form. If these parents expressed interest in their children having access to the lending library after the data collection phase of the study was completed, and they and their children signed consent forms, these children became the group from which control group participants were randomly selected.

Thus, participants were selected for the intervention group based solely on their participation in the parent training session and parental consent and child assent. Participants for the control group were selected based on parent absence at the parent training session, as well as their desire for their children to have access to the lending library and their consent and assent.

The intervention group as well as the control group included 3 girls and 4 boys, all seven years old. Two of the intervention children and one of the control group children were in the Title 1 reading program.

Materials

Target books. I selected ten target books from a collection of new primary grade nonfiction books purchased by the school. This collection of approximately 450 nonfiction book titles made up the lending library from which students borrowed books to share with their parents at home. The collection included books from a variety of publishers such as: Rigby, Scholastic, Wright Group, and Zoobooks. The target books

were selected from this large pool based on three main characteristics; first, my belief that these books would appeal to this group of first-graders, second, the books used some vocabulary that I believed would not be well-known by this first-grade population, and third, the books had coherent text structure and could be read in one sitting. The target books I selected were: Animals on the Move by Allan Fowler, Boom! by Howard Gutner, The Biggest Animal on Land by Allan Fowler, The Statue of Liberty by Lucille Recht Penner, Looking Through a Microscope by Linda Bullock, Beacons of Light: Lighthouses by Gail Gibbons, Please Don't Feed the Bears by Allan Fowler, Liftoff! by Carmen Bredson, Hot and Cold by Allan Fowler, and Giant Pandas by Gail Gibbons.

Vocabulary measures. I selected specific target vocabulary from each of the ten target books. In total, I chose 27 words from the target books. I measured the participants' knowledge of these words with two types of assessment tools I designed. The receptive vocabulary measure consisted of ten 4-panel cards displaying graphic representations of the target vocabulary term and three other terms that I deemed to be somehow syntactically, semantically, or aurally related to the target vocabulary term. I asked the student to "point to the box which shows a _____". The participants completed this assessment in 2-5 minutes.

The expressive vocabulary measure consisted of a verbal definition task of 17 target vocabulary words. The instructions informed the participants to answer questions such as, "What does it mean to _____?", "What is a _____?" or "What are _____ (s)?". I transcribed the participants' responses verbatim as they answered. The participants completed this assessment in 5-10 minutes. I coded the responses by student number and six raters rated the responses using the following 5-

point scale: 1= not able to define term, 2=defines term minimally with some inaccuracy, 3=demonstrates minimal understanding of term, 4=demonstrates some understanding of term, 5= demonstrates understanding of term. The six raters attended a brief training session that session. These raters were teachers at the school where the pilot study was conducted. The raters, two first-grade teachers, two third-grade teachers, and two fifth-grade teachers, volunteered to help me in response to an e-mail request sent to all 19 teachers at the school.

Motivation to read measure. Gambrell, Palmer, Codling, and Mazzoni's (1996) "Motivation to Read Profile" was used to measure the participants' attitudes toward reading before and after the intervention period. There is robust research literature to suggest a link between reading motivation and reading achievement. Thus, I was interested to learn if motivation to read increased after the participants participated in an intervention where they were sharing nonfiction books with their parents and interacting while they were read to. The MRP (Motivation to Read Profile) consists of two basic instruments: The Reading Survey, and the Conversational Interview. Only The Reading Survey was used in this study, and it was administered individually. The survey assesses two specific aspects of reading motivation; self-concept as a reader and value of reading. The instrument consists of 20 items and uses a 4-point response scale. According to Gambrell, Palmer, Codling, and Mazzoni (1996), the items are designed to elicit information about students' self-perceived competence in reading and self-perceived performance relative to peers, as well as the value students place on reading tasks and activities, particularly in terms of frequency of engagement and reading-related activities.

I read the statements and choices orally and marked the participants' responses. The profile's administration was completed in 5-7 minutes.

Questionnaire and survey. The parents of both the intervention and control group students completed a brief home literacy questionnaire at the onset of the study. The questionnaire included six questions about literacy activities that occur in the home, such as what kinds of books are available at home, and how often an adult reads to the child. The questionnaire used was created by Jordan, Snow, and Porche (2000) and used in their study on the effect of a family literacy project on kindergarten students' early literacy skills.

At the completion of the study, parents of intervention participants completed a ten item evaluation survey of the "Book Club" program. Parents were directed to circle a number (1-5) on a Likert scale to describe how they felt about statements related to the program. They were also provided space to make additional comments.

Procedure

There were three main components to this pilot study. The first was the parent training session. Since the intervention group participants were drawn from the pool of parents who participated in the training, the parent training session was integral to the study. The second component was the intervention period, and the third component was pre/post testing.

Parent training. A flyer was sent home from school advertising a new "first-grader book club" to every parent of a first-grade student two weeks before the initial parent information (training) session was to take place. The flyer detailed that parents would learn how to do interactive read-alouds with their children, how their children may

benefit from them, and how their child could take home books from a fantastic new lending library of nonfiction books. The session was held on a weeknight evening, and activities and a snack were provided for children who accompanied their parents.

The first flyer produced very little response from parents: two parents signed up to attend. The researcher revised the flyer, visited each first-grade classroom to promote the program, and encouraged the students to tell their parents about the "book club." After this second flyer went home, 11 parents signed up to attend the information session. Seven parents actually attended the session, and they all gave their consent to participate in the study.

At the information session, parents were informed of the potential benefits of interactive read-alouds, how the lending library would work, and what would be required of them in order to participate in the "book club" program. I also informed the parents, at this time, of my research interests and affiliation with a research institution. Parents were then trained in conducting interactive read-alouds with nonfiction books. They were given information packets to take home and watched a video of an adult reading a nonfiction book interactively with a 7-year-old girl. After I thanked parents for attending the session, I asked parents if they would like to participate in the study. I explained the consent form, and all seven parents gave their consent and completed the home literacy questionnaire before leaving the session. It was my hope that parents who participated in the initial training would be likely to carry through with the actual intervention at home, since they were informed of the benefits of the "book club", and would likely view it as an enjoyable activity to share with their child.

The day after the training session, a letter was sent home to parents of first-graders whose parents did not attend the session. This letter briefly explained my research interests and invited parents to take part in the study if they wanted their children to join the "book club" and borrow books from the nonfiction take-home library. A consent form for parents was included with the letter. In all, 18 parents signed consent forms and expressed interest in their children joining the "book club." I then assigned numbers to this newly formed control group pool of participants and used an automatic random number generator from a website to determine the seven control group participants. The parents of these children were sent the home literacy questionnaire to complete and return. The parents of children who were not selected to form the control group were sent a note explaining that due to a good number of parents responding, their child would participate in the "book club" without being asked questions at the beginning and end of the "project."

Pre-testing. Pre-testing began as soon as control group participants were selected. I arranged times with the participants' teachers during the school day that were as least disruptive as possible. The pre-testing took place in a quiet room, close to the participants' classrooms. I gave the assessments to the children individually, and believed their familiarity with me as the building reading specialist allowed for a comfortable and valid testing environment. I had had almost daily interactions with the students since the beginning of the school year in their classroom settings.

The average time to explain the assent form, and administer the pretests (receptive and expressive vocabulary tasks and Motivation to Read Profile) was 15 minutes. All 14 children gave their assent and completed the pre-testing tasks without any noticeable

distress. They seemed to answer to the best of their abilities and did not show signs of frustration with the tasks.

Intervention period. The pre-testing was completed in one week and the "nonfiction lending library" cycle was initiated immediately for the seven intervention group participants. These students came to the reading room with me at the end of the school day during dismissal time. The participants were given "book club bags" to keep their borrowed books safe on their trips to and from school. I showed the participants how the approximately 450 nonfiction books were organized (in magazine holders with picture and word descriptions of contents, e.g. "weather, dinosaurs, etc.") and let them browse for several minutes independently. I then assisted with selecting a few books and also periodically "recommended" the target books to the participants. I kept a chart logging which target books were taken home by each participant to ensure that each target book was taken home by each participant one time. A brief response slip was included in each participants' bag when they borrowed books. The response slip had three boxes for children to dictate to their parents a favorite part, something cool they learned, and what they'd like to know more about. I expressed to the participants that the books they were taking home were to be shared with their parents, and was not required "homework." The participants, at times, requested to keep books longer or to take home the same books multiple times, if they didn't have time to share with their parents or forgot to transport them.

Results

Home Literacy Questionnaire

A comparison of the mean scores of the Home Literacy Questionnaires for the intervention group (M= 16.36, SD= 3.17) and the control group (M= 13.28, SD= 2.69) found no statistically significant differences between the groups. A one-way ANOVA showed an F ratio of 2.65, p= .14. Therefore, some concerns about the intervention group's home literacy environment being more supportive (due to the voluntary nature of the formation of the intervention group) were alleviated.

Motivation to Read Profile

An ANOVA was conducted with the pre-test scores of the intervention and control groups. The F ratio of 0.03, p = .87 (not statistically significant) showed that the two groups were equivalent before the intervention period. Next, an ANCOVA was employed with pre-test scores as the covariate. Sufficient correlation was found between the covariate and dependent variable (post-test scores). Although a small difference in favor of the intervention group was found in the mean post-test scores, an ANCOVA showed that the difference was not statistically significant (F ratio = 0.17, p= .70).

Table 1

Means and Standard Deviations of MRP Measure

Group	Pre-test Mean (SD)	Post-test Mean (SD)
Intervention (7)	62.14 (9.33)	63.43 (9.52)
Control (7)	61.43 (6.83)	61.71 (5.44)

Receptive Vocabulary Measure

Again an ANOVA was conducted with the pre-test scores of the intervention and control groups. The F ratio of 0.05, p = .83 (not statistically significant) showed that the

two groups were equivalent before the intervention period for this measure as well. And again, although a small difference in favor of the intervention group was found in the mean post-test scores, an ANCOVA found the difference was not statistically significant (F ratio = 0.31, p= .59).

Table 2

Means and Standard Deviations of Receptive Vocabulary Measure

Group	Pre-test Mean (SD)	Post-test Mean (SD)
Intervention (7)	7.14 (1.21)	8.00 (.58)
Control (7)	7.28 (1.25)	7.86 (.69)

Expressive Vocabulary Measure

Lastly, another ANOVA was conducted with the pre-test scores of the intervention and control groups. The F ratio of 0.33, p = .57 (not statistically significant) showed that the two groups were equivalent before the intervention period for this measure as well. And once again, a small difference in favor of the intervention group was found in the mean post-test scores. On this measure, an ANCOVA found the difference was approaching statistical significance (F ratio = 3.74, p= .08).

Table 3

Means and Standard Deviations of Expressive Vocabulary Measure

Group	Pre-test Mean (SD)	Post-test Mean (SD)
Intervention (7)	250 (51.99)	291 (59.06)
Control (7)	232.43 (61.24)	233.14 (87.83)

"Book Club" Program Evaluation Survey

Out of the seven surveys that were sent home to evaluate the "Book Club" program, only four were returned. The results of these surveys indicated a very positive view of the program. All parents agreed that they enjoyed learning how to do interactive read-alouds, and that their children enjoyed the read-alouds of non-fiction books at home. All parents also agreed that they have seen their child become more interested in reading in general. Three of the four parents reported seeing their children become interested in learning more about a topic they read about; one parent somewhat agreed with this observation. Interestingly, three out of four parents reported they hear their children use words they encountered during their book reading at other times after they read. All parent responses indicated that their children see themselves as good readers. All four surveys showed that the parents found participating in the program easy, that the books were of high quality and interesting to read, and that they plan to continue to do interactive read-alouds after the program came to an end. Half of the surveys indicated that their family's library visitation has increased since taking part in the program.

Discussion

Recommendations for Future Research

A future study based on this pilot will need to explore ways to ensure greater parent participation at the parent training session. Most likely, multiple sessions would be offered on different weeknights, as well as a daytime session. Incentives such as free books, or a meal, may further encourage participation. Also, promoting the program heavily to the students themselves, should not be overlooked.

Although I had planned to have students "trade" their books twice a week, a more unstructured approach seemed to work best. Some students asked to take home a new book or two each day, and some students did not bring their books back regularly, or wanted to keep them longer than two days. In a future study based on this pilot, it would be helpful to have multiple copies of each of the target books to speed up the "cycling" process. Of course, a study conducted in the Fall, with a longer period for the intervention, would eliminate some of this concern.

Participants' reactions to the lending library were overwhelmingly positive. Future studies should be prepared to have a lending library of several hundred books to keep up with the demand of the participants for more new books. The participants would comment about the books to me in the hallway, at recess, etc. After a few weeks of exchanging books I noticed that the participants were recommending books to each other and selecting books with a specific subject in mind. The response slips came back with comments about 50% of the time. The control group participants asked frequently when it would be their turn to begin taking home books from the nonfiction lending library.

Limitations of the Study

This pilot study had several limitations. The small number of participants reduced the ability to generalize to other populations greatly. Also, the manner by which the intervention group was constructed (children of parents who voluntarily attended a training session) calls into question the relative equivalence of the intervention and control groups. Also, even though target vocabulary and not general vocabulary growth was measured, and it is unlikely that the target books were encountered outside of the parameters of the study, it was not possible to control the participants' chance exposure

to target vocabulary. It was also beyond the scope of this study to measure how much interaction occurred between parents and children around the target vocabulary words. Additionally, although parents and children did acknowledge that target books were read at home in writing, there was no direct observation of the interactive read-alouds, and thus no irrefutable validation of the event.

Implications for School and Home Settings

The findings of this pilot study provide tentative support for the practice of using interactive read-alouds with children as a way to foster vocabulary development and motivation to read. Undoubtedly, this study will lead to more refined research questions concerning read-alouds and vocabulary acquisition. Since results indicated slight positive outcomes for the intervention group, there may be further school support of future parent training interventions. Future research may focus on specific aspects of nonfiction text structures or parent/child interactions that encourage vocabulary acquisition and motivation to read.

Conclusions

This was a very small-scale pilot study designed to field test an interactive read-aloud parent training program, a student take-home library design, and several instruments to measure target vocabulary growth and motivation to read differences between an intervention and comparison group. The "Book Club" program proved to be well-received by parents, teachers, and students. End-of-program evaluation surveys, and parent notes and phone calls concerning the program were overwhelmingly positive. Slightly greater gains in mean scores for the intervention group were observed on the receptive and expressive vocabulary measure, as well as the motivation to read measure.

Although the differences on post-test scores between the intervention and control group were not statistically significant, this could be attributed to the abbreviated length of the program (8 weeks) as well as the small sample size. A future replication of this study with an intervention period of 20 weeks may produce more significant results. Additionally, a study with a larger N will increase the statistical power and make it easier to detect statistical differences.

References

- see dissertation references

Appendix L
Response Slip
Please fill out this response slip before you take back these books to get your new books!
Thanks, Mrs. Gibson



STUDENT NAME:

Wow! I learned something cool!:

I might want to learn more about:

I was able to read these books aloud to my child.
Titles or Subjects of books read:_____
_____

Parent Signature:_____
Date:_____

Appendix M
Week 5 and week 10 "check in" note to parents
WEEK 5
Hello! You and your child have been participating in our first-grade "Book Club". The kids have been so excited about taking these books home and having you read to them. Thank you for helping your child to remember to take home and return the books, and thank you for continuing to read these great books to your child. I just wanted to "check in" and see how you think the "club" is going.
Mrs. Gibson

Have you been able to find time to read the books that come home to your child?
_____ yes _____no

How much talking do you do with your child during the reading of the books?
_____ hardly any _____ a little _____ a lot

Comments:

Parent
signature:_____

WEEK 10
Hello! You and your child have been participating in our first-grade "Book Club". The kids continue to be very enthusiastic about taking these books home and having you read to them. Thank you for helping your child to remember to take home and return the books, and thank you for continuing to read these fantastic nonfiction books to your child. I just wanted to "check in" and see how you think the "club" is going after all these weeks! Mrs. Gibson

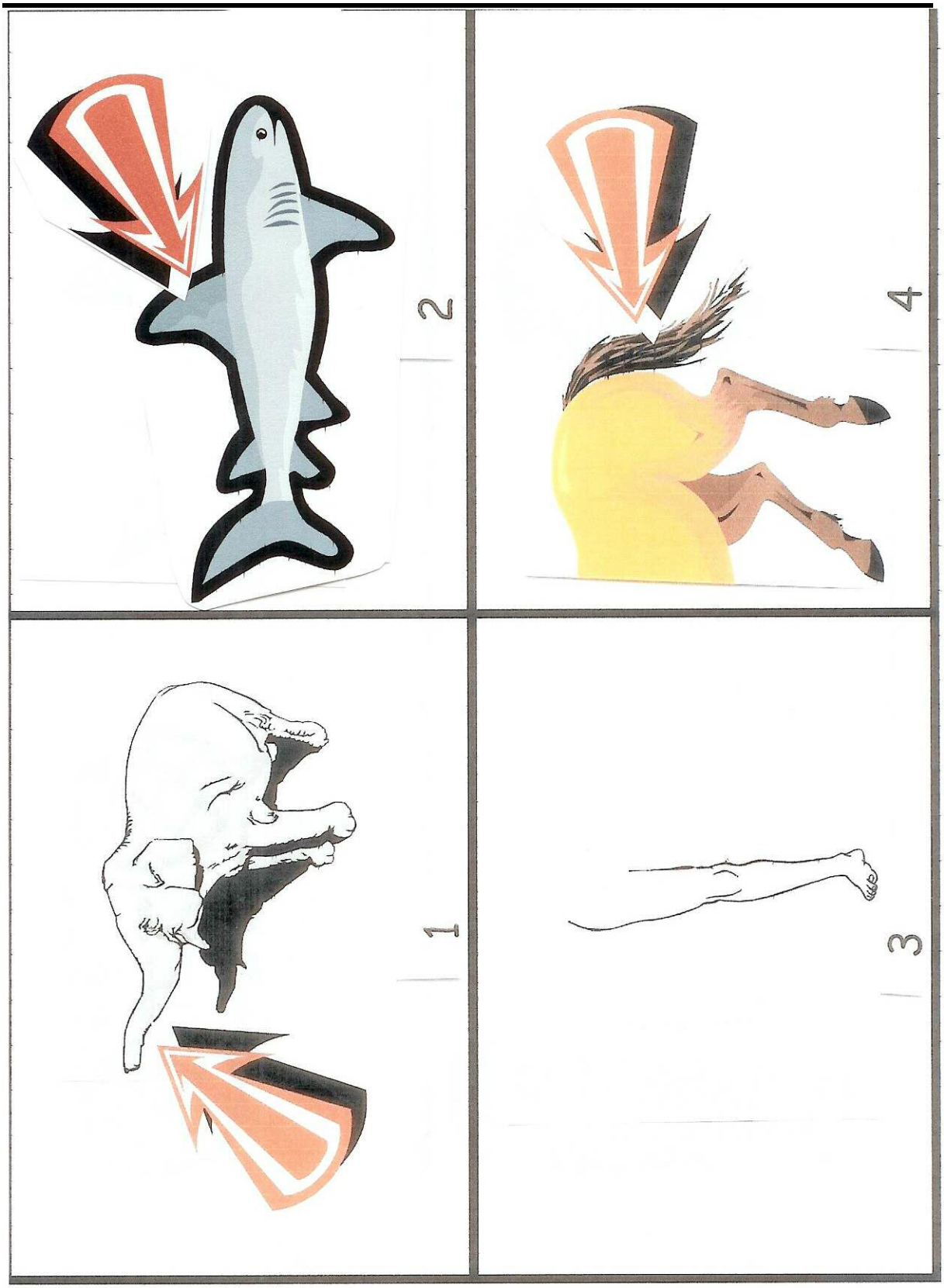
Have you been able to find time to read the books that come home to your child?
_____ yes _____no

How much talking do you do with your child during the reading of the books?
_____ hardly any _____ a little _____ a lot

Comments:

Parent
signature:_____

Appendix N
Receptive Vocabulary Measure (a)


2
4
1
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Appendix N
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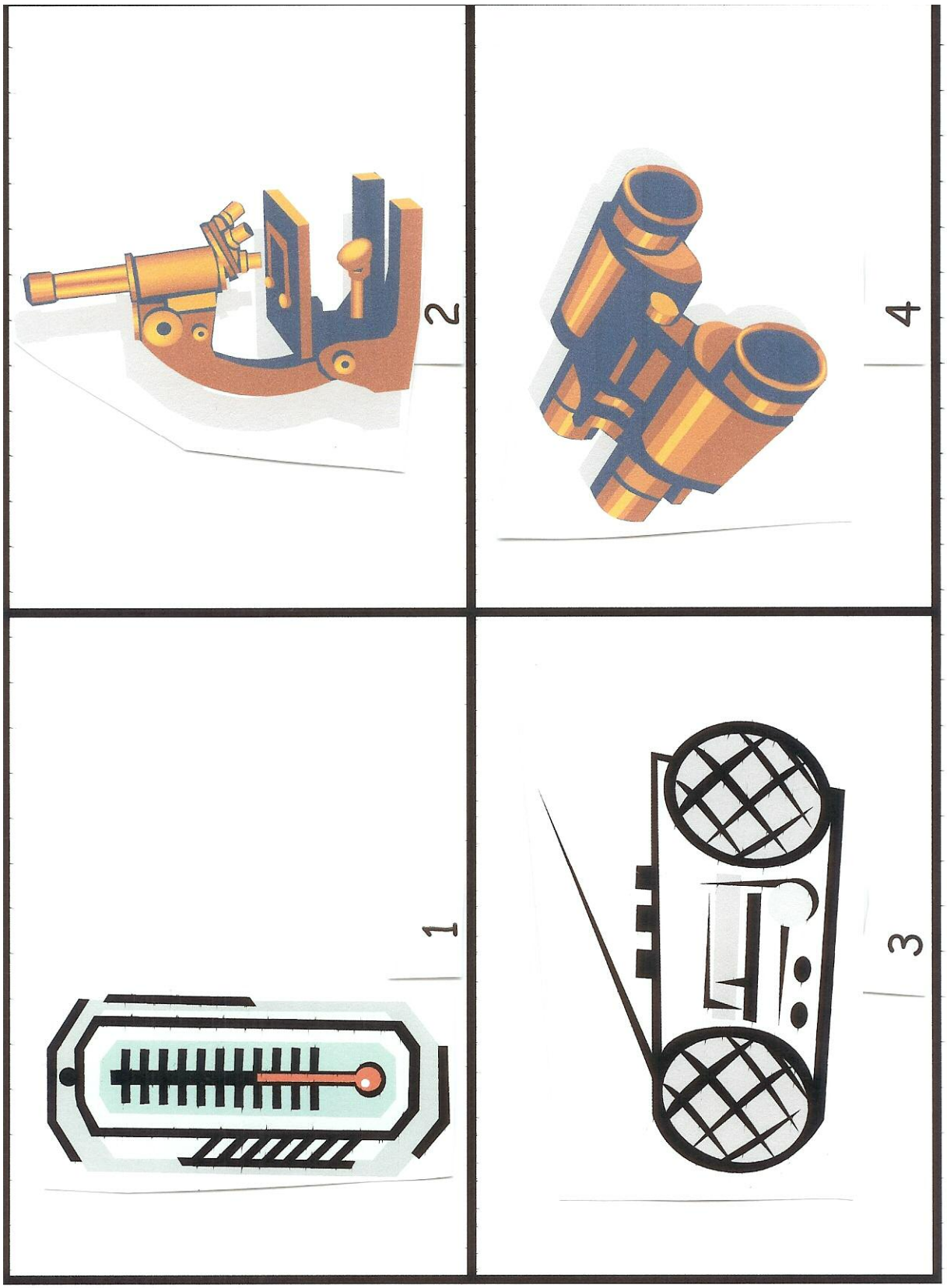
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4
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Appendix N
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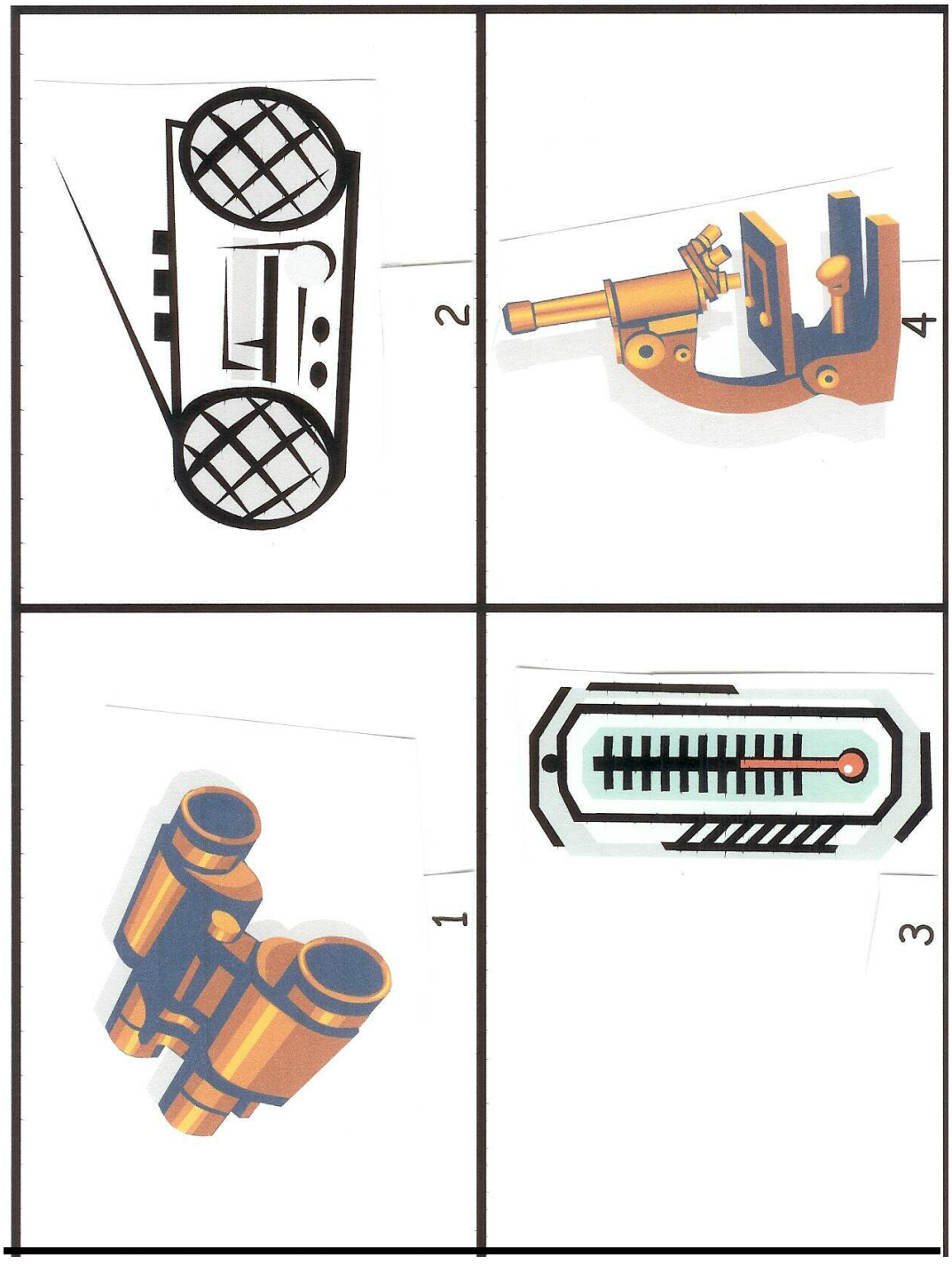

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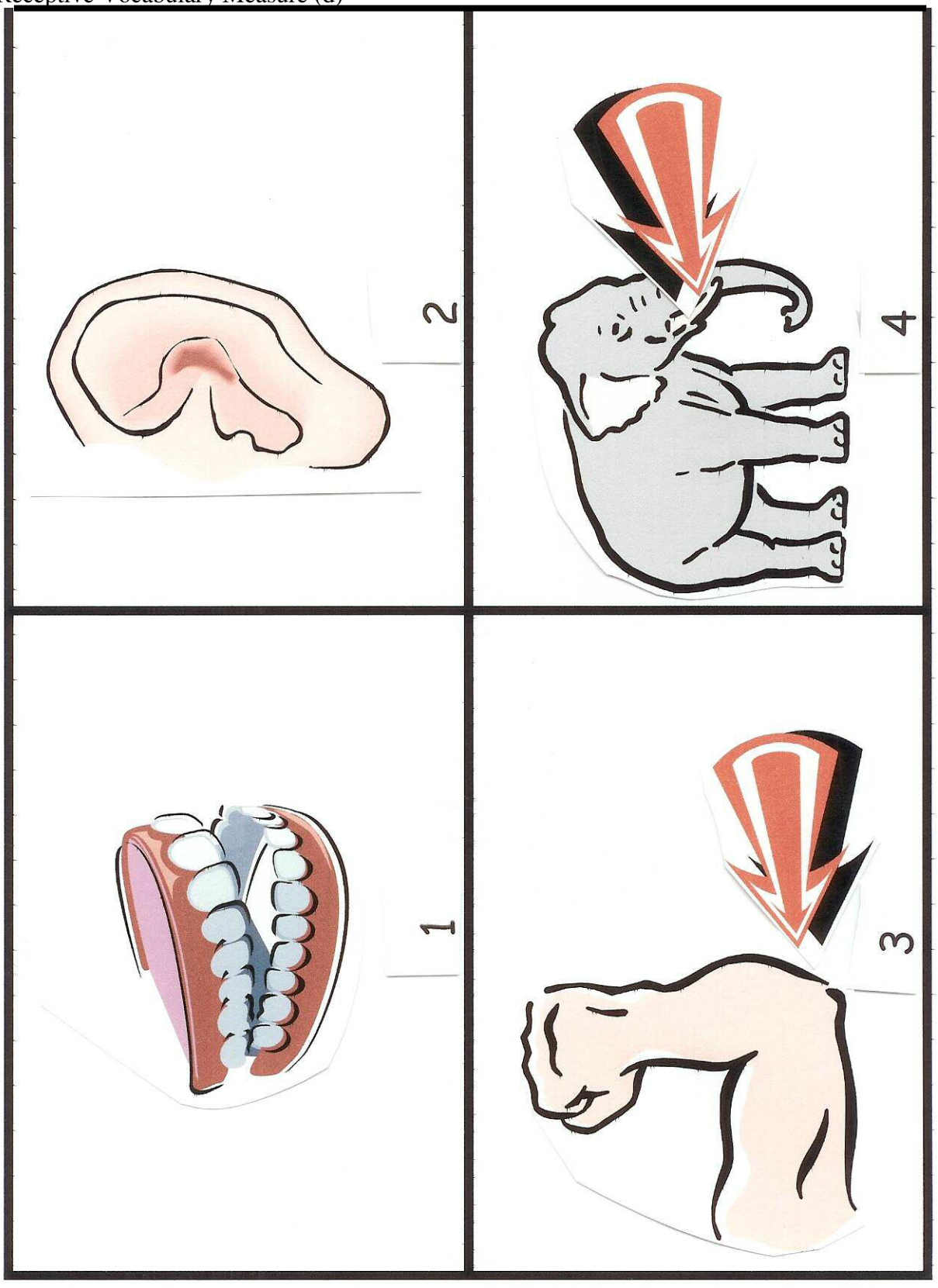
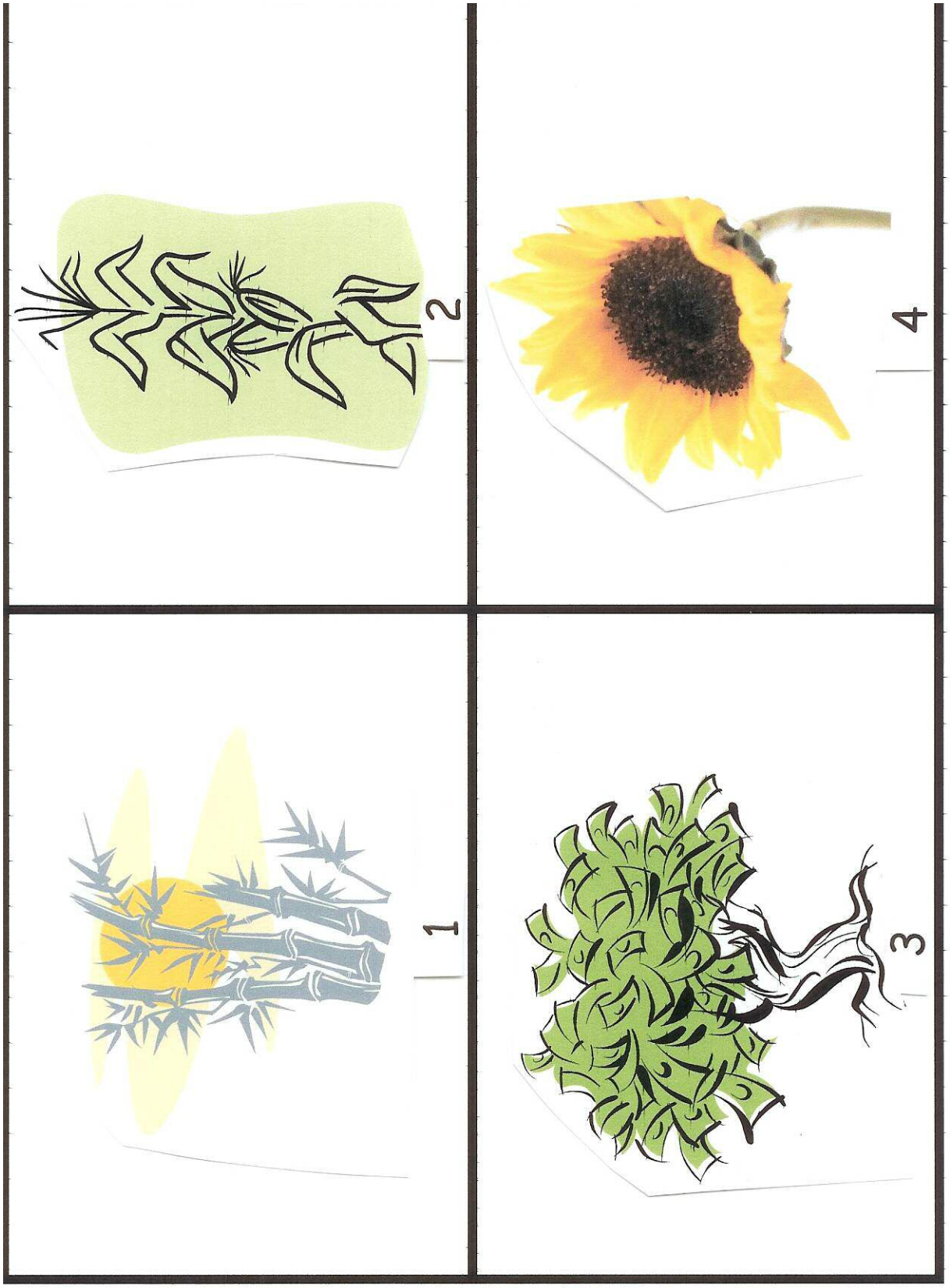


Appendix N
Receptive Vocabulary Measure (e)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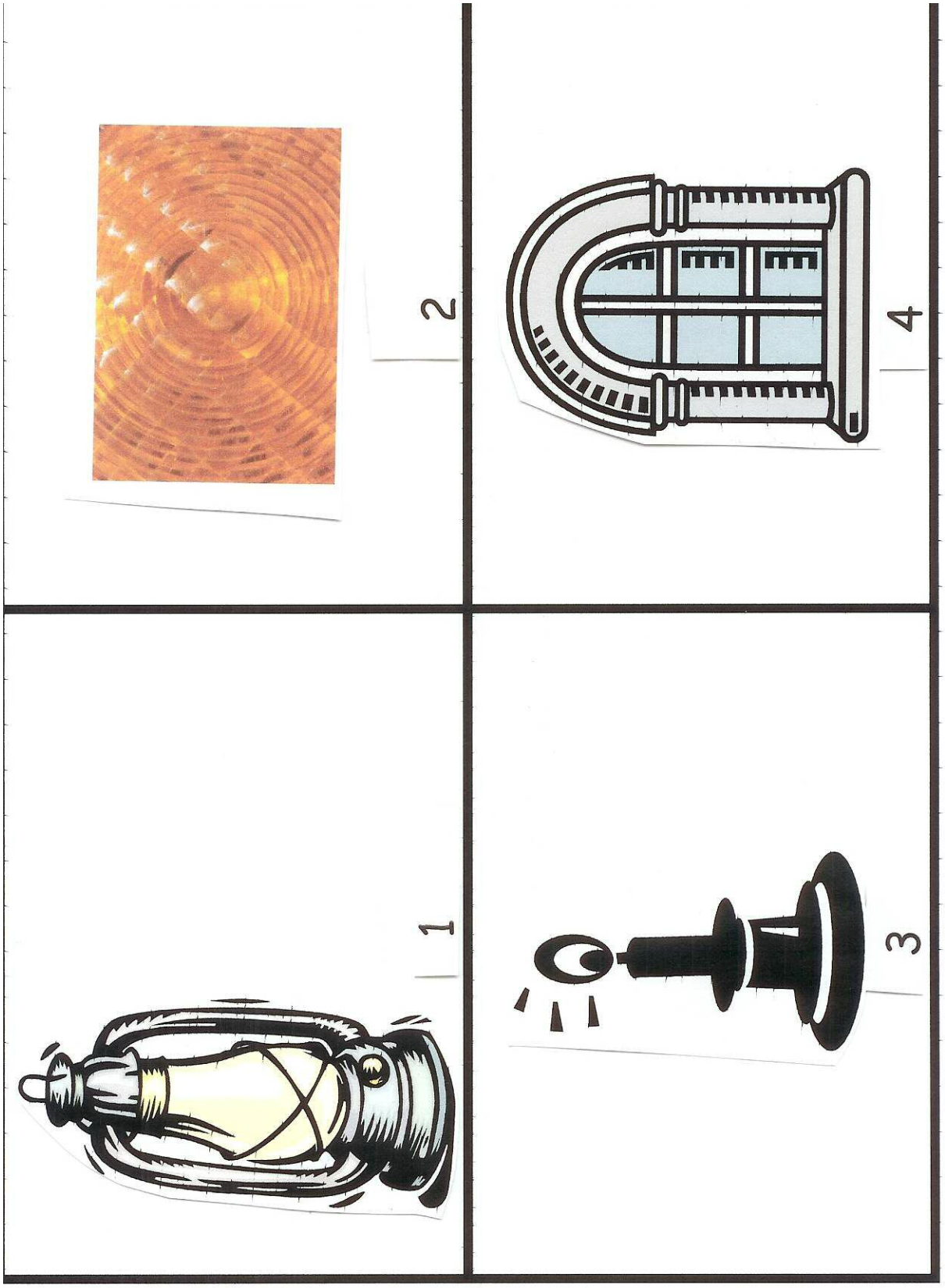
Appendix N
Receptive Vocabulary Measure (f)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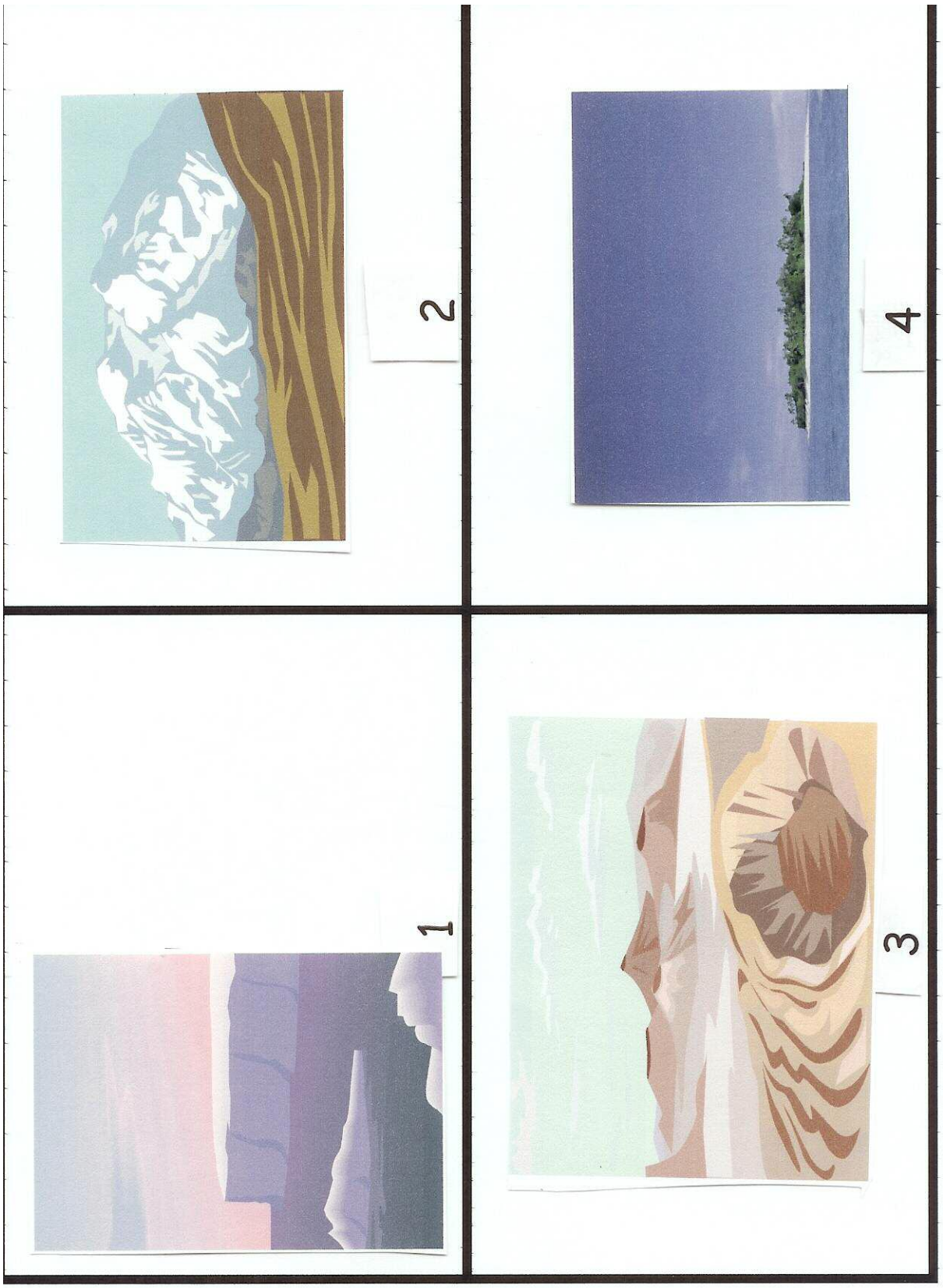
Appendix N
Receptive Vocabulary Measure (g)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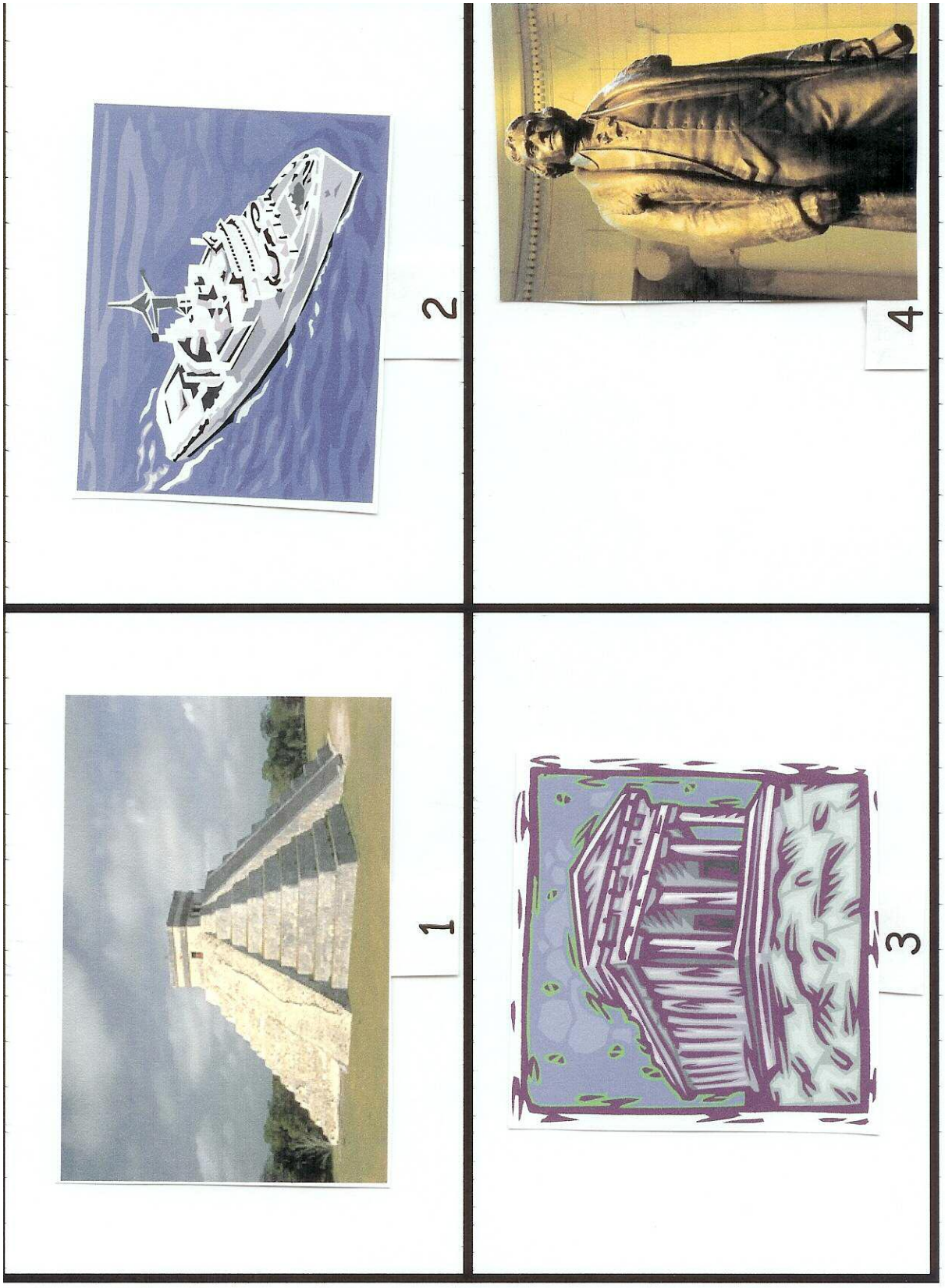
Appendix N
Receptive Vocabulary Measure (h)


2
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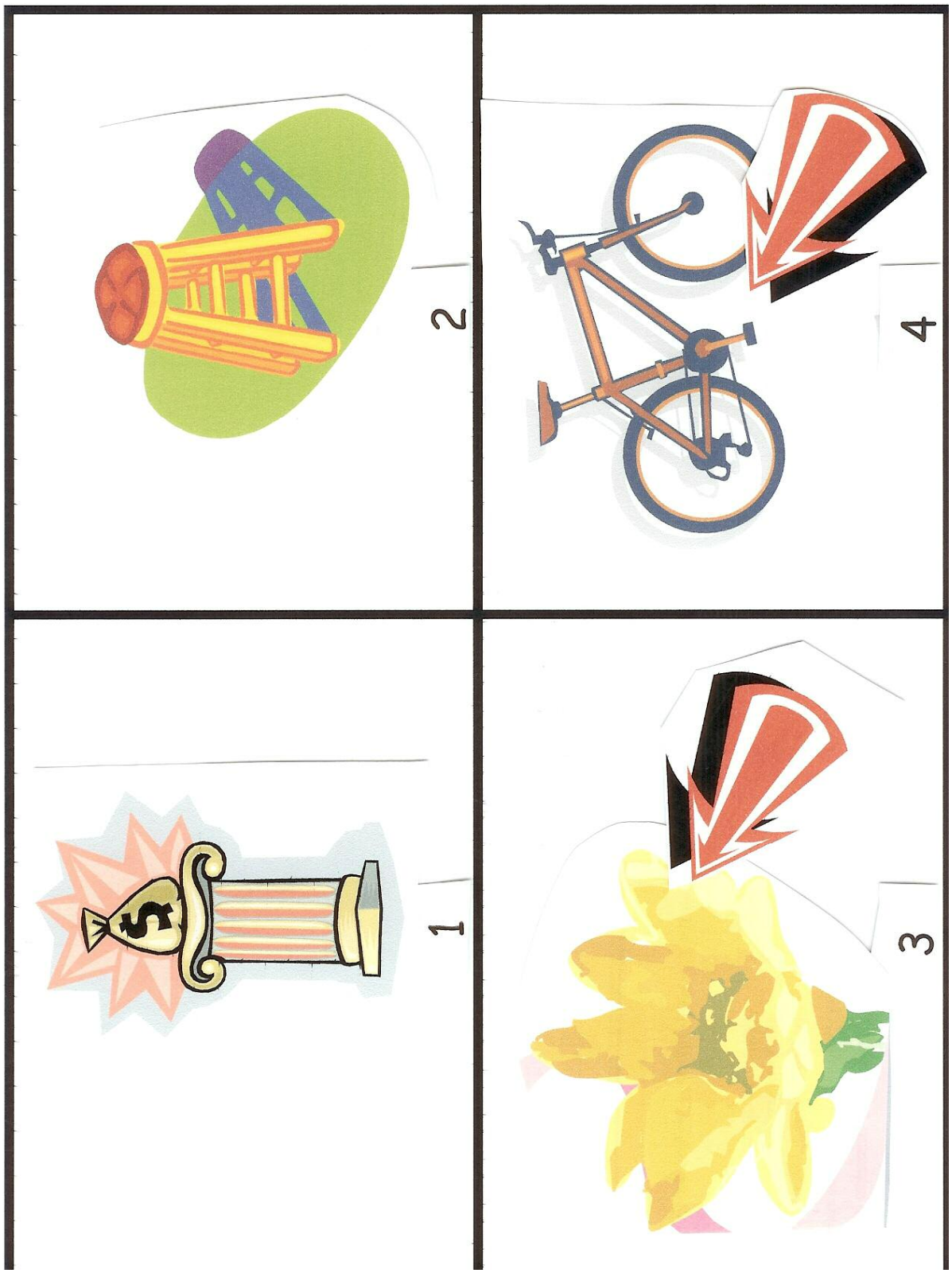
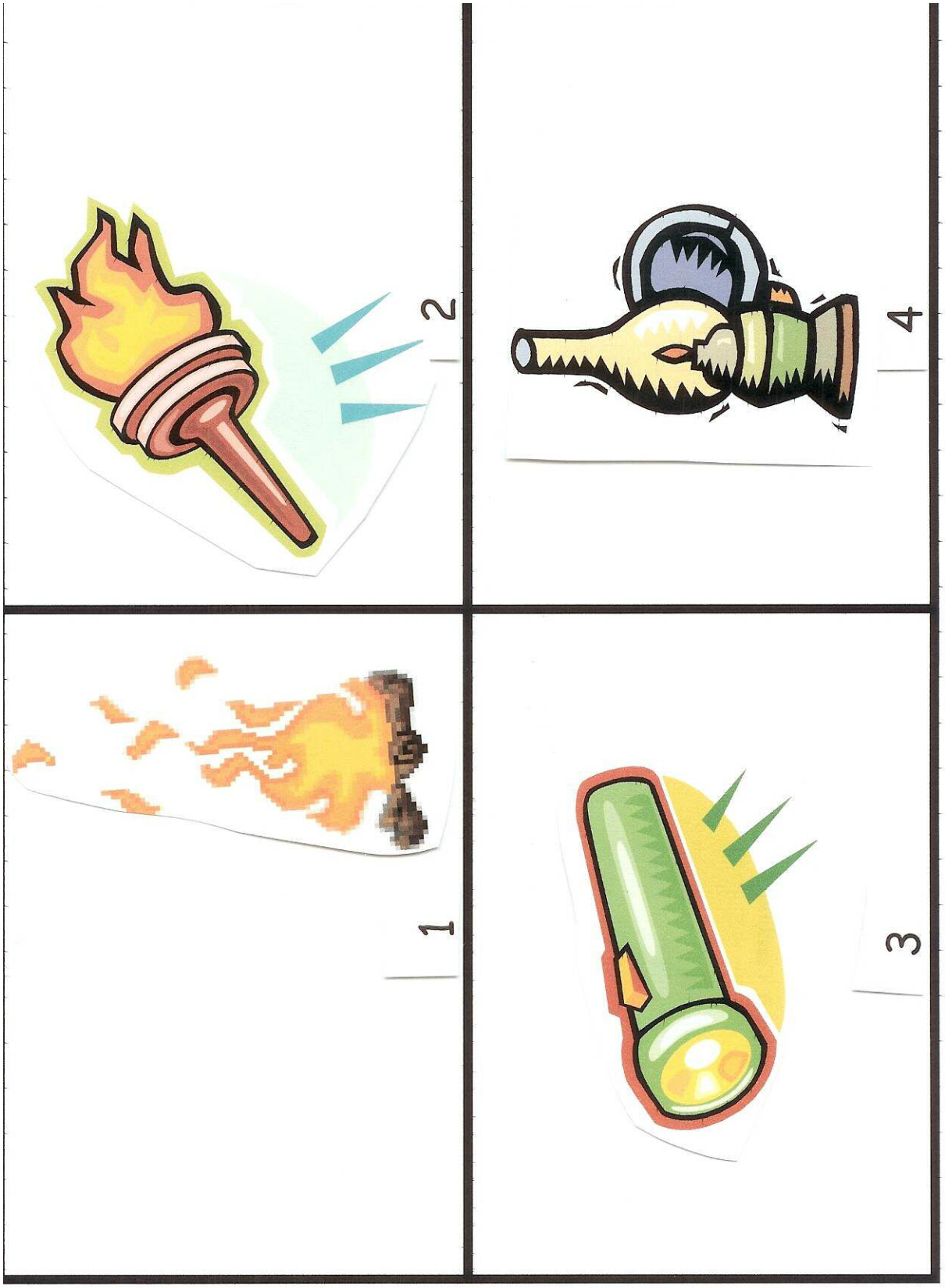
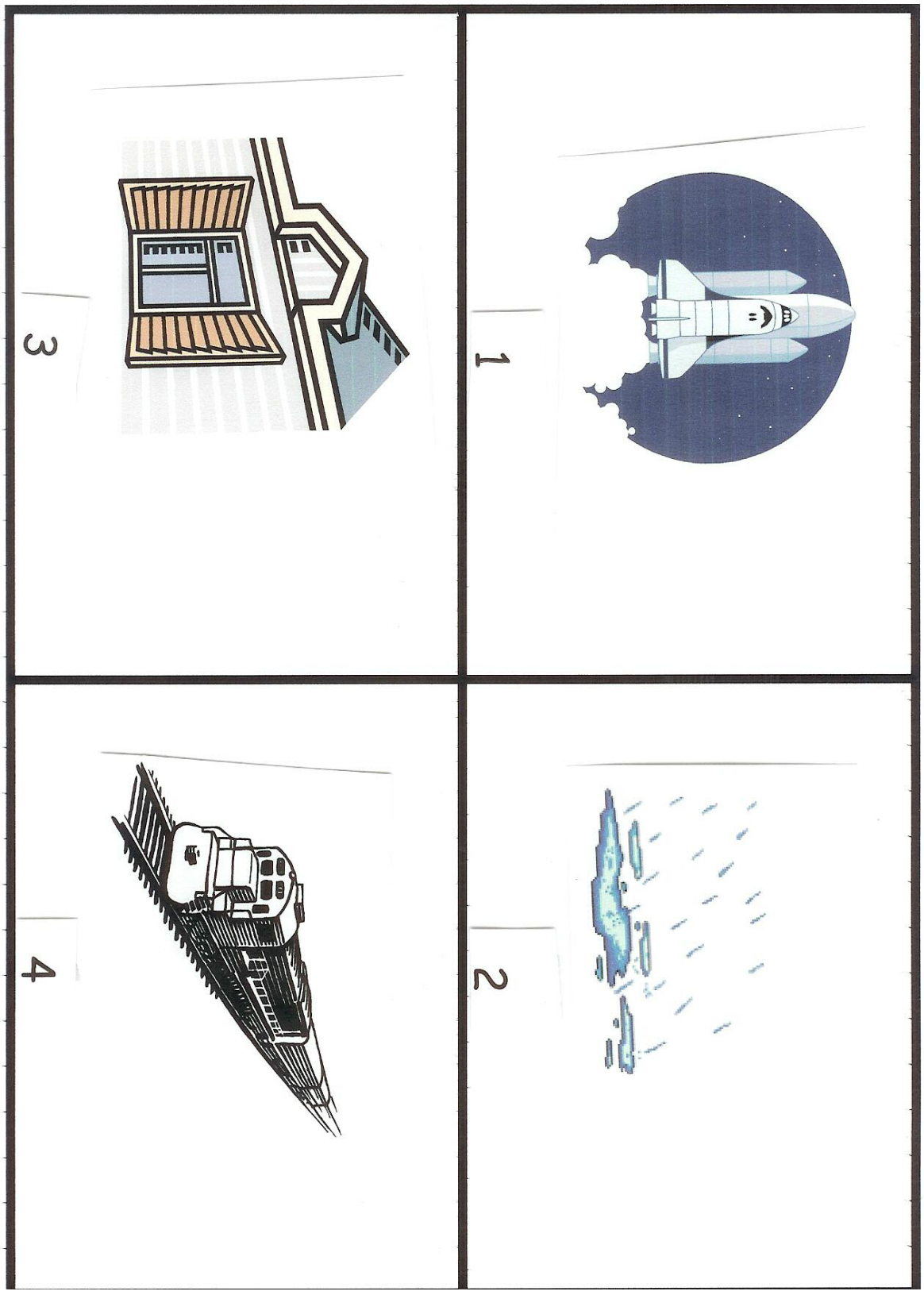
Appendix N
Receptive Vocabulary Measure (i)



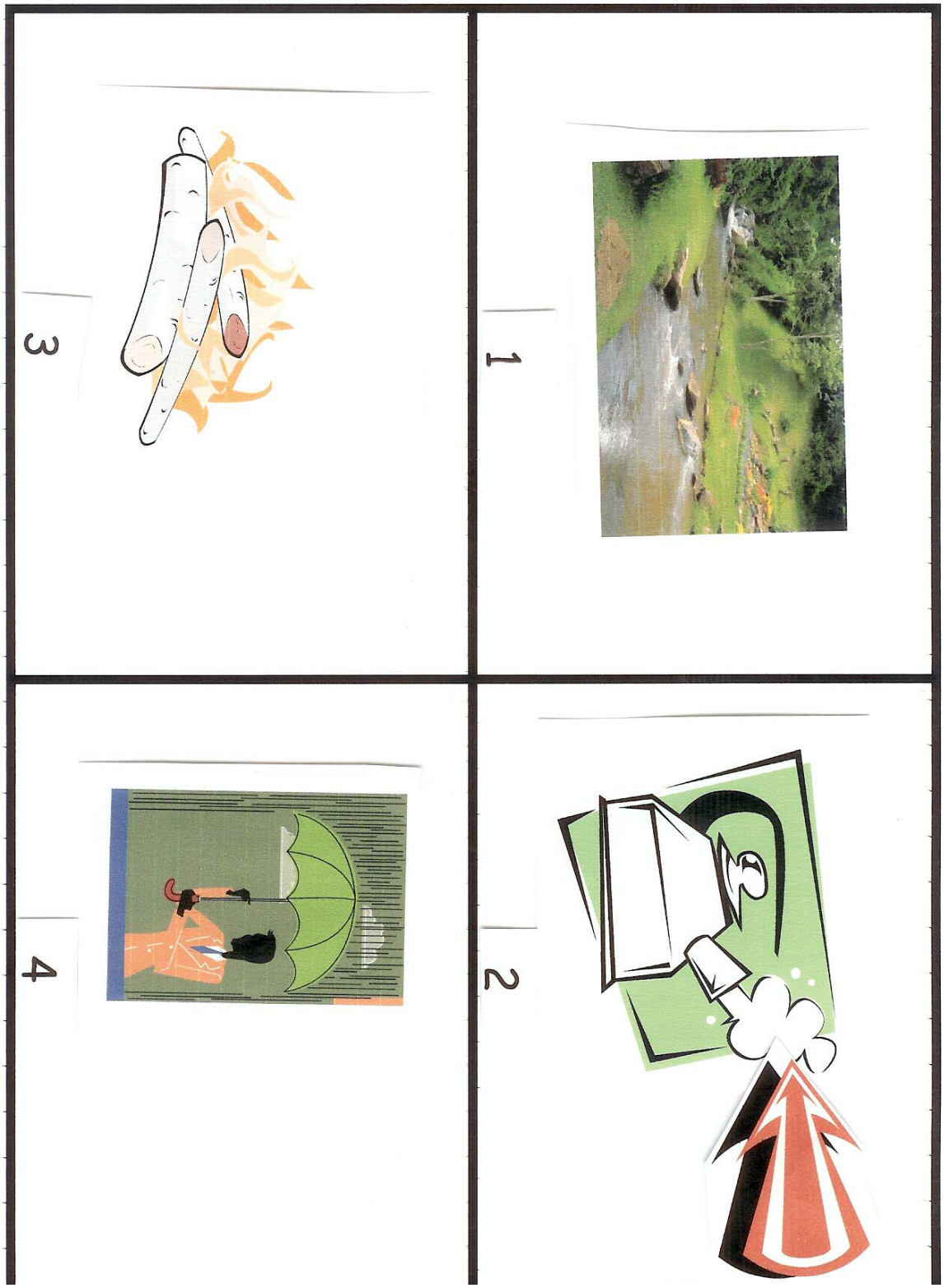
Appendix N
Receptive Vocabulary Measure (j)


2
4
1
3

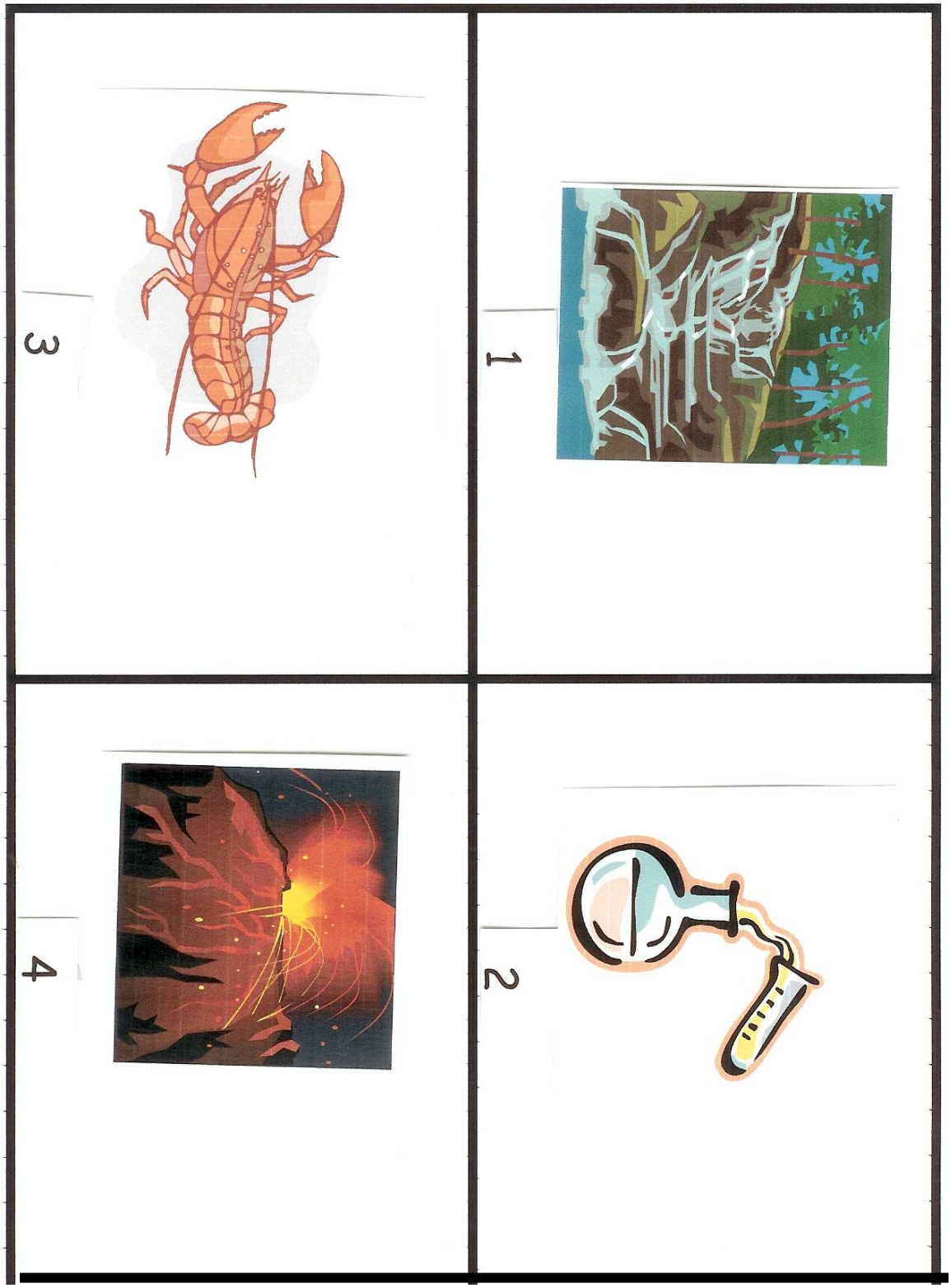
Appendix N
Receptive Vocabulary Measure (k)



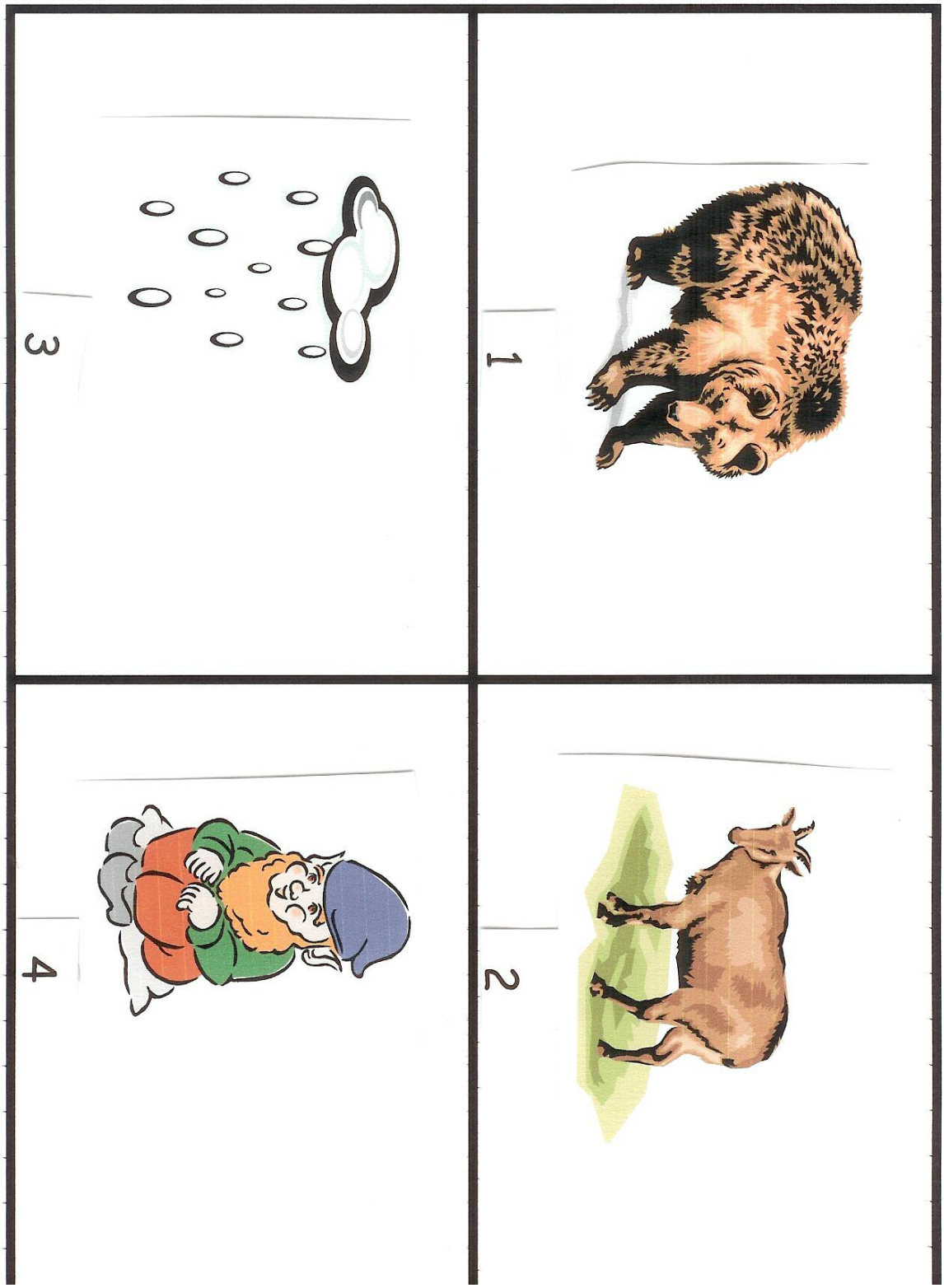
Appendix N
Receptive Vocabulary Measure (l)



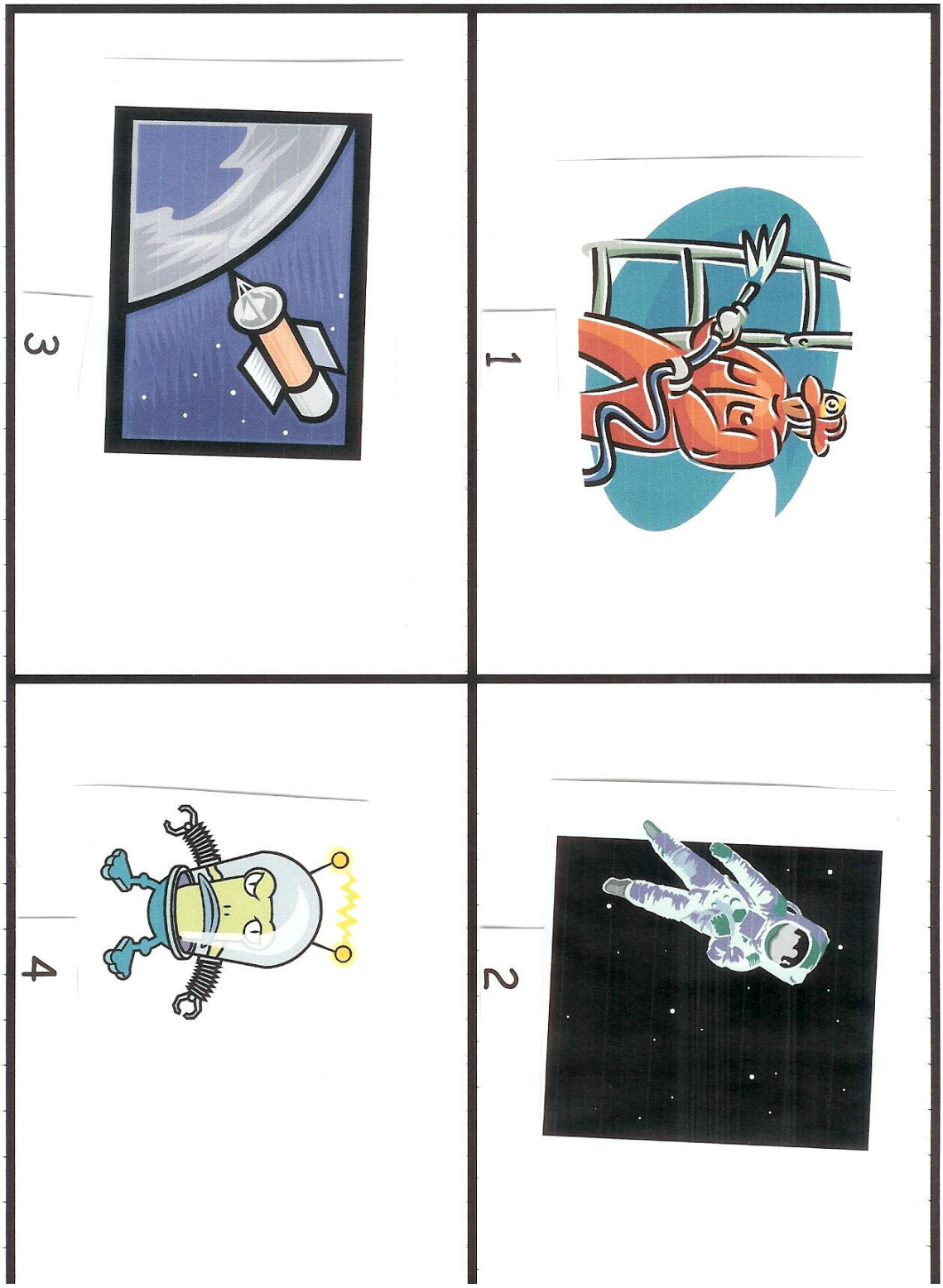
Appendix N
Receptive Vocabulary Measure (m)



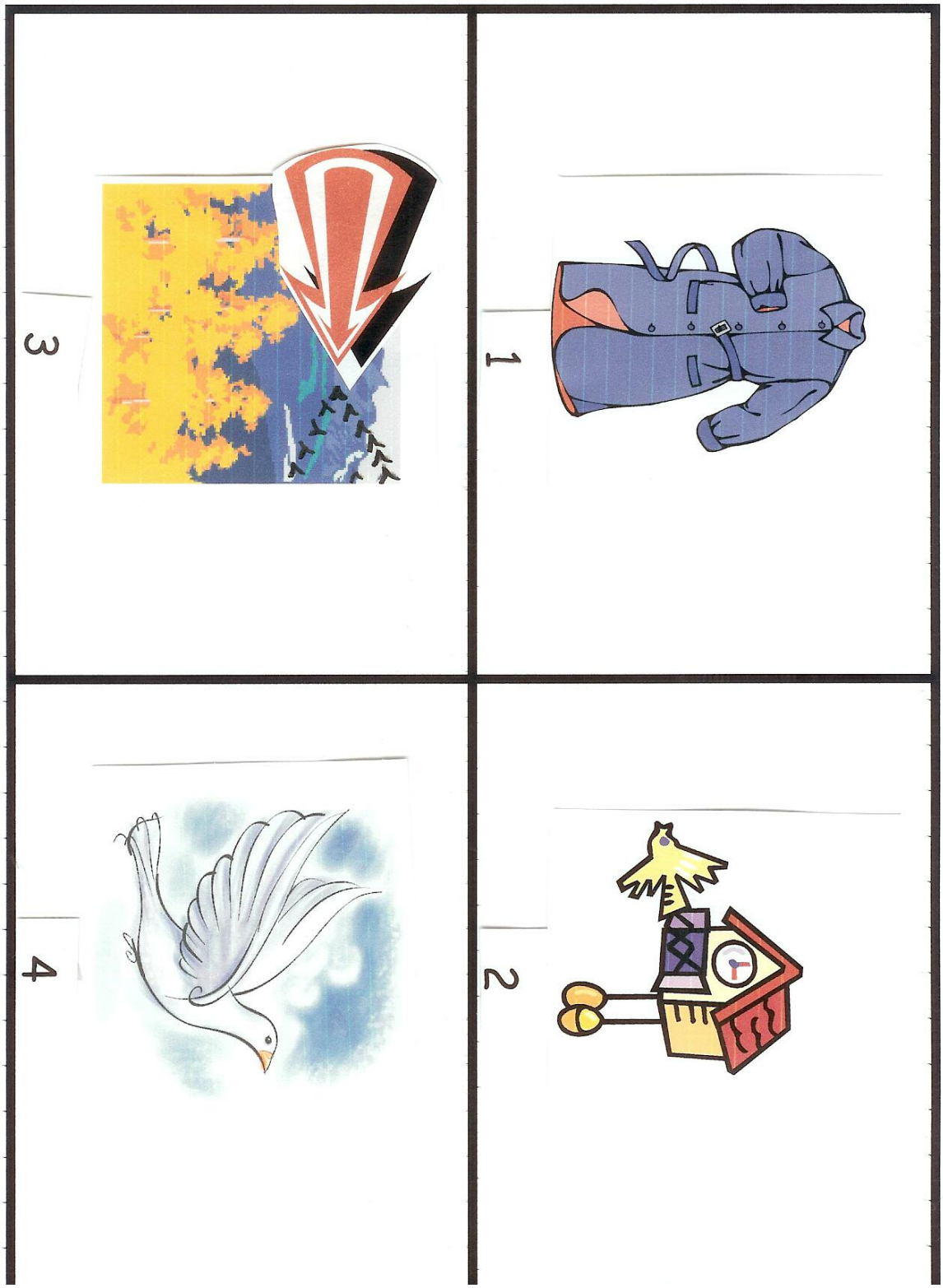
Appendix N
Receptive Vocabulary Measure (n)



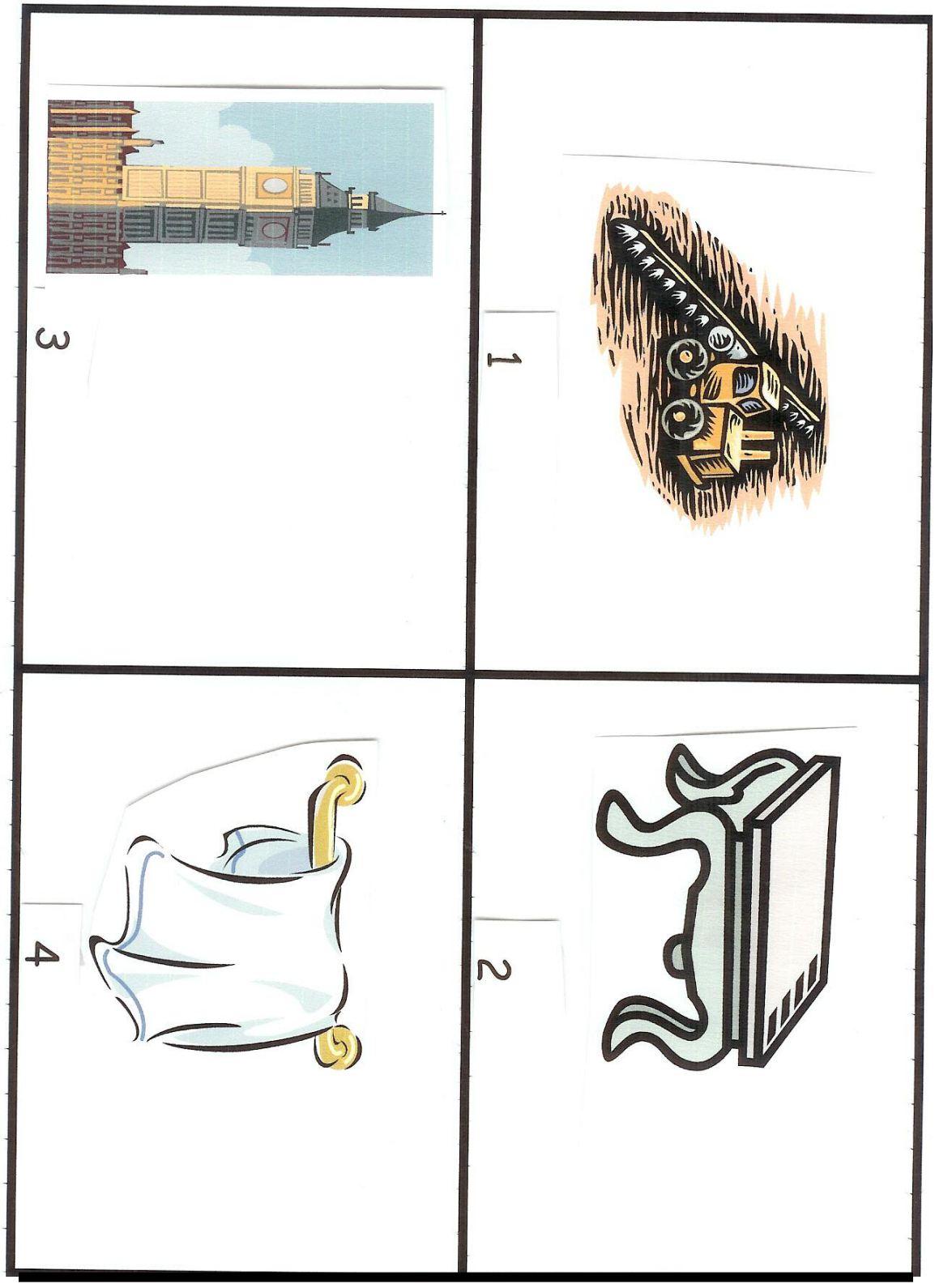
Appendix N
Receptive Vocabulary Measure (o)



Appendix N
Receptive Vocabulary Measure (p)



Appendix N
Receptive Vocabulary Measure (q)



Appendix O
Expressive Vocabulary Measure

Expressive Target Vocabulary Measure

Intervention or Control group child #_____
Pre-test or post-test

Instructions: Ask student to answer the following questions the best they can. Provide verbal emphasis to the target word. Record responses on form verbatim.
"I'm going to ask you what some words mean. You need to try your best to tell me what the words mean."

1. What does it mean to **migrate**?

2. What is a **herd**?

3. What does it mean to **erupt**?

4. What are **germs**?

5. What does it mean to **guide** something?

6. What does it mean to **warn** someone?

7. What is a **den**?

8. What is a **cub**?

9. What are **tropics**?

10. What does it mean to **expand**?

11. What does it mean to **communicate**?

12. What does it mean to be **athletic**?

13. What does it mean to do or say something **gently**?

14. What is a **habitat**?

15. What does it mean to **launch** something?

16. What is **fuel**?

Student gives a definition and is rated on a scale

1 2 3 4 5

1= not able to define term

2=defines term minimally with some inaccuracy

3=demonstrates minimal understanding of term

4=demonstrates some understanding of term

5= demonstrates understanding of term

Students' responses are recorded on form and scored by multiple raters after a training session.

Appendix P
Motivation to Read Measure

Intervention or Control group child #_____

Pre-test or Post-test

Motivation to Read Measure

Directions: Administer to student individually and orally. Repeat statement/choices as needed. Mark student responses.
Say: I am going to read some sentences about how you feel about reading and books. Some sentences are about nonfiction books. Nonfiction books are about real things, **not** make-believe stories. After I read the sentence, I'll give you four choices and you tell me the one that sounds most like you.

Sample items:
A) When we have pizza for lunch at school I feel_____

- ❒ Very happy
- ❒ Sort of happy
- ❒ Sort of unhappy
- ❒ unhappy

B) Playing soccer at recess is something I like to do.

- ❒ Often
- ❒ Sometimes
- ❒ Not very often
- ❒ Never

1. Reading a book is something I like to do.

- ❒ Never
- ❒ Not very often
- ❒ Sometimes
- ❒ Often

2. I like to choose nonfiction books to read.

- ❒ Often
- ❒ Sometimes
- ❒ Not very often
- ❒ Never

3. My best friends think reading is_____.

- ❒ Really fun
- ❒ Fun
- ❒ OK to do
- ❒ No fun at all

4. My best friends think reading nonfiction books is_____.
- ❒ Really fun
- ❒ Fun
- ❒ OK
- ❒ No fun at all

5. I tell my friends about what I learn when I read Nonfiction books.
- ❒ Never
- ❒ Not very often
- ❒ Sometimes
- ❒ Often

6. I tell my friends about good books I read.
- ❒ I never do this.
- ❒ I almost never do this.
- ❒ I do this some of the time.
- ❒ I do this a lot.

7. People who read a lot are _____.
- ❒ Very interesting
- ❒ Interesting
- ❒ Not very interesting
- ❒ Boring

8. People who read nonfiction books a lot_____
- ❒ Know lots of interesting information
- ❒ Know some interesting information
- ❒ Know the same things everyone does
- ❒ Don't know any interesting information

9. I think libraries are_____
- ❒ A great place to spend time
- ❒ An interesting place to spend time
- ❒ An OK place to spend time
- ❒ A boring place to spend time

10. I check out nonfiction books from the library_____
- ❒ Never
- ❒ Once in a while
- ❒ Almost every time I go
- ❒ Every time I go

11. Knowing how to read well is_____
    - ❒ Not very important
    - ❒ Sort of important
    - ❒ Important
    - ❒ Very important

12. Reading nonfiction books is_____
    - ❒ Really fun
    - ❒ Fun
    - ❒ OK
    - ❒ Not fun at all

13. I think reading is_____
    - ❒ A boring way to spend time
    - ❒ An OK way to spend time
    - ❒ An interesting way to spend time
    - ❒ A great way to spend time

14. I think reading nonfiction books is_____
    - ❒ Not as much fun as reading storybooks
    - ❒ Just as much fun as reading storybooks
    - ❒ More fun than reading story books
    - ❒ Much more fun than reading storybooks

15. When I grow up I will spend_____
    - ❒ None of my time reading
    - ❒ Very little of my time reading
    - ❒ Some of my time reading
    - ❒ A lot of my time reading

16. When I grow up I want to have_____
    - ❒ Lots of nonfiction books of my own
    - ❒ Some nonfiction books of my own
    - ❒ A few nonfiction books of my own
    - ❒ No nonfiction books of my own

17. I would like for my teacher to read books out loud to the class_____
    - ❒ Every day
    - ❒ Almost every day
    - ❒ Once in a while
    - ❒ Never

18. I would like my teacher to read nonfiction books to the class_____
    - ❒ Never
    - ❒ Once in while
    - ❒ Almost every day
    - ❒ Every day

19. When someone gives me a book for a present, I feel_____.
    - ❒ Very happy
    - ❒ Sort of happy
    - ❒ Sort of unhappy
    - ❒ Unhappy

20. If someone gave me a nonfiction book for a present I would feel_____.
    - ❒ Unhappy
    - ❒ Sort of unhappy
    - ❒ Sort of happy
    - ❒ Very happy

Appendix Q
Parent Program Evaluation Survey

Parent Survey: Evaluation of the "Book Club" Program

Circle the number that represents how you feel about the program:

1= disagree 2=somewhat disagree 3 = somewhat agree, 4= agree

1. I enjoyed learning how to do interactive read-alouds with my child.

   1 2 3 4

2. My child enjoyed the read-alouds of the non-fiction books sent home.

   1 2 3 4

3. I have seen my child become more interested in reading in general.

   1 2 3 4

4. I have seen my child become interested in learning more about a topic we read about.

   1 2 3 4

5. I have heard my child use words we encountered during our book reading at other times after we read.

   1 2 3 4

6. My child sees him/herself as a good reader.

   1 2 3 4

7. We have visited the library more often since taking part in the program.

   1 2 3 4

8. Participating in this program was easy.

   1 2 3 4

(continues on back)

Circle the number that represents how you feel about the program:

1= disagree 2=somewhat disagree 3 = somewhat agree, 4= agree

9. I plan to continue to do interactive read-alouds with my child after the program ends.

   1 2 3 4

10. The books my child brought home were interesting, of high quality, and promoted lots of interaction.

    1 2 3 4

Additional comments:

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