SHARED BOOK READING USING FICTIONAL AND INFORMATIONAL TEXTS:

THE EFFECTS OF GENRE ON INTERACTIVE BOOK READING

by

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ABSTRACT OF THE DISSERTATION

Shared Book Reading Using Fictional and Informational Texts:
The Effects of Genre on Interactive Book Reading

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Dr. Lesley Mandel Morrow

This study assesses the impact of genre on shared book reading and identifies factors that maximize children’s literacy development. It examined the physical and verbal interactions of eight parent-child dyads that include four boys and four girls, ages four and five. The dyads read two children’s books, one non-narrative informational and the other narrative fictional.

The researcher videotaped shared book reading sessions and analyzed the sessions using the Adult/Child Interactive Reading Inventory (ACIRI) (DeBruin-Parecki, 2007). The ACIRI assesses the frequency with which parents and children use interactive reading techniques during shared book reading. A statistical analysis determined differences in interactive reading behaviors according to book genre. Further, using semi-scripted questions, the researcher asked participants about their reading behaviors and compared their experiences reading both books.

The ACIRI test total found the children engaged in significantly \( t (14) = 2.460, p = .027 \) more interactive reading behaviors during shared book reading with an informational text than with a fictional text. This difference had a large effect size \( d = \)
Analysis shows that the informational text encourages more children's interactive reading behaviors that develop emergent literacy skills in comparison to the fictional text.

Qualitative analysis shows that informational book features such as pictures with captions, predictable texts, and a glossary support interactive reading behaviors. Further, children engage more with concrete, factual concepts and less with the inferred elements of the narrative text. The interviews with parents suggest parent preference is a major contributor to fiction's dominance at home. The inclusion of informational text for preschool children creates a condition that motivates the use of literacy behaviors, including expressive language, when compared to narrative and should be used more with young children.
DEDICATION

To my daughter Annika; whose growth as a person, intellect and reader inspired it all.

“It’s your fault--entirely.”
ACKNOWLEDGEMENTS

While this dissertation is the product of my own considerable efforts over several years, I could have not gotten to the end without the substantial help and support of scores of individuals. My gratitude extends to all who did their part and I ask for forgiveness by those accidentally omitted from this acknowledgement page; there are so many to thank that omissions are a certainty.

First, I want to thank Lesley Morrow who not only led, focused, and directed this dissertation, but who offered guidance from my first day at Rutgers in 2007. I can only begin to acknowledge my gratitude and debt; she has made her mark on me in the best possible way. Of course, the rest of my dissertation committee proved invaluable. My deep appreciation goes to Toni Kempler Rogat who stood out as one of my favorite teachers. I wanted her on my committee because I knew she had a lot to offer in the form of guidance and she never disappointed. Susan Golbeck earned my gratitude as she encouraged my thinking on many fronts and she helped me “run the numbers.” Without her able assistance, the quantitative section of my dissertation would not have been possible. Additionally, it has been a pleasure getting to know Heather Casey who joined the committee just weeks before defending my dissertation proposal. Despite having relatively little time to impact this dissertation, her contribution was profound. She was often the first to get back to me, and thanks to her, I have much more to think about regarding literacy and genre.

Without a doubt, I am grateful for those who helped me with the numbers. Significant among this group is Lynne Kowski. She was instrumental in supporting me through statistics, especially ANOVA and Regression; I was not going to get through on
my own. Also deserving recognition are two women who served as scorers using the ACIRI. Sheila Miles was a great help with the pilot study and Kellyanne Healey who was invaluable during the main study. It was harder than anyone would think and they stuck with it.

Because of my own childhood struggles with reading and writing, I plunged into the field of literacy. Unfortunately, to this day, I can be blind to my own drafting errors. Therefore, I offer a special thank you to those who saved me from my own writing mistakes. My gratitude goes to my proofreaders, Monica Baldwin, Breck Baldwin, Susan Adams, Mark N-P, Christine Patterson, and Indika Samarawickreme.

For proofreading above and beyond the call of duty, Jane Adams gets her own paragraph. I cannot adequately thank Jane. She is one of six people who, as of the writing of this acknowledgement page, has read the whole dissertation. Her influence and assistance impacts just about every page, and there are a lot of pages.

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CHAPTER 1 – INTRODUCTION

Purpose of the Study

How parents and children engage in shared book reading matters, yet few studies examine the parent/child use of informational texts during shared book reading. Given the potential benefits of using informational texts, such studies will be enlightening. Consequently, it is vital to understand parent/child shared book reading interactions that surround two different genres such as narrative and informational texts. An understanding of the similarities and differences guides efforts to extend the use of informational texts into the home. This trend, in turn, benefits children's literacy development.

Broadly, this study examines whether genre influences the quality of shared book reading. More specifically, it reports how parents and children interact with books using informational and narrative texts. It further compares and contrasts parent/child shared book reading interactions according to the genre of the text and further describes the interactive language used by the participants while using two contrasting genres. Identifying such differences has implications for how parents encourage the development of their children’s emergent literacy skills.

Benefits of Shared Book Reading

Bus (2001) explains that the frequency of shared book reading is a predictor of reading achievement, and that reading to children from an early age encourages an interest in books that is sustained throughout the child’s development. Further, research shows that parents lay a solid literacy foundation when they read a variety of genres aloud to their children (Duke, 2000). Despite the advantages of reading varied genres, fiction dominates the books used in reading aloud (Duke, 2000; Palincsar & Duke, 2004;
Yopp & Yopp, 2006), and the dominance of one genre has unfortunate consequences for children's future literacy development.

**Benefits of Varied Genres**

Every book is an example of at least one genre. Fictional stories, biographies, and science texts are all examples of genres. Genres represent differences in text that vary according to the book's purpose. According to Duke and Purcell-Gates (2003), different genres reflect differences in content, language, format and structure. Bruner (1991) takes this idea further. He makes the point that genre is not only "a property of a text," but also "a way of comprehending" (p.14). Bruner argues that the language we use shapes how we understand the world. That is to say, the structure of the language children experience shapes their thinking. This idea applies to the role of genre with shared book reading.

Theory and research indicate that children's early exposure to varied genres facilitates literacy (Duke, 2000), an assertion recognized by the influential Common Core State Standards (2010). Palincsar and Duke (2004) assert that exposure to a genre makes reading and writing that genre possible. More specifically, research has shown that the use of informational texts can build background knowledge and support content learning (Palincsar & Duke, 2004; Yopp & Yopp, 2012), which helps students engage with the real world (Calo, 2011). Informational texts further expose children to specialized vocabulary (Duke, 2000) and encourage different reading strategies (Duke, 2004; 2007). In some cases, it even encourages students to read more (Duke, 2007; Yopp & Yopp, 2012).
Informational Texts

Studies indicate that narrative texts dominate the reading experiences of primary school children (Palincsar & Duke, 2004) at the expense of informational texts (Pentimonti, Zucker, Justice, & Kaderavek, 2010). As an example, Duke (2000) found in a sample of 20 first grade classrooms, only 12.7 percent of the titles in classroom libraries from high SES schools were informational. Low SES classroom libraries fared worse, with 6.9 percent informational texts. Similarly, Yopp and Yopp (2006) surveyed 1,144 preschool to third grade teachers and found that only 8 percent of the books they read aloud to their students were informational.

This informational text shortage exists at home as well. Duke (2000) observes that parents are not aware of informational texts. Supporting this observation, a yearlong study of 20 middle class, ethnically diverse kindergarten parents by Yopp and Yopp (2006) revealed that just 7 percent of the books read aloud to the children were informational texts.

The shortage of informational texts has detrimental implications as the near exclusive use of narrative texts may be a barrier to children's full access to literacy (Pappas, 1991). Without early exposure to a range of other genres, and informational texts in particular, children struggle with literacy and do not develop strong informational reading and writing skills (Corria, 2011; Duke, 2004).

Distinguishing Shared Book Reading from Related Terms

Parents reading books to their children has become a daily routine in western literate families (Bus, 2001) and goes by many names. This study calls this practice of adults reading with children "shared book reading" along with "storybook reading."
Other terms include "interactive shared book reading," and "dialogic book reading." The term "storybook" implies the use of narrative fiction although the term can include informational texts. Additionally, interactive shared book reading and dialogic book reading entail specific behaviors meant to support literacy development.

**Shared book reading defined.** The influential National Early Literacy Panel Report (NELP) (2008) describes shared book reading as adults reading books with children. Their description also includes adults encouraging various interactions with children around books. This study uses the umbrella term “shared book reading” to encompass a range of terms that describe a conventional reader interacting with an emergent reader. The practice involves the use of a book, usually a book appropriate to the emergent reader’s abilities. Shared book reading generally supports literacy development and may be entertaining for all participants.

**Curriculum Change, NAEP and CCSS**

Schools are coming to understand the importance of informational texts and are feeling increasing pressure to use them in the classroom. The federally sponsored National Assessment of Educational Progress (NAEP) assesses national achievement in grades four, eight and twelve in several subject areas, including reading. NAEP assessments collect longitudinal data and rarely change (United States Department of Education, National Center for Educational Statistics, n.d.). However, the newest revision of the NAEP (2008) measures children’s progress in reading informational texts. In turn, the NAEP influenced the creation of the Common Core State Standards (CCSS) (2010).
The Council of Chief State School Officers and the National Governors Association led the creation of the CCSS (2010). The CCSS is replacing and reforming state educational standards (Duke, Caughlan, Juzwik & Martin, 2012). 43 states, the District of Columbia, Guam, American Samoa, Northern Mariana Islands, and the U.S. Virgin Islands adopted the CCSS (Common Core Standards State Standards Initiative, retrieved October 31, 2014). Recognizing students’ need to be proficient in reading informational texts in a range of content areas, the CCSS (2010) emphasizes informational texts in its English Language Arts Standards.

The CCSS (2010) sets standards for kindergarten through twelfth grade in public schools and works to ensure that students are college and career ready by the end of high school. To meet this goal, the CCSS requires both literary and informational texts in its English Language Arts standards starting at kindergarten. Because the CCSS is driving the curricular and high stakes testing decisions for school districts, it is highly influential; it is forcing an increasing emphasis on informational texts in public schools. Further, the standards comply with the reality that much work, as well as college and adult reading, is informational.

Parents' Opportunity with Informational Texts

While the CCSS (2010) is driving schools to work with greater numbers of informational texts, shared book reading at home represents another and potentially significant opportunity to support development in varied genres. The National Institute for Early Education Research (NIEER) recommends that parents purposefully work on the language of school (Espinosa, 2002). Parents are their children's first and most important teachers (Morrow, 2005; Promoting Healthy Families, 2008) and as such, they

Several researchers (Duke, 2000; Palincsar & Duke, 2004; Yopp & Yopp, 2006) clearly demonstrate the dominance of fiction within early childhood literacy instruction despite the benefits of informational texts (Calo, 2011; Duke, 2000, 2004, 2007; Palincsar & Duke, 2004; Yopp & Yopp, 2012). The question then becomes, why are informational texts so slowly becoming part of children's literacy experiences? The literature supporting this study suggests several possibilities. First, as implied by the shortage of informational books in libraries (Duke, 2000; Yopp & Yopp, 2006), informational texts are simply harder to come by. As will be discussed in more detail, another possibility comes from history. This line of reasoning suggests that fiction's dominance is the result of historical and cultural influences, and that informational texts are slow to make inroads against time and tradition. A third line of reasoning suggests that parents, teachers and children simply do not like reading informational texts. Yet, this seems unlikely. According to Duke (2000), parents enjoy reading informational texts their children; the CCSS (2010) has teachers reading more informational texts, and both Duke (2007) and Yopp and Yopp (2012) established that many children read more when exposed to informational texts.

This study proposes an additional line of reasoning. It may be that while Duke (2000) found parents enjoy reading informational books, it may also be that parents
and/or children read better with narrative fictional texts when compared to non-narrative informational texts. There may be something inherent to the genres that makes one more engaging or somehow different for parent and/or child during shared book reading. Consequently, parents may be more comfortable with fiction. Should such a difference exist, it would help understand an additional factor inhibiting the adoption of varied genres during early childhood.

This study initially hypothesized that parents prefer narrative fiction for storybook reading, which contributes to the greater use of the genre when compared to non-narrative fiction. Further, parents’ preference and comfort with narrative fiction will lead to more behaviors supporting literacy development.

Currently, researchers know little about parent and child engagement with informational texts during early childhood. Yet, more must be known if parents are to support their children's learning in varied genres. It is important to know how parents and children interact with informational texts in contrast to narrative texts during shared book reading. Consequently, this study asks three questions.

Research Questions

1) What is the nature of interactive behavior, including language, when parents read non-narrative informational texts?

2) What is the nature of interactive behavior, including language, when parents read narrative fictional texts to their children?

3) What are the similarities and differences found with interactive reading during narrative fictional texts and during non-narrative informational texts?
CHAPTER 2 - LITERATURE REVIEW

History, children’s literacy challenges, research, and theory frame this study. The literature review begins with a brief history of shared book reading and genre during early childhood. It next examines the fourth grade slump, an enduring literacy problem. Then, the review looks at shared book reading, a potential strategy for addressing the fourth grade slump. It further transitions to review research framing the study. This frame includes demonstrating the literacy benefits of shared book reading, and exploring research suggesting effective shared book reading practices. Finally, the review looks at two theoretical foundations that guide the development of the study: sociocultural learning theory, including the zone of proximal development, and emergent literacy.

Defining Narrative Fictional and Non-narrative Informational Texts

Before exploring the difference in narrative fiction and non-narrative informational texts, it is essential to understand the elements of each genre. Bruner (1991) explained his defining characteristics of the narrative. In contrast, Pappas (2006) listed the elements of informational texts.

Narrative fictional texts. Bruner (1991) identified 10 elements found in narrative texts. They are narrative diachronicity, particularity, intentional state entailment, hermeneutic composability, canonicity and breach, referentiality, genericness, normativeness, context sensitivity and negotiability, and narrative accrual. Narrative diachronicity requires stories to recount particular events over time. It further requires particular happenings to serve as a vehicle for the narrative. Particularity is specific application of a general rule within a narrative type. Bruner gives the example of love stories often require a gift as a love token where flowers, perfume or an endless golden
thread are the particularities that may fulfill the role. The intentional state entailment requires that characters choose how they respond to events; the audience must see the characters as having free will. Hermeneutic composability refers to the attempt by the author to transmit meaning and the reader’s effort to grasp textual meaning. Bruner notes the possibility that a reader will grasp a meaning other than the one intended by the author. Canonicity and breach requires that the characters' actions must have at least one breach of a culturally accepted norm. Further, the violation of that norm provides an opportunity to give the story meaning, often demonstrating a culturally desired behavior.

Referentiality requires that a story refer to truth without necessarily being fully truthful. Certainly, a fictional narrative must have inventions, but the story must have the feel of reality within the imagined fiction. Of obvious relevance to this study is genericness. It asserts that a text and its interpretation require the understanding of genre; it is especially important to understand the text’s particular genre. Normativeness is the cultural norm that must exist within a narrative. The aforementioned breach of canonicity must violate this normativeness. Context sensitivity and negotiability overlap with hermeneutic composability in that separate readers can interpret different meetings. It also asks the reader to plunge into the text, accepting the context that the author establishes, which may require suspending disbelief and accepting how the characters negotiate the portrayed reality. The last item, narrative accrual, is the effect the current and previous narratives have on creating and altering a reader’s paradigm. Bruner suggests it is akin to culture, which builds from a history of narratives to create a cumulative understanding. In addition to these terms, Bruner (1991) touches on how the individual will understand a text based on a script internal to the individual. Scripts are
understandings of how a story should unfold; it is the violation of scripts that highlight change and innovation. Table 2.1 summarizes Bruner’s (1991) and Pappas’s (2006) description of both genres.

Table 2.1

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<td>Diachronicity (Events understood over time)</td>
<td>Topic introduction</td>
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<tr>
<td>Particularity (Specific device meeting a genre expectation)</td>
<td>Topic defined</td>
<td></td>
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<tr>
<td>Intentional state entailment (Free will for characters)</td>
<td>Characteristic process</td>
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<tr>
<td>Hermeneutic composability (Story meaning)</td>
<td>Summary statement</td>
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<tr>
<td>Canonicity and breach (Breaking of a cultural norm)</td>
<td>Vocabulary review</td>
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<td>Referentiality (Verisimilitude)</td>
<td>Illustrations with explanatory labels</td>
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<tr>
<td>Genericness (Has genre)</td>
<td>Has genre</td>
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<td>Normativeness (Story must represent a cultural norm)</td>
<td>Category comparison</td>
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<tr>
<td>Context sensitivity and negotiability (Suspending disbelief)</td>
<td>Vocabulary recapitulation</td>
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<td>Narrative accrual (Sum of cultural experience)</td>
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Non-narrative informational text. Part of Bruner’s (1991) work can be helpful with understanding informational texts as well. His explanation of genericness suggests that informational texts have a structure particular to that genre. Further, it suggests that the reader must be familiar with the genre to understand a text.

Contrasting Bruner’s work on narrative, Pappas (2006), examined over 400 books to determine the genre features of children's informational texts. She purposefully separated books that were both narrative and informational from non-narrative informational texts. According to Pappas, non-narrative informational texts must have four textual features: the topic must be introduced, the topic must be defined, characteristic processes regarding the topic must be described, and there must be
summary statements regarding the topic. Topic-specific vocabulary reviewed at the end of the book is a frequent attribute of informational texts. Very commonly, Pappas also found illustrations with explanatory labels.

**Contrasting Fictional and Non-narrative Informational Texts**

Narrative fictional texts and non-narrative informational texts are significantly different in many ways. Missing from non-narrative texts are attempts to convey cultural norms. Non-narrative texts are not dependent on time for their structure. Informational texts do not necessarily have characters, and if they do, those characters may not fulfill the requirements of an intentional state. While an informational text will try to convey meaning, understanding that meaning is often literal and not implied as will often be the case with the canonicity and breach of fiction.

Similarly, narrative fiction does not have the same structure as non-narrative informational texts. Narrative fiction may give background for the beginning of a story, but it does not typically introduce a topic as is done with informational texts. Narrative fiction does not define the topic, and it does not usually describe characteristic processes. Summaries are also absent from most narratives, as are the explicit examples, definitions, and illustrations associated with vocabulary, as is often found with informational texts. Additionally, Pappas (2006) alludes to the frequency with which children’s informational texts use photographs instead of drawn illustration. To the researcher’s experience, children’s fiction frequently contains hand drawn illustrations while informational texts are likely to use photographs.


*Shared Book Reading and Informational Texts--a Brief History*

Researchers have known for more than a century that reading aloud to children is an essential foundation for literacy development (Huey, 2009), and the practice is certainly much older. Cotton Mather (b. 1663- d. 1728), a famous Puritan minister, taught his 16 children and 3 wives how to read, in part, by reading aloud (DeBruin-Parecki, 2007). What Cotton Mather knew more than 300 years ago remains true today as the benefits of reading aloud to children is well established (Morrow, 1990).

For most of American history, narrative fiction was secondary to other, more dominant forms of literature in primary grade classrooms. Before the American Revolutionary War, religious texts were prominent, many of which were narrative in form but considered informational by contemporaries. After the Revolution, educators worked to unify the new nation using patriotic non-fiction texts. Horace Mann's 1842 testimony in Fifth Annual Report of the Secretary to the Board of Education and McGuffey Readers suggested informational texts were in common use throughout 19th century America (Duke, Bennett-Armistead & Roberts, 2003).

At the end of the 19th century, graded reading textbooks, commonly called "readers," dominated literacy instruction. At the time, Charles Eliot, president of Harvard University, felt that readers were inadequate, as they provided watered down versions of the original works of literature. He called for the use of real literature in the classroom. Eliot's influence was such that his assertion began to bring fiction to dominance. Evidence suggests that during the 1920's, fiction came to the forefront of reading instruction, a position that it maintains until this day (Duke, Bennett-Armistead & Roberts, 2003). Ironically, it was also in the 1920's that research established the
importance of reading varied genres (Chall, Jacobs & Baldwin, 1990). Since then, attempts to address fiction's near ubiquity in early education have struggled.

Recent Forces against Informational Text

Despite the evidence showing the value of informational texts in early childhood, reforms have not taken hold. In 1990, Chall, Jacobs and Baldwin speculated that the emphasis on hands-on, experiential learning might have brought about the informational text shortage, at least in the middle grades and in low-income schools.

Despite Chall, Jacobs and Baldwin’s (1990) explicit recommendation for the use of informational texts during instruction, it may be that Chall’s work was a significant contributor in maintaining fiction's dominance. Ness (2011) hypothesizes that Chall's influential stage theory of reading may have unintentionally contributed to fiction's ubiquity. In Chall's (1996) theory, students before grade four are learning to connect the words and information that they already know to print, or more simply, learning to read. Then, in fourth grade, children start reading for a new reason; they are reading to learn new information.

Fourth Grade Slump

Unfortunately, many reading professionals may have misinterpreted Chall’s work to mean that students are not ready for informational texts until after fourth grade (Ness, 2011). Large numbers of children will read at appropriate levels through third grade, but then struggle in the fourth grade (Duke and Kays, 1998). Chall, Jacobs and Baldwin (1990) called this the fourth grade slump. The 2013 NAEP test (National Center for Education Statistics, 2013) suggests the problem is still with us. According to the test, 65% of US fourth graders scored below the proficient level in reading. The test report
indicates that the children were not able to interpret and integrate texts to evaluate and develop conclusions from the texts. Additionally, the NAEP uses multiple genres.

Further suggesting the importance of genre, Shanahan and Shanahan (2008) note that a national trend emphasizing early reading instruction has paid off for nine-year-olds who were reading better in 2008 than they were in 1993, but those reading gains disappeared by eighth grade. Shanahan and Shanahan believe this is because students are unable to adapt to reading within academic genres.

Previous to the implementation of the Common Core State Standards (2010), curriculums frequently began emphasizing informational texts in fourth grade (Duke & Kays, 1998). At the fourth grade transition, students must start contending with increasingly difficult texts, which are more complex, both informationally and linguistically. As Fang (2012) explains, students must develop control of increasingly sophisticated and challenging language to construct meaning within varied disciplines. Ogle and Blachowicz (2002) assert that the cause of the fourth grade slump is a failure by students to fully transition from familiar narrative texts in the primary grades to more varied genres expected in late elementary.

Regrettably, students who fall behind in reading at this point stay behind for the rest of their academic careers unless extraordinary measures change the student’s trajectory (Chall, Jacobs & Baldwin, 1990). Yet, this problem is not without solutions. Duke and Kays (1998) speculate that exposing children to informational texts earlier in life will help prevent later reading problems. However, when should this early exposure start?
When Intervene?

Little genre-specific research suggests the best age to introduce informational text to children. However, indirect lines of reasoning suggest advantages to introducing varied genres during the earliest literacy experiences at home.

The work of several researchers indicates that a good start during early literacy leads to improved literacy outcomes. For example, in a longitudinal study, Juel (1988) found children who were behind in first grade had an 88 percent chance of remaining behind in fourth grade. Further, Storch and Whitehurst (2001) point out that children who arrive to school with literacy deficits generally stay behind, and those who are ahead stay ahead during their school careers. Thus, supporting literacy development before a child enters school is the ideal.

As demonstrated by Manz, Hughes, Barnabas, Bracaliello and Ginsburg-Block (2010), home literacy interventions are effective. These researchers created a descriptive review and meta-analysis of 31 descriptive studies and 14 experimental and quasi-experimental studies. The studies looked at family-based emergent literacy interventions that focused on ethnic minorities and low-income families, and examined the two to six-years-old children within those groups. Their study found that home interventions are effective, and on average, improve children's reading readiness more effectively than school interventions.

Collectively, Juel (1988), Storch and Whitehurst (2001), and Manz et al. (2010) suggest that it may be best to address the fourth grade slump at home and during early childhood. This view, in turn, supports the advice of Morrow, Freitag and Gambrell (2009), who explain the benefits of parents’ working with their children on literacy.
They state, "When families provide a rich literacy environment at home, teaching reading and writing becomes easier for both the teacher and the child at school" (p. 83). Clearly, children's early literacy experiences are important. This suggests that exposing children to informational texts before they enter school could be part of an improved literacy foundation. Of course, a natural opportunity is for parents to expose their children to informational texts during shared book reading.

**Shared Book Reading**

Shared book reading is an effective strategy for building emergent literacy skills (National Institute for Literacy, 2008; What Works Clearinghouse, 2007a; 2007b), which support the development of conventional literacy (National Institute for Literacy, 2008). De Temple and Snow (2003) contend that shared book reading with pre-school children is major source of vocabulary development, which is in turn a major contributor to later academic success, a finding supported by the National Reading Panel (National Institute of Child Health and Human Development, 2000). Similarly, the National Early Literacy Panel's (National Institute for Literacy & National Center for Family Literacy, 2008) meta-analysis determined that shared book reading supports children's later print knowledge.

However, not all studies show a benefit for shared book reading. Evans, Shaw and Bell (2000) found that shared book reading at home did not predict later literacy skills in kindergarten. Similarly, the National Early Literacy Panel's report (2008) concluded that evidence does not support shared book reading as a tool for improving conventional literacy skills, and a What Works Clearinghouse (2007b) meta-analysis claimed mixed results for shared book reading. A close reading of the research indicates,
however, that these results do not indicate a problem with shared book reading *per se*, but instead reflect differences in how parents engage in shared book reading activities (What Works Clearinghouse, 2007a; 2007b).

**Best Parental Shared Book Reading Practices**

All instructional interactions between parents and children during shared book reading are not the same. Frequently parents engage in shared book reading and support their child’s literacy development with additional behaviors. Recent studies indicate how parents engage in shared book reading impacts the development of emergent literacy skills (DeBruin-Parecki, 2007; Pomerantz, Moorman, & Litwack, 2007; What Works Clearinghouse, 2006; 2007a). In fact, Morrow and Gambrell (2001) explain that interactive behaviors enhance literacy development. Consequently, researchers have developed interactive shared reading as an effective strategy for shared book reading.

**Interactive Shared Book Reading**

In a room full of objects and at least one additional person, it makes sense that an adult must bring an emergent reader's attention to the storybook. Nevills and Wolfe (2009) found that adults have the ability to involve children in the reading process and help them more efficiently learn about reading. As Morrow (1985) explains, adults supporting children's active storybook engagement improves children's literacy development. One proven method for involving emergent readers in reading is interactive shared book reading.

knowledgeable other person, usually an adult, to which both contribute. Parents read, comment, ask questions, and point to the illustrations. Children point, make comments, and answer questions" (p. 39). These definitions suggest that interactive shared book reading is a set of techniques designed to focus an emergent reader's attention on the salient book features, develop a foundation for comprehension, and to create an environment that is emotionally supportive of reading.

**Vygotsky**

Vygotsky's theory of learning puts forth that literacy has its origins in social interactions and suggests that parents have a critical role in developing their children's literacy skills. Specifically, this study proposal connects Vygotsky's conceptualization of sociocultural learning to parent behaviors during shared book reading. According to Vygotsky (1978), "human learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them" (p. 88). Quite simply, parent and child interactions allow literacy to develop within the child.

While Vygotsky can potentially explain the development of literacy skills with his explanations for the development of language, symbols (reading) and writing, it is his ideas on sociocultural learning are most influential on this shared book reading study. As Bruner (1985) explained, Vygotsky showed that social interaction is the basic vehicle of education. Social interaction is the foundation of Vygotsky's work on the zone of proximal development; this in turn supports Bruner's work on scaffolding.

**Sociocultural Learning as Conceptualized by Vygotsky**

Vygotsky's (1978) sociocultural learning theory holds that a change in thinking begins with social interactions that then lead to cognitive changes. He contends that a
child's behavior comes from two sources, one biological and the other social. For Vygotsky, the "elementary processes" are behaviors of biological origin that do not lead to constructs of higher thinking. The other process comprises higher psychological functions, which have sociocultural origins; that is to say, children learn higher psychological functions through social interactions. It is these higher psychological functions that include literacy along with many forms of reasoning and thinking. Ultimately, in the Vygotskian view, literacy, like other forms of higher thought, grows out of social interactions.

Vygotsky (1978) explains that the sociogenesis of higher order thinking begins with a mother and child. He gives the example of a child grasping for a desired object that is out of reach. The child will reach in the direction of an object, but it remains out of reach. The mother sees her child reaching, determines which object the child wants, and gives it to her baby. Not only is the mother/child interaction social, the child learns that another person can provide a desired object. After repeating this reaching/receiving exercise several times, the child learns that the path to the object lies within another person.

Notably, when a child realizes he or she can get such objects in the future with the reaching gesture, the reaching gesture becomes a sign. Both the parent and child realize that the pointing gesture is a sign for attaining a desired object (Vygotsky, 1978). From this social beginning, pointing then becomes the child's first foray into social tools.

*Mastering Memory and Thinking*

Vygotsky (1978) explains that people remember with the help of signs. When the child points to a desired object, the child is using past experiences to remember that the
pointing gesture/sign was a successful social interaction that gave the child the desired object. Consequently, when the child purposely points towards an object, the child is remembering that this action was successful in the past. Thus, the child links a memory and a sign.

Vygotsky (1978) explains signs not only "makes fragments of the past more available, but also results in a new method of uniting the elements of the past experience with the present" (p. 36). Thus, a memory brings the past into the moment and becomes useful for the child. Increasingly, children make connections between signs and events.

According to Vygotsky (1978), signs include many things beyond gestures, such as spoken and printed words. Together, the sign not only facilitates social interactions, but the process allows the individual to "extend the operation of memory beyond the biological dimensions of the human nervous system" (Vygotsky, 1978, p. 39). Because we easily use signs, humans develop their memories to great effect. Bandura (1986) extends this idea by explaining that if we remembered each experienced event exactly as we experienced it, we would not be able to see similarities between memories; each event would be unique. Instead, signs allow us to make connections between events.

Thus, with the help of the mother, the child learns that spoken words are substitutes for "objects, persons, actions, states, or desires" (Vygotsky, 1986, p. 82), and the child starts to understand the need for words. As each word becomes a sign, it serves as a mental substitute for the real thing. Thus, we do not need to see an elephant to talk about one, but can simply use the word "elephant" to represent the animal. As Vygotsky said, "Thought and speech turn out to be the key to the nature of human consciousness" (p. 256). As part of the process of words becoming thoughts, words and other signs must
become internal to the person; they must be internalized. Of course, it is not just spoken words that serve as signs. Printed words are signs which are cultural tools internalized by the child.

**Social Interaction Leads to Internalization**

The fact that human beings interact and are social is readily apparent. What is less clear is what constitutes learning. For the purposes of this study, learning is the internalization of concepts, and those concepts take the form of signs. According to Vygotsky (1978), thought connects to word via external speech. External speech is speech intended for others to hear and is inherently social. Then, what was originally an external, social operation becomes an internal one. As the child develops, he or she learns to use words to assist with the completion of complex tasks.

Vygotsky (1978) writes of how children, age four or five, will couple talk with action, and solve problems. He called this process of speaking aloud without an intended audience “egocentric speech.” Vygotsky observed that if children cannot engage in social speech while solving a problem, they quickly switch to egocentric speech. The child will quite literally talk him or herself though a problem, but the child is only talking to him or herself.

Vygotsky (1978) saw egocentric speech as the intermediate point between external and internal speech. The child was starting to use words for planning, acting and solving problems, but the child still needed to speak the words. With time, the child internalizes this process; the egocentric speech dies away, replaced by inner speech. With inner speech, the child will continue to use words to solve problems, but those
words remain unspoken; they are internalized. Consequently, the child does the entire process within the mind.

*Sociocultural Learning Theory’s Importance to Current Literacy Research*

Vygotsky's theory serves as a foundation to elaborate teaching and learning models. This next section examines an elaboration of Vygotsky's sociocultural learning concept. Included is his theory of the zone of proximal development and scaffolding.

*Sociocultural Learning Theory and the Zone of Proximal Development*

In contemplating how social interaction leads to internalization, Vygotsky (1978, 1986) developed his notion of the zone of proximal development (ZPD). Vygotsky observed that what a child does at a particular moment should not be the focus of interest. Instead, it is the child's potential for mental development that is important; that is, it is the child's potential, not his or her achievement that matters.

Vygotsky proposed the ZPD to describe this gap between current ability and potential. Vygotsky (1978) explained the ZPD as the child’s psychological functions that have not yet matured, but are in the process of maturing. This process begins long before a child enters school; Vygotsky even claimed that it begins from "the very first day of life" (p.84). Vygotsky defined the ZPD by explaining, "It is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). Of course, collaborating with others makes working in the ZPD an inherently social process.

Vygotsky's (1978, 1986) zone of proximal development makes a fundamental point for educators: the teacher or tutor must work at a level ahead of what the child can
already do on his or her own; instruction must be in front of the child's current intellectual development. Vygotsky (1978) elaborated on this point by explaining that what a child can do with help today can be done by the child alone tomorrow. Of course, there are limits to the ZPD. The child's mental development is limited and there are points beyond which the child's learning cannot stretch. To illustrate the point, Vygotsky gave the example of math. While an elementary age child may be able to imitate an arithmetic problem independently, the same child will not successfully imitate a calculus function, no matter how well demonstrated.

In his writings, Vygotsky left several holes in his discussion of the ZPD. Vygotsky (1978) claimed that the ZPD would vary according to a child's development and even the school subject; he did not describe these variations nor did he elucidate how to take advantage of the ZPD. While he called for more research, he died at an early age and left this work undone. Thus, several questions remained unanswered by Vygotsky. Fortunately, other researchers took up the challenge.

Sociocultural Learning and Scaffolding

One question is particularly relevant to teaching: what are the best methods for working within in the ZPD? Wood, Bruner and Ross (1976), who coined the term "scaffolding," provide an answer. Scaffolding elegantly fills the need of describing a process by which a more expert other may work in the ZPD with a child. For Bruner (1985), scaffolding is the social process by which a child may "internaliz(e) external knowledge and convert it into a tool for conscious control" (p. 25).

The term scaffolding is a metaphor. In construction, workers erect a scaffold to assist in the creation of a building, which they remove when the building is completed.
For Wood, Bruner and Ross, a scaffold is support put in place while the child is learning something new. The scaffold comes in the form of an adult or a more able peer who helps prop up the child's learning. The more capable individual removes the scaffold as the child learns to accomplish the task without assistance (Smidt, 2009).

Wood, Bruner, and Ross (1976) more explicitly describe scaffolding as enabling "a child or novice to solve a problem, carry out a task or achieve a goal which would be beyond his unassisted efforts. This scaffolding consists of the adult 'controlling' those elements of the tasks that are initially beyond the learner's capacity, thus permitting him to concentrate upon and complete only those elements that are within his range of competence" (p. 90).

Wood and company (1976) explain that scaffolding requires six elements: recruitment, reduction in degrees of freedom, direction maintenance, marking critical features, frustration control and demonstration. The researchers noted that children will have their own agenda, and recruitment requires the adult to focus attention on the task at hand. From the child’s perspective, there are a seemingly infinite number of possibilities for action. Thus, it is important to have reductions in degrees of freedom by means of simplifying tasks into components that the learner can manage. As the child can easily be distracted, direction maintenance requires the tutor to keep the learner on task. Marking critical features has the tutor work with the learner; the tutor identifies important aspects of the task. Thus, the child learns what is essential and what is superfluous. In addition, the child can be easily flustered and give up on a task, so frustration control is important. Finally, the child must know what he or she is trying to accomplish; “demonstration” is
modeling or completing the task in the presence of the learner, perhaps with the task readjusted to the needs of the learner.

*Relevance to Current Study*

Vygotsky’s (1978, 1986) sociocultural learning theory and the ZPD provide a model to describe how parents reading to their children can develop the children’s literacy skill. In Vygotskian terms, parents can provide children with ample opportunities to develop signs that eventually lead to independent reading. The ZPD also suggests how parents can facilitate the creation of such signs. The work of Wood, Bruner and Ross (1976) explains how parents can scaffold children’s learning and most effectively work within the ZPD. In turn, this view suggests that it is possible to identify and observe parent behaviors that will effectively support children’s literacy development during shared book reading.

*Emergent Literacy*

In the 1960's, new research techniques emerged in the field of early literacy, leading to fresh understandings and a paradigm shift. Before the development of the emergent literacy model, Morrow (2005) describes how teachers used the "reading readiness" model and waited until children adequately matured before beginning reading instruction. As a standard, many teachers waited until standardized testing indicated that children had attained a mental age of 6.5 years before beginning literacy instruction. Then reading readiness gave way to a new idea, "emergent literacy."

First used by Clay, emergent literacy is associated with her seminal work. Clay was interested in the time before children were ready to read in the conventional sense. In the emergent literacy paradigm, Clay determined that it is not necessary to wait until
children are ready to read, but instead it is appropriate to begin forms of literacy instruction from an early age (Morrow, 2005).

**Emergent Literacy Theory**

The literacy skills possessed by a child before developing conventional literacy skills are described as emergent literacy. Morrow (2005) explains that emergent literacy "refers to a child's early unconventional attempts at reading, writing and listening" (p. 394). Consider a child attempting to "read" a book based on the book's pictures and not the text. The child is demonstrating an emerging understanding that books contain meaning, but has not developed the conventional ability of decoding print.

In addition to early reading, emergent literacy also includes the development of oral language and emergent writing, all of which is essential to the child's later conventional reading and writing. Eisenberg, Murkoff and Hathaway (1996) explain that toddlers are talking before their parents understand their children are saying something. As examples, toddlers use sounds such as "uh" for up and "ba-ba" for bottle before learning to speak in fully formed sentences. Schickedanz and Casbergue (2009) describe a range of children's non-conventional writing. They explain that writing frequently begins when toddlers delight in being able to make marks on paper. With time, children start to reproduce the features of print, such as copying the linear direction of print, which, in turn, evolves into the use of mock letters. Eventually, children mix letters and mock letters to approximate words. Ultimately, children increasingly write words using conventional spelling.

Emergent literacy is important because this stage is when the trajectory of a child's literacy attainment is set. According to Apel and Masterson (2001), children gain
a foundation for a lifetime of learning in the first six years of life when a child's language development has a chance to flourish. Language, as well as reading and writing, is the vehicle by which the child can express him or herself; it becomes a bridge for almost all aspects of the child's academic and social life. During the first six critical years of life, children develop their understandings of literacy.

Emergent literacy also suggests possibilities for adult and child interactions. Direct instruction of literacy skills is often unsuccessful. However, Clay (1991) maintains that through repeated example a child can learn literacy concepts. Of course, the child’s primary caregiver often provides the examples. The attuned primary caregiver notices the child's efforts to communicate and provides appropriate responses. This encourages the child to communicate more and to refine his or her knowledge of language. The adult can encourage such learning opportunities where the child develops and tests personal literacy hypotheses. Then, the child’s hypotheses are either supported or rejected until a hypothesis matches the child's observations. To support this process, the adult should conduct activities that bring attention to certain literacy concepts. According to Clay, the goal is not so much an attempt to elicit correct responses from the child, but to build successful literacy concepts and strategies.

Substantiating Emergent Literacy

Since its introduction in 1966 (Morrow, 2005), many researchers supported and extended the notion of emergent literacy. Casbergue and McGee (2011) assert that the literature supporting emergent reading skills as a precursor of conventional reading is convincing. Supporting this view, The National Early Literacy Panel (NELP) (National Institute for Literacy & National Center for Family Literacy, 2008) meta-analysis
persuasively demonstrates a connection between several emergent literacy skills and later conventional literacy development. Relevant to this study, DeBruin-Parecki (2007) identified parent and child behaviors that support emergent literacy.

The National Early Literacy Panel

NELP (National Institute for Literacy & National Center for Family Literacy, 2008) convened to improve reading achievement by looking at literacy research focused on children from birth until age five. The panel used stringent criteria to identify experimental and quasi-experimental studies in a meta-analysis. NELP identified "interventions, parenting activities, and instructional practices that promote the development of children's early literacy skills" (p. vi). To identify salient emergent literacy skill, NELP identified approximately 500 published research articles using experimental and quasi-experimental designs that met the Panel's criteria for quality.

NELP (National Institute for Literacy & National Center for Family Literacy, 2008) found six early literacy skills that have medium or large predictive effects on later conventional literacy skills. Those skills are alphabet knowledge, phonological awareness, rapid automatic naming of letters or digits, rapid automatic naming of colors, writing or writing one's own name, and phonological memory. Also moderately correlated with one or more later literacy skills are concepts about print, print knowledge, reading readiness, oral language and visual processing. According to the National Literacy Panel, these 11 factors predict literacy development for both preschoolers and kindergartners. NELP calculated a large correlation (r = .59) for reading readiness (a combination of alphabet knowledge; concepts of print, vocabulary, memory; and phonological awareness), a large correlation (r = .54) for concepts about print, a medium
correlation \((r = .48)\) for alphabet knowledge, a medium correlation \((r = .48)\) for print awareness and a medium correlation \((r = .44)\) for phonological awareness. On the whole, the NELP study gives strong support to the importance of emergent literacy skills in the development of conventional reading.

The longevity of emergent literacy, and its current conceptual dominance in early childhood education, establishes it as a well-accepted theoretical model (Rowe, 2010). Studies from the National Reading Panel (National Institute of Child Health and Human Development, 2000) and NELP (National Institute for Literacy & National Center for Family Literacy, 2008) along with hosts of others, demonstrate that emergent literacy skills predict later conventional literacy skills. Consequently, emergent literacy has gone from a developing concept to a benchmark for other ideas. Of the recent emergent literacy studies examined, all use emergent literacy skills as benchmark indicators; none did more than establish the validity of emergent literacy measures within their literature reviews. As Rowe (2010) explains, we have reached the "maturation of emergent literacy as a research area” (p. 134).

*Two Studies after NELP*

Several studies after NELP continue to support the connection between emergent literacy skills and conventional literacy. Kim (2009) found that 192 Korean speaking children, ages four to six, developed better emergent reading skills in Korean when exposed to more frequent shared book reading. While the study did not explicitly look for a connection, it found a positive correlation between emergent literacy skills and children’s conventional literacy skills.
Cabell, Justice, Konold and McGinty (2011) examined the emergent literacy skills of 492 preschool children from a mid-Atlantic state who were at risk for academic problems. The researchers wanted to see if they could identify patterns of emergent literacy strengths and weaknesses of low socioeconomic status children and relate the results to later kindergarten performance. To do this, they conducted a cluster analysis of students grouped according to their emergent literacy skills. Cabell et al. found that early emergent literacy patterns are meaningful to later reading achievement. More specifically, the study finds preschool alphabet knowledge and phonological awareness are predictors of kindergarten reading success.

Implications for the Current Study, the What and the How

Sociocultural learning theory and emergent literacy provide a theoretical foundation for the current study. Sociocultural learning theory explains how parent interactions are critical to children’s literacy development. This theory further suggests that parent behaviors will be successful in teaching literacy to the degree with which those behaviors scaffold children’s learning. Emergent literacy allows research to identify specific skills that are precursors to conventional literacy. Thus, sociocultural learning theory informs the “how” of the study while emergent literacy informs the “what.” Together, the two theoretical foundations combine to allow an evaluation of parent and child practices that develop into conventional literacy skills.

Development of the ACIRI

DeBruin-Parecki (1999) wanted to give teachers within a family literacy program a way to assess parent and child storybook reading practices that support instruction. Before the creation of the Adult/Child Interactive Reading Inventory (ACIRI), DeBruin-
Parecki claims that programs would frequently rely on standardized tests to demonstrate progress. In DeBruin-Parecki’s view, standardized tests suffer from an inability to demonstrate how progress should be made. However, if properly developed, a tool could trace the improvement of shared book reading skills for both parent and child. Consequently, DeBruin-Parecki created the ACIRI.

Research Supporting the ACIRI

Researchers interpret a growing body of studies to make recommendations for shared book reading. Such studies not only justify interactive book reading, but also provide guidance for measures of interactive book reading quality. DeBruin-Parecki (2007) developed a 12-item inventory used to assess the quality of shared book reading. The 12 rated items are: maintaining physical proximity, sustaining interest and attention, displaying a sense of audience, posing and soliciting questions, relating context to personal experience, pausing to answer questions, asking children to predict what is going to happen in the story, offering ideas about the story, identifying and understanding pictures and words, holding the book and turning pages, using visual cues, and recalling information from the story. Facilitating organization, the 12 indicators divide into three categorical groupings. The three groupings comprise studies within the following categories: drawing attention to book features, cognitive processes inside the child, and supportive communication.

Drawing Attention to Book Features Studies

Children begin as apprentice readers, and learn about books and book features before growing into independent readers. The National Research Council (1998) reports that children become more aware of print when parents and teachers bring children’s
attention to print. The studies that immediately follow indicate the advantages of bringing book features to children’s attention.

*Martin study.* Martin (1988) looked at how parents bring attention to book features. She selected 25 mothers from a large university and divided mother and child pairs into five groups according to the child's age. The groups were 4-8 months, 10-14 months, 16-20 months, 22-26 months and 44-52 months. The researcher videotaped and audio-recorded parents reading to their children in a laboratory setting. Martin gave the parents three books to read with their children. She observed that the mother's natural scaffolding strategies were highly interactive, and that they used multiple scaffolding strategies that included bringing children's attention to pictures and words by labeling them. She also saw that mothers would share control of the reading experience, often by encouraging the child to hold the book and turn pages.

*Piasta, Justice, McGinty, and Kaderavek study.* Piasta, Justice, McGinty, and Kaderavek (2012) wanted to see if verbal and non-verbal reference to print during shared book reading has long-term benefits for children's literacy skills. In an experimental, longitudinal study, they looked at 85 Head Start classrooms randomly assigned to three groups, a high dose program, low dose, and treatment conditions. The high dose classroom had teachers expose their children to verbal and non-verbal explicit reference to print during shared book reading four times a week. The low dose classrooms exposed children to the explicit print reference twice a week, and the treatment classrooms continued with their regular classroom practice. Each classroom had an average of six students randomly selected for testing, with a total of 356 children completing all follow-up testing.
Piasta, Justice, McGinty, and Kaderavek (2012) found that, at one and two years later, both the children in the low and high print reference conditions had better literacy scores than the control group. For example, the high dose children had higher scores for word recognition \( (d = 0.27, p = .022) \), spelling \((d = 0.31, p = .002)\), and comprehension \((d = 0.26, p = .025)\) when compared to the control group. The authors concluded that verbal and non-verbal print references benefit later literacy development.

The study shows that bringing children's attention to the features of text can significantly increase the time children attend to print during storybook reading, yet Piasta, Justice, McGinty, and Kaderavek (2012) note that parents seldom overtly bring children's attention to print.

**Cognitive Processes inside the Child Studies**

Discussed in more detail earlier, Vygotsky's (1978) sociocultural learning theory suggests that parents and children co-create meaning during shared book reading. By involving the child in a story discussion, the parent and child come to a common understanding about the book (Nevills & Wolfe, 2009). Thus, discussions help children create story meanings and learn literacy strategies while parents read with them (Morrow, 2005). In addition to theory, the studies that follow give credence to the notion that specific types of talk support children's developing understanding of stories.

**Flood study.** Flood (1977) designed his study to find out if parents talking with their children and asking questions during shared book reading support literacy development. Flood studied 36 parents and their children, ages three-and-a-half to four-and-a-half years old. Parents were tape-recorded reading to their children while the researcher was out of the room. He measured and analyzed 14 separate aspects of shared
book reading against measures of five skills areas associated with reading success: alphabet recognition, whole word recognition, vocabulary, visual discrimination, and knowledge of geometric shapes. Using stepwise regression, Flood found four parent-child interactions that supported literacy. They were the following: the total number of words spoken by the child \( (r = .27, p < .05) \), a post story conversation about the story \( (r = .45, p < .05) \), positive reinforcement by the parent \( (r = .45, p < .05) \), and warm up questions \( (r = .48, p < .05) \).

Based on his results of his study, Flood (1977) claims that children need to be part of the reading process, asking and answering questions with their parents. Flood felt his study showed that positive interactions support literacy and that children need to interact with their parents during the entirety of the shared book reading experience.

**Snow study.** Snow (1983) used a case study to argue that children acquire and develop literacy and oral language in significantly similar ways. She studied one male child between the ages of 18 and 36 months. The researcher recorded the child for a minimum of 30 minutes and a maximum of three hours once every two weeks. Many of the interactions took place around reading activities with his parents, who were university academics. Snow felt the case study demonstrated the importance of certain behaviors during shared book reading.

Snow (1983) claims that parents can support their children's literacy by answering children's questions about letters and words. They can read books to their children on request, and engage them in conversation about book features, including the texts and the pictures. Parents can also make storybook reading a positive experience for children and
keep children focused on the story. Such activities improve children's literacy skills and support decontextualized language.

Snow (1983) noted that the parents were able to scaffold the child's memory in support of decontextualized learning. She also noted the value of book handling routines that allow children to handle books.

Morrow study. Morrow (1985) conducted two studies looking at the impact of story retelling. In the first study, she wanted to know if retelling a story after a single exposure improved the child's ability to answer literal, inferential, and critical questions about the story. In the second study, Morrow wanted to see if repeated story retelling would have a greater effect.

In study one, Morrow (1985) divided 59 kindergarten students into experimental and control conditions. All participants were pre-tested and post-tested. The pre-test consisted of a single reading of a storybook followed by a series of comprehension questions. A week later, the students read another book and were again given comprehension questions. The children in the experimental conditions group retold the story. Children in the control condition group drew a picture about the story.

Study one found a small (3.1 percent, p < .05) magnitude of improvement in the experimental conditions group comprehension test scores over the control group. Morrow (1985) hypothesized that the magnitude of improvement would increase with more story retelling practice. Following the same procedures used in the first study, Morrow had children practice storybook retelling eight times in the treatment group. The second study involved 82 children. Children's scores on comprehension questions went up 9.3 percent from pre-test to post-test while the treatment group's scores went up 27.6
percent. The treatment group's scores were on 11.5 percent ($p < .001$) better than the control group's scores.

*Martin study.* Martin (1988), discussed earlier, looked at how parents deviate from storybook texts during shared book reading to help support the child's understanding of the text. She wanted to see how the child's reading development relates to deviations from the book. Martin found that parents scaffold their extra-textual deviations according to the child's cognitive, linguistic, experiential, and affective development. Specifically, the mother deviated from the text in three ways: simplification, cognitive elaboration, and engagement. She also found that parents would talk about the book before reading began and would then review the book after the story was completed. Parents asked questions and elicited predictions about the story. They further referenced familiar experiences for children when explaining something new to the child.

*Medcalf Davenport study.* While working an earlier study, Medcalf Davenport (2003) noticed that some children gave seemingly nonsensical answers to questions from the Peabody Individual Achievement Test-Revised (PIAT-R). She then thought that the children might not be responding to the immediate question being asked, but were answering earlier questions; perhaps children were ignoring the immediate question and taking needed time to answer the earlier question. She then hypothesized that children may benefit from additional thinking time before giving their responses.

Medcalf Davenport (2003) selected 80 students entering kindergarten and gave them the Peabody Individual Achievement Test-R along with researcher-developed questions. Oral responses were audio recorded and transcribed. She found 101 instances
of children giving irrelevant statements during the testing. Of these, she was able to link 49 of these statements to earlier questions in the PIAT-R. Medcalf Davenport feels that giving children an opportunity for wait-time during assessment allows them to communicate their knowledge. She also feels that conversational interactions allow children to express more fully what they know.

*Wasik, Bond and Hindman study.* Wasik, Bond and Hindman (2006) studied 16 Head Start classrooms, with 10 classrooms (139 children) in the intervention condition and 6 classrooms (68 children) in the control condition. The researchers found that Head Start teachers could significantly support children's vocabulary development by using open-ended questions associated with shared book readings. In experimental conditions, the intervention group's score on the Peabody Picture Vocabulary Test III increased by an average of slightly more than 20 points compared to the control group's mean gain of slightly less than 10 points ($F(1, 189) = 33.28, p < .001$), from fall to spring, with a large effect size ($d = 0.73$). The study found that asking predictive questions and making connections were important strategies for building preschool vocabularies.

*Supportive Communication Studies*

The environment helps create or hinder an educationally supportive atmosphere. More specifically, maintaining physical proximity, sustaining interests and attention, and displaying a sense of audience help to create a positive shared book reading experience. *Bergin study.* Bergin (2001) found that parents' positive affect supports positive attitudes for reading. She videotaped 32 parent/child dyads during shared book reading and coded affective interactions. For the study, Bergin created a composite rating of positive interactions during shared book reading, interactions that she called "affection". It
included warmth (expressions of concern for the other, including smiling),
responsiveness (interest and response to the other's activities), flexibility (willingness to
go along with the other's wishes) and sensitivity (response to cues from the other person).
The researcher found a correlation \( r = .38, p < .05 \) between the parent's affection score
and the child's reading fluency. Bergin also found that children who had positive
interactions during shared book reading were more engaged readers. The reverse was
also true; more engaged readers had interactions that were more positive during shared
book reading.

*Sonnenschein and Munsterman study.* Similarly, Sonnenschein and Munsterman
(2002) studied 30 families with five-year-old children; 83 percent were from low-income
families. The researchers videotaped parents and children during shared book reading.
Sonnenschein and Munsterman transcribed the videotapes and analyzed them for the
affective quality of conversations around books. They additionally measured the child's
motivation for reading at the start of first grade.

The study looked at the affective quality of the parent/child interactions. The
researchers described affective quality as a combination of reading expression, contact
with the child, reader's involvement with the child, the child's involvement with the
parent, and the parent’s sensitivity to child engagement. Sonnenschein and Munsterman
(2002) gave each category a 1-3 score and summed scores for each dyad. Interrater
agreement was established \( (\kappa = .85) \). Later, they interviewed students individually at the
beginning of first grade and administered a forced choice questionnaire designed to
assess their reading motivation. Sonnenschein and Munsterman (2002) found a
correlation ($r = .55, p = .004$) between the affective quality of storybook reading and first grade reading motivation.

**Overview of Studies**

The studies collectively suggest distinct parent and child activities that separately lead to improved literacy outcomes for children when used during shared book reading. Further, as the activities are independent of one another, they can be combined to create a rich and varied combination of practices that support children’s literacy development during early childhood. The studies suggest that teachers can instruct parents to learn successfully the 12 strategies measured by the ACIRI (DeBruin-Parecki, 2007). The parents, in turn, can use the strategies to scaffold their children’s literacy development. The passages below review the strategies within the context of the three categories previously identified.

**Drawing attention to book features review.** Martin (1988) and Piasta, Justice, McGinty, and Kaderavek (2012) find that it is important for adults to point out book features. The studies suggest three beneficial interactive reading behaviors: identifying and explaining pictures and words; using visual cues; and holding the book, and turning pages.

Wolfe and Nevills (2004) call for parents to point at pictures and words while reading. By pointing to words as they read, parents can help children connect spoken words to the printed form. Such strategies further help children distinguish between print and other visual information.

Parents can also use visual clues and interactional strategies to support literacy. McGee and Richgels (2003) demonstrate that parents can help children use picture cues
to support comprehension, and Nevills and Wolfe (2009) suggest that adults should have children point to and name pictures.

A child can also demonstrate and practice the emergent literacy skills that he or she has learned so far by holding books, turning pages, and otherwise becoming an active participant in the shared book reading experience. In this way, children can demonstrate they have learned important emergent literacy concepts (Clay, 1985), such as, the fact that pages turn from right to left and print goes from top to bottom for texts written in English (Sonnenschein & Munsterman, 2002).

*Cognitive processes inside the child review.* For the purposes of this study, six behaviors identified in the previous studies are of particular importance: posing and soliciting questions, pausing to answer questions, relating context to personal experience, asking children to predict what is going to happen in the story, offering ideas about the story, and recalling information from the story.

Effective questions help children's comprehension and retention of information and are frequently recommended as part of an effective literacy strategy (e.g. Armbruster, Lehr, & Osborn, 2003; Morrow, 1985; Paris & Paris, 2003). Of course, learning is not always instantaneous. According to Feldman (2003), wait-time is critical in eliciting further thinking. For example, Honea (1982) recommends that teachers give three to five seconds of wait-time for questions but suggests even more may be appropriate for preschool age children.

Morrow (1990) recommends relating readings to the child's life experiences, and Morrow (1990) supports restating information from stories. Armbruster and company (2003), along with Miller and Prins (2009), believe that relating the story to the child's
own experience allows the child to engage better with the reading experience and facilitates comprehension. Further, Hansen (2004) supports children’s retelling stories, as this activity improves comprehension.

Children can improve their understanding of a text by predicting what will happen in a story and by offering ideas about the story. Armbruster, Lehr, and Osborn, (2003) recommend that children should make book predictions based on pictures and information in the story. Miller and Prins (2009) feel that having children predict upcoming events within a story supports imagination, and critical thinking skills. In addition, Morrow (1990) recommends parents’ extending information from the story.

**Supportive communication review.** Sonnenschein and Munsterman (2002) found that parents who read with expression, maintain physical proximity to their children, and direct their children's attention to the text have children who enter school more prepared to learn and more motivated to read.

The Sonnenschein and Munsterman (2002) study justifies maintaining physical proximity with a child. Sonnenschein and Munsterman along with Martin (1998) support the importance of sustaining a child's interest in the book, and both studies, along with the earlier Martin (1998) study, show the importance of displaying a sense of audience.

Howe, Brandon, Hinings, and Schofield (1999) claim that children feel secure when in close proximity with a main caregiver. This is because a secure relation between parent and child is necessary for promoting parent/child interactions (Bowlby, 1973). In turn, parent/child interaction supports the child's connection with his or her caregiver. Bus (2001) explains that securely attached children attend to print more successfully than do insecurely attached children.
Parents can further help children develop interest in literacy by supporting their children's interest and attention in books by means of adjusting language, displaying positive affect, and offering reinforcement (DeBruin-Parecki, 2007). According to Nevills and Wolfe (2009), adults helping children focus their attention is a necessary part of literacy development. Adults must help children learn what to attend to and what to ignore in their environment. Parents can bring their children's attention to the text by using various strategies. DeBruin-Parecki (2007) recommends using a dramatic voice for characters, using words the child knows, and complementing what the child is doing well. Additionally, Flood (1977) and Snow (1983) found that positive feedback is an essential element, as children will respond well to the positive interactions surrounding literacy.

Parents who display a sense of audience bring children into the story reading experience (DeBruin-Parecki, 2007). Trevarthen and Aitken (2001) explain that a person's visible, audible, and mechanical signals can direct and reinforce learning for a child; this is especially true of mothers working with young children. Such social signaling helps children focus on what they are to learn. The parents focus children's attention on learning objectives by the rhythms of movements such as eye pointing, hand pointing, and gestures. All of these movements support learning, as does the expressive use of voice and emotions.

Studies Influential to Methodology

On multiple occasions, researchers have used the ACIRI. Of particular influence to this proposed study are the Rodriguez, Hines, and Montiel (2009) and the Barnyak (2011) studies. Rodriguez et al. successfully used the instrument within a quantitative study. Adapting the ACIRI, Barnyak demonstrated the potential for the ACIRI within a
Rodriguez, Hines, and Montiel (2009) examined differences in the interactive reading strategies of low and middle SES Mexican American mothers and their children by comparing ACIRI scores. Both SES groupings had ten dyads. The dyads consisted of five girls and five boys, and their mothers. The children were between 24 and 36 months in age. As with the proposed study, shared book reading sessions were both audio and video recorded. Further, the researchers asked participants to read according to their normal routine; the researchers pre-selected four book titles used in the study.

Rodriguez, Hines, and Montiel (2009) found median scores for the ACIRI were higher with middle SES parents when compared to low SES parents. However, a MANOVA test did not find significant differences in the ACIRI scores ($F(1, 18) = 1.54$, $p = .249$). Rodriguez et al. give three reasons for not finding significant differences in their data. First, the ACIRI test observes behaviors that are more appropriate for three to five-year-old children while the study looked at two to three-year-old children. Second, the narrow 0 to 3 score range of the ACIRI, along with the high variability of observed behaviors, reduces the chances of finding statistically significant results. Third, the ACIRI may have a bias toward middle class reading behaviors, as the test was developed through research looking at middle SES families. Despite the failure to achieve a significant result, Rodriguez and company's methods influence the quantitative design of this proposed study.

Barnyak (2011) examined parent and child beliefs regarding shared book reading
and explored how those beliefs affected shared book reading sessions. Of particular interest, one of Barnyak’s research questions focused on physical and verbal reading interactions between the adult and child during shared book reading. The study used eight children, ages two through seven, and seven adults, all of whom were from rural Pennsylvania.

Barnyak’s (2011) qualitative study used semi-structured interviews for both children and parents; it additionally videotaped shared book reading sessions. The researcher studied parent and child interactions using the ACIRI (DeBruin-Parecki, 2004). For analysis, she then paired observations made with the ACIRI with questions from the semi-structured interviews. As an example, Barnyak asked parents, ”Does your child make predictions or guess what might happen in the books you read together?” which corresponds to an ACIRI item, "Adult solicits predictions."

Barnyak (2011) found that rural parents foster literacy events in the daily lives of their children by using locally available resources and a variety of methods. The researcher also determined that teachers could provide clear and better instruction for parents, which would encourage the most effective storybook sharing techniques. However, important to the current study is the use of the ACIRI in a qualitative study. Barnyak’s study showed how the ACIRI could be used beyond simply scoring observations. Her study demonstrated that semi-structured questions could further explore ACIRI observations. It also opened up the possibility of qualitatively describing the interactions.
ACIRI and the Study’s Theoretical Foundation

The above studies demonstrate that the ACIRI (DeBruin-Parecki, 2007) complements the current study in two distinct ways. First, it establishes many verbal and physical behaviors that support the development of emergent literacy skills within children (DeBruin-Parecki, 1999; Rodriguez, Hines, & Montiel, 2009). Moreover, the literature review demonstrates that the identified behaviors scaffold emergent literacy skills. Thus, the ACIRI elegantly complements the sociocultural foundation of the study, both as a quantitative tool and as a foundation for qualitative questions.

Summation of Main Research Questions and Contributions to the Literature

This study asks what is the nature of interactive behavior, including language, when parents read informational texts and when they read narrative fictional texts to their children. It further asks what are the similarities and differences found with interactive reading during narrative fictional texts and during non-narrative informational texts. The answers to these questions extend our understanding of emergent literacy development. It identifies differences in parent child interactions during shared book reading that are dependent on book genre. The study identifies such differences; it suggests changes for how parents encourage the development of their children's emergent literacy skills. Ultimately, the study encourages prophylactic literacy practices that prevent problems with conventional literacy development such as the fourth grade slump.
CHAPTER 3 – METHODOLOGY

The researcher recruited from daycare centers eight parent-child dyads who read children’s books from two different genres. The experience of the primary investigator’s advisor suggested that eight is a realistic and manageable number of participants. The children are four girls and four boys in their last year of pre-school. This is typically when the children are four and five-years-old.

Looking at children before they enter kindergarten is ideal for several reasons. First, this is the last year children’s education is not influenced by the Common Core State Standards (2010), which emphasize literacy and the use of informational texts. At this age, most children frequently engage in shared book reading, but are not conventionally literate. In addition, this is when language development is flourishing (Apel & Masterson, 2001), and this may be when children can still easily develop cognitive structures helpful for understanding varied genres (Duke, 2000). Finally, Rodriquez, Hines and Montiel (2009) claim that the behaviors measured by the ACIRI are most frequently seen with four and five-year-old children and thus the tool is most attuned to this age group.

The videotaped sessions had each of eight parents read both a narrative and an informational text with his or her four- to five-year-old child. Half of the observed interactions began with the informational text and the remaining half began with a fictional text. The Adult/Child Interactive Reading Inventory (ACIRI) (DeBruin-Parecki, 2007) was employed to evaluate reading interactions. A quantitative analysis of the ACIRI scores demonstrates whether there were statistically significant differences in book reading behaviors.
In addition to scoring the ACIRI (DeBruin-Parecki, 2007), the researcher described observed differences in behaviors based on the ACIRI. At the conclusion of shared book reading, parents and children answered semi-scripted interview questions to explain the “why” of parent and child behaviors (see Appendix A). The researcher asked both parents and children general questions about their perspectives regarding their shared book reading behaviors. By design, many of the questions aligned to behaviors measured by the ACIRI. Additionally, an examination of the video data allowed for detailed analysis of parent and child behaviors to a greater degree than possible with just the ACIRI scores. Further, the video allowed for contrasts between parent statements and their behaviors.

Book Selection

Parents read two books, *A Penguin Pup for Pinkerton*, by Kellogg (2001), and *Rockets and Spaceships*, by Wallace (2011). The narrative fictional text is *A Penguin Pup for Pinkerton*. This is a children's storybook about a dog named Pinkerton. Pinkerton learns how Emperor Penguins care for their eggs, and he misguidedly tries to care for a football, mistaking it for an egg. *Rockets and Spaceships* is a non-narrative informational text, a genre generally available within early childhood literature. Written to teach children about space flight, the text gives information about space vehicles in orbit, on the moon, and visiting other planets. The researcher selected these books because they exemplify strongly contrasting genres while they are also compatible in terms of textual difficulty and length.

To find contrasting genres, it is important to note that the distinction between genres can overlap. As examples, histories, biographies, and autobiographies are often
both informational and narrative. This blurring of boundaries can extend to many topics, including the sciences. Certainly, some informational books about science use the narrative style. One can imagine a “story” of a water drop to illustrate the water cycle. Further, there is variability in how children’s books are narrated. Some books illustrate events without writing and others depict events without illustrations. These possibilities extend to both informational and narrative texts. However, the researcher purposely selected fictional narrative and informational genres because most children’s books within these genres have substantially distinct features. Fortunately, they both frequently include a written text and illustrations, making a comparison of share book reading possible.

Features of storybooks. Atwell (1998) indicates that writing fiction requires the development of multiple elements such as character, problem, setting and dialogue. *A Penguin Pup for Pinkerton* (Kellogg, 2001) has multiple characters, with the dog Pinkerton as a main character. Additionally, because the family wants to stop Pinkerton from caring for a faux penguin egg, the story presents a problem that is to be solved. Much of the book is set in Pinkerton's home amid daily activities, and Pinkerton's family engages in dialogue at multiple points during the book. Large, full color, hand drawn illustrations frequently support storybook texts. *A Penguin Pup for Pinkerton* uses ink and pencil line, acrylic paints, and watercolor washes for its full-page illustrations (Kellogg, 2001). Further, *A Penguin Pup for Pinkerton* meets Bruner’s (1991) 10 elements found in narrative texts (see Table 2.1).

Features of informational texts. Pappas (2006) describes the features of informational texts (see Table 2.1). She determines that informational texts introduce the
topic of a book, describe the attributes of the topic, and describe the characteristics of the topic. She also notes that as an optional feature, informational texts may recap information in a form of a glossary and may use text and illustrations in support of the main text. *Rockets and Spaceships* (Wallace, 2011) fits these attributes. The book introduces space travel and explains the attributes of rockets and spaceships. Full-page glossy color photographs support concepts and vocabulary presented in the text. Like many informational texts, *Rockets and Spaceships* has a short glossary and an index. Further, the author gives information without reference to time order. Duke and Kays (1998) found that informational texts often use many timeless verbs, indicating that the described actions have taken place in the past, take place in the present, and will take place in the future. *Rockets and Spaceships* uses such timeless verbs. Additionally, outside of the main body of text are definitions with small illustrative images.

**Textual Difficulty**

The selected texts are appropriate for shared book reading with four to five year old emergent readers. Potentially, poorly matched texts may skew the study results as children may find one text more difficult to understand. This may occur because of textual features such as vocabulary and sentence length. Further, this study follows the example of DeBruin-Parecki (1999). In her validating study for the ACIRI, she controlled for book difficulty and vocabulary; her study found 99% agreement in materials reliability scores when the same dyads read two different books on separate occasions. Further, supportive features such as illustrations may also be a factor in children’s comprehension (Common Core State Standards, 2010; Fountas & Pinnell, 1996). This study attempts to control for both possibilities, disparities in difficulty and
supportive features, in an effort to isolate variables so that, as much as possible, differences in ACIRI scores are the result of variation brought about by genre features.

To assure that the books were of similar reading difficulty, the researcher matched the books according to two leveling schemes, the Lexile Framework (Lexiles) and the Guided Reading system (also called Fountas and Pinnell). Both Lexiles and Guided Reading levels indicate the difficulty that a reader will have with a given text (Lennon & Burdick, 2004); texts of the same rating present the same reading challenge. Popularly used in schools, the Lexile Framework and the Fountas and Pinnell systems are significantly different techniques used to arrive at a readability measure. Finding books that match according to both measures addresses a controversy regarding reliability levels. Further, one of the systems, Guided Reading, also approximates the comprehension support offered by photos and illustrations (Fountas & Pinnell, 1996).

*Lexile Leveling Systems*

MetaMetrics, Inc, the creator of the Lexile Framework, claims that it is the most widely used readability formula (Lennon & Burdick, 2004). Lexiles measures semantic difficulty and semantic complexity. Semantic difficulty is a calculation of word frequency derived from the mean log frequency of 5-million words found within a 600-million-word database. In the Lexile system, sentence length determines semantic complexity. An undisclosed algebraic equation, which includes the mean log frequency of words and the mean sentence length, creates the Lexile score. Reported in multiples of 10, higher Lexile scores indicate texts that are more difficult. Lexile ratings range from 0 to 1700+. A score of L200 indicates a reading level typical of first grade and L1700 indicates graduate school reading. The L in front of numbers stands for “Lexile” and
indicates a print materials rating. Lexiles also estimate students’ 75 percent comprehension level. Such ratings do not have the L prefix.

MetaMetrics’ (Lennon & Burdick, 2004) scoring criteria require the subtraction of 120 Lexile points from fictional picture books. *A Penguin Pup for Pinkerton* (Kellogg, 2001) fits the criteria for the Lexile point deduction.

**Fountas and Pinnell Leveling System**

Contrasting the Lexile framework, Fountas and Pinnell (2009) maintain that an equation cannot describe readability. Instead, textual supports must be a factor for determining text levels. Fry (2002) points out that readability formulas do not take into account factors that are "inside the students head" (p. 289). The Fountas and Pinnell leveling system includes judgments about criteria such as book content, illustrations, language structure, book format and a judgment about the topic's familiarity to the given audience. Fountas and Pinnell levels range from A to Z+. “A” indicates a beginning reading level and “Z+” indicates books above the eighth grade level (Fountas & Pinnell, 2009). As an example, level K books have pictures on every page or every other page, additions that support or enhance meaning (Fountas & Pinnell, 1996). The amount of text on each page can vary between 1 and 15 lines within the book, and clear spaces help to delineate words and lines of text. Level K books correspond with the independent reading of typical second grade students (http://www.heinemann.com/fountasandpinnell/handouts/TextLevelLadderOfProgress.pdf).
Similarities between Texts

As indicated in Table 3.1, *A Penguin Pup for Pinkerton* (Kellogg, 2001) has a Guided Reading level of K and a Lexile rating of L400AD, which converts to 520L when the 120 Lexile points are added back because of the picture book deduction associated with the measure. Similarly, *Rockets and Spaceships* (Wallace, 2011) has a Lexile rating of 510L and a Guided Reading level of K. A database available through Scholastic books (Scholastic.com) initially identified Guided Reading levels and Lexile levels. Table 3.1 verifies the compatibility of these measures and supports the comparability of the two texts.

![Table 3.1](image)

<table>
<thead>
<tr>
<th>Book Title</th>
<th>F &amp; P (1)</th>
<th>Lexile (2)</th>
<th>#Pages</th>
<th># Words (3)</th>
<th>Tot. Sen (4)</th>
<th>WPS (5)</th>
<th>CPW (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>A Penguin Pup for Pinkerton</em></td>
<td>K</td>
<td>L520</td>
<td>32</td>
<td>548</td>
<td>65</td>
<td>8.4</td>
<td>4.4</td>
</tr>
<tr>
<td><em>Rockets and Spaceships</em></td>
<td>K</td>
<td>L510</td>
<td>32</td>
<td>492</td>
<td>59</td>
<td>8.3</td>
<td>4.5</td>
</tr>
</tbody>
</table>

(1) Fountas and Pinnell Reading Level
(2) Lexile Reading Measure
(3) Total words in body of text
(4) Total sentences in body of text
(5) Average words per sentence
(6) Average characters per word

Shared Reading Demonstration

The researcher supplied the books for the shared book reading sessions. The sessions began with instructions asking the following: “Are you familiar with either of these books, *A Penguin Pup for Pinkerton* and *Rockets and Spaceships*?” and, “Please read the following book as you normally would do at home.” Reading sessions were
video recorded and are expected to take 10 to 20 minutes. All recordings were coded using the pseudonyms of the participants. A tripod supported the camera in a fixed position as suggested by Ratcliff (2003). A stationary camera makes the camera's presence less distracting for participants (Erickson, 2006).

For mutual convenience and safety, videotaping took place in a suitable room within the daycare facilities. This allowed the space to be set up with sound and audio equipment in advance. Parents read to their children while sitting on a couch, often a small child-sized couch. To limit variability in time of day factors, sessions were recorded at the end of the school day, when parents might have a few minutes to read to their child before taking the child home.

**ACIRI**

Developed by DeBruin-Parecki (1999, 2007), the Adult/Child Interactive Reading Inventory (ACIRI) is an observational tool for assessing the reading behaviors of both children and adults during shared book reading. DeBruin-Parecki created the measure so that teachers could work with adults to help them more effectively read with children in a variety of settings including family literacy programs; the researcher validated the test using parents and children in the Even Start family literacy program. The original intent of the measure was to evaluate and focus attention on specific behaviors known to enhance literacy development in children ages two to seven. Previously cited research demonstrates that children make reading gains through an interactive dialogue that develops around shared book reading. The ACIRI indicates the degree to which parents and children interact around shared book reading using proven literacy enhancing behaviors.
Selection of the ACIRI

An extensive review of shared book reading measures determined that the ACIRI (DeBruin-Parecki, 2007) was the most suitable instrument for this study. Many measures used in previous research were informal; this study sought a formal, quantitative measure. Six measures met these criteria; however, three of these measures were not appropriate to the goals of the study. Three candidates remained, the Dialogic Reading Inventory of Parent-Child Book Reading (Dixon-Krauss, Januszka & Chae 2010), the Systematic Assessment of Book Reading (Pentimonti, Zucker, Justice, Petscher, Piasta, & Kaderavek, 2012), and the ACIRI, (DeBruin-Parecki, 2007).

Several factors made the ACIRI (DeBruin-Parecki, 2007) the most appropriate measure. First, the instrument fits the theoretical foundations of the study, which include scaffolding and emergent literacy theory. It measures the extent adults scaffold children’s emergent literacy skills development. Second, its validation article is readily available (DeBruin-Parecki, 1999), and, third, the inventory measures a wide range of behaviors; the Dialogic Reading Inventory of Parent-Child Book Reading (Dixon-Krauss, Januszka & Chae 2010) and Systematic Assessment of Book Reading (Pentimonti, Zucker, Justice, Petscher, Piasta, & Kaderavek, 2012) are more narrowly focused in their measures. The ACIRI is also relatively simple to use. Finally, suggesting the confidence of other researchers in the measure, a literature review indicated that the ACIRI was the most widely found in peer-reviewed studies of the measures. Further, it is not patronizing, threatening, or insulting to the participants. As a result of the selection process, the study used the ACIRI (DeBruin-Parecki, 2007) to score readings with both genres. The researcher adhered to the fair use guidelines published with the instrument.
ACIRI Validation Statistics

DeBruin-Parecki (1999) validated the ACIRI using 29 mother and child dyads. The mothers were from 19 to 49 years of age and the children (12 girls, 17 boys) were two to seven years of age. As the ACIRI assumes that parent behavior during shared book reading models behaviors that the child is adopting, it was important to establish a correlation between parent and child scores. DeBruin-Parecki compared the three categorical scores of the ACIRI for parents to the same categorical scores for children. The study found significant correlations ($p < .01$) between parent and child scores for enhancing attention to text ($r = .90$), promoting iterative reading and supporting comprehension ($r = .95$), and using literacy strategies for both the parent and child ($r = .76$). DeBruin-Parecki claims these correlations indicate covariation among the adult and child measures, suggesting the behaviors are interactive.

During the validating process, the study achieved an interrater reliability statistic of 97 percent and a materials reliability statistic of 99 percent when assessing the same pairs reading different books (DeBruin-Parecki, 1999). The study matched books for author, vocabulary, and difficulty. The materials reliability statistic indicates that similar materials produce substantially the same ACIRI scores from session to session.

At the time of the validation study, instruments similar to the ACIRI (DeBruin-Parecki, 1999) did not exist and it was not possible to compare the study to a peer measure. Thus, the test could not establish concurrent validity. However, the study established construct validity by comparing ACIRI questions to research and theory for shared book reading behaviors. According to DeBruin-Parecki, construct reliability is ascertained by comparing the theoretical and research constructs to items measured to the
testing instrument. In addition to the studies previously mentioned in this paper, a joint position paper from the International Reading Association (IRA) and the National Association for the Education of Young Children (NAEYC) (1998) support the importance of the testing items. Preventing Reading Difficulties in Young Children (Snow, Burns, & Griffin, 1998) found further support for the importance of the behaviors measured by the test.

As the ACIRI is an instrument for authentic assessment intended to improve children’s literacy development, it is appropriate to establish consequential validity. DeBruin-Parecki (1999) established consequential validity by demonstrating that the test measures behaviors that improve literacy outcomes for children. To do this, the study determined that parent/child dyads who used the test improved their shared book reading interactions, which in turn improved the child’s reading ability. Using qualitative interview techniques and informal conversation, DeBruin-Parecki (1999) determined that adults were able to improve their joint reading skills and focus children’s attention on literacy developing skills. As an example, one teacher spoke about using the ACIRI with parents. The teacher said:

It really helps them (parents) stay focused on the story, and it makes them really think about more than just the words. They have to think about things they are doing while they read, and that’s a good way to develop skills (DeBruin-Parecki, 1999, p. 17).

Additional Validation of the ACIRI

Boyce, Cook, Roggman, Innocenti, Jump and Akers (2004) looked at 47 Spanish-speaking immigrant Latina mothers and their three-year-old children. The researchers were interested in the interactive reading behaviors of the dyads and the children’s expressive language. The study did not seek to validate the ACIRI, but while using the
Spanish language version of the test, it showed a correlation between ACIRI scores and both the children’s English and Spanish vocabularies; this correlation held up even when corrected for the mother’s vocabulary. Boyce et al. found a correlation between two categories of the ACIRI, enhancing attention to text \((r = .38, p < .01)\) and using literacy strategies \((r = .41, p < .01)\), and scores on the children’s English and Spanish picture vocabulary scores using the Woodcock-Munoz test. The researchers also found a statistically non-significant correlation between promoting interactive reading and supporting reading comprehension \((r = .18)\), and the vocabulary scores.

*Scoring the ACIRI*

The ACIRI has an extensive manual that details the proper use of the instrument and defines the scoring system. Observers give scores for three categories both to the parent and to the child. The categories are as follows: 1) enhancing attention to text, 2) promoting interactive reading and supporting comprehension, and 3) using literacy strategies. Each category has four items, each of which scores specific behaviors graded on a zero, one, two, or three point scale. Thus, parents earn scores for 12 behavioral items and children earn scores for 12 parallel items adjusted to the child’s context. A sample of the scoring sheet is available in Appendix B. The researcher averages scores for each ACIRI category and additionally calculates a whole test score (DeBruin-Parecki, 1999; 2007). Higher scores on the ACIRI will indicate a more educationally supportive engagement of shared book reading.

The ACIRI manual (DeBruin-Parecki, 2007) details each behavior to be scored and clear criteria for each behavior are given for both parents and children; examples help clarify the scored behaviors. With the behavior ratings, a zero indicates a behavior not
observed. Behaviors observed once (or infrequently) are given a one. Behaviors observed two or three times (or some of the time) earn a two. A behavior that occurs four or more times (or frequently observed) earns a three. Further, analogous phrasing of questions allows the scores on the same criteria to apply to both parent and child. As an illustration, item 2.2 for adults assesses whether "Adult points to pictures and words to assist the child in identification and understanding" (p. 33). The corresponding item for children reads, "Child responds to adult cues or identifies pictures and words on his or her own" (p. 35). The scores associated with each item are distinct from all other items on the measure.

*Establishing Testing Reliability*

To establish scoring reliability, the researcher and an assistant followed the instructions of DeBruin-Parecki (2007). DeBruin-Parecki recommends the dyads be videotaped and that two individuals score behaviors. Further, she recommends that the scorers review all item with each other. The researcher was one reviewer and an assistant was hired for the project. As exemplified by Dixon-Krauss, Januszka, and Chae (2010), scorers initially worked separately and assessed videos independently. As demonstrated by Rodriguez, Hines, and Montiel (2009), the second scorer was blind to the goals of the study.

To assure data fidelity and to assist data analysis, shared book reading sessions were transcribed. Transcriptions came from the video, and an audio recorder also recorded sessions. The audio recording also served as a backup for the transcription. Primarily, the audio recorder was useful in understanding softly spoken words that the main camera microphone did not register.
Using the ACIRI’s (DeBruin-Parecki, 2007) written materials, the researcher made an effort to define coding schemes as clearly as possible. The ACIRI clearly identifies scored behaviors and rating scales and DeBruin-Parecki recommends referencing the definitions of the behaviors. To resolve any areas of uncertainty, the researcher also met with DeBruin-Parecki, the author of the ACIRI.

As suggested by Cho (2008), to clarify definitions, both coders practiced coding with sample videos; sample videos were created during equipment tests and during the pilot. To establish scoring consistency, during the training phase the scorers met, discussed, and arrived at a consensus regarding how to score specific items. Scorers noted points of agreement within a “coding scheme book.” The book included examples of coded behaviors discussed and agreed-upon results.

Further, the study evaluated the degree to which the two observers agreed about item values. Chen and Krauss (2004a) note a difference between interrater agreement and interrater reliability. For the statisticians, interrater agreement is the degree to which two observers give the exact same rating to a behavior. Interrater reliability describes the relative consistency of results between two observers (Chen & Krauss, 2004b).

A common indication of interrater agreement is a simple percentage (Chen & Krauss, 2004a). In the current study, the two raters scored eight sets of adult and child dyads on each of 12 items listed for the ACIRI (DeBruin-Parecki, 2007) for two books. Thus, each coder scored 384 items. Of the 384 scores, 293 scores were identical for both coders, a 76.3% agreement rate. However, Hallgren (2012) warns that a simple percentage agreement is inadequate and recommends using intra-class correlations. Cicchetti (1994), explains that the level of clinical significance for intra-class correlation
below .40 is poor, between .40 and .59 is fair, .60 and .74 is good, and .75 to 1.00 is excellent. As statistical analysis hinges on the ACIRI categorical subtotals and the score total, it is appropriate to analyze intra-class correlations on Enhancing Attention to Text ($r = .795$), Promoting Interactive Reading and Supporting Comprehension ($r = .901$), Using Literacy Strategies ($r = .888$) and the ACIRI total ($r = .933$). All scores met Cicchetti’s excellent rating.

Additionally, Pearson’s correlation can calculate interrater reliability (Chen & Krauss, 2004b). Interrater agreement on Enhancing Attention to Text ($r = .722$, $p < .01$), Promoting Interactive Reading and Supporting Comprehension ($r = .824$, $p < .01$), Using Literacy Strategies ($r = .795$, $p < .01$) and the ACIRI Total ($r = .876$, $p < .01$) showed a strong degree of agreement.

**Second Reviewer, Lessons Learned from Pilot**

The researcher and an assistant followed the procedures for scoring the ACIRI outlined above. However, some procedures developed after lesson learned in the field. The second reviewer initially looked only at the first shared book reading session, scoring all three categories before moving on to subsequent shared book reading sessions. Upon discovering this, the researcher asked the second reviewer to score a category for both books before moving on to the next category; thus the reviewer would see both reading sessions, scoring four items for adult and child before returning to the first video to score the second category. This method should promote consistency with scoring. Further, the second scorer found it useful to read the children’s books in preparation for watching the videos, and having the books open before her as she watched. As the parents and
children pointed at pictures, she referenced pictures and texts. Consequently, she revised some scores once she had the storybooks.

In the process of meeting and agreeing upon mutually agreed scores, the reviewers further refined their understanding of grading criteria. As an example, they observed the children responding to their parents’ pointing at a picture. Initially, they gave credit for the same action, pointing at a picture, in two categories. They then determined that they should distinguish, "Child responds to adult cues or identifies pictures and words on his or her own" (p. 41) from "Child responds to the adult and/or identifies visual cues related to the story him- or herself" (p 41). After reviewing the elaborations on the scoring criteria, they resolved that the parent had supported the child's comprehension of the story, but that the parent’s behavior was not a literacy strategy as defined by the ACIRI. Thus, the item in the "Promoting Interactive Reading and Supporting Comprehension" category gained points, but "Using Literacy Strategies" category did not gain points.

Another scoring criterion was "Adult relates the book's content and the child's responses to personal experiences" (DeBruin-Parecki, 2007,p 41). For this item, the scorers made a distinction between background knowledge and personal experience. As an example, a parent pointed at a picture and asked the name of the planet. They felt this was calling on background knowledge, which did not earn points in the category, but scored points elsewhere. In contrast, when a parent asked if his child remembered "seeing part of the Space Shuttle in Seattle," this was scored as relating to a personal experience. Lessons learned in the pilot study informed procedures for the main study.
Data Reconciliation

Several methods are appropriate for the reconciliation of scores by two raters. This study follows the advice of DeBruin-Parecki (2007), who recommends that coders meet to reconcile differences. This approach is most appropriate when the disagreement hinges on the fact of an event. That is to say, it is reasonable to reconcile differences when raters are assessing whether an objective standard has or has not occurred. This is appropriate here because scoring differences are due to missed observations and mistakes in applying definitions. Consequently, coders came together to discuss observations. After looking over the pertinent video and referencing the relevant definitions, the coders came to a consensus score on all items. Consensus scores are the basis for analysis.

Another method is to use the mean of all the scores calculated by the raters. Johnson, Penny, and Gordon (2000) find fault with this reasoning, but recognize that many consider it acceptable when scores are adjacent; that is, a score of three is adjacent to a score of two, but is not adjacent to a score of one or zero. Johnson and company point out that this approach can lead to a considerable error term clouding analysis. Further, this approach is appropriate when observed differences are the result of disagreements due to interpretation of degree, where the apparent magnitude of a behavior determines the score. In such cases, an objective standard is not possible. However, recognizing that some researcher may prefer this method, the mean of scores from both raters serves as the basis of a secondary set of tables, which is available in Appendix C.

Data Entry

After the ACIRI tests were scored, the data was manually entered into a computer
using SPSS, Graduate Student version 16 (2007), a statistical software program. So the researcher could more easily check the data for errors, the data were electronically transferred to Microsoft Office Excel (2007). The data was also transferred to SPSS version 22 (IBM, 2013) when calculating nonparametric statistics (see Appendix D).

Following the suggestion of Fink (2003), the researcher set maximum and minimum values for each data cell to reduce initial data entry errors. The researcher searched each entry column for values outside of the 0 to 3 scoring range, or 0 to 12 range for section totals, as appropriate to the data. The researcher followed the advice of De Vaus (1986), who recommends entering data twice and then crosschecking the data. He also followed the advice of Fink (2003), who suggests a seven day or more wait before reentering the data a second time. The researcher then used Microsoft Excel (2007) to compare the input data. Within Microsoft Excel (2007), a worksheet subtracted the value of a given cell from the analogous cell inputted a week later. Values other than zero indicated a data entry error. Data errors were resolved by reexamining the original documents. Corrected values informed analysis.

Sample Size and Power

Sample size impacts the ability of a study to detect significant differences between groups (Keppel & Wickens, 2004). As previously discussed, parents and children read many more narrative fictional books during shared book reading than non-narrative informational books (Duke, 2000; Palincsar & Duke, 2004; Yopp & Yopp, 2006). If the quality of interactive shared book reading is a significant factor in families choosing narrative fiction over informational texts, it follows that the measured effect sizes are likely to be at least medium and perhaps large. Cohen (1988) explains that
medium effect sizes are "visible to the naked eye" (p. 26). Cohen’s statement suggests that the impact of medium effect sizes are noticeable and large effect sizes are more noticeable still. For reasons previously noted, eight is a feasible sample size for this study, yet with eight dyads, the sample size is small.

Keppel and Wickens (2004) explain that power is an estimation of a type II error. Power also helps to calculate the number of subjects necessary for a study. A major factor in determining power is the number of observations, and small sample sizes are only likely to detect large effects. Keppel and Wickens claim that behavioral scientist generally consider a power of .80 reasonable. Using Cohen's (1988) tables, a two tailed analysis of two groups at a power of .80, a sample of 26 dyads will detect a large difference \((d = .80)\) between two groups. Under the same circumstances, to detect a medium effect size \((d = .50)\) requires 64 dyads.

The Keppel and Wickens (2004) and Cohen (1988) discussions of power suggest that the current study, with eight dyads, can only detect the largest effect sizes at \(\alpha = .05\) with a power of .80. Using Cohen's (1988) tables, at a power of 0.80, the current sample of eight will detect an effect size slightly larger than \(d = 1.40\), and at a power of 0.50 an effect size of \(d = 1.10\). The sample size suggests a significant limitation to the current study.

Rodriguez, Hines, and Montiel Method

The previously described Rodriguez, Hines, and Montiel (2009) study is influential in this study's design. Rodriguez and company compared ACIRI scores across two SES groupings. It additionally compared first and second testing sessions that were held a week apart, and its data met assumptions of normality. The researchers used
MANOVA for their statistical calculation. However, this proposed study tries to follow the Rodriguez et al. example, recognizing that data consideration requires some deviation from their example.

This study examines ACIRI data across two conditions, which suggests that a two-sample $t$ tests could be the appropriate data analysis method. However, according to Keppel and Wickens (2004), the Central Limit Theorem requires a sample size of 12 to assume a normal distribution. However, Moore and McCabe (2006) explain that $t$ tests are appropriate when $n = 5$ and larger if sample sizes are equal. This study uses a sample of eight dyads, and uses equal sample sizes.

Recognizing a potential controversy, as suggested by Moore and McCabe (2006), the current study presents nonparametric statistical results in Appendix D. Kraska-Miller (2014) points out that the Mann-Whitney $U$ test (also called the Wilcoxon-Mann-Whitney $U$ and the Wilcoxon Sum Rank-Sum test) is an appropriate nonparametric equivalent of independent sample $t$ test and is especially useful for small data sets. The Mann-Whitney U does not assume normal distributions or equal variances. However, it does assume that the samples are random and independent. The test compares the three categorical scores across the two conditions, informational and narrative text reading.

*Descriptive Statistics and Effect Size*

As exemplified in the Rodriguez, Hines, and Montiel (2009), the current study presents descriptive statistics associated with ACIRI scores. Specifically, the study reports minimum, maximum, mean, and standard deviation of ACIRI scores in the three categories and test totals. For statistically significant findings, the report gives effect sizes using Cohen's $d$ in the body of the report, and reports all effect sizes in Appendix E.
Barnyak Method

As a matter of coincidence, there are several similarities between this proposed study and the previously described Barnyak (2011) study. For example, data is collected using interviews and observations; interviews are semi-scripted and observations are based on the ACIRI (DeBruin-Parecki, 2007). However, beyond coincidence, Barnyak is also influential in the current study's design.

Barnyak (2011) does not report scores for the ACIRI (DeBruin-Parecki, 2007), but among other things, she describes in detail the extent to which an ACIRI item was carried out by parents. She further connects the observed behavior with answers that parents and children gave during the semi-scripted interviews. She goes on to analyze the connection between the things that parents and children say to the things that they do in the observed sessions. In this process, she quotes parent and child comments made during the shared book reading session and relates those verbal interactions to interview answers. She also connects responses to the semi-scripted questions to the observed behaviors described in the ACIRI.

Qualitative Use of the ACIRI

The Barnyak (2011) study suggested the viability of doing more than simply scoring the ACIRI (DeBruin-Parecki, 2007). Semi-scripted questions facilitated the comparison, as many of the questions originate from the categories and items of the ACIRI and ask the parents why the behavior occurred (DeBruin-Parecki, 2007) (see Appendix A).

In the qualitative part of the research, the ACIRI (DeBruin-Parecki, 2007) serves as a guide for describing parent-child interactions. For example, one question asks, "I
want to ask you about what you did to help your child to pay attention to the texts. Did you find a difference between the books?" The same question includes the comment: "Things you might want to consider include keeping your child close, letting him/her hold the book, letting him/her turn pages, and how you shared the book with your child." The “enhancing attention to text” category from the ACIRI served as a basis for the questions (see Appendices A and B). As appropriate, the researcher quotes comments made by parents and children during shared book reading. Analysis includes descriptions of parent and/or child behavior and the researcher describes the qualitative characteristics of the interactions.

**Interviews**

Before and after each dyad read both books, the researcher asked semi-scripted questions. Before the book reading, the parent and child were asked if they were familiar with either book. After the reading, questions allowed the study to explore participants' book reading experiences. The questions also allowed exploration of the study’s hypothesis. Parent and child comments help to explain their experience with each book and the genres the books represent. Semi-structured questions keep comments focused, but also allowed questioning to explore relevant topics that naturally developed (Creswell, 2007). The researcher also asked unscripted questions designed to explore topics that developed in the course of the interview. Interpretation of the interviews is informed by the previously discussed sociocultural learning theory and the zone of proximal development (Vygotsky, 1978, 1986).

So that the parents’ responses minimally influenced the children’s answers, the researcher encouraged each child to sit next to his or her parent. This reduced the child's
opportunity to look at mom or dad for approval. Further, the researcher solicited the child’s response first and asked the parent to "hold on to your thoughts." Questions included the following: "Which book did you like better? Why?", and "Did you find one book to be different from the other? What did you notice?" Parents were further asked questions about the three categorical items of the ACIRI (DeBruin-Parecki, 2007): 1) Enhancing Attention to Text, 2) Promoting Iterative Reading and Supporting Comprehension, and 3) Using Literacy Strategies.

Questions also asked both children and parents about their book preferences. The researcher asked children concrete questions such as, “Do you like reading books with stories like A Penguin Pup for Pinkerton?” and “Do you like reading books about space like Rockets and Spaceships?” The researcher asked parents questions meant to discover book preferences at home. They were asked, “Which kind of book, fictional or informational, do you read most frequently at home? Why?” See Appendix A for the complete list of questions. As genre preferences may influence results, these questions were designed to identify parent and child book preferences.

Video and audio equipment recorded the parent and child responses. After the interview, the audio recordings were transcribed with the aim to record faithfully the words and meanings conveyed in the interviews; indecipherable words were noted on the transcript. Similarly, certain repeated words, or seemingly interfering words without meaning (e.g. "you know" and "um") were excluded from the final transcript.

Inconsistencies with Interviews

On occasion, parent and child answers were inconsistent with observed data or established fact. The researcher compared the degree that statements parallel or deviate
from the observed behavior. The inconsistencies formed a foundation for some analyses.

**Pilot Study**

For the pilot study, the researcher recruited two parent-child dyads, Chris and his son Louis, along with Pauline and her son Paul (all names are pseudonyms). In both cases, a parent read to his or her five-year-old child. The children participated in the pilot the summer before they entered kindergarten. To find parent-child dyads, the researcher contacted families with whom he had a personal connection. In one case, a friend introduced the researcher via email to a neighbor. In the other case, he asked a friend related to him through a former marriage.

**Pilot Setting**

As the researcher found the participants without the help of a daycare facility, the researcher deviated from the dissertation recruitment plan. Instead of meeting the dyads in a daycare center, he traveled to the homes of the two families. After the researcher arrived at each home and exchanged pleasantries, he asked the parent where he or she would like to read. In each case, the parent selected a couch in the living room.

**Pilot Data Collection**

Both dyads read two books, *A Penguin Pup for Pinkerton* (Kellogg, 2001) and *Rockets and Spaceships* (Wallace, 2011), but the order of books was different in each case. The researcher set up the video camera as described in the methods section. The videotaping worked well for the first dyad of Pauline and Paul, but the researcher realized that two matters needed further attention. First, knowing that leaving the room during storybook reading might not be possible within a daycare facility, the researcher needed to work out the best way to remain present and operate equipment efficiently.
without being intrusive or affecting outcomes. Second, the researcher found that the video camera was not always able to pick up Paul's speech; he sometimes spoke in a volume below the microphone's registry. The researcher addressed these two issues in the subsequent videotaping.

For the second dyad, Chris and Louis, the researcher set up the video equipment in front of a couch where they often read. The researcher added an audio recorder near the dyad so that it was more likely to pick up any softly spoken words. Further, as suggested by DeBruin-Parecki (2007), the researcher sat in the room and slightly off to one side and out of the participants' direct line of sight. This arrangement seemed to work well. It closely approximated what the researcher would expect in a daycare facility. This reading went smoothly, and the researcher did not detect a reaction to his presence in the room by either the parent or child.

Preparing and Organizing Data

For the pilot, the researcher worked to determine consistent criteria for scoring each item; applying the ACIRI (DeBruin-Parecki, 2007) zero to three rating system was initially challenging with some items, as the ACIRI scale rates the frequency of behaviors, but not the quality of the behaviors. As an example, the researcher was initially uncertain about how to arrive at a score when a parent "sustains the child's interest and attention through use of child-adjusted language, positive affect, and reinforcement" (p.32) in barely perceptible ways. The researcher resolved this and similar questions as they developed. In the example given, the researcher chose to score subtle changes in voice pitch, as he believed the child recognized his or her parent's
positive affect. Further, counting the frequency of events was consistent with the ACIRI directions.

Rating all 12 items within a single viewing of a tape proved impossible. Instead, the researcher preferred reviewing the videos three times to score all items. On each pass, the researcher looked for four corresponding items within each of the ACIRI (DeBruin-Parecki, 2007) categories for both books. On the first pass, he reviewed the four items connected to the “enhanced attention to text” category for both the informational text and the fictional text. The researcher then reviewed “promoting interactive reading and supporting comprehension,” followed by the “using literacy strategies” category, again, always looking at both books. He watched the entirety of each shared book reading session, rating each session in succession on the same items. Rating both reading sessions in succession helped maintain consistency.

Pilot Results

The pilot offered preliminary results and suggested areas for further exploration. This initial study analyzed questions about the impact of genre and book order on shared book reading. Because both participating children were boys, it was not possible to explore differences according to the child’s gender.

There was little variation in parent total scores between readings of the informational and fictional genres. For the pilot, there was little variation between genres in the Enhanced Attention to Text category and there was a small degree of variation within the Promoting Interactive Reading and Supporting Comprehension Strategies category. The Using Literacy Strategies category earned category totals ranging from zero to four (see Table 3.2).
Table 3.2

Pilot Study: Informational Text vs. Fictional Text

<table>
<thead>
<tr>
<th>ACIRI Category</th>
<th>Pauline (Adult)</th>
<th>Paul (Child)</th>
<th>Louis (Child)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Informational</td>
<td>Fictional</td>
<td>Informational</td>
</tr>
<tr>
<td>Attention to Text</td>
<td>8</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Interactive Reading</td>
<td>7</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Comp</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literacy Strategy</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>16</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACIRI Category</th>
<th>Chris (Adult)</th>
<th>Louis (Child)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Informational</td>
<td>Fictional</td>
</tr>
<tr>
<td>Attention to Text</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Interactive Reading</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Comp</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literacy Strategy</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>16</td>
</tr>
</tbody>
</table>

Note. All names are pseudonyms

Without exception, the children’s scores were equal to or more commonly, below the parent’s scores. This might be expected as the children are generally following their parents’ example. While three of the parents’ scores were exactly equal for both book genres, twice the parents scored more points within a category with the informational text. Once, Chris scored one more point in a category with the fictional text. The children’s categorical scores were more variable; only Paul earned the same number of points for both books within a category. Four out of the six categorical totals were higher with the children’s informational scores and only once did fiction out score the informational text within a category.
Pilot Discussion: Findings

With only two parent-child dyads under consideration, findings could only be tentative and the sample size was too small for statistical analysis. However, preliminary results suggested areas for examination for the main study. Further, lessons learned in the pilot helped to refine procedures for the main study.

Areas identified for examination in the main study included differences, or lack thereof, between enhancements to attention as between genres. During the pilot, there was little variation in the Enhanced Attention to Text category. Both parents duplicated their scores with both books. This suggested that parents used the same strategies to enhance attention to text irrespective of genre. As for the children, Louis earned two fewer points with fictional texts when compared to informational texts. In contrast, Paul’s scores were the same in both categories.

Interestingly, no dyads earned points on this item or the related item for adults, “adult gives the child an opportunity to hold the book and turn pages.” It might be that parents did not encourage their children to turn pages. One unexplored explanation could be that they might have been concerned about caring for a book they did not own. Fearing damage, parents might have been reluctant to give a book over to their child. The main study examines this area more closely.

Preliminary scores indicated a potential advantage with informational texts in the Promoting Interactive Reading and Supporting Comprehension category. Additionally, certain book features seemed to encourage the use of emergent reading strategies. As an example, Pauline and Paul used the glossary at the end of Rockets and Spaceships (Wallace, 2011) to review information from the story. Additionally, all dyads used
supplemental information in the form of pictures and explanatory boxes found in the text to support story comprehension. Consequently, book design might potentially encourage the use of certain comprehension strategies and support background knowledge. The pilot identified this and other aspects of the shared reading environment as relevant to the main study.

Whether the readers’ interest is diminished for the second book read, whichever genre it represents, was found to be another area for examination. Pauline and Paul began with an informational book and finished with a storybook. Chris and Louis began with a storybook. Preliminary results suggested that parents might have used better literacy strategies and the children might have been more receptive with the first book than with the second. Analysis of a larger group might help determine if shared book reading becomes less effective with the second book.

*Pilot Discussion: Procedural Implications for Dissertation Study*

In addition to suggesting several possible areas of exploration, the pilot study helped identify factors that improved the main study. As a first step, it was prudent to use a better video camera with a more sensitive microphone. Additionally, the researcher found that writing the names of the participants and the date on a dry erase board facilitated record keeping. Videotaping this information at the start of each video helped associate records with the correct dyads.

The pilot also suggested problems with the sample size for the study. The relatively small variation in ACIRI (DeBruin-Parecki, 2007) scores suggested that the researcher might need a sample size larger than eight dyads to detect a statistically significant variation in the sample. This observation and the previous discussion of effect
sizes and sample size indicate a potential limitation of the main study. Additionally, preliminary data suggested that the order of book reading could be a factor in interactive book reading results.

The videos of the pilot subjects had benefits for working with a second reviewer. First, the videos helped to illustrate scoring criteria and supported the second scorer’s training. Second, the researcher more clearly stated the need to score a single category with all videos before returning to the first video to score the next category. Third, the second scorer needed to read the books read by the parent-child dyads and have copies available for reference during scoring. Fourth, working with a second reviewer demonstrated the importance of reviewing tapes after the completion of scoring and during data analysis.

Finally, the process of generating preliminary results suggested additional practices that may help augment analysis. While ACIRI scores indicated that a specific behavior did or did not occur, questions about why a behavior did or did not occur could not be answered. As an example, the researcher found that parents did not encourage their children to hold the book or turn the pages. During the main study, taking a moment after the readings to ask parents why they did or did not allow the child to hold the book was edifying.
CHAPTER 4 – RESULTS

This study investigates whether parents and/or children read non-narrative informational texts with the same or different interactive reading behaviors that they use when they read narrative fiction. In other words, the study seeks to understand if book genre makes a difference in how parents and/or children interact during shared book reading, especially in ways that impact the development of literacy and emergent literacy skills. The study specifically asks: what is the nature of interactive behaviors, including language, when parents read non-narrative informational texts? what is the nature of interactive behaviors, including language, when parents read narrative fictional texts to their children? and what are the similarities and differences found with interactive reading during narrative fictional texts and during non-narrative informational texts?

The chapter begins by describing the inclusion criteria for the study and introducing the participants. It then quantitatively examines the study data based on scores derived from the ACIRI (DeBruin-Parecki, 2007). The quantitative examination measures the differences in selected behaviors and determines whether those behaviors are statistically different. Next, the chapter reviews qualitative data from the parent and child interviews and the video. The interviews allow parents, and to a lesser extent children, to comment on their behaviors during shared book reading. The examination of the videos provides for a detailed analysis of shared reading behaviors. This includes contrasting parent comments with observed behaviors. Finally, the chapter uses the quantitative and qualitative data to answer the three dissertation questions in addition to drawing other conclusions from the data.
Recruitment

Participants were parents and their four- to five-year-old children who were expected to attend kindergarten the following September. The parents spoke and read English with enough fluency to participate in the study, and that they read to their children at home. Recruitment occurred in four daycare facilities. Practical considerations limited the choice of facilities to a geographic area in proximity to the researcher’s home. The sample size was limited to eight dyads, with each dyad comprised of a parent and a child.

The daycare centers were in four separate New Jersey communities. The New Jersey Department of Education gave the school districts for the four relevant communities district factor groupings of A, GH, I and J. The New Jersey Department of Education calculates District Factor Groupings from data provided by the US Census. Six demographic variables closely related to Social Economic Status comprise the measure. The GH, I and J ratings were given to schools at the highest end of the socioeconomic standing scale in New Jersey, with letter A representing the districts with the lowest socioeconomic indicators (from http://www.state.nj.us/education/finance/rda/dfg.shtml, retrieved on November 24, 2014).

An interview with the director indicated that the daycare facility within an A district primarily draws the children of the staff and teachers of a large university; the parents tend to be well educated and within the middle-income bracket. Further, the facility does not offer scholarships or tuition reductions to encourage low-income participation.

All of the programs are non-profit daycare facilities. The program in the I district
offers tuition assistance to qualifying families. Three are state accredited and the fourth is piloting the New Jersey ORIS state certification program, also known as Grow NJ Kids. All four programs use Creative Curriculum by Teaching Strategies to develop literacy. The National Association for the Education of Young Children additionally accredits the two programs in the GH and J district.

The Participants

Eight dyads agreed to participate in the study and the researcher videotaped them between February 20, 2014 and June 18, 2014. As detailed earlier, the recordings were made at four daycare centers. The dyads were as follows: Noah and Richard, Captain and William, Nate and Sarah, Bruce and Ting, Rapunzel and Peggy, Meena and Dee, Violet and Evan, and Cinderella and Pete. All names given in this study are pseudonyms with the children's names given first. The participants are introduced here in the same order as their names appear on the tables within this paper.

Noah and Richard. Noah was a generally enthusiastic boy who was highly engaged with the books. Even before the reading session had officially started, he announced his interest in reading the books based on the covers. This enthusiasm carried over to the shared book reading sessions. At one point, he got up to act out a rocket landing. Nevertheless, while engaged with the reading, he could also be distracted. He got up to "fix" things within the classroom. His father Richard was patient with his child and evidently enjoyed the time with his son. Noah would occasionally interrupt his father's reading of a book. Richard would stop and allow Noah to ask his question or make a statement, to which Richard would respond appropriately. He would then return to the reading. The video shows Richard smiling and laughing at his son's exuberance
during book reading. The pair took 20 minutes and 45 seconds to read both books, double the time that many of the other reading pairs used.

*Captain and William.* Captain took on the pseudonym of his favorite cartoon character, Captain America, and his Spiderman t-shirt suggested his enthusiasm for comic book heroes. While he was well behaved and seemed engaged in the readings, he also stared off into the room and his father helped refocus his attention. William was soft spoken and read noticeably more quickly than the other parents. Like the other parents, he answered his child's questions, but he was often very brief in his responses; initially, he did not elaborate on his answers, but said more as the session went on.

*Nate and Sarah.* Nate had abundant energy and needed help to remain focused on shared book reading. He read while holding a stuffed animal and with another lying next to him. Sarah patiently worked with Nate to keep him focused on the book. Before the session, Sarah was concerned about her son's reaction to reading in a new place with a new person around. While the study was done within a room in his daycare center, it was not a room that he normally enters. Fortunately, while he was interested in his new surroundings, and was briefly distracted by a stuffed animal in the room, he was able to focus and participate in the study. Nate spoke fluently in English. While English was a non-native language for Sarah, she spoke with the fluency of a native speaker and without a trace of a foreign accent.

*Bruce and Ting.* Both Bruce and Ting speak both English and Chinese. Bruce was a quiet boy, but he clearly understood and spoke English at a level appropriate for a preschool child. The books held his attention. However, while he usually spoke with his mother in English, several times he spoke Chinese instead. Bruce's ability to sound out
words in English was an advanced skill for his age and strongly suggested that they frequently read together in English. Ting spoke with a strong accent yet expressed herself fully in English. During the storybook reading session, she worked with Bruce on developing conventional literacy skills.

*Rapunzel and Peggy.* Rapunzel requested the name of her favorite storybook character for her pseudonym. As with the other children born to first generation immigrants in the study, Rapunzel spoke English fluently. She was happy to read with her mother, but was very quiet during the storybook reading. Peggy, an immigrant to the United States, read with a very slight accent; however, she spoke fluently, using appropriate vocabulary and correct English.

*Meena and Dee.* Meena is the fourth child in the study born to an immigrant parent. As with the other children, there was no trace of an accent and her speech suggested age appropriate fluency. She was cooperative during shared book reading and she generally focused her attention on the books. Like the other mothers in the study, Dee was a first generation immigrant. However, she was clearly fluent in English and did not speak with an appreciable accent. She was a soft-spoken woman.

*Violet and Evan.* Violet engaged easily with the book reading and focused her attention on both books. She was pleased to sit on her father's lap and genuinely enjoyed the experience. Evan also seemed happy to read with his daughter and used a particularly animated voice as he read. He was also careful to point out any elements in the books that Violet might not understand.

*Cinderella and Pete.* Like Rapunzel, Cinderella chose to use the name of her favorite storybook character as her pseudonym. When I later called her by her
pseudonym "Cinderella," she seemed pleased and responded with a big smile. Both books held her attention. Pete was quick to start reading with his daughter. While reading, he rarely departed from the text of the books. He only occasionally elaborated on the stories, usually to answer his daughter's questions.

Recruitment Check

The recruitment letter clearly articulated several participant characteristics critical to the study’s design (See Appendices H and I). First, the children were to be in their last year of preschool and were expecting to enter kindergarten in the coming fall. Second, parents were to speak English while participating in the study. Third, parents were to read to their children at home. Each of these three requirements was double-checked.

To make sure that the children were in their last year of preschool, staff at the various daycare centers worked with the researcher making sure only the parents of eligible children to received recruitment letters. Then, the researcher reviewed the requirement with each parent as he handed out the letter.

The researcher initially assessed each parent’s skill in English as the researcher discussed the study with the parent during the recruitment process. Further, he informally evaluated the parent's skill in English during the course of the study. All of the parents were able to work with their child and read the children's books in English. Only occasionally would Bruce, who is bilingual, speak with his mother in Chinese. Interestingly, four of the parents, all of the women, were non-native English speakers, while the fathers were all native English speakers.

Checking that parents read with their children at home, the researcher asked how much the parents and children participating in the study read at home. With one
exception, the parents indicated that they read with their child every day and that they read multiple books and sometimes for lengthy periods. As an example, Evan explained that he and Violet "probably read about six [books] a day." Richard indicated that he read with Noah at least 15 minutes daily, but that sometimes they read for an hour. The lone exception to daily reading was Peggy, who explained that piano practice limits how much reading they can do, but then offered, "We try to alternate [between piano practice and reading]. Before the piano, we used to read every day."

While not a requirement, the study anticipated that the middle SES participants would not only read with their children, but also provide rich, literacy-supportive environments at home. Dyads that engaged in frequent shared book reading were more likely to have a well-established reading routine. The researcher assumed that well-established routines are more resistant to change because of a novel reading environment. Still, some evidence suggested that parents varied a little from their home routine during the course of the study, but largely kept to the same routines.

*Reading the Same Way at Home*

Since all storybook reading sessions were held in a daycare center, with a clearly visible video camera in the proximity of the researcher, there was the possibility that the unusual environment would influence the participants’ behaviors. To guard against this, the researcher asked each dyad, "Please read together exactly as you would at home." As a check, after the dyads had finished reading both books, he asked the child and then the parent, "Did you read those stories the same way you read stories at home?"

All of the children indicated that they read the books just the way they do it at home. The most common response was for the child to nod yes. In an exception, Meena
replied, "I don't know" to the question. The researcher then rephrased the question as, "So, you usually sit next to your mom?" to which Meena replied, "Yes." As might be expected from four and five-year-old children, the answers must be taken with a grain of salt. The children were unlikely to fully appreciate the question. However, the parents' responses suggested that the experiences, with noted exceptions, were largely the same.

Richard was typical of the parents when he nodded yes and said that he and his son read the books "pretty much the same way we do it at home." However, there were also indications of variation. After Ting answered the question about reading the same at home, with "Yes, exactly," she then qualified her response by explaining the difference in the texts she reads at home. She explained, "The first book [Pinkerton] was a little bit higher than he can read, so I just pretty much did all the reading. But for books, like the second one [Rockets], because the words are easier, the vocabulary are simpler, so I usually just let him [Bruce] read most of the words."

Like Ting, Dee initially agreed that she read to her daughter "just the same way," but then qualified her response by saying, "I was just a little, a tiny little bit nervous." She developed her statement by claiming that the video camera was the source of her nerves, and adding, "Other than that, that's what we do. It's more interactive and.... She'll [Meena] be more involved. She'll just stop in the middle and start asking questions.... She was more like reserved here."

As a general matter, all of the children and parents indicated that they read the books the same way at home. However, four qualified their answers. Ting, Peggy, and Violet explained that they typically read easier texts with their children, and Dee explained she was nervous and her child was shy. Additionally, as is described in more
detail elsewhere, in the setting of the study, parents were also reluctant to let the child hold the books and turn pages. Some parents were concerned that they might damage a book that was not their own.

*Genre Read at Home*

Several studies (e.g. Duke, 2000; Yopp & Yopp, 2006) indicate that parents read more fiction than non-fiction with their children. As the participants' exposure to genre could influence the study's outcomes, the researcher asked how frequently parents read books from each category (informational and fictional) at home. Commonly, parents indicated that they read more fiction than non-fiction by a wide margin. Both William and Richard indicated they read a narrative story to their child every night, but read an informational text once a week. All of the parents claimed that they read more fiction, but read informational texts at least some of the time. Peggy was at one end of the range, reading fiction "90% of the time," while Pete was at the other end of the range, claiming a split "60/40 in favor of fiction." Most parents tended toward reading an informational book once a week. Table 4.1 summarizes the parent responses.

When asked why parents and children read more stories than informational books, parents largely gave similar answers. Many parents simply read stories without giving the matter much consideration. William was typical when he said, "I just never thought about it before." Also typical, parents allowed their children to select books at home. Dee explained, "I read to her whatever she brings to me.... She'll bring me like some bird books or math books and ask me to just read them. But most of the time, just storybooks."
Table 4.1

Parent Answers to "How frequently read informational books like Rockets and Spaceships?"

<table>
<thead>
<tr>
<th>Parent Name</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>William</td>
<td>[They read] a lot more storybooks… . [They read informational books] maybe once a week.</td>
</tr>
<tr>
<td>Dee</td>
<td>I read to her whatever she brings to me… . But most of the time, just story books.</td>
</tr>
<tr>
<td>Peggy</td>
<td>Probably one out of ten. 90% is story.</td>
</tr>
<tr>
<td>Evan</td>
<td>Six a day for fiction and once every other day for informational.</td>
</tr>
<tr>
<td>Richard</td>
<td>Probably, yeah, much less often. Yeah, once a week</td>
</tr>
<tr>
<td>Sarah</td>
<td>Much less often than storybooks. But I can't quite put a figure on it.</td>
</tr>
<tr>
<td>Pete</td>
<td>I'd say 60/40 in favor of fiction.</td>
</tr>
<tr>
<td>Ting</td>
<td>We try to [read a storybook] every day… . I just let him read [informational books] by himself.</td>
</tr>
</tbody>
</table>

Note. All names are pseudonyms

Child’s preferred genre. Children generally preferred *A Penguin Pup for Pinkerton* (Kellogg, 2001) over *Rockets and Spaceships* (Wallace, 2011). Six children chose *A Penguin Pup for Pinkerton*, with only Bruce initially choosing the other title (See Table 4.2). Taking a different path, Cinderella first said "both." She later forgot her "both" answer and stated her preference for the informational book, claiming, "*Rockets and Spaceships* is my favorite." Her father Pete explained, "She refers to non-fiction books as learning books. We go to the library and we get some learning books. She might have this idea that these are those are books you ask questions about and learn facts. Otherwise, it is her favorite; it is like her favorite topic. She might be more into it." Ting indicated that Bruce, too, liked informational books, but suggested that she mainly read fiction with him. She said that she let him peruse informational books by
himself and explained, "Yeah, it’s not like he's reading it. It's all trucks. He just sits there and looks at it."

Table 4.2

<table>
<thead>
<tr>
<th>Child</th>
<th>Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Captain</td>
<td>Pinkerton</td>
</tr>
<tr>
<td>Cinderella</td>
<td>Both*</td>
</tr>
<tr>
<td>Noah</td>
<td>Pinkerton</td>
</tr>
<tr>
<td>Nate</td>
<td>Pinkerton</td>
</tr>
<tr>
<td>Violet</td>
<td>Pinkerton</td>
</tr>
<tr>
<td>Bruce</td>
<td>Rockets</td>
</tr>
<tr>
<td>Rapunzel</td>
<td>Pinkerton</td>
</tr>
<tr>
<td>Meena</td>
<td>Pinkerton</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adult</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>William</td>
<td>William</td>
</tr>
<tr>
<td>Pete</td>
<td>Pinkerton</td>
</tr>
<tr>
<td>Richard</td>
<td>Pinkerton</td>
</tr>
<tr>
<td>Sarah</td>
<td>Pinkerton</td>
</tr>
<tr>
<td>Caly</td>
<td>Rockets</td>
</tr>
<tr>
<td>Peggy</td>
<td>Pinkerton</td>
</tr>
<tr>
<td>Dee</td>
<td>Rockets</td>
</tr>
</tbody>
</table>

*Note.* Cinderella also indicated a preference for *Rockets and Spaceships.*

Captain knew his preference, and he clearly preferred stories. When asked why, he replied, "Because they are faster," suggesting that stories seem to go faster as they are more entertaining. Sarah offered up a reason from her child’s point of view, saying that informational texts have "no person to root for. There was no applying human characteristics to any kind [of] character you could relate to. You can't relate to this book [Rockets] as well as he can to this book [Pinkerton] because he wants something to hug and love too."

*Adults’ preferred genre.* Adults also split as to their favorite title. Four of the eight chose *A Penguin Pup for Pinkerton* (Kellogg, 2001) (See Table 4.2). Explaining his preference, Pete offered, "I like reading stories to kids more. It's just more entertaining as a parent, I think, than non-fiction. She likes non-fiction, so it's nice,
but…" When asked why she read mostly storybooks at home, Dee explained, "Frankly, they are not that boring for me. I like them. …. I try to choose really fun, nice books."

Why Fiction Dominates at Home

In addition to asking, "Which kind of book, fictional or informational, do you read most frequently at home?", the researcher also asked, "Why?" While the parents were not explicitly asked if they had considered the importance of genre as they read with their children, three parents, Richard, Peggy, and William, volunteered that they had not. William simply explained, "I just never thought about it before." Further, conversations debriefing the parents on the study suggested that parents were unaware of genre's positive impact on children's literacy development.

Commonly, parents indicated that they read more fiction because they preferred the genre. While none of the parents explicitly said that informational texts were boring, Dee, Richard and Peggy implied it. When Dee offered, "Frankly, [storybooks] are not that boring for me," she suggested that informational texts were "that boring" for her. Similarly, Richard condemned the genre with faint praise by calling such books "fine." He then explained, "I guess it’s because I like stories better." Finally, Peggy simply called informational texts "dry". Four of the parents, Dee, Richard, Pete and Ting, all indicated a general preference for fictional texts, and no parent preferred informational texts. Pete was particularly clear and said, "I prefer reading stories. … As a parent, Dr. Seuss is actually enjoyable."

Finally, the children’s choices were a critical factor in the selection of books read at home, as the parents indicated that they allowed the children some autonomy when choosing books. For example, Dee explained, "I read to her whatever she brings to me."
William surmised that Captain just preferred stories based on Captain’s choices. Thus, the children’s preferences influenced what the parents read.

Interestingly, children seemed more open to whatever was available to read than might be expected in light of professed preference for fiction. Some evidence suggested that they had preferences for individual books, but were generally willing to read either informational or fictional books. Pete noticed that he preferred fiction, but that this preference was not necessarily the case for his daughter. He explained, "I guess I usually pick fiction books she picks non-fiction books."  Sarah offered a reason for her preference that was not strictly a matter of genre. She thought that it was the topic that mattered and suggested, "Anything gross and disgusting is much more catchy in terms of information. ... Anything he can relate to."  Sarah may have an interesting point: that a child may not be influenced by genre as much as topic, and especially a topic with which the child has a connection.

Quantitative Analysis

As a first step, the study must determine if book genre makes a difference in how parents and children interact around shared book reading. To ascertain and assess this difference, the study uses the ACIRI (DeBruin-Parecki, 2007). Statistical analyses examine the contrast between scores for the informational book, *Rockets and Spaceships* (Wallace, 2011) and the fictional book, *A Penguin Pup for Pinkerton* (Kellogg, 2001).  *T* tests compare means for the ACIRI’s three categorical scores and the test total for both parents and children.

The current study videotaped eight parent and child dyads and scored their interactive reading behaviors. The researcher controlled for several factors that could
potentially influence the study's outcome beyond book genre. Toward this end, the study purposely alternated book order and sought equal numbers of girls and boys. To the researcher's experience, early childhood studies typically involve many mothers and few fathers. Consequently, the original research design did not plan to compare the scores of men and women. However, the researcher successfully recruited equal numbers of mothers and fathers, thus balancing adult genders.

Table 4.3

Participant Gender and Book Order

<table>
<thead>
<tr>
<th>Name</th>
<th>Child Gender</th>
<th>Parent Gender</th>
<th>First Book</th>
<th>Second Book</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noah &amp; Richard</td>
<td>Male</td>
<td>Male</td>
<td>Rockets</td>
<td>Pinkerton</td>
</tr>
<tr>
<td>Captain &amp; William</td>
<td>Male</td>
<td>Male</td>
<td>Rockets</td>
<td>Pinkerton</td>
</tr>
<tr>
<td>Nate &amp; Sarah</td>
<td>Male</td>
<td>Female</td>
<td>Pinkerton</td>
<td>Rockets</td>
</tr>
<tr>
<td>Bruce &amp; Ting</td>
<td>Male</td>
<td>Female</td>
<td>Pinkerton</td>
<td>Rockets</td>
</tr>
<tr>
<td>Rapunzel &amp; Peggy</td>
<td>Female</td>
<td>Female</td>
<td>Rockets</td>
<td>Pinkerton</td>
</tr>
<tr>
<td>Mena &amp; Dee</td>
<td>Female</td>
<td>Female</td>
<td>Rockets</td>
<td>Pinkerton</td>
</tr>
<tr>
<td>Violet &amp; Evan</td>
<td>Female</td>
<td>Male</td>
<td>Pinkerton</td>
<td>Rockets</td>
</tr>
<tr>
<td>Cinderella &amp; Pete</td>
<td>Female</td>
<td>Male</td>
<td>Pinkerton</td>
<td>Rockets</td>
</tr>
</tbody>
</table>

*Note.* All names are pseudonyms

The balance in numbers allowed for an equal distribution of three conditions. The conditions are: 1) first book read, 2) participant gender, 3) and book genre. All dyads read both a fictional and an informational book, and two of the girls and two of the boys began with the informational text while the other children began with the fictional text. Similarly, mothers and fathers read the fictional title as the first book equally as often as the non-fiction title. Parents read to their child of the same gender as frequently as parents read to their child of a different gender. Table 4.3 illustrates the gender distributions and first and second books read.
The study analyzes parents’ and children’s scores separately. Keppel and Wickens (2004) explain that inferential statistics assume that no one subject has an effect on any other subject within a sample. Since parents are working with their own children on reading, an interactive effect is assumed. DeBruin-Parecki’s (1999) work supports this assumption. She found a covariation among the adult and child measures during test development.

**Hypothesis**

The study hypothesizes that parents and children read non-narrative informational texts differently than they read narrative fiction. Further, parents read more fiction than nonfiction (Duke, 2000; Yopp & Yopp, 2006) during shared book reading. This preference suggests that parents may not only prefer narrative fiction, but that they are more comfortable with the genre. Therefore, it is likely that the parents’ comfort and/or preference will allow them to engage in more literacy supportive strategies when they use fiction; it may be that parents use more interactive reading behaviors with fictional texts when compared to nonfiction.

To take this idea further, a major reason parents read to their children is to facilitate literacy education (Audet, Evans, Williamson & Reynolds, 2008; Collins & Svensson 2008; Ortiz, 2000). Additionally, Spock and Parker (1998) claim that a parent naturally knows what is best for his or her child. They claim, “the more people have studied different methods of bringing up children, the more they have come to the conclusion that what good mothers and fathers instinctively feel like doing for their babies is usually best after all” (p. 2). While Spock and Parker explicitly mention babies, their advice is offered in a book intended for parents of children before birth until
adolescences. From these two lines of reasoning, it follows that if parents are purposely supporting literacy during book sharing, they may conclude that fiction is the better facilitator of literacy development when compared to other, less used genres. This could result in more literacy supportive behaviors with fictional texts.

The theoretical portion of this study demonstrates that the content of educational efforts must include the development of emergent literacy skills. Further, the theoretical foundation of the study posits that such sociocultural learning techniques, especially scaffolding within the zone of proximal development, describe how children learn emergent literacy techniques. More simply put, children learn from their parents, and the children’s interactive reading behaviors follow their parents’ example. As a result, the study hypothesizes that both parents and children will earn higher scores for interactive reading behaviors with narrative fictional texts when compared to non-narrative informational texts.

**Planned Statistical Contrasts**

The pilot study suggested that book order might influence ACIRI scores. However, statistical analysis did not support this supposition. For both parents \((t(14) = 0.000, p = 1.000)\) and children \((t(14) = 0.056, p = .956)\), the results were far from significant. As will be discussed shortly, sample sizes of four mothers compared to four fathers along with four boys compared to four girls did not allow for a male to female statistical examination. The purpose of the statistical examination is to determine what the dyads do during shared book reading.
Descriptive Statistics

The current study presents descriptive statistics associated with ACIRI scores in Table 4.4. The tables present the number of observations, the mean, the standard deviation, and both the potential and the actual range of scores. The scores are for three ACIRI (2007) categorical totals and inventory totals for both parents and children associated with the informational and fictional book genres. The data was taken from SPSS (2007) output.

The results show that children’s mean scores were lower than parents’ mean scores. Further, children’s standard deviations were greater than that of the parents, with one exception. With the fictional text, children’s scores for Using Literacy Strategies were less variable than the parents’ scores. On this same item, children’s scores only ranged from 0 to 4, the smallest range of any category. This indicates that parents engaged in more interactive reading strategies than their children. As before, the exception is with fiction and the Using Literacy Strategies category; children were more consistent with their scores in comparison to the adults. Otherwise, on all the other categorical scores and the test total, the parents earned the more consistent scores. In sum, parent’s mean scores were more consistent than the children’s were when a comparison was made of the same categorical totals between informational and fictional texts.
Table 4.4

<table>
<thead>
<tr>
<th></th>
<th>Informational</th>
<th></th>
<th></th>
<th>Range</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
<td>SD</td>
<td>Potential</td>
<td>Actual</td>
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<td>1.356</td>
<td>0-12</td>
<td>9-12</td>
<td></td>
<td></td>
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<td><strong>Child</strong></td>
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<td></td>
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<td>Attention To Text</td>
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<tr>
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<tr>
<td>Test Total</td>
<td>8</td>
<td>13.375</td>
<td>4.206</td>
<td>0-36</td>
<td>12-23</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*T tests Results*

The current study analyzes data using two independent sample *t* tests. Moore and McCabe (2006) explain that *t* tests are appropriate when *n* = 5 and larger if sample sizes are equal. This study uses a sample size of eight for both the informational and fictional text comparisons. Table 4.5 summarizes the results for the *t* tests.
The children’s total score \( t(14) = 2.460, p = .027 \) was significant at \( \alpha \leq .05 \); however, the adult inventory total was not significant. Additionally, the three categorical scores, Enhancing Attention to Text, Promoting Interactive Reading and Supporting Comprehension, and Using Literacy Strategies did not produce significant results at \( \alpha \leq .05 \) for either adults or children.

In comparing the informational text to the fictional text, adult means were higher with the informational texts. This was true with all three categories and the test total. Additionally, the informational text scores showed less variation. Similarly, the children’s scores also had higher mean scores with the informational texts. The children’s fictional scores for Using Literacy Strategies had less variation than the informational text, but in all other cases, informational text scores had less variation.

Table 4.5

<table>
<thead>
<tr>
<th>ACIRI Category</th>
<th>Informational</th>
<th>Fictional</th>
<th>( t(14) )</th>
<th>( p )</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
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</tr>
<tr>
<td>Adult</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention To Text</td>
<td>9.875</td>
<td>1.356</td>
<td>9.500</td>
<td>1.512</td>
<td>0.522</td>
</tr>
<tr>
<td>Interactive Read Comp</td>
<td>6.625</td>
<td>1.302</td>
<td>5.375</td>
<td>2.200</td>
<td>1.383</td>
</tr>
<tr>
<td>Literacy Strategies</td>
<td>3.375</td>
<td>1.598</td>
<td>2.500</td>
<td>2.138</td>
<td>0.927</td>
</tr>
<tr>
<td>Test Total</td>
<td>19.875</td>
<td>2.232</td>
<td>17.375</td>
<td>3.701</td>
<td>1.636</td>
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<td>Child</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Attention To Text</td>
<td>9.750</td>
<td>1.488</td>
<td>8.500</td>
<td>2.070</td>
<td>1.387</td>
</tr>
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<td>Interactive Read Comp</td>
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<td>1.923</td>
<td>3.375</td>
<td>2.387</td>
<td>1.846</td>
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<td>Literacy Strategies</td>
<td>2.875</td>
<td>1.642</td>
<td>1.500</td>
<td>1.414</td>
<td>1.795</td>
</tr>
<tr>
<td>Test Total</td>
<td>18.000</td>
<td>3.251</td>
<td>13.375</td>
<td>4.206</td>
<td>2.460</td>
</tr>
</tbody>
</table>

*Note. CI = confidence interval; LL = lower limit; UL = upper limit.*
Table 4.6 reports the effect size for the only significant result. Becker (2000) explains that Cohen’s $d$ can be calculated using the following formula: $\text{Cohen's } d = \frac{2t}{\sqrt{df}}$ where $t$ is a $t$ score and $df$ are the degrees of freedom. Using this calculation, Table 4.6 shows a large effect ($d = 1.135$) for the children’s test total. Children used many more interactive reading behaviors as measured by the ACIRI (DeBruin-Parecki, 2007) while reading the informational *Rockets and Spaceships* (Wallace, 2011) when compared to the fictional *A Penguin Pup for Pinkerton* (Kellogg, 2001). For the benefit of future studies that may want to calculate sample sizes, Appendix F gives all categorical effect sizes.

Table 4.6

<table>
<thead>
<tr>
<th>Effect Size</th>
<th>DF</th>
<th>$t$</th>
<th>Cohen's $d$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informational/Fictional Child Test Total</td>
<td>14</td>
<td>2.46</td>
<td>1.135</td>
</tr>
</tbody>
</table>

*Note.* DF = degrees of freedom.

Data Trends

As discussed earlier, a sample size of eight will fail to detect significant differences for medium and even large effect sizes. Therefore, it is not surprising that the study did not detect many significant results. However, Tables 4.7 and 4.8 suggest the potential for trends in the data that may be significant with a larger sample size.
Table 4.7 gives the sample size and mean scores for the three ACIRI (DeBruin-Parecki, 2007) categorical scores and the total scores for both adults and children. It additionally gives the difference in the mean scores for informational and fictional books and indicates the genre with the higher mean score. In all cases, for both adults and children, the informational text had the greater mean score.

Table 4.7

<table>
<thead>
<tr>
<th>Most Interactive Book</th>
<th>Informational</th>
<th>Fictional</th>
<th>Mean Difference</th>
<th>More Interactive Genre</th>
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<tr>
<td></td>
<td>(n \quad M)</td>
<td>(n \quad M)</td>
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<td></td>
</tr>
<tr>
<td>Adult</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention To Text</td>
<td>8 9.875</td>
<td>8 9.500</td>
<td>0.375</td>
<td>Informational</td>
</tr>
<tr>
<td>Interactive Read Comp</td>
<td>8 6.625</td>
<td>8 5.375</td>
<td>1.250</td>
<td>Informational</td>
</tr>
<tr>
<td>Literacy Strategies</td>
<td>8 3.375</td>
<td>8 2.500</td>
<td>0.875</td>
<td>Informational</td>
</tr>
<tr>
<td>Test Total</td>
<td>8 19.875</td>
<td>8 17.375</td>
<td>2.500</td>
<td>Informational</td>
</tr>
<tr>
<td>Child</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention To Text</td>
<td>8 9.750</td>
<td>8 8.500</td>
<td>1.250</td>
<td>Informational</td>
</tr>
<tr>
<td>Interactive Read Comp</td>
<td>8 5.375</td>
<td>8 3.375</td>
<td>2.000</td>
<td>Informational</td>
</tr>
<tr>
<td>Literacy Strategies</td>
<td>8 2.875</td>
<td>8 1.500</td>
<td>1.375</td>
<td>Informational</td>
</tr>
<tr>
<td>Test Total</td>
<td>8 18.000</td>
<td>8 13.375</td>
<td>4.625</td>
<td>Informational</td>
</tr>
</tbody>
</table>

Table 4.8 further supports the possibility a trend in the data. With adults, 11 of 24 categorical totals had higher informational text scores compared to four fictional texts. With the test total, six adults had higher informational text totals and only two scored more points with fictional texts. The trend is even stronger with the children.
Table 4.8

Informational and Fictional Comparison

<table>
<thead>
<tr>
<th>ACIRI Category</th>
<th>Attention to Text</th>
<th>Interactive Reading Comp</th>
<th>Literacy Strategy</th>
<th>Inventory Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Info   Fic     Trend</td>
<td>Info   Fic     Trend</td>
<td>Info   Fic     Trend</td>
<td>Info   Fic     Trend</td>
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</tr>
<tr>
<td>William</td>
<td>12 11</td>
<td>Info</td>
<td>7 4   Info</td>
<td>2 1   Info</td>
</tr>
<tr>
<td>Dee</td>
<td>10 9</td>
<td>Info</td>
<td>6 4   Info</td>
<td>3 3   -</td>
</tr>
<tr>
<td>Peggy</td>
<td>12 12</td>
<td>-</td>
<td>5 6   Fic</td>
<td>3 3   -</td>
</tr>
<tr>
<td>Evan</td>
<td>9 10</td>
<td>Fic</td>
<td>5 7   Fic</td>
<td>4 0   Info</td>
</tr>
<tr>
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<td>9 7</td>
<td>Info</td>
<td>8 8   -</td>
<td>6 5   Info</td>
</tr>
<tr>
<td>Sarah</td>
<td>9 9</td>
<td>-</td>
<td>8 8   -</td>
<td>5 6   Fic</td>
</tr>
<tr>
<td>Pete</td>
<td>9 9</td>
<td>-</td>
<td>6 4   Info</td>
<td>1 1   -</td>
</tr>
<tr>
<td>Ting</td>
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<td>-</td>
<td>8 2   Info</td>
<td>3 1   Info</td>
</tr>
<tr>
<td>Child</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Captain</td>
<td>12 11</td>
<td>Info</td>
<td>7 4   Info</td>
<td>3 2   Info</td>
</tr>
<tr>
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<td>9 7</td>
<td>Info</td>
<td>3 1   Info</td>
<td>4 1   Info</td>
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<tr>
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<td>-</td>
<td>5 2   Info</td>
<td>0 0   -</td>
</tr>
<tr>
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<td>9 9</td>
<td>-</td>
<td>3 4   Fic</td>
<td>3 1   Info</td>
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<tr>
<td>Noah</td>
<td>9 7</td>
<td>Info</td>
<td>7 6   Info</td>
<td>5 4   Info</td>
</tr>
<tr>
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<td>Info</td>
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<td>Cinderella</td>
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<td>4 3   Info</td>
<td>1 1   -</td>
</tr>
<tr>
<td>Bruce</td>
<td>10 6</td>
<td>Info</td>
<td>6 0   Info</td>
<td>3 0   Info</td>
</tr>
</tbody>
</table>

*Note. Info = informational text; Fic = fictional text*
Of the 24 categorical scores for children, 18 were higher with *Rockets and Spaceships* (Wallace, 2011) when compared to *A Penguin Pup for Pinkerton* (Kellogg, 2001). Conversely, only once did *A Penguin Pup for Pinkerton* outscore *Rockets and Spaceships*. With the test totals, the eight children all scored more points with the informational book.

These results are in stark contrast to the study’s hypothesis. The study theorized that parents and children would use more interactive reading strategies with narrative fictional texts. Instead, with the parents, the results were largely in favor of the non-narrative informational text. For the children, the results were significant and were more decisively in favor of the non-narrative informational text. The next section will explore this surprise finding in more detail.

*Item Analysis*

Because of the small sample size and the small variation for each item, it was not practical to run statistical analyses on the item scores. However, it was possible to look over each item and examine trends in the data. Table 4.9 shows the scores for each item for all participants.
<table>
<thead>
<tr>
<th>Item</th>
<th>Trend</th>
<th>ACIRI Item 1.1</th>
<th>ACIRI Item 1.2</th>
<th>ACIRI Item 1.3</th>
<th>ACIRI Item 1.4</th>
</tr>
</thead>
<tbody>
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<td>Trend</td>
<td>Info</td>
</tr>
<tr>
<td>Adult</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
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<table>
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<tr>
<td>Peggy</td>
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<td>Richard</td>
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*Note. Info = Informational Text  Fic = Fictional Text*
Table 4.9 Continued

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<td>0</td>
<td>Info</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bruce</td>
<td>3</td>
<td>0</td>
<td>Info</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note. Info = Informational Text  Fic = Fictional Text
Each participant was scored on each of 12 items for two books. As there were 16 participants, there were 384 total items scored. The children's scores comprise 192 of these items and the parents compiled another 192 scores. For the adults, 20 (10%) of these scores favored informational texts and 8 (4%) favored fictional texts. The remaining 165 (86%) scores were the same for both book genres. For children, the scores showed more variation. The children's scores favored informational texts with 29 (15%) scores and fictional texts with 7 (4%) scores. With 156 (81%) of the cases, the scores were identical in both readings.

Despite the seeming consistency of the item scores, variations between the scores were not evenly distributed. Some item scores were consistent with all readers while other items showed considerable variation. This suggests that genre does not influence all aspects of shared book reading, but does significantly influence other aspects.

Each ACIRI (DeBruin-Parecki, 2007) item is identified by number and the corresponding adult description. As detailed previously, the child's correlating description parallels the adult description, except that it provides for the child's appropriate response to the adult action (See Appendix B). The descriptions do not give the child's correlating item except where the description is necessary for clarity or to assist analysis.

**Item Analysis, Enhancing Attention to Text**

Of the three ACIRI (DeBruin-Parecki, 2007) categories, parents and children scored the most points in Enhancing Attention to Text. However, this category was most consistent in scores between the two book reading sessions.
Items 1.1 (Adult attempts to promote and maintain physical proximity with the child) and 1.2 (Adult sustains interest and attention through use of child-adjusted language, positive affect, and reinforcement) were remarkably consistent with both adults and children. While children would briefly break contact with a parent, in only one case did a child not maintain physical contact with the parent for a substantial period. Otherwise, parents and children maintained physical contact, and parents spoke in ways appropriate to their children's needs.

With 1.3 (Adult gives the child an opportunity to hold the book and turn pages), two parents did more to encourage children to turn pages with the informational text, and in one case, the advantage went to the fictional text. The children responded by turning pages when encouraged to do so. Additionally, in one case, with an informational text, a child simply turned the page without his mother’s intending for him to turn the page. While children sometimes turned pages, no child held either book.

Interestingly, in all cases with 1.4 (Adult shares the book with the child--displays sense of audience in book handling when reading), the parents all earned the same score as each other, and the same score for both books. However, there was significant variation in the way the children responded to their parents. Four of the children earned more points with the informational text, while no child scored more points with the fictional texts.

Item Analysis, Promoting Interactive Reading and Supporting Comprehension

With 2.1 (Adult poses and solicits questions about the book's content), three parents asked more questions with the informational text than with the fictional text. However, the reverse was true with two parents who asked more questions with the
fictional book. Interestingly, while four children earned more points with the informational text on this item, none earned more points with the fictional text. This suggests that the children were more responsive to parent questions with the informational text.

When it comes to 2.2 (Adult points to pictures and words to assist the child in identification and understanding), parents were consistent with both texts. Seven parents earned equal scores with the two books while only one parent pointed more while reading the informational text. The corresponding measure for children was "Child responds to adult cues and identifies pictures and words on his or her own." Three children earned higher scores with the informational text on this item. One child scored one more point with the fictional text. Again, the children were more responsive with the informational text, even when their parents were consistent in their scores.

Only half of the parents scored points on 2.3 (Adult relates the book's content and the child's responses to personal experiences), and in three out of four cases, they only scored points with *Rockets and Spaceships* (Wallace, 2011). Only one parent scored points with *A Penguin Pup for Pinkerton* (Kellogg, 2001), but then scored an equal number of points with the other text. With the children, only two scored points with the informational text, while no child scored points with the fictional text.

Item 2.4 (Adult pauses to answer questions that the child poses) is one of the few items that assumes that the child takes the lead in reading interactions. For the child, 2.4 reads, the "Child poses questions about the story and related topics." Interestingly, the parents consistently answered their children's questions about the book; whenever a child asked a question, the parent nearly always answered. Consequently, the parents and
children scored exactly the same number of points in all cases. Three dyads scored more points with the informational text and two scored more points with the fictional texts on this item.

*Item Analysis, Using Literacy Strategies*

For item 3.1 (Adult identifies visual cues related to story reading—e.g., pictures, repetitive words), scores heavily favored the informational text. Four of the parents identified more visual cues with *Rockets and Spaceships* (Wallace, 2011), and one identified more with *A Penguin Pup for Pinkerton* (Kellogg, 2001). With the children, the difference in scores was even more in favor of *Rockets and Spaceships*. Six of the children scored more points with the informational text while only one student earned more points with the fictional text; one child did not score points with either item.

With two items, 3.2 (Adult solicits predictions) and 3.3 (Adult asks the child to recall information from the story), scores were very low. Only two adults scored points with *A Penguin Pup for Pinkerton* (Kellogg, 2001), and none scored points for the other title. Similarly, only one child scored two points with *A Penguin Pup for Pinkerton*. The children did not score any other points for this item. No child or parent offered predictions about either text.

In general, for item 3.4 (Adult elaborates on the child's ideas), when a child offered an idea about the story, the parent responded appropriately and elaborated on the child's idea. In three cases, the child offered more ideas about the informational text. In one case, a child offered more ideas about the fictional text, but his mother did not elaborate on the child's idea in that instance.
Qualitative Study

Qualitative part of the study consists of two major parts. First, the study examines parent and child interviews. The researcher looks at parent and child perspectives on their reading experiences. Second, the study reviews the video content of the reading sessions. Both sections are organized according to the sections of the ACIRI (DeBruin-Parecki, 2007). Further, Appendicies F and G offers summaries of the interview and video sections in tabular form.

Interviews

The researcher explored the participants’ perspectives on their interactive reading behaviors, especially with the adults. He asked semi-scripted questions at three levels. Initially, the researcher asked about the reading experience in broad terms, such as, "Did you use different practices between the two books?" The researcher then asked increasingly more specific questions based on the three ACIRI (DeBruin-Parecki, 2007) categories. As an example, the researcher asked, "I want to ask you about how you helped your child to pay attention to the texts." After the parent responded to a categorical question, he or she answered detailed questions based on the individual ACIRI items. One of these more detailed questions asked, "Did you let your child hold the book?" Depending on the answer, the researcher could ask the parents if there was a difference in their experiences with the two books. However, parents generally understood that they were comparing the two books and did not need prompting.

Interviews, Enhancing Attention to Text

The first category of the ACIRI (DeBruin-Parecki, 2007) is concerned with focusing attention on the reading text. Parents indicated that they did not have to do
much to focus the child's attention. Evan was typical when he explained, "She wants to constantly read. I don't think I have to do anything extra special to get her interested in a book. She'll give everything a fair shot."

As a solitary exception, a child-sized stuffed doll, Pete the Cat, which happened to be in the room, distracted Sarah's son Nate. Sarah explained that while she may not have realized it at first, she somehow needed to get her son's attention. She explains, "I knew once I saw Pete the Cat, he'd need some kind of re-direction because his focus was on the cat instead of on the book. So the initial part of this book [Pinkerton], I had to draw him in." Still, most parents suggested that the children did not need much help in paying attention to the book. Dee suggested this was the case with Meena, unless her child was bored. She explained, "I think it is just habits. When I read to her she listens."

*Interviews, 1.1 Adult Attempts to Promote and Maintain Physical Proximity with the Child*

Parents and children consistently sat in close proximity to one another. William was typical of the parents who explained that keeping his child close was "never an issue." Only Noah and Richard did not earn full marks when they read their second book, *A Penguin Pup for Pinkerton* (Kellogg, 2001). Neither the father nor the child offered an explanation.

*Interviews, 1.2 Adult Sustains Interest and Attention through Use of Child-adjusted Language, Positive Affect, and Reinforcement*

Even more consistent than maintaining physical proximity, all dyads in all conditions earned full scores for sustaining interest. Parents did not have much to say about their efforts to use child-adjusted language, positive affect, and reinforcement.
Perhaps Pete's explanation gets to the heart of matter. He explained, "I didn't notice. That's how we read books." This implies that he, and perhaps the other parents, simply did that which comes naturally.

*Interviews, 1.3 Adult Gives the Child an Opportunity to Hold the Book and Turn Pages.*

While several parents claimed that they let their children hold the book at home and turn the pages, only half of the dyads turned pages during the study. Of these four dyads, Violet and Meena only turned a single page between their two books. Only two children turned pages and held the book enough to score two or three points, and did so with both texts. Still, four dyads did not earn any points. The reason for the low scores comes from three identified sources. First, parents were afraid that the child might damage a book that was not theirs. Ting offered, "He [Bruce] likes to turn the pages. Which, I usually don't let him, especially if the book is not mine. Because sometimes I'm afraid he will just destroy the book or make it dirty or something." Dee offered a second explanation. She explained, "I usually do not do that because I would have control of the book." Some parents seem to want to control the book so that the child is in the right place. Several parents also spoke of the child’s rushing the story, or skipping pages.

In contrast, four of the parents claim they are allowing children more control of the books at home. Sarah said, "Sometimes at home, [Nate will] flip the pages, especially if he already knows the story." Evan, who earned a single point with this item with each book explained, "Yeah. I think I generally do. I think maybe on the board books, when she was younger, she usually turned the pages, but now, when we are reading bigger books, I'm just turning them for her. I don't know why." This suggests a third reasons that parents did not have their children turn the book. Perhaps they felt that their children
have matured past needing to turn the page. Controlling the book seems to be one situation where parents did not precisely follow instructions to "read together exactly as you would at home," as requested by the researcher.

*Interviews, 1.4 Adult Shares the Book with the Child--Displays Sense of Audience in Book Handling when Reading*

Adults consistently shared books with their children. All of the parents held both books so that their children could easily see the pages. While some parents were more successful than others, each made some effort to change his or her voice when reading. Conversely, the children showed much more variation in their equivalent item, “Child initiates or responds to book sharing that takes his or her presence into account.” While four children showed no difference in their scores, four children earned more points with informational texts. This divide was not based on gender, as two boys and two girls did a better job responding to book sharing with informational texts.

One parent suggested that the difference had to do with how the books were written. William indicated that he felt more animated with the informational book. He explained the reason why, "Just in the, kind of 'roar' and those kind of things in the first book [Rockets].” He went on to say, "Just in the captions and actions and what was going on," suggesting the informational book's features made it easier for him to feel animated. Dee was also more emphatic in her reading of *Rockets and Spaceships* (Wallace, 2011). She wanted her child to “try to learn the words” associated with the informational book, but was less concerned with the story. Even while still emphasizing the vocabulary, Dee felt that she did better sharing the fictional text.
Dee was not alone. Surprisingly, at least four of the parents, Pete, Dee, Evan and Ting, claimed they had done a better job holding their children's attention with *A Penguin Pup for Pinkerton* (Kellogg, 2001), in contradiction to the children's ACIRI (DeBruin-Parecki, 2007) scores. Pete felt he was able to change his voice pitch more for *Pinkerton* because “it has an arc, and kind of has characters reenacting the emotion.” In contrast, the he felt the informational book “has no emotion.” Dee supports Pete's view by claiming that *Pinkerton* has more excitement and *Rockets* was instructional, making it feel “more flat.”

Evan offered a third view about the books. He felt that the difference with *Rockets* was that he had "to get her to pay attention." He would "point out some things that she might recognize," and he would "add a couple of follow up questions to things we read." As an example, he pointed out that he asked his daughter if she would like to live in space, after they read about a planned space hotel.

*Interviews, Promoting Interactive Reading and Supporting Comprehension*

The second category is concerned with supporting comprehension, which includes several interactive reading strategies. As with the first category, the parents did not think there was much of a difference between the literacy strategies they used between the two books.

Sarah started off saying that she had not done anything differently, but then explained more. She said, "I'm not sure. Because he [Nate] just saw that movie *Gravity.* He already studied the planets, so I think had to do less explaining with this [Rockets] because he's seen those things in film. So I had to point out more things in this book [Pinkerton] than this book [Rockets] because of the factual stuff; he's already acquired the
knowledge from other sources." Despite feeling as if she pointed out more things with
the fictional text, Sarah's information and fiction item scores were identical for items 2.1
(Adult solicits and poses questions) and 2.2 (Adults points to pictures and words). For
2.3 (Adult relates the book’s content and the child’s response to personal experience), she
earned two points for the informational text and one point for the fictional text.

*Interviews, 2.1 Adult Posses and Solicits Questions about the Book's Content*

When the researcher asked parents about posing and soliciting questions, they
most frequently talked about their children's questions during shared book reading, and
not about their own questions addressed to the children. Some of the parents suggested
there was no difference in how they asked questions between the two books, and others
had not thought about it. As an exception to this trend, Dee spoke about her own
questions. She indicated that she was influenced by book features and explained, "For
the first one *[Rockets]* I would ask her specific words or showing pictures. This is like,
which planet. Saturn or Mars. The second one *[Pinkerton]* will be more like what will
be going on next…. It is more the story line." Dee scored two points for this item with
the informational text and one point for the fictional text. She asked more questions with
the informational book than with the fictional book.

Parent ACIRI (DeBruin-Parecki, 2007) scores suggest that there may not be a
difference in how parents ask questions. Parent scores on this item never varied more
than one point between the books. Three parents garnered one additional point with the
informational texts, and two garnered more points with the fictional text. The remaining
three parents earned exactly the same number of points, which was zero in two cases.
Richard helped clarify why parents might solicit more questions with one book or the other. He explained, "Ah, well I think there were a lot fewer questions for the Penguin book then the Rockets book," but he then adds, “The Rockets book had a lot more content, in terms of like stuff, to learn. The Penguin book was a story. It was a story about a lot of things he knew already. So, um, so I think there were maybe fewer things to explain in that regard. But then, the flip side is visually there was a lot more going on. So, I tried to help him see the story as well."

*Interviews, 2.2 Adult Points to Pictures and Words to Assist the Child in Identification and Understanding*

All the parents had something to say about pointing to pictures and words. Commonly, they spoke about how *A Penguin Pup for Pinkerton* (Kellogg, 2001) was busier than *Rockets and Spaceships* (Wallace, 2011). The busy text of the fictional text created challenges. William explained, "I think in the second book [Pinkerton], there were in the pictures so many things going on, it was difficult to point to a specific thing--more scenes versus objects." Sarah further described the problem, "So when I see his [Nate's] eyes pointing at something, and I know he's not looking,... I'll have to point at something else, to bring his attention to it."

In contrast, William pointed out that he had to take more time with *Rockets and Spaceships* (Wallace, 2011). He stated that the informational book had "things he [Captain] hadn't seen before. So, [his son needed] a little bit more explanation, just taking a little bit more time per page." Similarly, Pete felt that he pointed at more pictures with the informational text. He explained, "In the spaceship book, it would have, like, Astronauts are scientists that go into space. It would have a little box that said
'Astronaut' and there was a picture of an astronaut. And I think I would point to that. And then I would point to Saturn, and had her say that. So, I guess a bit more with the spaceship one." Pete also compared this activity to pointing at pictures in the fictional book. He said, "I feel like in the storybook, the pictures were not all that distinct; they were very busy.... I didn't find it that appealing."

Interestingly, Sarah felt her son Nate was not interested in the pictures. She claimed, "So, I try to point at the pictures. But he [Nate] didn't really have any interest in them. Because they have pictures on them with the word next to it. And they are definition pictures; he didn't have any interest looking at them." However, Nate scored a perfect three on this item, suggesting he paid attention to the pictures.

Dee offered an interesting explanation for how she pointed to pictures. She strategically pointed out individual things within a picture and also pointed to the sweep of the book illustration; that is to say, she pointed to the whole of the picture, not just the detail. She said, "On the first book [Rockets], I would show the object, directly…. The second [Pinkerton] showing over all scene from here to here. Showing the whole scene." She elaborated by saying, "The first one is more like learning the object or the terms. Like what those words are. And like the picture. But the second one is like an overall story. Like the first one is not a story, it is instructional. It is teaching about space. But the second one. I know there is a scene. Watching the people watching the game, and the dog. There are lots of things to see to understand what is going on, exactly."

Parents were not just pointing at pictures; they also showed their children printed words. Ting was working with her son Bruce on conventional literacy skills. She offered her purpose for pointing at words: "I wanted him to be able to read some of the words.
We learn phonics at home. So, I thought by pointing at words, he might be able to recognize the words.” However, she maintained that she pointed at words in both texts equally. However, Dee focused on the place in *Rockets and Spaceships* (Wallace, 2011) where children could easily follow along and participate in the reading. Early in the book, the book has a short countdown and the word “blastoff” accompanied by an appropriate picture of a rocket launch. Dee explained, "She knows like numbers. I'll like let her read numbers and read the 'blastoff'”. In general, parents indicated they had to point at pictures within the *Pinkerton* book more than in *Rockets*.

The physical size of the print may have been critical in the parent's ability to point at words as they read. Peggy explained, "I think the first book [*Rockets*], the words are bigger [larger font]. The second book [*Pinkerton*] seems more advanced.... And the words are smaller. So it is difficult to point at the words, because there are too many.” In contrast, Ting felt she needed to point at the words in *A Penguin Pup for Pinkerton* (Kellogg, 2001). She gave her reasoning: In the first book (*Pinkerton*), she “simply pointed to each word, because it has lots of words in it.” Ting also felt, "The vocabulary is really more complicated than the second book [*Rockets*], so I didn't want to make him [Bruce] read at all.” While the parents did not agree as to which book was more advanced, it is interesting that the parents all thought that one book actually was more advanced than the other, as objective measures, discussed earlier, suggest that they are similarly complex (see Table 3.1).

Peggy claimed that she pointed to words in a purposeful way. She wanted to point at key words and especially key words that Rapunzel did not know, such as
"spaceship." Pete made a related point, explaining that pictures with their associated words facilitated pointing to the specific associated words themselves.

Interviews, 2.3 Adult Relates the Book's Content and the Child's Responses to Personal Experiences

Only three parents commented on how they related the books’ content to personal experience. This is not surprising since only four parents scored points on this item with either book. On the whole, parents only made a few connections to their children's personal experiences, some of which come from TV and film.

William made a connection for Captain between Rockets and Spaceships (Wallace, 2011) and the film Star Wars. Similarly, Dee made a connection to the Cosmos television series for Bruce. Conversely, Richard felt that it was easier to make a connection with A Penguin Pup for Pinkerton (Kellogg, 2001). He suggested, "With the Rockets book, we have not been to space, but we did have a dog," but Ting felt that it was difficult to relate to the dog story.

After the researcher asked if the parents had made connections for their children, a few parents gave some thought as to why they had not made such connections. Evan explained the difficulty of making a connection: "I think, the first one [Pinkerton] we probably could do more of. I don't think that we have personal experiences with either. But certainly she goes to school, and she's been around other animals. But she never had any extraterrestrial activity." Pete, on the other hand, did not know why he had not made a connection with Rockets and Spaceships (Wallace, 2011). "I almost, ah, mentioned in the space book that we wanted to go to the planetarium… with grandpa, but I didn't. I don't know, I just kept reading."
Interviews, 2.4 Adult Pauses to Answer Questions that the Child Poses

Nearly every time a child paused to ask a question, the parent responded. Consequently, the parents’ scores matched the children's scores exactly. This correlation included two dyads where the children did not ask any questions during either book reading. The children may have become shy within the study environment, making them reluctant to ask questions. Pete explained that his daughter Cinderella "asked questions during the nonfiction book, and I tried to answer them the best I could." William offered a reason why Captain asked more questions for one book than the other. He explained, "I think he was more familiar [with the items and structure] with the second book [Pinkerton] and knew [more] things than the first book [Rockets]."

Interviews, Using Literacy Strategies

Since all dyads were reading both books for the first time, it is reasonable to assume that parents were using strategies they felt were appropriate for a first reading of a book. This also opens up the possibility that some parents generally use fewer literacy strategies during an initial reading of a book than they use in subsequent readings. Richard explained why he held back with literacy strategies and offered, "That's something we would work on in the second, third, fourth reading of the book, once I knew he was more familiar with a story overall. Sometimes, when we're reading it for reading first time, we are very into accessing the story. Once he knows the story, well then, [we] can focus on some other things." This may help explain why this category had the lowest total scores of the three categories, as parents may have held off on some literacy strategies.
Interviews, 3.1 Adult Identifies Visual Cues Related to Story Reading--e.g., Pictures, Repetitive Words

This item is similar to item 2.2, "Adult points to pictures and words to assist the child in identification and understanding," as both items have parents pointing to words and pictures. However, the essential difference is that the earlier item is concerned about understanding an individual word or picture, while this item is concerned about helping the child understand the story as a whole. Parent answers to the researcher's questions suggest they may not have fully understood the distinction. In one of the few parent comments directed toward the intent of the question, Evan explained, "I think, because there was more dialogue in the first one, you could point to the person who was saying it. I definitely did that.... In the second book, there's not really any way to do that because there was no dialogue. But I certainly pointed to the picture that went along with the text that was being read." Ironically, parents did not have much to say regarding this item. Still, it was the item within the Using Literacy Strategies category that earned the most points. All of the parents earned at least one point in this category.

Interviews, 3.2 Adult Solicits Predictions

Only two parents and one child earned points with this low-scoring item. In each case, the parents earned the points with the story text. When asked, parents indicated that they had not encouraged their child to make predictions. Peggy offered that her daughter Rapunzel was shy on the day of the study, but then explained that she (Peggy) could solicit predictions at home, after a book had been read several times and "they actually know what is coming." Dee simply explained that she does not usually have Meena make predictions.
It may be that making predictions works better with fictional texts than with informational texts. The conventions of story structure suggest what may happen next in a narrative text. In comparison, what may happen next in informational texts varies depending on the topic. This line of reasoning supports the ACIRI results and is supported by Evan's observation, "You could do that [make predications] a lot more in the first one [Pinkerton] because you could sort of anticipate what might happen in the story. But, science is science." However, Evan then went on to suggest how the text of an informational book might encourage predictions. He suggested that science books could pose hypothetical questions or ask leading questions, such as, "What might they find in space?"

In fact, two parents felt that the informational text was a good platform for making predictions. Sarah explained, "So when he says 'Blastoff' [in Rockets], he knows something is going to come, because of the way a factual book is written. The way they deliver information, sometimes you can actually predict what's going to be in the next line.... You know what things are leading to."

*Interviews, 3.3 Adult Asks the Child to Recall Information from the Story*

This item is singular in that no one scored points with either book; all scores were zero. When asked about encouraging recall of information from texts, parent responses suggested narrow and situational understanding of the question. Ting pointed to a moment when she and Bruce talked in retrospect about a photograph, recalling that the picture was of a probe and not of a spacecraft. When asked, both Sarah and Evan took the opportunity to explain the advantages of recalling information from one genre over the other. Sarah felt the advantage went to the informational book. She offered, "I think
he would probably recall more information from the factual book because he's seen so many things related to this. He's been to the air and space museum and everything." On the other hand, Evan felt that the advantage was with the storybook. He said, "I think it's probably easier to remember what happened in the first one [*Pinkerton*], because it was a story and I remember the story,... Whereas the other one was just a series of kind of facts,... It's easier for me to remember the story then." Still, most parents simply acknowledged they had not asked their children to recall information from the story.

*Interviews, 3.4 Adult Elaborates on the Child's Ideas*

In general, if the child offered an idea about the text, the parents elaborated or somehow acknowledged the idea. Interestingly, parents had varying opinions about which text was better for encouraging their child's ideas. Ting explained that her son Bruce "had more questions about the second book (*Rockets*)," and then suggested, "I guess he just likes the second book better." Neither Ting nor Bruce earned points for this item with the ACIRI.

Sarah indicated that her son Nate only elaborated with *Pinkerton*, while Richard said, "that was easier with the penguin book, of course, because it was an actual story.” However, the ACIRI scores suggest something else. Nate earned two points with *Rockets and Spaceships* (Wallace, 2011) text and one point with *A Penguin Pup for Pinkerton* (Kellogg, 2001). Richard's son Noah earned three points with both the informational and the story texts.

*Video Observations*

This section examines the content of the reading videos. Observations may reveal insights about the effect of genre on shared book reading. The ACIRI (DeBruin-Parecki,
2007) results indicate that there were differences in parent and child interactions. To explore those differences, the study examines the interactions of the parent/child reading dyads with the help of the video recordings. This examination allows for an exploration of verbal and physical interactions between the parent and the child facilitated by the text. 

*Video, 1.1 Adult Attempts to Promote and Maintain Physical Proximity with the Child*

The video shows children either sitting on their parent's laps or snuggled up to their parent. Usually, this was where the children stayed for the duration of the book reading. Only one child, Noah, moved away from his parent for any length of time. He was exceptional in that he and his father also took the most time to read both books, 20 minutes and 43 seconds. Given the length of time, Noah may have simply needed to move around and left his father's side. For much of the reading of the second book, Noah was sitting on the arm of the sofa, wiggling in place, but still largely focused on the book. He also got up to explore part of the room, but his father invited him to come back to book reading, which Noah did. Otherwise, the children stayed close their parents.

*Video, 1.2 Adult Sustains Interest and Attention through Use of Child-adjusted Language, Positive Affect, and Reinforcement*

The video revealed that parents were more or less consistent in sustaining children's interest; however, there were variations between parents in how well they used child-adjusted language, positive affect, and reinforcement.

Evan was one of the more animated readers. His voice carried well, and he projected clearly while modulating his voice appropriately to accent the text, which he did for both books. In contrast, Peggy read to her daughter with a very quiet voice and
modulated her voice less than many of the other parents; yet she would also animate her voice to get her child's interest.

Parents also adjusted their language appropriately for their children. As an example, all of the parents became more animated while reading the countdown to a rocket launch and then became particularly emphatic when saying, "Roar," for the sound of a rocket launch. Parents used appropriate vocabulary and at times would work to keep their child's attention on the text by encouraging their child's interest. When Peggy read about space walking in the informational book, she commented, "Floating. Floating. Weeee, weee, floating!" Similarly, when the text showed the Space shuttle, Peggy said, "Wow! Look at it. A space shuttle."

For *A Penguin Pup for Pinkerton* (Kellogg, 2001), while Sarah was careful to make sure Nate understood the elements of the story, she was also holding his interest. In one scene, the dog Pinkerton is thinking of taking care of the cat Rose as if she were his baby. Sarah explained, "See, the cat was thinking about it. She really didn't like the idea. She's sad, right? She didn't really like the idea of the dog licking her. So she jumped."

The parent strategies worked. A review of the videos suggests that children were able to focus on the books. Their eyes generally stayed on the books and the conversations were mostly associated with the books or related topics. In an extreme counter example, Sarah's son Nate appeared distracted by Pete the Cat, a stuffed doll that happened to be in the room. He got up to see the doll. To get him to come back to her side and start reading, Sarah called to her son, "Okay, Nate, come back over here though, because you'll have to help us tell if this book is good. Right?" Still, even Nate generally focused on shared book reading. As necessary, all of the parents refocused their child's
attention. Sometimes, as with Captain, a parent would gently remind his or her child, "Pay attention," but such interventions were infrequent and children needed little explicit help to focus on the book. Instead, parents helped the children focus with indirect methods, such as asking questions.

With *Rockets and Spaceships* (Wallace, 2011), parents would sometimes ask rhetorical questions. For instance, Dee asked Meena, “Remember this?” referring to an image of the Mars Rover; they had seen the rover on television. By no means was Dee the only parent to ask rhetorical questions, as the practice was common. After Sarah read, “Astronauts must use a special rope which keeps them attached to their spaceship. Otherwise, they would float away!” she asked Nate, “Is that right?” She then answered her own question by saying, “You have to be attached to the spaceship or you will fly away.” Similarly, Richard asked a rhetorical question that he then answered with the fictional text. Richard asked, “Is that silly?” and then explained to Noah, “It's a big picture of all these penguins and he's licking the penguin. That's what he's imagining.”

Parents also encouraged the children’s attention and added to their understanding. In some cases, the children answered questions and then the parent offered a fuller explanation. Sarah asked her son, “Do you think his football is ever going to hatch?” Even when Nate said “no” to the question, Sarah elaborated, “Naw, it is just a toy, right?”

*Video, 1.3 Adult Gives the Child an Opportunity to Hold the Book and Turn Pages*

As noted earlier, children did not hold the books and only occasionally turned the pages. While Peggy seemed interested in Rapunzel’s learning when to turn the page, William may have used page turning as a way to keep Captain focused. Twice William looked at his son and gently asked him to turn the page, at which point Captain refocused
on the book and even asked questions about the reading. Surprisingly, Captain only
turned the page twice with the fictional book while he turned the page seven times with
the informational text.

Three parents did not present clear opportunities to turn pages, but their children
turned pages anyway. For the remaining five, children turned pages for different reasons.
In one case, at the end of *A Penguin Pup for Pinkerton* (Kellogg, 2001), Violet turned the
last page after Evan had read the last line of the book, "Sweet dreams, Pinkerton," which
indicated the end of the book. Apparently, Violet understood this as a cue to turn the
final page. Parents were also more overt in helping their children turn pages. Peggy
frequently held Rapunzel's right wrist during shared book reading.

Bruce turned a page without encouragement from his mother, apparently to get a
better look at a picture. Ting had been gently holding Bruce's wrist, controlling some of
his hand movements, sometimes indicating when to turn the page and when not to turn
the page though his wrist. Once, while reading *Rockets and Spaceships* (Wallace, 2011),
Bruce broke free of his mother's grip to turn the page back so he could look at the earlier
page. He then turned the page back after his brief look.

Sometimes, children understood when to turn the page without their parent’s
direct intervention. Violet may have used story conventions as cues for when to turn the
last page. Bruce, on the other hand, turned the page to get a better look at a picture of
interest with the informational book.

Rapunzel was unique in that she showed the full range of reasons for page turning
and was evidently learning to turn the pages on her own. Rapunzel frequently turned the
pages of both books, doing so seven times with the informational book and five times
with the fictional text. She sometimes did this on her own, but Peggy often held Rapunzel by the wrist. Through her wrist, Peggy would gently indicate when it was time to turn the page of a book. At other times, her mother would tell her, "Turn the page."

Still, most of the time, Rapunzel turned the page on her own, but Peggy would place her hand on the page or hold her daughter's wrist if she did not turn the page at the right moment. Rapunzel also used other cues for turning the page. During pauses in her mother’s reading, Rapunzel would turn the page, which was evident from her mother’s stopping the page turning if the pause came before she had come to the end of the page. Her mother also frequently asked questions about the books after reading a page of text. Rapunzel may have used her mother's questions as a cue to turn the book pages.

Video, 1.4 Adult Shares the Book with the Child--Displays Sense of Audience in Book Handling when Reading

All parents consistently held the book so their child could see the story. Often, the parent held the book so that the position was slightly awkward for themselves, but the book was right in front of their child, easily accessible for the child to read.

The parallel item for children was, "Child initiates or responds to book sharing that takes his or her presence into account." While children generally attended to the book while reading, they did not always initiate or respond physically or verbally to book sharing. To get credit for this item, children had to do something that showed that they were engaging with the shared book reading process.

As an example of both responding and not responding to book sharing, Bruce did not engage with his mother Ting during shared book reading with A Penguin Pup for Pinkerton (Kellogg, 2001), but then engaged with his mother with Rockets and
Spaceships (Wallace, 2011). He sat in his mother's lap and silently looked at the book while Ting read to him. Ting held the book so Bruce could read along silently, and she modulated her voice, becoming louder and more emphatic in more exciting parts of the book. However, while reading Rockets and Spaceships, Bruce became a much more vocal participant in the book reading experience. Ting asked her son to read the title of the book, which he did with her help. Bruce would read short sections of the text aloud with his mother's help. Bruce's participation then generally increased as he started asking questions and even looked back in the text to examine a picture.

With A Penguin Pup for Pinkerton (Kellogg, 2001), to form a question, parents would raise their voices at the end of the line, "Do you have a question for our guest, Billy?" They then spoke more loudly to suggest the character Billy’s indignation as they read, "You bet I do! I'd like to know how this dog got my football that disappeared from my yard yesterday!" Parents tried, at least to some extent, to act a little while reading the lines.

Video, 2.1 Adult Poses and Solicits Questions about the Book’s Content

Parents asked questions that helped identify items and vocabulary with both books. However, parents were also likely to ask questions to assist with plot elements and character development with A Penguin Pup for Pinkerton (Kellogg, 2001). Since informational books do not have plots and characters, this was not possible with Rockets and Spaceships (Wallace, 2011).

Two parents did not ask any question regarding either of the books, and three others only asked questions regarding one of the books, which was a single question with the informational text. Of the remaining three dyads, one asked one more question with
the informational text and another asked one more question with the fictional text. The
final dyad was an outstanding example of a parent asking questions. Sarah posed 12
questions with the fictional text, and 6 with the informational text.

With *Rockets and Spaceships* (Wallace, 2011), the text explained that the picture
showed a storm coming. To this statement, Sarah asked, "So what should the boy do?"
To this, Nate replied, "Put on his jacket and get… eh…an umbrella." Of Sarah's six
questions that she asked Nate during the reading of the informational text, two were
open-ended questions and four were factual identifications. While Nate's responses were
brief, with one exception he always responded to his mother's questions.

Peggy twice asked questions based on the informational book. In one case, she
did not pause to allow Rapunzel a chance to answer after asking, "Have you heard about
Mars?" In the second case, Peggy asked, “Do you want to go on vacation in space,
Rapunzel?” to which Rapunzel nodded “yes.”

Seven of the eight parents took advantage of a place in *Rockets and Spaceships*
(Wallace, 2011) that suggests that a space hotel may be built someday. After reading the
text that says, "There are even plans to build a space hotel. Who knows? One day you
might go on vacation in space!" (p. 30). Much like the other parents, William asked his
son Captain, "You want to go on vacation in space?"

With *A Penguin Pup for Pinkerton* (Kellogg, 2001), Sarah asked, "Is the dog
friends with the penguin?" but stated that the answer was that the dog and Penguin could
be friends. To this Nate asked, "How is that possible?" She also asked, "Where do you
think [Pinkerton] is?" when a story character said she knew where to find the missing
dog. Nate responded to 10 of his mother’s questions, sometimes indicating “yes” with a
minimal "unhuh." In addition, eight of the questions were factual and could be answered with a single word, usually "yes," and four of the questions were open-ended. Ten of the questions were directly connected to story elements, especially plot.

Three parents used a question within *A Penguin Pup for Pinkerton* (Kellogg, 2001) to ask their own questions. The text reads, "Did you know that in the Antarctic, a father emperor penguin cradles his egg on his feet?" Similar to the other parents asking questions, Peggy read this section and then asked, “Well, do you know that, Rapunzel?” Like Peggy, Richard and Sarah also followed up with a question regarding this part of the text.

Evan was concerned with Violet’s understanding a vocabulary word and a concept of the fictional book. After reading, "As a penguin parent, Pinkerton is a flop!" Evan asked Violet a series of questions. He said, "Why do you think he's a flop? What does a flop mean? … It means he is not a very good penguin parent. Why? What did he do?" Unfortunately, it is impossible to clearly hear Violet's response to her father, as her voice was very soft.

*Video, 2.2 Adult Points to Pictures and Words to Assist the Child in Identification and Understanding*

Typically, parents would point at a critical picture or illustration while reading to assist the child's understanding of a text. They also frequently verbally elaborated on the item of interest.

Four parents pointed to nearly equal numbers of pictures for both the informational and the fictional texts. Of the remaining four parents, three pointed more to the informational text, and one, more to the fictional text. Additionally, while children
did not visibly or audibly respond to all of their parents' efforts, they responded in a similar pattern. Four children responded equally to both texts, three had more responses to the informational text, and one had more responses to the fictional text.

Dee was typical of the parents in bringing her child's attention to pictures that might help Meena understand the text. She was nearly equally vigilant with both texts, pointing at illustrations eight times for the informational text and nine times in the fictional text. Typically, Dee pointed at an illustration and said something that highlighted the picture, and then continued reading. As an example, Dee pointed to a photograph of a rocket, saying, "There is a rocket here." She reinforced the identification of an item and then quickly returned to reading, not giving her child a chance to respond. In a particularly clear example of getting a child's attention, Dee told Meena, "Look at that," while pointing to an illustration in *A Penguin Pup for Pinkerton* (Kellogg, 2011). Dee, like many of the parents, seemed to be making sure that Meena focused on the book.

Parents generally pointed to an illustration in passing, such as when several parents pointed to a picture of a satellite while reading the word "satellite," but often they did more. Parents like Evan offered additional information about the image. In *Rockets and Spaceships* (Wallace, 2011), Evan pointed at a photograph of the Earth taken from space, and reinforced a point made by the text. *Rockets and Spaceships* reads, "This is how astronauts see Earth from space" (p. 9). Evan explained, "That's what it looks like when you go up into space. You can see the whole Earth like that." He also pointed to a rover, to distinguish it from other items on the page, when the text mentioned it. Taking this approach even further, Sarah explained how an illustration of a satellite had wavy lines to represent invisible radio signals. She told Nate, "So these aren't really signals.
They just look like what the signals do. They bounce and they come back. But you can't see those signals because they really are invisible. This is just to make it look like the way it works, so you can understand it."

Sarah pointed at illustrations in *A Penguin Pup for Pinkerton* (Kellogg, 2001) and asked Nate what was happening in the scene. As a point of humor, the text explained, "Right now, Rose is probably dreaming about having a kitten of her own," but the illustration contradicted the text. It showed Rose, a cat, dreaming about cat food, not a kitten of her own. Sarah explained that one of the book characters is "pointing at this kitten, right, but what is the kitten dreaming about? See, dot, dot, dot." She then encouraged Nate to answer, but when Nate did not respond, she then said, "That's cat food, isn't it?" to which Nate replied, "Food, it's cat food." Sarah, along with Bruce, Dee, William and Richard, referenced the cat food illustration.

The cat food illustration was not the only image to illicit notice by parents. Pete, Sarah, Dee, Evan pointed at a photograph of Saturn while working their children. Typical of the parents, Evan asked what planet was in the picture. Violet replied that it was Mars, and he corrected her response to “Saturn.” Evan also tried to lead her answer by sounding out the first part of the planet's name, "Sa..." to which Violet said "Mars!" Evan tried again, saying, "Sat..." and this time Violet understood and said, "Saturn." Ting and Bruce also noticed Saturn, but after Ting pointed out Saturn and reminded Bruce, "Saturn is red." In response, Bruce said, "Saturn," suggesting he recognized something about the planet.
Video, 2.3 Adult Relates the Book's Content and the Child's Responses to Personal Experiences

Parents made relatively few connections to their child's personal experience, and Richard made more connections to his son's experience than any other parent. He made three personal connections with *Rockets and Spaceships* (Wallace, 2011), and twice he made connections with *A Penguin Pup for Pinkerton* (Kellogg, 2001). As an example, when the book showed a photograph of the space shuttle landing, Richard pointed out that "it's a big parachute that comes out the back of the shuttle that helps it stop. You've seen people using parachutes to float down when they jump out of a plane. The chute helps them land more softly. Well, this works the same way for the shuttle." With *A Penguin Pup for Pinkerton*, Richard read, "Once a gorilla adopted a kitten. Maybe Pinkerton could adopt and care for Rose." Richard continued to explain, "He looks excited, but she doesn't. She's thinking of him licking her. I think she thinks that's kind of gross." A little later, based on this discussion, Noah asked, "But he [Pinkerton] won't [lick the cat], right?" to which Richard replied, "He might. He looks like a licker." When explaining that the dog Pinkerton might try to lick a cat, Richard explained, "Teddy [the family dog] was not much of a licker, was he?" To this, Noah replied, "Yeah, but he licked me a lot."

Sarah was one of the few parents to relate the informational book to her child's experiences. When reading about the Space shuttle carrying satellites, she helped Nate make a connection to a computer at home. She said, "Remember your game on the computer here where you can see the stars, and some of the satellites?" Nate indicated that he remembered. At the end of reading Pinkerton, Sarah connected Pinkerton's
having a penguin pup of his own to Nate's stuffed animals. Sarah said, "Do you have something to love and hold, Nate? You do. Right? You got this guy [indicating a stuffed animal]?

Video, 2.4 Adult Pauses to Answer Questions that the Child Poses

Both types of text generated questions. Not surprisingly, if a child asked a question related to one of the books, the parents were likely to answer, and only occasionally ignored questions. Additionally, children were most likely to ask questions that helped identify people, identify things, or clarify vocabulary. The questions were mostly "what" questions, such as when Noah asked, "What’s that picture?" and only occasionally "how" or "why" questions. Cinderella asked one of the “why” questions. She asked, “Why is she reading a story to an egg?” when Emily, a character in the story, offered to read to Pinkerton and his faux egg.

Noah asked more questions than the other children, and Richard always answered his son's questions. Noah asked six questions for the informational text and five questions for the fictional text. Questions could be based on pictures, or spoken vocabulary for the informational book. With vocabulary, Noah asked, "What does 'fall away' mean?" Pointing at a photograph of an astronaut inside the International Space Station, Noah asked, "What is that?" For the fictional text, the questions were similarly based on a clarification of pictures or spoken vocabulary. When the text called the dog a "pooch," Noah asked, "Who's pooch?" His father explained that it was another word for "dog.” Noah also wanted to know, "What kind of dog is it?" and his father offered a guess, "Dalmatian," but later corrected himself to “Great Dane.”
While reading about rovers on Mars, Cinderella asked, "What's a Rover?" Pete explained, "It's a little thing. It's like a little machine; it has wheels and drives around Mars and takes pictures and stuff, and sends it back to Houston." Cinderella asked one question with the informational text and asked one with the fictional text. For the fictional text, she asked a higher order “why” question. Cinderella asked, "Why is he reading a story to an egg?" referring to an illustration of a girl reading to her dog and an egg. This is also one of the few times a child asked "why?" Her father did not answer the question, but shook his head, indicating he did not know. Both Pete and Cinderella smiled at the absurd humor of reading to an egg. Cinderella also asked for a clarification in the informational text. Pete read, "Astronauts can see the Moon and stars in space. They can see planets too." Cinderella then asked, "Star. Where is a star?" To this Pete acknowledged, "There are no stars in the picture."

Bruce asked four questions about the informational text, and Ting responded to each question. While Ting was reading about astronauts, Bruce asked in Chinese, "Is he a physician?" Ting replied, "Astronaut, well, they're a kind of scientist too." Each of Bruce's questions was factual in nature.

Captain asked his father, "What are they?" while pointing to the space shuttle's rocket nozzles. His father then explained, "That's where the heat comes from." In fact, seven of Captain's eight questions about the informational books were factual. The one exception started as a factual question about Mars. After William explained that Mars is a planet, Captain asked, "That's a planet, even if you're a . . . Monster or an alien, and then you can destroy the Earth." As with the other questions, William responded. He explained, "Maybe. Are you thinking of the Bugs Bunny Cartoon?" Captain’s last
question about monsters and aliens destroying earth was one of several where the child checked his or her understanding. In another example, Bruce asked, "Is this America?" indicating a continent on a photograph of the earth taken from space.

*Video, 3.1 Adult Identifies Visual Cues Related to Story Reading--e.g., Pictures, Repetitive Words*

Parents helped their children start the process of reading by using elements from both books to start the process. In the most extreme case, Ting was teaching her son how to read conventionally. Ting pointed to more words than any other parent, but she mostly pointed to words when reading the informational book. Bruce had a good number of sight words. He had begun to sound out words and was in the early stages of reading conventionally. Bruce read, "They can see..." but then stumbled on the word "planet" and needed his mother's help. For the fictional text, Ting did not ask Bruce to read any words and only twice pointed to words.

Certain parts of the informational book seemed to encourage parents to support their children's literacy development. Four parents, Evan, Sarah, Dee, and Richard read, "Our planet is called,..." and paused to allow their child to fill in the blank. Most children did like Noah and replied, "Earth!" Ting took this one-step further. Bruce tried to read the entire sentence himself, but needed help from his mother with the word "called."

Richard did not explicitly have Noah read aloud with him during the countdown, but the video shows Noah's lips moving as he silently mouthed "Three, two, one," and then, a moment behind his father, "Blast off." However, Evan and Peggy were more explicit. They used the countdown at the start of the informational book to get their children to speak the countdown while also pointing to the corresponding word. In the
case of Peggy, she helped guide Rapunzel's hand to point to the numbers in the countdown.

Finally, the glossary of the *Rockets and Spaceships* (Wallace, 2011) presented another popularly used spot to encourage a connection between a spoken word and its print form. Evan, Peggy, and Ting pointed to the words and photographs in the glossary and said each word. Sarah explained to Nate, “This is where all the definitions are. It’s called a glossary.” She then read one definition to him. Richard did much the same with Noah, except he read all five of the definitions.

While the informational book had several places where parents frequently used the text to support emergent literacy, the fictional text had only one place where parents consistently emphasized words they were reading. Richard explained how he knew the cat was dreaming about cat food when Noah thought he was dreaming about dog food. Richard explained, "Actually, I think it is all cat food. Because it actually says 'cat chow.'"

*Video, 3.2 and 3.3 Adult Solicits Predictions and, Adult Asks the Child to Recall Information from the Story*

These two items had the second lowest and the lowest ACIRI (DeBruin-Parecki, 2007) scores. Only Sarah and Peggy asked their children to make predictions. In both cases, they did so with the fictional text. No one asked a child to recall information from the story.

In one of the few attempts at a prediction, Peggy asked what Pinkerton was going to do when he had to choose between a faux penguin egg and a dog snack. Peggy read, "Here's a cookie,” and then asked Rapunzel, "What do you think he's going to do?” After
a pause, Peggy went on, “What do they do? Do they eat a cookie? He grabbed a cookie, and then what? He eat a cookie. OK, what happened to the egg?” Rapunzel never answered despite the many prompts.

Video, 3.4 Adult Elaborates on the Child's Ideas

Children offered more ideas about the informational text than they did about the fictional text. In most instances, the parent would respond to his child's ideas. As an example, Violet asked if a photograph of a storm could represent a tornado. Evan responded by saying, "It could be a tornado." Similarly, the fictional text also generated ideas for children. With *A Penguin Pup for Pinkerton* (Kellogg, 2001), Noah pointed at an illustration and said, "Yeah, and then they pretended it was an egg. But it has a zipper on it, so it's not really an egg." His father, Richard, replied, "It was not a real egg, but that's sweet and you see, they gave the football back to the football players."

While parents did respond to some of the children's comments, they did not do so consistently. Twice Meena offered ideas about the informational book. The first time Meena offered, "But you can't breathe in space," and her mother confirmed her idea, "No, you cannot." The second time, Meena said, "Mars are hot," but her mother did not comment and instead kept reading. Captain only once offered an idea about *A Penguin Pup for Pinkerton* (Kellogg, 2001). Early in the story, he pointed out, "They forgot the egg," referring to an egg that had been shown in a previous illustration, but not included in later events in the narrative. In this case, his father left the comment unanswered and kept reading the story. William also did not comment on Captain’s statement about Pinkerton’s sitting by himself. Prompted by an illustration showing the dog sitting
unaccompanied on an ice rink, Captain showed empathy for Pinkerton when he said, "[Pinkerton is] alone."

Especially with the informational texts, children used their background knowledge to comment on the text. During the course of reading the informational text, Nate offered, "Oh, did you know the sun can, like die." Sarah replied, "Really?" Nate and Sarah spoke back and forth about this topic until Sarah reassured Nate that it would not happen for a long time and explained, "Sometimes it takes billions of years."

Many of the children’s statements may have been efforts by the children to check their understanding. With the informational text, Captain said, "That's the earth; it's mostly in water." With the fictional text, Cinderella pointed to an illustration and stated, "And this is where he's dreaming of a baby puppy." To this Pete confirmed Cinderella's understanding and said, "Oh, he is." In yet another case, Evan explained that a sign in one of the illustrations said that the ice rink is closed, and established that Pinkerton was sitting in the closed rink on the ice. Violet then incorrectly said, "It's sea ice," an observation her father did not correct.

Discussion

The following section reviews findings from both the qualitative and quantitative data and responds to the three questions defining this dissertation. The three questions are listed at the beginning of this chapter and again as a heading for each section below. Further, this section explores each question independently, and then explores participant behavior during shared book reading before examining participant language.

What is the Nature of Interactive Behavior, Including Language, when Parents Read Non-narrative Informational Texts to Their Children?
Each parent read *Rockets and Spaceships* (Wallace, 2011) in such a way as to help his or her child focus on the text and learn from it. Parents were careful to keep the child's attention on the book while also taking advantage of teaching opportunities. Each child responded to his or her parent’s book reading and engaged with the book and his or her parent.

**Informational Text Behavior**

With *Rockets and Spaceships* (Wallace, 2011) parents shared the book for the benefit of the child; they held the book so the child could easily see the text and pictures. Further, parents and children sat together, and each parent used various techniques to keep his or her child's interest in the informational text. However, not all of the findings were positive. Each parent always held on to the book, never allowing his or her child to hold the book.

Parents reading *Rockets and Spaceships* (Wallace, 2011) pointed at pictures and words in the book. Generally, they pointed at photographs of objects as they were mentioned in the text, thus reinforcing the textual message with a visual support. As an example, Peggy pointed to a photograph of a spaceship as she read about spaceships. Not only did this activity reinforce the general textual understanding; it also helped to define words. Pete pointed to a photograph of an astronaut in *Rockets and Spaceships* and said the word "astronaut," which was written underneath. Only one parent, Ting, pointed to words more than images, with the informational text. With the fictional text, she pointed to more images. Following the parents’ example, all children responded and pointed to their own pictures with the informational book.

**Informational Text Language**
Interestingly, parents engaged their child by working with book elements within the text to find places to modulate their voices. As an example, the parents would, to varying degrees, become more excited, more animated, and louder as each read the countdown in *Rockets and Space Ships* (Wallace, 2011). Also, four children joined in at some point during the rocket countdown saying, "Blast off!" William commented that he felt more animated while reading the informational text.

*Types of questions.* With the informational book, when children spoke on their own initiative, they generally did so to check their understanding. Sometimes their comments or questions were directly about a topic mentioned in the book, and sometimes they were about an idea indirectly associated with a book topic. Whatever the form, comment or question, the child often referred to the identity of items within photographs. This was the case with Captain, who said, "That's the earth; it's mostly in water." Such statements may have been made for the purpose of checking with the parent for the correct understanding.

Among the children, checking their understanding statements were by far more common than questions; however, there were hybrid questions that both confirmed understanding and asked for information, such as Bruce’s asking, "Is this America?" While Bruce posed an informational question, he was likely checking his understanding of landmass depicted. Children would also occasionally ask questions when they could not make sense of the connection between the text and the photograph. For example, the text mentioned a star, but there was no star in the picture. Cinderella wanted to know where the star was in the picture when it was not there.
Focusing questions. With the informational text, parents used questions to help children focus on the reading. Of all the children in the study, Nate spent the most time looking away from the books; he was distracted. Sarah used a series of questions that may have helped Nate focus more on the informational book. During the interviews, Sarah explained that she had to work to get Nate to concentrate on the photographs and words in *Rockets and Spaceships* (Wallace, 2014). Other parents used questions with a similar purpose.

Background knowledge. Children were also likely to fill in the blank with the informational text. Parents would start to read a statement related to a photograph and let his or her child finish the sentence. After reading about the earth, and looking at an accompanying photo, four parents read, "Our planet is called..." and then each allowed his or her child to answer, "Earth." Other examples included the parents’ encouraging children to fill in the blanks in sentences with "Mars" and "Saturn".

Less frequently, children also made statements based on their background knowledge, as when Meena asked about breathing in space. Clearly, she understood that it is not possible to breathe in space, and said, "But you can't breathe in space."

Rhetorical questions and devices. Parents asked several rhetorical questions with the informational text. By definition, rhetorical questions are a strategy for making a point or for gaining attention. Fitting the definition, the rhetorical questions helped children to pay attention to the book reading. As a second purpose, the questions encouraged children to use their background knowledge and to make connections to the text.
In one case, a rhetorical device in the text encouraged parents to ask their own questions. For one line, the text speaks directly to the reader. All parents except one, after reading, "One day you might go on vacation in space!" (Wallace, 2011, p. 30) asked if his or her child would like to go to space; apparently, the use of “you” in the text helped spark parents to ask their own questions. While the children did not respond to all of the parents’ questions, the seven children whose parents asked about going to space answered without exception; the children wanted to travel to space. The children’s responses suggested that the children’s interest was piqued.

Supporting understanding. While parents often casually pointed to an image related to the text they were reading, they were also interested in making sure that the children understood what was happening in an illustration. Sometimes parents paused and discussed an image in some detail, such as when Evan pointed to the earth and said, “Earth.” He then explained that the photograph represents an astronaut’s view of the planet from space.

What is the Nature of Interactive Behavior, Including Language, when Parents Read Narrative Fictional Texts to Their Children?

As with the informational book, parents primarily read A Penguin Pup for Pinkerton (Kellogg, 2001) for the benefit of the child. Their actions and words revealed their intent to keep the child focused on the reading and to support the child’s learning. Children responded to parental efforts and participated in the shared book reading.

Fictional Text Behavior

Parents and children were in contact with each other while reading A Penguin Pup for Pinkerton (Kellogg, 2001); often the child sat in the parent's lap. Only one child,
Noah, did not maintain physical contact with his father for the entire story. Additionally, parents displayed the book their child's advantage, even if the book's position was slightly awkward for them. At all times, it was the parent holding *A Penguin Pup for Pinkerton*.

With *A Penguin Pup for Pinkerton* (Kellogg, 2001), all parents except one pointed at words and pictures in ways that supported the child's literacy development. In general, the parents pointed to illustrations that helped the child to understand the text. They also pointed to illustrations to explain humorous asides that contradicted the text, such as when the text claimed the cat was dreaming about kittens, but the illustration showed that the cat was instead dreaming about food.

Richard spoke of trying to help his child with "accessing the story." This is to say that he wanted to make sure that his child followed the story narrative. Parents commented on their concern with the child’s making sense of the busy illustrations in *A Penguin Pup for Pinkerton* (Kellogg, 2001). As one might expect, children, like their parents, pointed at pictures. Additionally, while parents pointed to specific elements within the illustrations, William explained that he pointed to entire pictures instead in the fictional text. He found it difficult to point to just one thing.

**Fictional Text Language**

With *A Penguin Pup for Pinkerton* (Kellogg, 2001), parents also modulated their voices. For instance, while reading, "Do you have a question for our guest, Billy?" they would raise the pitch of their voices at the end of the question. To varying degrees of success, they spoke more loudly to suggest Billy's indignation as he said, "You bet I do! I'd like to know how this dog got my football that disappeared from my yard yesterday!"
Types of questions. With *A Penguin Pup for Pinkerton* (Kellogg, 2001), children asked questions and made statements. Most of those questions and statements checked the child's understanding or asked for information about items portrayed in the book's illustrations. As with informational texts, children made statements that had the effect of checking their understanding of story events and behaved like the question, “Am I right?” This happened when Cinderella pointed to an illustration of Pinkerton and stated, contrary to the story, "He's dreaming of a puppy." In an additional example, Violet explained that Pinkerton was sitting on sea ice while the illustration depicted him sitting down in a skating rink.

As with the informational text, children also asked factual "what's that" questions, as well as making statements and offering questions to check their understanding. As examples, Noah asked, "What kind of dog is that?" The "what's that" question could also extend occasionally to the vocabulary used in the reading. Violet wanted to know, "What does a ‘flop’ mean?" and Noah, not realizing that “pooch” is another word for “dog,” asked, "Who’s pooch?"

Focusing questions. Some parents asked questions to keep the child's attention. As the clearest example, Sarah asked many questions and made statements about the story. She explained what was happening with the book by going over the illustrations with a good amount of detail, sometimes to a degree that seemed obvious. Sarah asked her son if he felt that the football-egg was going to hatch, to which Nate said, "No." Still, she elaborated that the football would not hatch. Sarah may have also been interested in getting Nate to focus on the book reading. She worked for the first part of the book getting him to pay attention to the book instead of Pete the Cat and other distractions.
Background knowledge. Infrequently, children could also connect the fictional story to personal experience. Noah and Richard made connections to Teddy, the family dog they once had. Additionally, Captain was empathetic toward Pinkerton when the dog sat alone. In the interviews, Evan and Richard explained that the fictional text could more easily relate to their children’s experiences because the children had had experience with school and dogs.

Unanswered questions. Parents asked questions. Some of the questions the children never answered, and some of the questions were never intended to be answered. As an example, Pinkerton received a dog treat and abandoned his faux egg. Peggy asked Rapunzel, "What do you think he's going to do?" When Rapunzel did not respond, Peggy asked increasingly specific questions, until Peggy finally answered her own question without Rapunzel’s response.

Unlike Peggy, who was trying to elicit an answer, parents sometimes did not give time for an answer. Richard asked Noah a rhetorical, "Is that silly?" before explaining a humorous illustration of a dog licking a penguin. The rhetorical questions reengaged Noah's interest.

Supporting understanding. As with the informational text, parents helped children interpret illustrations. However, parents were less likely to help the child identify an object within an illustration, and more likely to help connect the image to the narration. In other words, parents helped the child interpret story elements from A Penguin Pup for Pinkerton (Kellogg, 2001); this included explaining character feelings and character motivations, and making sense of jokes, using the illustrations.
Table 4.10

Number of ACIRI Item Scores that are Higher for the Informational Text, Fictional Text, or Show No Difference

<table>
<thead>
<tr>
<th>Adult ACIRI Item</th>
<th>Informational</th>
<th>Fictional</th>
<th>No difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1, Adult attempts to promote and maintain physical proximity with the child</td>
<td>1</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>1.2, Adult sustains interest and attention through use of child-adjusted language, positive affect, and reinforcement</td>
<td>0</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>1.3, Adult gives the child an opportunity to hold the book and turn pages</td>
<td>2</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>1.4, Adult shares the book with the child--displays sense of audience in book handling when reading</td>
<td>0</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>2.1, Adult poses and solicits questions about the book's content</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2.2, Adult points to pictures and words to assist the child in identification and understanding</td>
<td>1</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>2.3, Adult relates the book's content and the child's responses to personal experiences</td>
<td>3</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>2.4, Adult pauses to answer questions that the child poses</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3.1, Adult identifies visual cues related to story reading--e.g., pictures, repetitive words</td>
<td>4</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>3.2, Adult solicits predictions</td>
<td>2</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>3.3, Adult asks the child to recall information from the story</td>
<td>0</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>3.4, Adult elaborates on the child's ideas</td>
<td>3</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>
Table 4.10 Continued

Number of ACIRI Item Scores that are Higher for the Informational Text, Fictional Text, or Show No Difference

<table>
<thead>
<tr>
<th>Child ACIRI Item</th>
<th>Informational</th>
<th>Fictional</th>
<th>No Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1, Child seeks and maintains physical proximity</td>
<td>1</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>1.2, Child pays attention and sustains interest</td>
<td>0</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>1.3, Child holds the book and turns the pages on his or her own or when asked.</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>1.4, Child initiates or respond to book sharing that takes his or her presence into account</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>2.1, Child responds to questions about the book</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>2.2, child responds to adult cues or identifies pictures and words on his or her own</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2.3 child attempt to relate the book's content to personal experiences</td>
<td>2</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>2.4, Child poses questions about the story and related topics</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3.1, Child responds to the adult and/or identifies visual cues related to the story him- or herself</td>
<td>6</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3.2, Child is able to guess what will happen next based on picture cues</td>
<td>0</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>3.3 Child is able to recall information from the story</td>
<td>0</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>3.4 Child spontaneously offers ideas about the story</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

What are the Similarities and Differences Found with Interactive Reading during Narrative Fictional Texts and During Non-narrative Informational Texts?

The parents largely behaved the same way with both texts. With the two notable exceptions of Evan and especially Ting, they asked similar numbers of questions and
used much the same techniques for enhancing attention to the text. The children's behavior and language were often similar with both texts, except that the children engaged in more literacy supportive behaviors with the informational text. They were especially more likely to make statements and ask questions with *Rockets and Spaceships* (Wallace, 2011). Table 4.10 summarized the quantitative similarities and differences found with the ACIRI (DeBruin-Parecki, 2007).

**Similar Behavior**

Parents often held the book to their own discomfort, but in the optimal position for the child. In many cases, when children turned the pages, they did so on their own, seemingly without the parent's expectation or under the parent's explicit verbal or physical control. As exceptions, Rapunzel and Captain turned pages with parental input. The interviews after the book reading session indicated that at least four of the parents allowed children more control of the book at home; they were concerned with damaging a book that was not their own. This concern, of course, may have limited how often children turned the pages and explained why none of the children held the book.

With both books, parents and children sat together; often the child sat on the parent's lap or flush up against mom or dad. Additionally, parents were supportive of the children's reading, as they used various techniques to keep the children’s interest in both texts. As a trend, children responded to the parents’ more subtle efforts to focus their attention, such as modulating their voices, turning pages, and pointing at pictures and words. Parents used these strategies to largely the same degree for both books.

*Keeping attention.* Parents were vigilant in keeping the children's attention. The video recordings showed that parents were quick to respond to the children's wandering
eyes. Sarah explained that she could tell when Nate's eyes were wandering away from the book. To get his attention back, she would point to something in the book. Usually, parents pointed or used questions to direct the child's attention. Only twice during the reading of the books did parents explicitly address the child's attention. William asked Captain to "pay attention," and Sarah called for her son to come back to read the book. In both cases, the child responded and engaged with the book.

The parents' vigilance in responding to the children's wandering attention implies effort. However, the parents denied that it was difficult to maintain the children's attention. This suggests that the parents may have simply done what came naturally without giving much thought to the actions themselves. Their strategies included pointing at the book, making statements, and asking questions. Such strategies seemed to work. The children's interviews and the videos indicated that the children were at least willing, and more likely pleased, to be reading with the parents. Overall, parents held the children's attention by engaging them in the reading process.

*Pointing for literacy development.* While all parents, except one, pointed at pictures and words, the result was more than simply holding the child's attention. Much of what the parents facilitated literacy development. With one exception, parents reading the two books pointed much more to pictures than to words. They generally chose to point at the objects mentioned by the text, thus reinforcing the textual message with visual support. Following the parents’ examples, all children responded to parents’ pointing at pictures and/or pointed to the pictures themselves.
**Similar Language**

Parents were more consistent than the children to the degree which they shared the books regardless of genre. They asked the children roughly the same number of questions (see Table 4.9) and did roughly the same things to bring the child’s attention to both texts (see Table 4.5). However, some book features and writing structures of the two genres did affect some of the things that parents said in support of the child's understanding of the book.

Parents understood that they had to support the child's general fund of background knowledge, but several parents felt that they did not have to do as much to support the child's background knowledge with the informational text as they did with the fictional text. Sarah took a contrasting view. She felt that she had less to explain about *Rockets and Spaceships* (Wallace, 2011) because Nate had seen the movie *Gravity*. Presumably, she felt her son already had a good understanding of outer space. Still, she asked the same number of questions with the informational text as she did with the fictional text.

**Behavior Difference**

Children engage in significantly more interactive reading strategies, as measured by the ACIRI (DeBruin-Parecki, 2007), with the informational text than with the fictional text. Of the 24 categorical scores for children, 18 were higher with *Rockets and Spaceships* (Wallace, 2011) when compared to *A Penguin Pup for Pinkerton* (Kellogg, 2001) (see Table 4.8). Conversely, only once did *A Penguin Pup for Pinkerton* outscore *Rockets and Spaceships* on a categorical item. Reinforcing the point, the children's item scores favored informational texts, with 29 (15%) scores, in comparison to the fictional text, with 7 (4%) scores (see Table 4.9). Additionally, parents were relatively consistent
about pointing at pictures with both texts. However, children responded to parents’ pointing to words and pictures to support textual meaning more frequently with the informational book.

While not statistically significant, parents also had higher ACIRI (DeBruin-Parecki, 2007) categorical totals with the informational text. For the adults, 20 (10%) item scores favored informational texts and 7 (4%) favored fictional texts.

Ting pointed more at words than pictures as she was working with her son on conventional reading. With Ting as the sole exception, parents were more likely to point at illustrations than at words. When they pointed at pictures in *Rockets and Spaceships* (Wallace, 2011), the parents were generally helping the children to identify the object in the picture. With *A Penguin Pup for Pinkerton* (Kellogg, 2001), the parent would both identify objects within the illustration and explain a picture's connection to the story. Similarly, parents asked questions that assisted the child’s recognition of an object. Of course, the informational book did not have a plot and other story elements, so it was not always possible to ask the same types of questions. However, even though parents had the opportunity to ask questions about story elements and identify objects within the storybook, parents tended to bring the child's attention to similar numbers of illustrations and ask similar numbers of questions with both texts.

*Language Difference*

A review of the transcripts shows that, to varying degrees, most of the children asked more questions and made more statements with the informational text. Two children, Nate and Rapunzel, were relatively quiet during the reading of *A Penguin Pup for Pinkerton* (Kellogg, 2001). They did not ask questions. Though they sometimes
were prompted to respond to a direct question, they generally remained quiet and did not initiate verbal interactions. However, with *Rockets and Spaceships* (Wallace, 2011), Nate nearly doubled his verbal interactions and Rapunzel doubled her verbal interactions.

Captain, Meena, Violet, and Bruce were relatively mute with the fictional text, but like Nate and Rapunzel, opened up more with the informational text. Bruce was largely passive while his mother read the fictional text, but came alive when his mother encouraged him to read many of the words from *Rockets and Spaceships* (Wallace, 2011). It seems that once he engaged with the text by reading aloud, the seal was off and he asked questions about the text. Captain, Meena, and Violet asked more questions and made more comments with the informational book. Cinderella generated similar numbers of questions and statements with both texts. Noah asked two questions and made six statements associated with the informational text, and four questions and five statements associated with the fictional text. On the whole, children were more likely to ask their own questions and state their own ideas with the informational text.

Potentially explaining children's greater verbal participation with the informational text, William suggested that familiarity with the topics made the difference for his son. He felt that Captain was more familiar with the ideas in the fictional book than he was with the content of the informational book, and thus had more questions with the informational book. However, Sarah, William, and Dee suggested that their children were familiar with outer space.

*Types of questions.* Dee pointed out that the fictional text promoted questions about the story line while the informational text promoted identifications. She expanded on the idea that the fictional book was constructed to convey a story; when she pointed at
a picture in the story, she offered that she was actually pointing at the scene, not an item. In contrast, the informational book was instructional and lent itself to learning words and the identifications of objects through pictures.

Because *A Penguin Pup for Pinkerton* (Kellogg, 2001) has a narrative, parents and children were able to comment on story elements. In fact, both parents and children asked a mix of "what's that?" and "what is happening?" questions. In other words, there were questions about the identification of objects presented in the book's illustrations and about the story elements. *As Rockets and Spaceships* (Wallace, 2011) did not have a story structure, parents and children generally asked "what's that?" questions focused on the identification of objects within illustrations or photographs. Yet, despite the fact that fictional texts encouraged both “what is that” and “what is happening?” questions, and despite the fact that parents asked nearly the same number of questions for both texts, four children were more responsive regarding questions for *Rockets and Spaceships* than they were regarding questions for *A Penguin Pup for Pinkerton*. Their responses included answering parent questions and, to a lesser extent, asking their own questions (see Table 4.9, children items 2.1 and 2.4).

For fictional texts, children seemed less concerned with understanding story elements and following plot than they did with identifying the objects depicted in the text. A child was most likely to check his or her understanding of an illustration or factual matter in the text. They also asked questions about vocabulary when they did not understand a word. This is not to say that children did not ask questions about the story itself.
While less prevalent than the "what's that" question, children asked questions about story events and story logic, such as when Cinderella asked, "Why is she reading a story to an egg?" Similarly, Sarah asked how the cat and dog could be friends. Noah even guessed at what Pinkerton might do. He explained that Pinkerton would probably not lick the cat, a prospect that had sent the cat running out a window.

_Holding Attention_  

Four parents, Pete, Dee, Evan, and Ting felt that they were better at holding their children's attention with the fictional text. Pete felt he could use the story to show emotion in his voice. Dee felt the lack of a story made the informational text flat. Evan claimed that he had to do more to get Violet to pay attention to _Rockets and Space Ships_ (Wallace, 2011). But not all parents felt the advantage was with the fictional text. Richard felt that there was more to learn with the informational text. This explanation suggested that children learned something new by reading the text.

_Developing Literacy_  

For the category Using Literacy Strategies, scores were higher with the informational text; the children's scores showed an even greater difference than the parents’ scores in favor of the informational text. Parents more frequently used the informational text to support both emergent and conventional literacy skills compared to the fictional text. As an extreme example, Ting explained that Bruce was learning phonics at home; she had Bruce read conventionally from the informational book, which she did not do with the fictional text. In a less extreme but more common example, parents would pause and encourage the child to finish a sentence. Several parents stopped at "Our planet is called…" and "The Planet in this picture is called…” Children
would then give the answer "Earth" and "Saturn" as appropriate. Evan even worked with Violet to identify Saturn after she said, "Mars." Finally, several of the parents used the glossary at the end of the book to review the five words with corresponding pictures listed there.

The structure of the informational text allowed opportunities for the child to participate in the text in predictable ways, such as when parents read, "This planet is called..." to which the child often replied "Saturn". There were at least two such opportunities with *Rockets and Spaceships* (Wallace, 2011), and parents often used them to good effect. Parents did not have children fill in the blank with the fictional text. The structure of the fictional text did not allow children to complete sentences in a similar fashion.

*Information from the Text*

Both texts presented questions that a parent could ask a child. At one point in *A Penguin Pup for Pinkerton* (Kellogg, 2001), a character asks a class, "Did you know that in the Antarctic, a father emperor penguin cradles his egg on his feet?" This question in the text is similar to "There are even plans to build a space hotel. Who knows? One day you might go on vacation in space!" from *Rockets and Space Ships* (Wallace, 2011, p. 30). While the *Pinkerton* question is more clearly a question, the *Rockets and Space Ship* statement sparked a greater response. The *Pinkerton* question prompted three of eight parents to address that the book’s question to the child. In comparison, seven parents asked the child about visiting the space hotel.

The children engaged more with the informational text. It may be that the children's natural curiosity with the physical world was a key reason for their greater
participation. The questions that they asked were factual in nature and often based on photographs. While the text could spark questions, the pictures encouraged the most interactions.

Summary

This study hypothesized that parents and children read non-narrative informational texts differently than they read narrative fiction during shared book reading. It further hypothesized that parents and children engage in more literacy supportive behaviors with the fictional text.

While the parents, and, even more, the children, engaged the two genres differently, the study's results turned the second part of the hypothesis on its head. In fact, the study demonstrated that informational texts do not discourage interactive reading techniques, but instead encouraged more interactive reading behaviors than fictional texts. Although parents generally used the same interactive reading techniques with both genres, the qualitative data and the descriptive statistics suggest that they used interactive reading strategies somewhat more frequently with informational texts. However, the quantitative data showed that children used significantly more reading strategies with the non-narrative informational text as compared to the narrative fiction. Further, the effect size of the finding is large ($d = 1.135$), suggesting that children are very responsive to the informational text genre in ways that support their literacy development. The qualitative data further supports this finding.

Parents may have engaged in more attention-getting behaviors because they felt they needed to do more to help sustain their child's interest. However, while parents offered more focusing strategies with the informational text than with the fictional text,
the children responded more frequently, at least in ways beyond paying attention, to those strategies with the informational text. While the parents may have been focusing the child's attention, they were also supporting the child's literacy development. These efforts were more successful with the informational text.

**Book Features**

Several features within *Rockets and Space Ships* (Wallace, 2011) prompted responses from parents and children that garnered points on the ACIRI (DeBruin-Parecki, 2007) measure. First, *Rockets and Spaceships* (Wallace, 2011) had photographs that encouraged more interactive reading behaviors. Typical of informational books, *Rockets and Spaceships* had illustrative pictures with captions. Parents would point to these items and frequently read the corresponding caption below the picture. Further, the illustrations clearly connected to the topic without many extraneous elements in the photographs. The informational text had clean and on-point images in comparison to the busy drawings of *A Penguin Pup for Pinkerton* (Kellogg, 2001).

*Rockets and Space Ships* (Wallace, 2011) additionally had an explanatory text with a larger font than *A Penguin Pup for Pinkerton* (Kellogg, 2001). The explanatory text may have encouraged children to check their own background knowledge and general understanding with the text. Certainly, children asked questions and made statements as they read the informational text. The larger print of *Rockets and Spaceships* may have encouraged parents to point at words more in comparison to the smaller print of *A Penguin Pup for Pinkerton* (Kellogg, 2001).

Also supporting the interactive reading were the predictable sentences supported by illustrative photos. Parents could easily read the first part of a sentence and allow the
child to fill in the blank with the help of context and pictures. Beyond that, the text had a
countdown which was particularly predictable for a four-or-five-year-old child, and the
words "Blast Off!" and "Rumble… rumble… ROOAAAARRRR" allowed parents to
become more animated during the reading.

*Rockets and Space Ships* (Wallace, 2011) asked a rhetorical question. The
rhetorical question had the effect of prompting seven of the eight parents to ask their own
questions, which the children answered. Likely, the rhetorical question was effective
because it prompted the imaginations of both the parents and the children. Perhaps
parents knew that the idea of visiting space would intrigue the child. This prompting of
the readers’ imaginations may be critical for engaging children’s imaginations and
interests.

Finally, as feature typical of many informational books for children, *Rockets and
Space Ships* (Wallace, 2011) had a glossary. A few of the parents skipped the glossary,
but others stopped and reviewed the five items and their pictures. Interestingly, very few
parents reviewed the definitions that accompanied the pictures and captions.

The examination of book features indicated an advantage for using informational texts
over the fictional text in promoting interactive book reading. In the field of product
design, Timothy Prestero proposed, "You want to make the right way to use it the easiest
way to use it" (TEDtalks, 2012). The spirit of this notion might apply to books. Certain
book features may have facilitated the use of literacy supportive strategies.

Consequently, book design might potentially encourage the use of certain shared book
reading strategies, which support literacy development.
Information Type

Another reason children may have responded more to *Rockets and Space Ships* (Wallace, 2011) was because it was factual. Obviously, informational texts provide information. The children seemed interested in learning factual information and less interested in interpretive information. To rephrase, the children seemed interested in learning the identities of objects and less interested in understanding the story narrative and understanding ways in which the story elements fit together. The children seemed to be interested in the concrete world and understanding the identities of new items.

Interest

As a final point, there is the possibility that parents engaged in more interactive reading activities with the informational text because they felt that the child was less interested. Six of the children indicated that they preferred reading *A Penguin Pup for Pinkerton* (Kellogg, 2001); only one preferred *Rockets and Space Ships* (Wallace, 2011), and one child claimed to like both. If the child liked the informational book less, it may have been that parents had to do more to keep the child's attention on the book. Parents used techniques like pointing and asking questions to hold the child’s interest. It may be that parents used interactive reading techniques to keep the child focused on the reading task. If this was true, it suggests that an accidental benefit of reading a less interesting informational text is better literacy development interactions.

While it is plausible that parents would engage in more interactive reading activities to make a less appealing text interesting, it seems unlikely that the children's interactive behaviors would increase if there was little or no interest on the part of the child. Children are less likely to engage in a dull text than they are in a text capturing
their interest. Consequently, children are unlikely to ask questions about a text if they were uninterested. Instead, a bored child would be likely to lose attention and become significantly less involved with the book reading.

Why do Parents Read More Fictional Texts with Their Children?

This study grew out of research indicating that children read more fictional texts during storybook reading than informational texts (Duke, 2000; Palincsar & Duke, 2004; Yopp & Yopp, 2006), even though informational texts have demonstrated benefits for children's literacy development (Duke, 2000; 2004; 2007; Palincsar & Duke, 2004; Yopp & Yopp, 2012). As part of the recruitment check, the study uncovered reasons for the dominance of fiction not found in the study’s literature review.

As indicated earlier, children have preferences for book topics, but not for book genre. Children are open to different genres. However, adult preferences limit their access to genres other than fiction; parents prefer fictional texts. This makes sense as children's books can have clever plots that may interest parents, but informational texts are simplistic by adult standards. Nevertheless, it may be that children find informational books interesting, at least if they are interested in the book’s topic. Duke (2007) as well as Yopp and Yopp’s (2012) found that many children read more when reading informational texts. This supports the idea that many children are interested in the genre.

Ultimately, the reason fiction dominates at home may be because parents are comfortable with fiction. This assertion is in contradiction to Duke (2000) who noted that many parents claim to enjoy reading informational texts with their child. Peggy explained how children could be open to any genre and still end up reading a near exclusive diet of fictional books. She reflected on her own reasons for providing mostly
fictional titles and said, "Maybe when I buy the books, I thought that stories are more fun. You know, information seems to be dry. ... So, part of it is us/me. So I buy more story books." Thus, the parents' own preferences and their economic control over purchases that limit the number of informational books children access at home. The next chapter discusses the implications of this and other findings.
CHAPTER 5 – SUMMARY AND RECOMMENDATIONS

Summary of the Introduction to the Problem

The failure to introduce children to varied book genres during early childhood impedes children’s literacy development. The paucity of genres other than narrative fiction has significant and lasting implications for children's educational attainment. As explained within this study, the solution to this problem is to introduce children to varied genres, including non-fiction informational texts. This introduction ideally starts at home during early childhood. Despite the seemingly straightforward solution to the problem, this study examines a hypothesis for why parents read a near exclusive diet of fiction with their four- to five-year-old children. Further, it examines and contrasts parent and child interactions, including language, while reading non-narrative informational and narrative fictional children’s books.

Shared Book Reading and Genre

To maximize the benefit of shared book reading, parents should engage in interactive reading behaviors (Morrow, 1985; Morrow & Gambrel, 2001). According to DeBruin-Parecki (2007), reading aloud should involve the child. This includes conversational give and take, turn taking, and making the child part of the reading process. MaGee and Richgels (2004) take this idea further and explain that an adult may read, ask questions, comment, and point to words and illustrations while the child also points, comments, and asks questions.

As an ideal, interactive book reading should incorporate varied genres; using varied genres during shared book reading supports child literacy development (Duke, 2000). Palincsar and Duke (2004) assert that introducing a child to a genre allows that child to read and write within that genre. This is because each genre represents a distinct way of thinking. Bruner (1991) explains that genre is a way of understanding a text, while Duke and Purcell-Gates (2003) explain that genre is a difference in content, language, format and structure. Mature readers may barely notice these structural differences, but the difference affects children, who must master different genre forms. The difficulty of this task may be beyond the imagination of many adults. In fact, evidence suggests that this difficulty is the cause of Chall's fourth grade slump (Ogle & Blachowicz, 2002).

The Fourth Grade Slump

The fourth grade slump is a time when students who have been reading at grade level suddenly fall behind and frequently stay behind for the rest of their school experience (Chall, Jacobs & Baldwin, 1990), a problem the 2013 NAEP (Center for Educational Statistics, 2013) test suggests is still with us. Further, Shanahan and
Shanahan (2008) claim children’s failure to read genres within content areas explain why recent gains in fourth grade reading disappear by eighth grade.

Additionally, waiting until the fourth grade to address the fourth grade slump is too late. Research by Juel (1988) along with Storch and Whitehurst (2001) indicates that the most effective time to address fourth grade reading problems is in early childhood, even before the child enters kindergarten. Additionally, the work of Manz, Hughes, Barnabas, Bracaliello and Ginsburg-Block (2010) indicates that this work is best done at home. Thus, having parents read varied genres to their children during shared book reading is a potent inoculation against reading failure (Corria, 2011; Duke, 2004; Palincsar & Duke, 2004). Yet despite the distinct advantage of using varied genres during shared book reading, fiction dominates the vast majority of children’s reading experiences in early childhood (Duke, 2000; Palincsar & Duke, 2004; Yopp & Yopp, 2006).

How This Study Relates to Previous Work

This study uses Vygotsky’s (1978, 1986) sociocultural learning theory, including his notion of the zone of proximal development, as a foundation. Sociocultural learning theory explains how parents bring children into literacy. The zone of proximal development explains how parents guide children into the structure of genres through scaffolding; this includes how parents ask questions, respond to questions and encourage children to ask their own questions.

This study’s theoretical foundation further includes emergent literacy theory (Clay, 1985, 1991). Emergent literacy explains what children need to learn before becoming conventionally literate (Morrow, 2005). It allows this study to recognize the
salient features of literacy development for beginning readers. This study further confirms and challenges findings from previous researchers examining genre and children's books. It comments on findings by Duke (2000), and Yopp and Yopp (2006). Extending the current body of research, it suggests the potency of using informational texts during shared book reading for supporting literacy development. The discussion section explores these findings.

Hypothesis

The origins of the current study are found in a simple question: why is fiction dominant in shared book reading? While Charles Elliott's call at the end of the 19th century to emphasize literature (Duke, Bennett-Armistead & Roberts, 2003), and a misinterpretation of Chall's (1996) stage theory of reading, can potentially explain fiction's dominance, the researcher speculated there might be an additional explanation. In *Dr. Spock's Baby and Childcare*, Spock (Spock & Parker, 1989) famously assured parents, "You know more than you think you do" (p. 1), and then warned parents against giving "experts" too much credence. Instead, he tells parents to "trust your own instincts" (p. 1). Perhaps parents instinctively know that informational books are not effective for teaching literacy. This study hypothesized that parents understand that there is a problem with reading non-narrative informational texts and that such books are not as effective for making readers of their children as fictional texts.

Practical Implications of the Study

This study intends first to identify what parents and children do during shared book reading with both non-narrative informational and narrative fictional texts. It then seeks to contrast the behaviors of parents and children during shared book reading of the
two genres. Next, it seeks to explore the parents' and, as much as possible, the children's perspectives on their behaviors. Ultimately, the study sheds light on the reasons why children experience few informational texts, and suggests solutions.

Summary of the Methods

The following section describes the study participants. It further reviews the sampling procedures, which includes a description of the materials used. It then discusses the implications of the sample size in terms of the study’s power and precision. This section describes the Adult Child Interactive Reading Inventory (ACIRI) (DeBruin-Parecki, 2007), an inventory that serves as a basis for both the quantitative and qualitative analysis of the study. A statistical analysis of the ACIRI establishes what parents and children do, and whether they behave differently with the books.

The qualitative measures include interviews and an examination of the videos. Interviews establish parent, and to a lesser degree, children's perspectives on the “why” of their behaviors. More than is possible with the ACIRI scores, an examination of the video allows for a detailed analysis of what parents and children do. Additionally, the videos occasionally allow a contrast between parent claims and their observed behaviors.

Participants

The researcher found four mothers and four fathers willing to participate in the study along with their preschool children. The children were four girls and four boys. As verified by the researcher with their daycare centers, the children were expected to enter kindergarten in the next school year.

The children were four- to five-years-old and were, to varying degrees, transitioning from emergent literacy to conventional literacy. The study looks at this age
because it is a time of remarkable language development (Apel & Masterson, 2001), and it is also a time when children can easily develop cognitive structures necessary for understanding varied genres (Duke, 2000).

**Sampling Procedures**

The study’s hypothesis shaped the design of the analysis. The study used a mixed methods design, with three main components. First, it used the ACIRI (DeBruin-Parecki, 2007), a reading inventory for scoring and statistical analysis. The inventory and statistical analysis established what parents and children did during shared book reading using different genres. This could determine if their behaviors changed according to the genre being read.

Second, it used interviews to gather the parent and child perspectives on their shared book reading behaviors and preferences. The parent perspectives are important as they could potentially prove or disprove the study’s hypothesis. Finally, it used the videos, and the transcripts derived from the videos, to analyze parent and child shared reading behaviors subjectively.

The researcher recorded the parent and child pairs, using a video camera along with an audio recording for backup. Each parent read two books to his or her child, the fictional narrative, *A Penguin Pup for Pinkerton*, by Kellogg (2001), and the non-narrative informational text, *Rockets and Spaceships*, by Wallace (2011). Half of the dyads began with *A Penguin Pup for Pinkerton* while the other half began with *Rockets and Spaceships* (see Table 4.3). The eight reading sessions took place in a quiet room within one of four daycare facilities at the time when the parent would normally pick up the child.
The researcher prepared a list of semi-scripted questions (see Appendix A). Before each shared book reading session began, the researcher asked if the parent or child were familiar with either book. In all cases, the answer was no. The interviewer then asked the bulk of additional questions after the book reading session concluded. Those later questions explored reasons why parents did or did not engage in certain interactive reading behaviors scored by the ACIRI (DeBruin-Parecki, 2007). Additionally, the researcher asked questions to confirm study recruitment assumptions.

The researcher selected *Rockets and Spaceships* (Wallace, 2011) and *A Penguin Pup for Pinkerton* (Kellogg, 2001) because the books are strongly contrasting in terms of genre while written on the identical K reading levels as measured by the Fountas and Pinnell leveling system and the nearly-identical Lexile levels. *Rockets and Spaceships* has an L510 Lexile level and *A Penguin Pup for Pinkerton* has an L 520 Lexile level. The books are additionally of comparable length (see Table 3.1).

*Rockets and Spaceships* (Wallace, 2011) is a children's book, but teaches about space, space flight, and space vehicles. As can be expected of informational books (Pappas, 2006), *Rockets and Spaceships* introduces a topic and develops that topic with multiple examples. It further has a glossary of vocabulary terms. Instead of characters, it focuses on items associated with space. Its organization is not dependent on time; it uses timeless verbs (Duke & Kays, 1998). It does not have a plot.

*A Penguin Pup for Pinkerton* (Kellogg, 2001) is a children's book that centers on a Great Dane named Pinkerton and the family that is caring for him. In the story, Pinkerton tries to care for a football in the same manner that an Emperor Penguin cares for its egg. Typical of narrative fiction, *A Penguin Pup for Pinkerton* has characters, is
organized by time, is written in the present tense, and has a plot with the many features typically found in an fictional text (Atwell, 1998).

Sample Size, Power and Precision

Because of the difficulty of recruiting participants, the current study used eight dyads. For statistical analyses, the study used two sample \( t \) tests and set significance at \( \alpha \leq .05 \). Within these limitations, the study could only detect large effect sizes of \( d = 1.10 \) or larger at a power of .50 (Cohen, 1988).

Measure Used

The study used the ACIRI (DeBruin-Parecki, 2007) to establish parent and child behaviors. It then used the semi-scripted questions based on the ACIRI items to determine the parents' reasons for their behaviors. The ACIRI is an observational tool that scores 12 literacy supportive behaviors for parents and for children. Three categories divide the 12 items into 1) drawing attention to book features, 2) cognitive processes inside the child, and 3) supportive communication. Four items comprise each category. For each item, the scores range from zero to three. Those scores are summed, allowing for a potential range of zero to 36 for each individual. The higher the score, the more the individual is engaging in literacy supportive interactive reading techniques (see Appendix B for all items). A score of zero indicates that a behavior was not observed, while a score of three indicates that the behavior was observed four or more times.

Two coders, the researcher and a second scorer, used the ACIRI (DeBruin-Parecki, 2007) to score the reading interactions. The researcher did not tell the second scorer the goal of the study. The two scorers had a 76.3% agreement rate, and an intra-
class correlation ($r = .933$) met Cicchetti’s (1994) excellent rating for all scores. Pearson calculation indicated inter-rater reliability of $r = .876$ ($p < .01$) for all scores.

Summary of the Results

The summary of the results reviews the recruitment procedure for participation in this study. It then looks over the statistical analysis of the data. Analysis then continues as the paper reviews analyses based on the qualitative data; behavior and language sections further subdivide the qualitative data. Finally, this section accounts for differences found according to textual features.

Recruitment

The researcher asked multiple daycare centers within proximity of his home for permission to recruit participants from among their students; four daycare centers agreed. The demographics of the communities suggested that the centers catered to middle SES and upper middle SES parents. At each center, the researcher waited at the children’s pick-up time, roughly four to six o’clock in the afternoon, and personally handed parents copies of a recruitment letter (see Appendices H and I) and a self-addressed stamped envelope. After six attempts, he recruited eight parents for the study. He was able to video record the dyads at each of the four centers between February 20, 2014 and June 18, 2014.

The recruitment letter indicated that, to be eligible to participate, the parent had to read at least occasionally with his or her child, and that the parent and child speak English well enough to participate realistically in the study. The children were in the last year of pre-school before entering kindergarten.
Statistics and Data Analysis

With the ACIRI (DeBruin-Parecki, 2007), the informational text mean scores were higher in all categories and test totals. This is true for both parents and children (see Table 4.5). T tests showed that the higher scores for the informational text were only significant with the children's test total ($t (14) = 2.460, p = .027$). The effect size of this finding was large ($d = 1.135$) with the informational text, *Rockets and Spaceships* (Wallace, 2011) outscoring the fictional text, *A Penguin Pup for Pinkerton* (Kellogg, 2001) (see Table 4.5). Even though the results were not different at a statistically significant level, an examination of test means shows that parents used more literacy supportive behaviors with the informational text (see Table 4.4); a larger sample size may show a significant difference.

Qualitative Results, Behavior

Parents read both texts for the benefit of their children and were careful to keep their children focused on the book. They often engaged in literacy supportive activities and were particularly good at creating a nurturing atmosphere around storybook reading. Similarly, the children generally engaged in the shared book reading and gave their attention to the books. Children were also responsive to interactions with their parents.

As one might expect, the parents' behaviors showed that they engaged in shared book reading for the benefit of their children. Every parent held the book so his or her child could easily see the pictures, even if the book was at an awkward angle for the parent. The dyads sat closely together and, with varying degrees of success, read the books with appropriate emphasis and expression. Unfortunately, no parent allowed his or
her child to hold either book and only two, William and Peggy, encouraged the child to turn pages.

With both *Rockets and Spaceships* (Wallace, 2011) and *A Penguin Pup for Pinkerton* (Kellogg, 2001), parents pointed to words and pictures. In general, the parents pointed to pictures that supported understanding of the texts and were likely to point to a picture or illustration as it was mentioned in the text or immediately afterwards. With the informational book, the parents’ pointing to illustrations may have supported children’s vocabulary development; as an example, the parents would point to a photograph of an astronaut while saying, "Astronaut." With the fictional text, parents were likely to point to illustrations that included elements of humor, such as the drawing of the cat in *A Penguin Pup for Pinkerton*, dreaming about food when her owners thought she was dreaming about having kittens. In general, parents were concerned that the children follow the story, and pointed to pictures to help them do so. Children reacted to their parents’ pointing at pictures, and also pointed at pictures on their own. Both parents and children pointed to pictures more in the informational text than with the fictional text (see Table 4.9, item 2.2).

*Qualitative Results, Language*

Both parents and children asked questions and made statements connected to the books. As might be expected, parents made statements that helped guide the children's attention and support their understanding. Similarly, they asked questions that checked the children’s understanding. Parents also asked questions that focused the children’s attention. Some parents would ask a question if they noticed that the child was looking away from the book or was otherwise distracted.
Children checked their understanding of both texts by asking questions and making statements. Most frequently, pictures and illustrations prompted children's questions and statements. Children were less likely to have a verbal response based on the text the parents were reading.

**Background Knowledge**

Parents made connections between what the texts said and what the children already knew. However, they were more likely to do this with *Rockets and Spaceships* (Wallace, 2011). As an example, four of the parents started reading a sentence in *Rockets and Spaceships* and then stopped, leaving the last word blank. This allowed the child to fill in the missing word. Evan read, "The planet in this picture is called...", thus working with Violet to fill in with "Saturn."

While four parents had the child fill in the blank with the informational book, no parent used this technique with the fictional text. The presence of a picture clearly indicating the correct answer may have been critical in making this approach work. Instead, for the fictional text, a parent sometimes connected the story to the child's own experience. With *A Penguin Pup for Pinkerton* (Kellogg, 2001), one parent made a connection between the dog in the story and a dog the family once had. Still, parents made more connections to what the child already knew with the informational text than with the fictional text.

**Differences between the Texts**

With the exception of pointing at pictures to support literacy, the parents' behaviors were much the same for both texts. However, book features, especially
features common to informational books, brought out more behaviors that support emergent literacy.

Parents generally asked nearly the same number of questions (see Table 4.9) and used essentially the same techniques for enhancing attention to the text (see Table 4.5). Yet, one parent-child dyad stood out. Ting read A Penguin Pup for Pinkerton (Kellogg, 2001) rather quickly and earned relatively few points. She then had her son Bruce read many of the sentences and sound out some words with Rockets and Spaceships (Wallace, 2011). This produced a significant shift in both her behavior and her son's behavior as identified by the ACIRI (DeBruin-Parecki, 2007), and both of their scores dramatically increased with the informational text.

The children exhibited many of the same behaviors with both texts. However, the informational text brought out more physical and verbal interactions. Children were more likely to engage in talk with Rockets and Spaceships (Wallace, 2011). They turned more pages, engaged their parents more with book sharing and engaged in activities that supported comprehension. They were especially more responsive to questions and were more responsive to visual cues that the parents pointed out.

Summary of the Discussion

The summary of the discussion reviews the study’s hypothesis and then refutes it. It continues by analyzing observed difference in behavior, including language with each genre. It finishes up by exploring why informational texts engage participants in interactive shared book reading more effectively than fictional texts.
Study Hypothesis Refuted

The preponderance of evidence in this study goes against the study's hypothesis. Instead of justifying a reduced use of informational texts during shared book reading, the study supports the greater use of such texts. The hypothesis assumed parents recognize a problem with using informational texts. Instead, the study shows that informational texts are more supportive of children’s literacy development than fictional texts. Of particular interest is the strength of the finding. With an effect size of Cohen's $d = 1.135$ in favor of the informational text, the increase in children’s interactive reading interactions is large. To rephrase this point, genre affects the degree to which children engage in literacy supportive reading behaviors. It significantly changes the language and behavior of children and, to a lesser degree, it may change the language and behavior of adults. In all cases, the informational text did more than the fictional text to support children's literacy development.

Additionally, parent interviews suggest the reason for the informational text shortage may be parent preferences and/or comfort with reading different genres. When compared to non-narrative informational texts, parents tend to choose fictional texts for their children.

Why Informational Text Engaged More

Three possibilities stand out as reasons for the higher score with the informational text when compared to the fictional text: book features, information type, and interest.

Why Informational Text Engaged More, Book Features

Some book features of *Rockets and Spaceships* (Wallace, 2011) encouraged interactive book reading. One such feature was predictable sentences. Parents frequently
used the combination of picture and context to allow the child to finish a sentence. As an example, the text had a countdown, which was particularly predictable for a four-or-five-year-old child, and the words "Blast Off!" Similarly, supported by a photograph of the correct planet, shown in three places, the text gave a sentence that ended with the name of the planet. No such analogous feature appeared in *A Penguin Pup for Pinkerton*, (Kellogg, 2001).

Additionally, *Rockets and Spaceships* (Wallace, 2011) also had clear, uncluttered photographs and captions that clearly illustrated key vocabulary words, a format that encouraged interactive book reading strategies such as pointing at the illustration, questions, and statements. It also had moments that encouraged the parents to become animated in their reading. While reading, "Rumble… rumble… ROOAAAARRRR," to emulate the sound of a rocket taking off, parents became particularly expressive and often read the words with enthusiasm. Further, *Rockets and Space Ships* (Wallace, 2011) had a larger font than *A Penguin Pup for Pinkerton* (Kellogg, 2001). While no parent commented on the font difference, this may have made it easier for parents to point at words as they read.

Both books used "you" in the text as a rhetorical device designed to draw attention to something within the text. In both books, parents used the "you" statements to bring the child's attention to an idea. *Rockets and Spaceships* (Wallace, 2011) stated, "One day you might go on vacation in space!" (p. 30). After reading this, seven out of the eight parents asked the child if he or she wanted to go to space, to which the child indicated yes. In *A Penguin Pup for Pinkerton* (Kellogg, 2001), a teacher asked his students, "Did you know that in the Antarctic, a father emperor penguin cradles his egg
on his feet?" While similar to the first statement in that it used "you," this question elicited a more modest three of eight parents’ asking questions of the child.

Part of the appeal of the rhetorical "you" statement in *Rockets and Space Ships* (Wallace, 2011) was the captivating power of an idea that could spark a child's imagination. The parents understood that children would marvel at the thought of spending time in space, which in turn engaged the children’s interest. In addition, *Rockets and Spaceships* directly addressed the "you" statement to the reader. In *A Penguin Pup for Pinkerton* (Kellogg, 2001), the "you" statement was directed toward a classroom of students within the story, which may have dampened the effect.

*Rockets and Space Ships* (Wallace, 2011) had a glossary, a feature typical of many informational books. Some parents skipped the glossary, but five stopped and reviewed the items and associated pictures. Three simply pointed to the pictures and identified the object depicted. One parent read all of the definitions and another read just one definition before moving on to the next book. Still, most parents used this book feature to facilitate interactive reading behaviors.

Why Informational Text Engaged More--Information Type

The fictional texts encouraged both "what is that?" and "what is happening?" questions. Even though parents asked nearly the same number of questions for both texts, four children answered more parent questions and asked more their own questions (see Table 4.9, children items 2.1 and 2.4) with the informational text.

It may be that children's interest in learning about the world is another possible reason they participated more with interactive book reading. The informational book may have sparked the children's propensity to ask factual questions as shown by the
number of questions and statements they generated. Perhaps the photographs in the informational book encouraged children’s verbal responses.

The videotape showed how parents helped children understand the content of pictures and illustrations. With the fictional text, parents pointed to help children identify the item or items within an illustration and asked questions (see Table 4.9, adult items 2.1 and 2.2). They also used the illustration to support the story narrative. Parents spoke of assisting their children's understanding of the story by pointing at illustrations. Parents also pointed at the pictures in the informational book, but to identify the objects in the photograph.

**Why Informational Text Engaged More--Interest**

Supporting children's understanding may have not the parents' only reason for their interactive reading behaviors. Some parents indicated that they asked questions, and pointed at pictures and words, because they wanted to hold their children’s attention. The video shows that parents knew when the child's attention flagged. Additionally, Pete indicated that he found narrative fiction more entertaining than children’s informational books, and Dee explained that she had to do more to engage her child’s interest with a book if her daughter was bored. Driving the point home, Evan explained he had to make sure his daughter paid attention with *Rockets and Spaceships* (Wallace, 2011). It may be that parents engaged their children more because they were interested in keeping the children’s attention. Further, these attention-getting behaviors may have had an additional benefit: the parents were supporting literacy development. Backing this speculation, six of the eight children said they preferred *A Penguin Pup for Pinkerton*
(Kellogg, 2001) (see Table 4.2). Opposing this idea, another line of reasoning suggests that it was the parents who were less interested in the informational text.

As a group, the parents had only a relatively modest gain in interactive reading techniques with the informational text, but their children had a significantly larger gain (see Table 4.4). It seems unlikely that children would interact more with a book they enjoyed less. Instead, a child would likely disengage and become less interactive with a boring book. After all, the informational book was designed for children, but was well below the interest level of adults. It is easy to imagine a children’s book entertaining a child while leaving the parent uninterested.

Supporting, Extending, and Challenging Previous Studies

The current study supports, extends, and challenges previous studies. Similar to Duke (2000), and Yopp and Yopp (2006), this study finds that parents read mostly fiction at home. It also supports a finding of Duke (2000), who noted that parents are unaware of the importance of informational texts. This present study finds that parents had simply not thought about the issue of genre when reading books with their children.

Extending current research, this study suggests the effectiveness of using informational texts at home. An extensive literature review suggests that this may be the first study to find an explicit connection between the choice of book used during shared book reading and the quality of reading interactions. This study also extends current research by suggesting the potency of using informational texts. The large effect size found with the analysis of the children's scores suggests that informational texts encourage more literacy supportive behaviors in four- and five-year-old children.
This study also goes against a claim by Duke (2000) who found parent enjoy reading informational books. In contrast, this study finds that parents are less enthusiastic about reading informational texts during shared book reading. Three parents indicated that they find informational books less interesting than fictional books. Four parents clearly indicated a preference for fictional books. This finding is important, as it provides an alternative explanation for the dominance of fiction at home; at least some parents do not read informational texts because they are less appealing to the parent.

The parents within the study allowed their children to choose many of the books used in shared book reading. If available, children are likely to choose informational books. However, the children usually pick storybooks from a home library. The parents stock the home library along with other adults who may have purchased books as gifts. One of the parents, Peggy, explained informational books seem, "to be dry. ... So, part of it is us/me. So I buy more story books." The home libraries are largely comprised of fiction because that is what the adults purchase. While the parents may be trying to buy books that their children will enjoy, their own preferences may steer the children away from informational books. This means that children read more fictional books at home because of adult preference. This preference is a likely culprit in fiction’s domination of children’s reading. After all, children can only choose books that are available to them.

Limitations of the Study

This study has several limitations. With a sample size of eight dyads, the study is only able to detect differences in the ACIRI (DeBruin-Parecki, 2007) that are very large. It is probable that significant results have gone undetected because of the number of dyads in the study. Further, this study does not fully explore the degree to which the
observed differences are the result of the specific books used versus the difference in features inherent in book genre. With only two books used for comparison, the results would be more robust if the study compared several narrative fiction titles to an equal number of non-narrative titles. This would allow the confident attribution of differences to book genre. Further, a larger study would allow for a comparison between genders.

A larger study would also afford the opportunity to include a more diverse and representative population of parents. The eight dyads, while culturally diverse, do not fully represent either the US or the local population. The sampling procedure likely found dyads that were middle SES and upper middle SES; low SES individuals are missing from the study.

Additionally, the study asks parents and children to replicate home reading practices; however, reading at the end of the school day within a daycare environment may not successfully replicate the home reading environment. The environment, including the presence of the researcher and video cameras, the location, and the time of day, may influence some reading behaviors.

Recommendations

This study implies several areas of future research. The study suggests the possibility of an experimental design. Children could be randomly assigned to a control group and a treatment group that is exposed to a greater number of informational texts. Children could then be pre- and post-tested to assess emergent literacy skills.

Future studies should include a greater number of dyads. Extrapolations from sample size Tables using Cohen's d suggest that 22 dyads may reveal a significant ($\alpha \leq .05$) finding for the parent test total. Additionally, a study with 30 dyads may reveal a
significant \((\alpha \leq .05)\) finding for all of the children's categorical scores. A sample size of 348 dyads is necessary to explore all parent categorical tests. All estimates are based on a power of .80 (Cohen, 1988).

To assure that the results are descriptive of genre differences and not simply of features of individual books, it would be important to use multiple titles of both non-narrative informational books and narrative fictional books. Further, future studies could look at a greater range of ages, and not just children in their final year of pre-school.

Other Recommendations

The purpose of this study was to impact children's literacy attainment. To succeed in this goal, parents must become aware of the importance of informational texts to the literacy development of children. Through various forms of outreach, parents should learn the importance of using informational texts during shared book reading with their children.

Finally, this study may have implication for the design of informational books. The study found several book features that seem to encourage interactive reading behaviors. Further research may suggest the value of having authors adopting these features within new books. These features include the use of intriguing “you” statements within the text and predictable text moments supported by a well-selected photograph or illustration.
REFERENCES


Barnyak, N. (2011). A Qualitative Study in a Rural Community: Investigating the Attitudes, Beliefs, and Interactions of Young Children and Their Parents regarding Storybook Read Alouds. *Early Childhood*


http://www.heinemann.com/fountasandpinnell/handouts/TextLevelLadderOfProgress.pdf


Hallgren, K. A. (2012). Computing inter-rater reliability for observational data: An overview and
tutorial. Tutorials in quantitative methods for psychology, 8(1), 23.

Hansen, J., (2004). Tell me a story: Developmentally appropriate retelling strategies. Newark,
DE: International Reading Association.

Honea, J. r. (1982). Wait-Time as an Instructional Variable: An Influence on Teacher and

maltreatment and family support: A practices and assessment model. Mahwah, NJ:
Lawrence Erlbaum Associates.

Huey, E. B. (2009), The psychology pedagogy of reading, Newark, DE: International Reading
Association.

Corp.

International Reading Association & National Association for the Education of Young Children.
(1998). Learning to read and write: Developmentally appropriate practices for young

and interrater reliability: An empirical study of an analytic scoring rubric. Applied

Through Fourth Grades.” Journal of Educational Psychology, 80, 437–447.

Readers.

Hall, Inc.

Kim, Y. (2009). The relationship between home literacy practices and developmental trajectories
of emergent literacy and conventional literacy skills for Korean children. Reading and
Writing: An Interdisciplinary Journal, 22(1), 57-84.

Raton, Fl: CRC Press.

measurement and success. MetaMetrics Inc.

The Lexile framework for reading. (n.d). My Lexile measure is: [Data file]. Retrieved from
http://www.lexile.com/fab/

Manz, P. H., Hughes, C., Barnabas, E., Bracaliello, C., & Ginsburg-Block, M. (2010). A
descriptive review and meta-analysis of family-based emergent literacy interventions: To
what extent is the research applicable to low-income, ethnic-minority or linguistically-diverse young children? 


What Works Clearinghouse (2006), Dialogic Reading. Rockville, MD. ERIC # ED493769
What Works Clearinghouse (2007a), Interactive Shared Book Reading. Rockville, MD. ERIC # ED497615

What Works Clearinghouse (2007b), Shared Book Reading. Rockville, MD. ERIC # ED497615


Appendix A

Introductory Script: Thank you for being part of my study. In this study, I want to see how parents and children read together using two different books.

In a few moments, I will start the recording equipment and then I will step to the side. After that, and when you are ready, please read together exactly as you would at home. Please start with: *A Penguin Pup for Pinkerton / Rockets and Spaceships* and then read the other book. Are you familiar with either book? Y/N (circle one)

After reading: I want to ask a few questions, but I do not want anyone’s answer to change because of what someone else says. Mom/Dad, I would like to hear from your child first, but please hold on to your thoughts.

A) To child: “Which book did you like better? Why?”

B) To child: “Did you find one book to be different from the other? What did you notice?”

C) To parent: “Which book did you like better? Why?”

D) To parent: “Did you find one book to be different from the other? What did you notice?”

E) To child: “Did you read those stories the same way you read stories at home? How was it the same or different?”

F) To parent: “Did you read those stories the same way you read stories at home? How was it the same or different?”

G) To Parent: Did you use different practices between the two books? What were the differences?

H) To parent: I want to ask you about how you helped your child to pay attention to the texts. Did you find a difference between the books? (after initial response) What about?:
   1) keeping your child close
   2) letting him/her hold the book
   3) letting him/her turn pages, and
   4) how you shared the book with your child

I) To parent: Today you did several things to help your child’s understanding of the books. Did you feel there was a difference between the books? (after initial response) What about?:
   1) asking questions
   2) pointing at pictures
   3) pointing at words, and
   4) relating the text to personal experiences
J) To parent: You and your child used literacy strategies while reading the books. Again, did you find a difference between the books? (after initial response) What about?:
1) how you used visual cues
2) making predictions about the texts
3) recalling information from the books
4) how you added to your child’s ideas about the story

K) Tell me about the books you generally enjoy reading together.
1) To Child: Do you like reading books with stories like A Penguin Pup for Pinkerton?
2) To Child: Do you like reading books about space like Rockets and Spaceships?
3) To Child: Which kind of book do you like better?
4) To Parent: How frequently read storybooks like A Penguin Pup for Pinkerton?
5) To Parent: How frequently read informational books like Rockets and Spaceships?
6) To Parent: Which kind of book, fictional or informational, do you read most frequently at home? Why?
### Adult–Child Interactive Reading Inventory

<table>
<thead>
<tr>
<th>ADULT BEHAVIOR</th>
<th>OBSERVATION</th>
<th>CHILD BEHAVIOR</th>
<th>OBSERVATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Enhancing Attention to Text</strong></td>
<td></td>
<td><strong>I. Enhancing Attention to Text</strong></td>
<td></td>
</tr>
<tr>
<td>1. Adult attempts to promote and maintain physical proximity with the child.</td>
<td></td>
<td>1. Child seeks and maintains physical proximity.</td>
<td></td>
</tr>
<tr>
<td>2. Adult sustains interest and attention through use of child-adjusted language, positive affect, and reinforcement.</td>
<td>2. Child pays attention and sustains interest.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Adult gives the child an opportunity to hold the book and turn pages.</td>
<td>3. Child holds the book and turns the pages on his or her own or when asked.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Adult shares the book with the child (displays sense of audience in book handling when reading).</td>
<td>4. Child initiates or responds to book sharing that takes his or her presence into account.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>II. Promoting Interactive Reading and Supporting Comprehension</strong></td>
<td></td>
<td><strong>II. Promoting Interactive Reading and Supporting Comprehension</strong></td>
<td></td>
</tr>
<tr>
<td>2. Adult points to pictures and words to assist the child in identification and understanding.</td>
<td>2. Child responds to adult cues or identifies pictures and words on his or her own.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Adult relates the book’s content and the child’s responses to personal experiences.</td>
<td>3. Child attempts to relate the book’s content to personal experiences.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Adult pauses to answer questions that the child poses.</td>
<td>4. Child poses questions about the story and related topics.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>III. Using Literacy Strategies</strong></td>
<td></td>
<td><strong>III. Using Literacy Strategies</strong></td>
<td></td>
</tr>
<tr>
<td>1. Adult identifies visual cues related to story reading (e.g., pictures, repetitive words).</td>
<td>1. Child responds to the adult and/or identifies visual cues related to the story him- or herself.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Adult solicits predictions.</td>
<td>2. Child is able to guess what will happen next based on picture cues.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Adult asks the child to recall information from the story.</td>
<td>3. Child is able to recall information from the story.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Adult elaborates on the child’s ideas.</td>
<td>4. Child spontaneously offers ideas about the story.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix C

Contrast between Informational and Fictional ACIRI scores using Mean of Two Raters

<table>
<thead>
<tr>
<th>ACIRI Category</th>
<th>Informational</th>
<th>Fictional</th>
<th></th>
<th></th>
<th></th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>t(14)</td>
<td>LL</td>
</tr>
<tr>
<td>Adult</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention To Text</td>
<td>9.875</td>
<td>1.361</td>
<td>9.500</td>
<td>1.157</td>
<td>0.522</td>
<td>0.500</td>
</tr>
<tr>
<td>Interactive Read Comp</td>
<td>6.625</td>
<td>1.534</td>
<td>5.375</td>
<td>2.344</td>
<td>1.383</td>
<td>0.278</td>
</tr>
<tr>
<td>Literacy Strategies</td>
<td>3.375</td>
<td>1.363</td>
<td>2.500</td>
<td>1.499</td>
<td>0.927</td>
<td>0.088</td>
</tr>
<tr>
<td>Test Total</td>
<td>19.875</td>
<td>2.696</td>
<td>17.375</td>
<td>2.696</td>
<td>1.636</td>
<td>0.076</td>
</tr>
<tr>
<td>Child</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention To Text</td>
<td>9.750</td>
<td>1.425</td>
<td>8.500</td>
<td>1.413</td>
<td>1.387</td>
<td>0.135</td>
</tr>
<tr>
<td>Interactive Read Comp</td>
<td>5.375</td>
<td>2.371</td>
<td>3.375</td>
<td>2.615</td>
<td>1.846</td>
<td>0.334</td>
</tr>
<tr>
<td>Literacy Strategies</td>
<td>2.875</td>
<td>1.032</td>
<td>1.500</td>
<td>1.208</td>
<td>1.795</td>
<td>*0.005</td>
</tr>
<tr>
<td>Test Total</td>
<td>18.000</td>
<td>3.292</td>
<td>13.375</td>
<td>3.944</td>
<td>2.460</td>
<td>*0.035</td>
</tr>
</tbody>
</table>

* Significant at α ≤ 0.05

Note. CI = confidence interval; LL = lower limit; UL = upper limit.
Appendix D

Contrast between Informational and Fictional ACIRI scores using Non-parametric Statistics

<table>
<thead>
<tr>
<th>ACIRI Category</th>
<th>Informational Med</th>
<th>Fictional Med</th>
<th>U (16)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention To Text</td>
<td>9.875</td>
<td>9.500</td>
<td>28.500</td>
<td>0.721</td>
</tr>
<tr>
<td>Interactive Read Comp</td>
<td>6.625</td>
<td>5.375</td>
<td>20.500</td>
<td>0.234</td>
</tr>
<tr>
<td>Literacy Strategies</td>
<td>3.375</td>
<td>2.500</td>
<td>22.500</td>
<td>0.328</td>
</tr>
<tr>
<td>Test Total</td>
<td>19.875</td>
<td>17.375</td>
<td>19.000</td>
<td>0.195</td>
</tr>
<tr>
<td>Child</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention To Text</td>
<td>9.750</td>
<td>8.500</td>
<td>17.000</td>
<td>0.130</td>
</tr>
<tr>
<td>Interactive Read Comp</td>
<td>5.375</td>
<td>3.375</td>
<td>16.500</td>
<td>0.105</td>
</tr>
<tr>
<td>Literacy Strategies</td>
<td>2.875</td>
<td>1.500</td>
<td>17.000</td>
<td>0.130</td>
</tr>
<tr>
<td>Test Total</td>
<td>18.000</td>
<td>13.375</td>
<td>13.000</td>
<td>*0.05</td>
</tr>
</tbody>
</table>

*Significant at $\alpha \leq 0.05$

*Note. Med = Median; $U =$ Mann-Whitney $U$
Appendix E

<table>
<thead>
<tr>
<th>Effect Sizes, Consensus, Informational/Fictional</th>
<th>DF</th>
<th>t</th>
<th>Cohen's $d$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention To Text</td>
<td>14</td>
<td>0.522</td>
<td>0.279</td>
</tr>
<tr>
<td>Interactive Read Comp</td>
<td>14</td>
<td>1.383</td>
<td>0.739</td>
</tr>
<tr>
<td>Literacy Strategies</td>
<td>14</td>
<td>0.927</td>
<td>0.496</td>
</tr>
<tr>
<td>Test Total</td>
<td>14</td>
<td>1.636</td>
<td>0.874</td>
</tr>
<tr>
<td>Child</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention To Text</td>
<td>14</td>
<td>1.387</td>
<td>0.741</td>
</tr>
<tr>
<td>Interactive Read Comp</td>
<td>14</td>
<td>1.846</td>
<td>0.987</td>
</tr>
<tr>
<td>Literacy Strategies</td>
<td>14</td>
<td>1.795</td>
<td>0.959</td>
</tr>
<tr>
<td>Test Total</td>
<td>14</td>
<td>2.460</td>
<td>1.135</td>
</tr>
</tbody>
</table>

*Note.* DF = degrees of freedom.
## Appendix F

### Selected Interview Conclusions and Responses

<table>
<thead>
<tr>
<th>Category/Item</th>
<th>Summarized Conclusions and Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enhancing Attention to Text</strong></td>
<td>Keeping children focused on the book is easy. Meena explained, &quot;When I read to her she listens.&quot;</td>
</tr>
<tr>
<td>1.1</td>
<td>Parents and children kept together. William thought keeping his son close was, &quot;never an issue.&quot;</td>
</tr>
<tr>
<td>1.2</td>
<td>Each parents held his or her child's interest, which was easy and routine. Pete explained, &quot;That's how we read books.&quot;</td>
</tr>
<tr>
<td>1.3</td>
<td>Parents did not let children hold the book and only sometimes encouraged them to turn the page. Ting offered, &quot;He [Bruce] likes to turn the pages. Which, I usually don't let him, especially if the book is not mine. Because sometimes I'm afraid he will just destroy the book or make it dirty or something.&quot;</td>
</tr>
<tr>
<td>1.4</td>
<td>For some, book features in the informational book made it easier to be animated. William explained, &quot;Just in the, kind of 'roar' and those kinds of things in the first book [Rockets].&quot; For others, the fictional book was easier to be expressive. Pete said <em>Pinkerton</em> “has an arc, and kind of has characters reenacting the emotion.”</td>
</tr>
<tr>
<td><strong>Interactive Reading and Comprehension</strong></td>
<td>Sarah thought she had to support background knowledge. She said, &quot;I had to point out more things in this book [Pinkerton] than this book [Rockets] because of the factual stuff; he's already acquired the knowledge from other sources.&quot;</td>
</tr>
<tr>
<td>2.1</td>
<td>Parents may have been asking about specific objects with the informational text and the story line with the fictional text. Dee said, &quot;For the first one [Rockets] I would ask her specific words or showing pictures. This is like, which planet. Saturn or Mars. The second one will be more like what will be going on next…. It is more the story line.&quot;</td>
</tr>
<tr>
<td>2.2</td>
<td>Parents pointed at pictures in the informational book to identify items while they pointed at pictures in the fictional text to support the story. Dee explained, &quot;On the first book [Rockets], I would show the object, directly…. The second [Pinkerton] showing over all scene from here to here.&quot; The ACIRI scores do not support this perception.</td>
</tr>
<tr>
<td>2.3</td>
<td>There were only a few connections to personal experience. Bruce offered that, &quot;With the Rockets book, we have not been to space, but we did have a dog,&quot; but Ting felt that it was difficult to relate to the dog story.</td>
</tr>
<tr>
<td>2.4</td>
<td>Nearly every time a child paused to ask a question, the parent responded. Consequently, the parents’ scores matched the children's scores exactly.</td>
</tr>
</tbody>
</table>

*Note. All names are pseudonyms*
### Selected Interview Conclusions and Responses (Continued)

<table>
<thead>
<tr>
<th>Category/Item</th>
<th>Summarized Conclusions and Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using Literacy Strategies</td>
<td>This was the first time the dyads read the book and may have held back on literacy strategies. Richard said, &quot;That's something we would work on in the second, third, fourth reading of the book, once I knew he was more familiar with a story overall.&quot;</td>
</tr>
<tr>
<td>3.1</td>
<td>Parents pointed to words and pictures to support the child's understanding of the text. Evan explained, &quot;I certainly pointed to the picture that went along with the text that was being read.&quot;</td>
</tr>
</tbody>
</table>
| 3.2                    | This was a low scoring item. Evan thought fictional texts were best for making predictions, but then realized predictions are possible with informational texts too. He said, "You could do [make predications] a lot more in the first one [Pinkerton] because you could sort of anticipate what might happen in the story. But, science is science." However, Evan then realized it is possible to ask leading questions such as, "What might they find in space?"
| 3.3                    | No dyad earned any points on this. Parents did not ask their children to recall information from the book and the children did not do it on their own.                                                                                     |
| 3.4                    | Generally, if a child offered an idea about the story, the parents were likely to elaborate on it. Some parents felt it was easier to elaborate on ideas from the fictional book, but both children and parent scored higher with the informational book.       |

*Note.* All names are pseudonyms
Appendix G

Selected Video Observations

<table>
<thead>
<tr>
<th>Category/Item</th>
<th>Summarized Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhancing Attention to Text</td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Children either sat on their parent's laps or snuggled up to their parent.</td>
</tr>
<tr>
<td>1.2</td>
<td>Parents consistently sustained children's interest. Parents were better and worse at using child-adjusted language, positive affect, and reinforcement. Parents adjusted their language appropriately for their children. All parents became more animated while reading the countdown to a rocket launch and then became particularly emphatic when saying, &quot;Roar,&quot; for the sound of a rocket launch. Read Pinkerton with emotion.</td>
</tr>
<tr>
<td>1.3</td>
<td>Children did not hold the books and only occasionally turned the pages.</td>
</tr>
<tr>
<td>1.4</td>
<td>All parents consistently held the book so their child could see the story. Children generally attended to the book while reading. Children did not always initiate or respond physically or verbally to book sharing.</td>
</tr>
<tr>
<td>Interactive Reading and Comprehension</td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>Parents asked questions that helped identify items and vocabulary with both books. Parents were likely to ask questions to assist with plot elements and character development with <em>A Penguin Pup for Pinkerton</em> (Kellogg, 2001). Plot and character questions were not possible with <em>Rockets and Spaceships</em> (Wallace, 2011).</td>
</tr>
<tr>
<td>2.2</td>
<td>Parents pointed at critical pictures or illustrations while reading to assist the child's textual understanding. Parents also frequently elaborated on the item of interest. Four parents pointed to nearly equal numbers of pictures for both the informational and the fictional texts. Three parents pointed more to the informational text, and one, more to the fictional text. Four children responded equally to both texts, three had more responses to the informational text, and one had more responses to the fictional text.</td>
</tr>
<tr>
<td>2.3</td>
<td>Two parents made three connections to their child's personal experience.</td>
</tr>
<tr>
<td>2.4</td>
<td>Both types of text generated questions. If a child asked a question related to one of the books, the parents usually answered—only occasionally ignored questions. Additionally, children were most likely to ask questions that helped identify people, identify things, or clarify vocabulary. The questions were mostly &quot;what&quot; questions and only occasionally &quot;how&quot; or &quot;why&quot; questions.</td>
</tr>
</tbody>
</table>

*Note. All names are pseudonyms*
Appendix G (Continued)

Selected Video Observations (Continued)

<table>
<thead>
<tr>
<th>Category/Item</th>
<th>Summarized Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using Literacy Strategies</td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>Parents helped children develop emergent and even conventional reading skills by using elements from both books.</td>
</tr>
<tr>
<td>3.2</td>
<td>Only Sarah and Peggy asked their children to make predictions. In both cases, the mothers did so with the fictional text.</td>
</tr>
<tr>
<td>3.3</td>
<td>No one asked a child to recall information from either book.</td>
</tr>
<tr>
<td>3.4</td>
<td>Children offered more ideas about the informational text than they did about the fictional text. In most instances, the parent would respond to his child's ideas. Many of the children’s statements may have been efforts by the children to check their understanding.</td>
</tr>
</tbody>
</table>

*Note. All names are pseudonyms*
Appendix H

Dear Sir or Madam,

I am asking for your participation in my study examining *Shared Book Reading*; the study will videotape you reading two storybooks with your child at the XXXXXX X. The purpose of this study is to learn how parents and children interact around the books. I am a PhD candidate at Rutgers where I am studying early literacy development.

If you are willing to participate, in the next two days, simply fill out the contact information below and return the letter to me in the enclosed stamped, self-addressed envelope. If you do not wish to participate, disregard this letter and dispose of the documents in an appropriate manner. You and your child are under no obligation to participate whatsoever.

In order to participate in the study I ask that you have a preschool aged child who is expected to attend Kindergarten in the fall of 2014, that you speak English well enough to participate, and that you normally read to your child at least occasionally. Your participation in the study is expected to take approximately 15 minutes, and we will schedule a time of mutual convenience (possibly when you pick your child up from school). I am well studied in early childhood literacy and will be glad to discuss topics related to reading; extra time will be available if you want to ask questions. I am looking for 8 parents with 4 boys and 4 girls.

Please contact me with any questions and thank you for your time and consideration,

Grattan Baldwin, Primary Investigator
1205 Sayer Drive
Princeton, NJ 08549
G_Baldwin@yahoo.com
609 951-8727

Lesley Morrow, Advisor
Rutgers GSE
10 Seminary Place
New Brunswick, NJ 08901-1183
848-932-7496

Parent Name (Please Print): ___________________________________________________

Gender of Child (Check as Appropriate): _____ Male _____ Female

Email: ________________________________________________________________

Phone: ____________________________________ (Preferred time to call: _________)

Address: ______________________________________________________________

______________________________________________________________

Preferred Method of Contact (Check as Appropriate)

_____ Email _____ Phone _____ Post
Appendix I

**Invitation and Purpose of Study.** You and your child are invited to participate in a research study looking at shared book reading using two texts, conducted by Charles Baldwin, a student in the Graduate School of Education at Rutgers University. The purpose of this research is to see how parents and children respond to reading two children’s books.

**Expectations for Participants.** Approximately 8 parent and child pairs will participate. Each parent and child pair will be videotaped reading two books to their children. Your participation will last between 15 to 30 minutes.

**Study is Confidential.** This research is confidential. Confidential means that the research records will include some information about you, such as your name, your child’s name, contact information and gender. I will keep this information confidential by limiting individual's access to the research data and keeping it in a secure location.

**Who May See the Data.** The research team and the Institutional Review Board at Rutgers University are the only parties that will be allowed to see the data, except as may be required by law. If a report of this study is published, or the results are presented at a professional conference, only pseudonyms will be used. All study data will be kept for three years.

**Foreseeable Risks.** Despite the efforts listed above, there is a chance that you and/or your child’s identity will be revealed.

**Direct Benefits to You.** The benefits of taking part in this study for you may include learning about literacy practices that may benefit your child; especially if you choose to discuss storybook reading session with me after your session. However, you may receive no direct benefit from taking part in this study.

**Participation in this study is voluntary.** You may choose not to participate, and you may withdraw at any time during the study procedures without any penalty to you. Additionally, you are representing your child’s interests as well. You should feel free to withdraw from the study if your child does not wish to participate or if you feel participation is not in his or her best interest.

**Contact Researcher.** If you have any questions about the study or study procedures, you may contact me at (609) 951-8727 or by email at G_Baldwin@yahoo.com or you can contact my advisor, Lesley Morrow at (732) 932-7496 ext 8119.

**Contact Institutional Review Board.** If you have any questions about your rights as a research subject, you may contact the IRB Administrator at Rutgers University at: Rutgers University, the State University of New Jersey, Institutional Review Board for the Protection of Human Subjects, Office of Research and Sponsored Programs, 3 Rutgers Plaza, New Brunswick, NJ 08901-8559 Tel: 848-932-0150, Email: humansubjects@orsp.rutgers.edu

**Two Copies of Consent Form.** One copy of this consent form is for your records. Please give the second signed copy to the researcher.

**Sign below if you agree to participate in this research study:**

Adult Subject (Print ) ________________________________________

Child Subject (Print ) ________________________________________

Parent/Adult Signature _____________________________   Date ______________________

Principal Investigator Signature __________________________ Date ___________________

Protocol Approval Date: ________________   Protocol Expiration Date: ____________
Appendix J

AUDIO/VIDEOTAPE ADDENDUM TO CONSENT FORM (ADULT)

You have already agreed to participate in a research study about shared book reading conducted by Charles Baldwin. We are asking for your permission to allow us to both audio record and videotape as part of that research study.

The recording(s) will be used for analysis by the research team.

The recording(s) will include will not include your real name but will instead use pseudonyms. Recording will include full facial pictures.

The recording(s) will be stored in a password protected computer and labeled with subjects’ pseudonyms and will be retained. Videos and audio recordings will be deleted upon completion of data analysis, currently estimated to occur before October 31, 2014.

Your signature on this form grants the investigator named above permission to record you as described above during participation in the above-referenced study. The investigator will not use the recording(s) for any other reason than that/those stated in the consent form without your written permission.

Subject (Print) _____________________________________________

Subject Signature _______________________________ Date __________

Principal Investigator Signature _______________________ Date ________
Appendix K

AUDIO TAPE AND/OR VIDEO TAPE / PHOTOGRAPHY ADDENDUM TO CONSENT FORM (CHILD)

You have already agreed to allow your child to participate in a research study about shared book reading conducted by Charles Baldwin. We are asking for your permission to allow us to both audio record and videotape your child as part of that research study.

The photographs and recording(s) will be used for analysis by the research team.

The recording(s) will include will not include your child’s real name but will instead use pseudonyms. Recording will include full facial pictures.

The recording(s) will be stored in a password protected computer and labeled with subjects’ pseudonyms and will be retained. Videos and audio recordings will be deleted upon completion of data analysis, currently estimated to occur before October 31, 2014.

Your signature on this form grants the investigator named above permission to record your child as described above during participation in the above-referenced study. The investigator will not use the recording(s) for any other reason than that/those stated in the consent form without your written permission.

Name of Child (Print) ____________________________________________________________

Name of Parent/Legal Guardian (Print) ______________________________________________

Parent/Legal Guardian’s Signature ________________________________ Date ____________

Principal Investigator Signature ___________________________________ Date ____________
Appendix L

Child Oral Consent Form

STUDY TITLE: Shared Book Reading Using Fictional and Informational Texts

SCRIPT:

You are going to read with your mother/father. Would you like to read a story with her/him? Yes/No (Circle)

I would like to use a camera to video tape you. Is that OK? Yes/No (Circle)