



142
517
THS



This is to certify that the
dissertation entitled

PROMISE AND POSSIBILITIES OF INFUSING PARENT-CHILD
READ ALOUDS WITH COMPREHENSION STRATEGY
INSTRUCTION: AN INTERVENTION STUDY

presented by

KATHRYN L. ROBERTS

has been accepted towards fulfillment
of the requirements for the

Doctoral

degree in

Curriculum, Teaching, &
Educational Policy

Nell K. Duke
Major Professor's Signature

May 11, 2010
Date

PLACE IN RETURN BOX to remove this checkout from your record.
TO AVOID FINES return on or before date due.
MAY BE RECALLED with earlier due date if requested.

DATE DUE	DATE DUE	DATE DUE

**PROMISE AND POSSIBILITIES OF INFUSING PARENT-CHILD READ ALOUDS
WITH COMPREHENSION STRATEGY INSTRUCTION: AN INTERVENTION
STUDY**

By

Kathryn L. Roberts

A DISSERTATION

**Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of**

DOCTOR OF PHILOSOPHY

Curriculum, Teaching, and Educational Policy

2010

ABSTRACT

PROMISE AND POSSIBILITIES OF INFUSING PARENT-CHILD READ ALOUDS WITH COMPREHENSION STRATEGY INSTRUCTION: AN INTERVENTION STUDY

By

Kathryn L. Roberts

This dissertation is comprised of two manuscripts that resulted from a single study that tested the efficacy of teaching parents how to infuse comprehension strategy instruction into read alouds with their preschool-aged children. Twenty dyads, each composed of an incoming kindergartener and one of his or her parents, participated in this study. This study employed an experimental design: children were matched based on initial scores on a standardized comprehension measure, and then randomly assigned to condition within pairs. Parents assigned to the experimental group attended workshops at two-week intervals during which they were taught to infuse their read alouds with their children with comprehension strategy instruction, and sent follow-up packages with strategy reminders and a book to practice with in between sessions. Parents in the control group were provided with one initial session during which they were instructed on the benefits of reading at home with their child. They were also mailed follow-up packages on the same schedule as the experimental group that contained reminders about the importance of reading and a book. Pre- and post-intervention scores on measures of parental implementation and child comprehension were then compared. Results indicate that, for parents in the experimental condition, interactions with their children during read aloud sessions changed to include statistically significantly more instances than control group peers of talking about text (specifically, more turns and uptake of initiated topics by both parents and children), retelling, and story structure. Results approached

significance for instances of initiation of discussion about text by children and instances of activation and use of prior knowledge. In addition, children in the experimental group showed higher gains than children in the control group on composite comprehension scores.

The first manuscript focuses on the two central research questions of the study:

(1) To what extent are parents able to implement comprehension strategy-based instructional practices (specifically retelling, attention to story structure, activation and use of prior knowledge, and talking about text) into lap reading with their children in response to workshops on the topics? and (2) What are the effects on children's comprehension of parents' attempts to infuse comprehension strategy instruction (specifically retelling, attention to story structure, activation and use of prior knowledge, and talking about text) into lap reading of fictional narrative texts with their children? This manuscript is written for researchers, and outlines the study and addresses these questions in the standard research article format.

The second manuscript is written for the practitioner audience. While it, too, includes some discussion of the literature, methodology, and results, the primary focus of this article is on the discussion and implications of the research for the teaching community; particular attention is paid to the information necessary to successfully implement the intervention.

The results of this study contribute to the small, but growing body of literature on family literacy interventions focused on comprehension. In addition, this study provides a framework for practitioners interested in harnessing the power of families as they strive to help all children become proficient readers.

ACKNOWLEDGEMENTS

Completing this dissertation, both the study itself and the writing, has been one of the most challenging and rewarding adventures that I have experienced, and I owe a great debt of gratitude to those who supported me as I navigated the ups and downs. First, I would like to thank my advisor and dissertation director, Dr. Nell Duke. I owe much of what I know about research to her guidance, and am deeply grateful both for the times that she provided me with invaluable advice and for the times that she pushed me toward independence, at times having more confidence in me than I had in myself. On a similar note, I would like to thank Rebecca Norman, Meagan Shedd, Meghan Block, Laura Jimenez, Nicole Martin, and Lauren Fingeret for their feedback at all stages of this study, help with data collection, reading of endless drafts, and general sanity preservation. I am particularly grateful to Meghan Block, who was extremely generous with her time and support during the data collection stage of the study.

I would also like to thank my committee members, Dr. Patricia Edwards, Dr. Kim Maier, and Dr. Donna Scanlon for their support. Their thoughtful suggestions and feedback at all stages were insightful and greatly strengthened the study.

Finally, I would like to thank my family for being my biggest fans and supporters. In particular, I would like to thank my husband for talking me down from the ledge during the rough patches and trying to be interested as I talked endlessly about the study, and my brilliant daughter Lola for acting as a sounding board on everything from statistical analyses to implications.

TABLE OF CONTENTS

LIST OF TABLES	viii
LIST OF FIGURES.....	ix
INTRODUCTION.....	1
Overview of Dissertation.....	2
References.....	7
 MANUSCRIPT 1: COMPREHENSION STRATEGY INSTRUCTION DURING PARENT-CHILD LAP READING: AN INTERVENTION STUDY	 9
Introduction.....	10
Family Literacy.....	13
Research on Book Reading Interventions.....	15
Research on Successful Family Literacy and Tutoring Interventions.....	18
Comprehension and Young Children.....	19
Comprehension Strategy Instruction.....	21
Retelling and Story Structure in the Classroom.....	23
Activation and Use of Prior Knowledge in the Classroom...	25
Talking About Text in the Classroom.....	26
Methods.....	28
Design.....	28
Participants.....	29
Data Collection Measure and Procedures.....	30
Implementation Measures.....	30
Child Measures.....	31
<i>The Early Literacy Skills Assessment</i>	31
Retelling Measure.....	33
Conditions and Procedures.....	35
Experimental Treatment.....	35
Control.....	36
Analysis.....	37
Implementation.....	37
Comprehension.....	38
Results.....	39
Parent Implementation.....	39
Frequency of Strategy Use.....	39
Turns, Initiation, and Uptake.....	39
Effects of Implementation of Comprehension.....	40
Child Comprehension.....	40
<i>The Early Literacy Skills Assessment</i>	40
Retelling Measure.....	40
Comprehension in Relation to Implementation.....	41

Discussion.....	41
The Potential of Parent-Child Read Alouds.....	43
Young Children Learning to Comprehend.....	44
Promise of this Intervention.....	45
Limitations.....	46
Conclusions.....	48
References.....	49

MANUSCRIPT 2: TEACHING PARENTS TO INFUSE COMPREHENSION INSTRUCTION INTO PARENT-CHILD READ ALOUDS: A LOW-COST, HIGH-IMPACT

APPROACH.....	67
Introduction.....	68
Comprehension.....	68
Literacy in the Home.....	70
The Present Study.....	72
Setting and Participants.....	72
Parent Workshops.....	73
Materials.....	74
Strategy Handouts.....	74
Video Examples.....	74
Follow-up Packets.....	75
Control Condition.....	75
Did the Workshops Make a Difference?	76
Parents' Implementation.....	76
Transcript Analyses.....	76
Demographic Variables.....	78
Children's Comprehension.....	79
The Early Literacy Skills Assessment (ELSA).....	79
The Retelling Measure.....	79
Concluding Comments.....	81
References.....	85
Literature Cited.....	88

APPENDICES

Manuscript 1:

A Example of a Retelling Scoring Protocol.....	57
B Example of a Strategy Handout.....	59
C Example of a Strategy Bookmark.....	62

Full Dissertation:

D Negative Binomial Statistics for Effects of Gender and Socioeconomic Status on Post-Intervention Comprehension Measures.....	98
--	----

REFERENCES

Introduction.....	7
-------------------	---

Manuscript 1.....	49
Manuscript 2.....	85

LIST OF TABLES

Manuscript 1:

Table 1	Participant Demographic Information.....	64
Table 2	Post-Intervention Means and Effect Sizes Based on Strategy Use from Analyses of Parent-Child Read Alouds.....	65
Table 3	Post-Intervention Means and Effect Sizes Based on Turns, Initiation, and Uptake Analyses of Parent-Child Read Alouds.....	66
Table 4	Pre- and Post-Intervention Means and Effect Sizes Based on Experimental Group Comprehension Scores.....	67

Manuscript 2:

Table 5	Descriptions of Individual Story Comprehension Strategies.....	90
Table 6	Mean Pre- and Post-Intervention Comprehension Scores.....	92

LIST OF FIGURES

Manuscript 2:

Figure 1	Outline of a Typical Workshop Teaching Parents about Infusing Comprehension into Parent-Child Lap Reading.....	93
Figure 2	Timeline for Workshops and Follow-Up Mailings.....	94
Figure 3	Example of a Strategy Handout.....	95
Figure 4	Example of a Strategy Bookmark.....	97
Figure 5	Sample Retelling Scoring Protocol for <i>Sylvester and the Magic Pebble</i>	98

Introduction

Reading, by definition, is about “extracting and constructing meaning through interaction and involvement with written language” (RAND Reading Study Group, 2002, p. xiii). In 2000, the National Reading Panel published its report, naming five essential components of reading: phonemic awareness, phonics, fluency, vocabulary, and comprehension. If reading is, as stated above, about meaning making, then the first four components are in service of the last: comprehension. Yet, there is much more empirical research on phonemic awareness, phonics, fluency, and vocabulary learning than comprehension in the primary grades. Perhaps, the research and practice communities are looking to have these first four components in place before addressing comprehension. In some ways, this is logical. For example, a child would never be able to independently comprehend a complex text if he or she couldn’t decode the words in that text. However, children who are not yet independently reading can learn both decoding and comprehension skills simultaneously. Indeed, the learning of each is likely to support the learning of the other. Comprehension (which is closely related to the semantic and pragmatic cuing systems) can be used in coordination with decoding (which is closely related to the graphophonemic cuing system) in order to facilitate the construction of meaning from connected text (Adams, 1990; Goodman & Goodman, 2006).

The literacy skills of young children have been the focus of my research for the last four years. I have looked at the writing skills of children in primary grades (Roberts & Wibbens, in press), comprehension instruction in the primary grades (Roberts, in preparation; Roberts & Duke, 2009), young children’s comprehension of graphics in text (Duke et al., 2009), and young children’s comprehension of informational text (Billman,

et al., 2008; Hilden, et al., 2008). In each of these areas of research, I looked at literacy from a classroom-centered perspective. For my dissertation work, I wanted to address issues of literacy learning from a different perspective, so I turned to the study of the roles that families play in their children's comprehension. Interactions around text in the home during early childhood have a tremendous influence on children's literacy skills and attitudes (e.g., Bus, van Ijzendoorn, & Pellegrini, 1995; Cunningham & Stanovich, 1997; DeBaryshe, 1993; Hood, Conlon, & Andrews, 2008; Justice & Ezell, 2000; Neuman, 1996; Sénéchal, 2006; Stanovich, 1986; Weigel, Martin, & Bennett, 2006), and my own experiences as a teacher made it quite clear that there were many parents who were motivated to help, but were unsure of what to do. Therefore, tapping these resources in order to maximize their potential seems to be a worthwhile endeavor. In particular, I wanted to examine the efficacy of moving comprehension strategy instruction, which has a record of success in the classroom, into the home.

Overview of the Dissertation

Because this intervention study has implications for both researchers and practitioners, I decided to write it using an alternative format (Duke & Beck, 1999), which includes one manuscript written in a manner consistent with publication standards for the research community, and a second appropriate for publication in a practitioner journal. In addition, the manuscript includes this introduction, linking the two articles and situating them in the broader context of the study.

Overview of the Study

When I originally conceptualized this study, I was pondering whether comprehension strategy instruction could “work” if it took place in the home as parents

read to their children. However, it quickly became apparent that the answer would depend largely on my definition of “work”. After some thought, I decided that, for the intervention to work, it would have to both change parents’ read aloud practices immediately and show the potential to change children’s comprehension. Due to the necessarily short duration of the study and the long-term nature of comprehension development (e.g., Sénéchal & LeFerve, 2002), large effects for comprehension were not expected to be immediately apparent. Therefore, the success of the intervention was gauged to a greater extent by parent implementation, and to a lesser extent by children’s comprehension.

Both manuscripts address the same two central questions: 1) *To what extent are parents able to implement comprehension strategy-based instructional practices (specifically retelling, attention to story structure, activation and use of prior knowledge, and talking about text) into lap reading with their children in response to workshops on the topics?* and 2) *What are the effects on children’s comprehension of parents’ attempts to infuse comprehension strategy instruction (specifically retelling, attention to story structure, activation and use of prior knowledge, and talking about text) into lap reading of fictional narrative texts with their children?* The first manuscript, written for researchers, takes readers through the study in the traditional format of a research report, highlighting contributions to the bodies of literature on both comprehension and family literacy, as well as providing implications for future research. The second manuscript also discusses the rationale, design of the study, and findings, but focuses much more heavily on practical issues related to teaching parents to incorporate comprehension strategy instruction into their at-home reading sessions.

The final sample for this study included twenty dyads, each composed of one incoming kindergartener and one parent, from a range of socio-economic and ethnic backgrounds. The children were paired within site (Head Start, Suburban preschool/developmental pre-kindergarten, tuition-based childcare) based on their scores on a standardized measure of comprehension (the *Early Literacy Skills Assessment*, DeBruin-Parecki, 2005), and then one child from each pair was randomly assigned to each condition (control or experimental). Parents of the children in the experimental group received training via four, 45- to 60-minute workshops on strategy instruction at two-week intervals, while parents in the control condition were advised as to the benefits of reading with their children frequently during the intervention period, and offered the intervention workshops after the completion of the study. Both groups received follow-up mailings between scheduled sessions. These packages contained a reminder about the next session, a bookmark with suggestions for implementing the strategy that they had learned in the previous session (or regarding information from the initial session, in the case of the control group), and a fictional narrative book with which to practice.

In order to determine the effectiveness of the intervention, measures of both implementation and comprehension were employed. First, before both the first and last sessions, audio recordings were made of each parent-child dyad as they engaged in a read aloud of a fictional narrative picture book. These recordings were then transcribed and analyzed for instances of target strategy use, number of different strategies used, total number of conversational turns related to text taken by both the parent and child, and number of topic initiations and amount of uptake made by both the parent and the child. Also, child comprehension was measured both before and after the intervention period

through the administration of the Early Literacy Skills Assessment (ELSA, DeBruin-Parecki, 2005) and a researcher-designed retelling protocol. The scores from these measures were then analyzed using *t* tests; negative binomial regressions were also run to determine the relationships between SES within condition and final ELSA scores, and between gender within condition and final ELSA scores.

Results indicated that parents were quite capable of implementing strategy instruction during their one-on-one read alouds with their children. Parents in the experimental condition were more likely to infuse their read alouds with strategy use and instruction, use a wider range of strategies, and engage with their children around text, in general, post-intervention than they were pre-intervention. Furthermore, post-intervention, parents and children in the intervention group were also more likely to engage in actual conversations about text as opposed to cross-talk. In other words, parents and children were both more likely to build on topics initiated by the other (as opposed to ignoring the initiation and introducing a new topic) post-intervention than pre-intervention. These changes were not evidenced in the control group.

In terms of comprehension, children in the experimental group experienced statistically significant growth from pre- to post-intervention on their total *ELSA* scores, while there were no significant differences between time points for the control group. On the retelling measure, the experimental group also experienced more growth, but not at a level of statistical significance.

The findings of this study carry implications for both researchers and practitioners. For researchers, this study contributes to the research base supporting the efficacy and importance of comprehension strategy instruction for young children. In

addition, it contributes to the knowledge base of effective ways in which parents can be taught to engage with their children around literacy. For practitioners, this study can serve as a template for the design of family literacy initiatives, both in content and in format.

References

- Adams, M. J. (1990). The three-cueing system. In J. Osborn & F. Lehr (Eds.), *Literacy for all: Issues in teaching and learning* (pp. 73-99). New York: Guilford.
- Billman, A. K., Duke, N. K., Hilden, K., Zhang, S., Roberts, K., Halladay, J. L., et. al. (2008). *Concepts of Comprehension Assessment (COCA)*. East Lansing: Trustees of Michigan State University.
- Bus, A., van Ijzendoorn, M. H., & Pellegrini, A. D. (1995). Joint book reading makes for success in learning to read: A meta-analysis on intergenerational transmission of literacy. *Review of Educational Research*, 65, 1-21.
- Cunningham, A. E., & Stanovich, K. E. (1997). Early reading acquisition and its relation to reading experience and ability 10 years later. *Developmental Psychology*, 33, 934-945.
- DeBaryshe, B. D. (1993). Joint picture-book reading correlates of early language skill. *Journal of Child Language*, 20, 455-461.
- DeBruin-Parecki, A. (2005). *Early Literacy Skills Assessment (ELSA)*: High/Scope Press.
- Duke, N. K., & Beck, S. W. (1999). Education should consider alternative formats for the dissertation. *Educational Researcher*, 28(3), 31-36.
- Duke, N. K., Norman, R. R., Roberts, K. L., Martin, N., Knight, J. A., Morsink, P., et al. (2009). *Visual literacy development in young children: An investigation with informational text*. Paper presented at the annual meeting of the Literacy Research Association.
- Goodman, Y. M., & Goodman, K. S. (2006). To err is human: Learning about language processes by analyzing miscues. In R. B. Ruddell & N. J. Unrau (Eds.), *Theoretical models and processes of reading* (fifth ed., pp. 620-639). Newark, DE: International Reading Association.
- Hilden, K. R., Duke, N. K., Billman, A. K., Zhang, S., Halladay, J. L., Schaal, A. M., Roberts, K., & Martin, N. M. (2008). *Informational Strategic Cloze Assessment (ISCA)*. East Lansing: Trustees of Michigan State University.
- Hood, M., Conlon, E., & Andrews, G. (2008). Preschool home literacy practices and children's literacy development: A longitudinal analysis. *Journal of Educational Psychology*, 100, 252-271.
- Justice, L. M., & Ezell, H. K. (2000). Enhancing children's print and word awareness through home-based parent intervention. *American Journal of Speech-Language Pathology*, 9, 257-269.

- National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups*. Washington, DC: National Institute of Child Health and Development.
- Neuman, S. B. (1996). Children engaging in storybook reading: The influence of access to print resources, opportunity, and parental interaction. *Early Childhood Research Quarterly, 11*, 495-513.
- RAND Reading Study Group. (2002). *Reading for understanding: Toward an R & D program in reading comprehension*. Santa Monica, CA: RAND.
- Roberts, K. L. (in preparation). Measuring comprehension with a fictional narrative retelling protocol.
- Roberts, K. L., & Duke, N. K. (2009). Comprehension in the primary grades: A review of the research. In K. Ganske & D. Fisher (Eds.), *A Comprehensive Look at Comprehension*. Guilford: New York.
- Roberts, K. L., & Wibbens, E. N. (in press). Writing first: What research says about writing instruction in the primary years. In G. A. Troia (Ed.), *Writing Research in Classroom Practice: Applications for Teacher Professional Development*. New York: Guilford.
- Sénéchal, M. (2006). Testing the home literacy model: Parent involvement in kindergarten is differentially related to grade 4 reading comprehension, fluency, spelling, and reading for pleasure. *Scientific Studies of Reading, 10*, 59-87.
- Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly, 21*, 360-407.
- Weigel, D. J., Martin, S. S., & Bennett, K. K. (2006). Contributions of the home literacy environment to preschool-aged children's emerging literacy and language skills. *Early Childhood Development and Care, 176*, 357-378.

MANUSCRIPT ONE: COMPREHENSION STRATEGY INSTRUCTION DURING
PARENT-CHILD LAP READING: AN INTERVENTION STUDY

Abstract

In this experimental study, I examined the effectiveness of a series of workshops and between workshop at-home activities designed to teach parents to integrate comprehension strategy instruction into one-on-one read alouds with their pre-kindergarten aged children. Parent-Child dyads were randomly assigned to either a control or experimental (workshop) condition. Results revealed significant changes in interaction patterns between parents and children in the experimental group, reflecting the strategies taught in the workshops. There were also significant effects for children's comprehension, with moderate effects on children's total comprehension scores on a commercially-available assessment and small effects on their abilities to retell. Findings support the idea that children are capable of strategically comprehending text well before they are reading connected text independently and that a low-intensity intervention with parents can facilitate the process.

Comprehension Strategy Instruction during Parent-Child Lap Reading: An Intervention Study

The American educational system has taken on the challenge of making every child a reader (National Reading Panel, 2000), an admirable undertaking. But, how do we go about ensuring that *every* child rises to the challenge, and with whom does the responsibility lie? The most obvious answer is that teachers and schools bear the bulk of the responsibility--that is, at least in part, why such occupations and institutions exist. However, realistically, schools alone are not enough for all children, especially those who are already at a statistically greater risk for literacy failure (Committee on the Prevention of Reading Difficulties in Young Children, 1998). There is a large research base that supports the assertion that it takes a village to raise a reader--that is, that schools, families, and the community at large must unite if we are to have the best chance to improve literacy outcomes for all children (e.g., Goldenberg, 2006; Purcell-Gates, 1998, 2000; Sénéchal, 2006; Sénéchal & Young, 2008). Home literacy practices, in particular, have been shown to have a strong influence on literacy outcomes for children (e.g., National Early Literacy Panel, 2008; Purcell-Gates, 2000), however there is considerable variation in the quality, types, and frequency of these interactions across families (e.g., Goldenberg, 2006; Li, 2006; Sénéchal, 2006). Therefore, interventions and educational initiatives designed to improve the quality of these interactions are imperative.

While the research base on what schools can do and actually do to grow readers is relatively large and rapidly increasing, the research base on the types of roles that the family might play in improving literacy outcomes is considerably smaller. The result of this uneven attention is that families, which are for the most part made up of people who

lack formal teacher education training, are receiving the least amount of support to hold up their end of the bargain. In addition, families receive even less support in the years leading up to formal schooling (when parent-teacher conferences, family literacy nights, etc., typically begin), years during which they bear a disproportionately large amount of the responsibility. This study investigates one way families might be taught to help their children grow as readers, particularly in the area of comprehension.

The purpose of the current study was to examine the effects of comprehension strategy instruction embedded within parent-child read aloud sessions on the comprehension ability of children between the ages of four and six who had not yet begun schooling, controlling for children's initial comprehension ability. Because, as stated above, the interactions of parents and children around literacy have a profound impact on later literacy outcomes, maximizing the effectiveness of parent-child read alouds during the early childhood years has the potential to be a powerful early intervention. Specifically, the study was designed to inform two questions:

1. To what extent are parents able to implement comprehension strategy-based instructional practices (specifically retelling, attention to story structure, activation and use of prior knowledge, and talking about text) into lap reading with their children in response to workshops on the topics?
2. What are the effects on children's comprehension of parents' attempts to infuse comprehension strategy instruction (specifically retelling, attention to story structure, activation and use of prior knowledge, and talking about text) into lap reading of fictional narrative texts with their children?

This study was conceptualized based on a social constructivist perspective, which holds that knowledge is socially constructed through interaction (Rogoff, 1990; Vygotsky, 1978). Specifically, this study was based on the assumption that “Children’s cognitive development is an apprenticeship--it occurs through guided participation in social activity with companions who support and stretch children’s understanding” (Rogoff, 1990, p. vi.). Comprehension, generally speaking, is a covert activity (Pressley et al., 1992). That is to say, the work of comprehending happens inside our heads, and is thus invisible to novice readers. Making these processes overt through strategy instruction during parent-child read alouds holds the potential to give young children a window into the mind of a more skilled reader and learn through apprenticeship. It is through this early modeling and scaffolding provided by more knowledgeable others that children become “emergent comprehenders” (Dooley, Matthews, Matthews, & Champion, 2009)--before children are reading conventionally, they engage (if given the opportunity) in meaningful experiences that stimulate comprehension strategy use. These experiences, in turn, have the potential to positively affect later reading comprehension.

While some children become strong, strategic comprehenders with or without scaffolding and support, many others do not learn to use effective comprehension strategies while reading independently (e.g., Gersten, Fuchs, Williams, & Baker, 2001). However, research has shown that students who do not naturally engage in strategy use can be taught to do so (Duke, Pressley, & Hilden, 2004; RAND Reading Study Group, 2002), which in turn is highly likely to improve both understanding of and memory for text (Dole, Duffy, Roehler, & Pearson, 1991; Duke & Pearson, 2002; Guthrie et al., 2004; National Reading Panel, 2000; Sporer, Brunstein, & Kieschke, 2009). Furthermore, even

very young children are capable of engaging in strategic comprehension of text (see, for example, A. E. Gregory & Cahill, 2010). In combination, these findings make a strong argument for the potential utility of early comprehension strategy instruction.

This study bridges two bodies of literature: family literacy and young children's comprehension. As can be seen in the following sections, both offer a great deal of research upon which studies of their intersection can be built. However, to date, very little research has been conducted at their intersection.

Family Literacy

Although the term "family literacy" has multiple connotations, most frequently it is used to describe the literacy of all members of the family (e.g., Edwards, 1994; Shanahan, Mulhern, & Rodriguez-Brown, 1995) or the effects of home literacy environments and interactions on children (e.g., Jordan, Snow, & Porche, 2000; Saint-Laurent & Giasson, 2005). In this study, family literacy is operationalized according to the second conceptualization, with a specific focus on improving the quality of parents' interactions with their children around literacy, not on the parents' own literacy skills.

Both research and common sense tell us that children's classroom teachers are not their only, and probably not even their most influential, teachers. There is a long history of research in family literacy that tells us that the home environment and quality and types of interactions with adults in the home matter (e.g., Durkin, 1966; Hewison & Tizard, 1980; Leseman & de Jong, 1998; Purcell-Gates, 2000; Sénéchal, 2006; Weigel, Martin, & Bennett, 2006). Home literacy practices have the potential to positively affect children's motivation to read or be read to (Sénéchal, 2006; Weigel et al., 2006), interest in books (DeBaryshe, 1993), acquisition of concepts and skills (Bus, van Ijzendoorn, &

Pellegrini, 1995; Justice & Ezell, 2000; Neuman, 1996), and behaviors related to literacy learning (Goldenberg, 2006; Purcell-Gates, 2000). In a similar vein, we know that there is a strong correlation between children's early and continued exposure to, and presumably engagement with, literature and their later reading abilities (Cunningham & Stanovich, 1997; Hood, Conlon, & Andrews, 2008; Sénéchal, 2006; Stanovich, 1986). However, despite the abundance of research implicating parental involvement in later literacy success, there has been relatively little focus on helping parents develop the skills and knowledge necessary to facilitate the types of interactions recommended.

Currently, nearly all professional development in literacy is geared toward classroom teachers with the implicit assumption that they have the greatest ability to impact the academic skills of their students. Reading First and Early Reading First initiatives, for example, have funded a great deal of professional development for teachers on effective classroom practices. Although there are and have been several successful family literacy initiatives (see, for example, Chow & McBride-Chang, 2003; L. P. Gregory & Morrison, 1998; Jordan et al., 2000; Saint-Laurent & Giasson, 2005; Shanahan et al., 1995), in comparison to the amount of research on school literacy practices available to teachers, there is less research on effective home literacy practices available to parents and other primary caregivers. If we know that it is important for children to engage in literacy activities at home early and often, and that the quality of that engagement matters, a next logical step seems to be researching ways in which to maximize the learning potential of home literacy interactions between young children and their caregivers.

Interventions around family literacy generally take two basic forms: (1) increasing the literacy and/or literacy interaction skills of parents with the hope of indirectly affecting children's literacy; or (2) simultaneous intervention with parents and children (for reviews, see Purcell-Gates, 2000; Sénéchal & Young, 2008). Although these approaches differ from each other in both philosophies and aims, positive results, as well as some null results, have been garnered by each. In general, research has shown that interventions designed to improve and increase family literacy practices can positively impact motivation, concepts, skills, and behaviors related to literacy acquisition, as well as increase student achievement at the start of formal schooling (Bus, van Ijzendoorn, & Pellegrini, 1995; Lonigan, Shanahan, Cunningham, & The National Early Literacy Panel, 2008; Purcell-Gates, 2000; Sénéchal & Young, 2008).

Research on Book Reading Interventions. The model of family literacy utilized in this study was two-tiered: the researcher intervened with parents and parents with children. The intent is that increasing the literacy interaction skills of parents would in turn affect their children's literacy skills, specifically those related to comprehension. Perhaps because parent-child interventions have been found to be most beneficial before children are reading conventionally (Bus & Van Ijzendoorn, 1995), there are a large number of studies of joint reading that focus on preschool children and their parents. Interestingly, few studies have examined the impact of interventions designed to encourage or improve these interactions, despite substantial evidence that frequency and quality of parent-child read alouds are related to later reading comprehension (Bus et al., 1995; Lonigan et al., 2008; Sénéchal, 2006). In fact, in their meta-analysis of family literacy interventions, Sénéchal and Young (2008) found that there were only three

studies that met their inclusion criteria (published, peer-reviewed, experimental or quasi-experimental) that used parent-child read alouds as the intervention.

The base of research shrinks further when looking exclusively for studies that utilize assessments of comprehension as outcome measures. For example, of the three studies on parent-child read alouds that Sénéchal and Young (2008) included in their meta-analysis, only one (i.e., Project EASE, Jordan et al., 2000) used a comprehension measure as a dependent variable. In Project EASE, as compared to a control group that received no intervention and a group in which parents read books to their children with no direction, children whose parents were taught to engage in dialogic reading with them performed significantly better on measures of story comprehension.

There is a similar lack of studies utilizing comprehension assessments as outcome measures in the National Early Literacy Panel's review of shared-reading interventions with preschool students (Lonigan et al., 2008). Their review lists language skills as the number one outcome measure utilized (16 studies); followed by print knowledge (4 studies), phonological awareness and alphabet knowledge (2 studies each); and general cognitive ability, reading readiness and writing (1 study each). They note that there were no interventions that met their criteria (experimental or quasi-experimental in design, outcome measures of conventional literacy skills or predictors of later literacy skills, peer-reviewed, inclusion of effect sizes or information to calculate effect sizes, and inclusion of preschool-aged children) that examined impacts on memory, rapid automatic naming, reading, spelling, or visual processes, but make no mention at all of the conspicuous lack of studies utilizing comprehension as a primary outcome measure (although five studies did use composite scores from language measures that included

listening comprehension as a component). This is particularly interesting given the established link between early joint reading experiences and children's later comprehension ability (Sénéchal, 2006).

While few studies have examined the impact of parent-child read aloud interventions on comprehension, studies do indicate positive impacts on other aspects of literacy. Two such studies with children in the primary grades are reviewed in Sénéchal and Young's (2008) meta-analysis: one that used word reading and receptive vocabulary as outcome measures (i.e., Chow & McBride-Chang, 2003) and a second that used assessments of print concepts, letter identification, and written vocabulary (Foster & Bitner, 1998). While both studies indicate that joint book reading positively impacts literacy outcomes, neither speaks to the issue of whether or not parent-child read alouds can contribute to comprehension growth in young children.

Other studies with parents and preschool children have also garnered positive results. In one such study, Neuman (1996), working with 41 Head Start children and their parents, found that children's receptive language and concepts of print improved significantly over the course of a 12-week intervention in which parents were provided with materials and support for reading with their preschool-aged children. In a similar, four-week study with preschool children, Justice and Ezell (2000) found increases in print and word awareness when parents were taught to read dialogically with their four-year-old children. Gregory and Morrison's (1998) intervention case study of three at-risk four-year-olds and their families showed that children's positive attitudes toward books and reading, perseverance, asking of higher level questions (which could be seen as a measure of comprehension), literacy-specific knowledge, and vocabulary increased in the

context of instruction in lap-reading techniques (e.g., methods of questioning, use of context cues, oral cloze). While these studies and others like them (e.g., Edwards, 1994; Pellegrini, Perlmuter, Galda, & Brody, 1990), as well as studies on shared book reading with emergent readers that have been conducted in classroom environments (e.g., Justice & Ezell, 2000; Wasik & Bond, 2001), and in both the home and school environments simultaneously (e.g., Whitehurst et al., 1994; Whitehurst et al., 1999) focus on joint book reading, they do not focus explicitly on comprehension, leaving a gap in the literature.

Research on successful family literacy and tutoring interventions. The literature on tutoring and family literacy interventions in general gives us some ideas about features of an intervention that are likely to improve the chances of a positive outcome. Generally speaking, effects of interventions are stronger when parents or tutors are taught to intervene in specific ways (Cohen, Kulik, & Kulik, 1982; Sénéchal & Young, 2008) and when tutors have access to frequent feedback and opportunities to ask questions (Wasik, 1998). There also seems to be some indication that interventions do not need to span large amounts of time in order to be effective. In their meta-analysis, Cohen and colleagues (1982) found that interventions lasting 0-4 weeks were significantly more effective than those lasting longer. However, it should be noted that, of the studies reviewed for that meta-analysis, the majority of the most effective interventions were focused on lower level literacy skills (e.g., letter naming, word recognition, etc.) and mathematics. Because of this confounding of time and content, it is possible, and even likely, that an intervention concerned with the higher-level skills involved in comprehension might necessitate more time.

Working with families adds another layer of logistical concerns to research and intervention design. While teachers may attend professional development sessions under contract time and tutors during times that they have set aside specifically for the endeavor, finding a way to make workshops available to *all* parents, especially those of our most at-risk students, can be quite difficult. Family stressors such as the need to take care of other children, prepare meals for the rest of the family, and find transportation all contribute to parents' abilities and motivation to attend workshops (Hoover-Dempsey et al., 2005). For this reason, it would seem logical that interventions aimed at families tend to have higher rates of participation when they are sensitive to these concerns by doing things such as providing childcare, including meals if they are scheduled around a regular meal time, and providing transportation or being held in close proximity to family residences.

In review, parents and other primary caregivers play a crucial role in the literacy development of young children. While there have been several studies that have looked at other literacy skills, there are very few studies of the impact of parent-child reading on comprehension, nor parental interventions designed specifically to improve young children's comprehension of connected text. This study seeks to fill that gap in the research by combining the findings from school-based comprehension studies, family literacy studies, and the small amount of research that looks at both comprehension and family literacy.

Comprehension and Young Children

Reading, for the purposes of this study, is defined as "an active and complex process that involves understanding written text, developing and interpreting meaning,

and using meaning as appropriate to type of text, purpose and situation” (National Assessment Governing Board, 2008, p. iv). Despite the emphasis on comprehension as it is defined here, the emphasis of reading instruction in the early grades has traditionally tended toward more isolated and lower-level skills. Until relatively recent years, many in the field of literacy education believed that students should first learn to “read”, operationalized as decode, and then gradually shift their attention to comprehension skills as decoding became more automatic (Chall, 1967). In other words, it was widely accepted that learning to read (decode) was the primary emphasis of instruction in the younger grades, with comprehension as a secondary emphasis, and that the two should gradually eclipse each other as children moved into the intermediate years. However, studies regarding the potential of young children to learn to comprehend (e.g., Baumann & Bergeron, 1993; J. Hansen, 1981) and effective teachers (e.g., Morrow, Tracey, Woo, & Pressley, 1999), in combination with alarmingly low rates of proficiency on standardized assessments of comprehension in the middle elementary years (Institute of Educational Sciences, 2007), have highlighted both the appropriateness and necessity of teaching comprehension and decoding skills concurrently to our even our youngest learners. Comprehension instruction in the early grades has also been called for by the National Reading Panel (2002) and the National Research Council’s Committee on the Prevention of Reading Difficulties in Young Children (1998).

Reading, as it is defined above, entails comprehension, or “...the process of simultaneously extracting and constructing meaning through interaction and involvement with written language” (RAND Reading Study Group, 2002, p. xiii). It is not simply a matter of identifying and understanding the meanings of individual words as we read or

listen to them; but rather involves a complex process of melding the author's intended message and the reader's purpose for reading, prior knowledge and experience, and world view. That is to say, meaning does not reside in the text itself, but is a product of the interaction. As readers mature, it is our goal that they learn and become increasingly able to flexibly use the wide range of strategies and skills necessary to facilitate that interaction and thoroughly comprehend text.

To this end, comprehension strategies such as prediction, use of prior knowledge, questioning, retelling, and talking about text, once used primarily in the upper elementary grades, have gradually worked their way down to the primary grades to be taught by teachers, studied by researchers, and learned by students. So far, the results are encouraging. The teaching of these research-based practices in our K-3 classrooms has had a positive impact on students' comprehension (Gersten, Fuchs, Williams, & Baker, 2001; Morrow et al., 1999; Pearson & Duke, 2002; Roberts & Duke, 2009; Stahl, 2004). We now know that children in kindergarten through third grade are capable of learning to strategically comprehend text, and we have a reasonable idea of some of the ways in which this can be accomplished.

Comprehension strategy instruction. Beyond the asking and answering of questions, perhaps the most widely used instructional practice cited in the literature on comprehension instruction and used in classrooms is strategy instruction. Strategies, according to Pressley et al. (1992, p. 525), are "the techniques readers use to process the text." They are, according to Afflerbach, Pearson, and Paris (2008) "deliberate, goal-directed attempts to control and modify the reader's efforts to decode text, understand words, and construct meanings of text" (p. 368). The primary goal of strategy instruction

is to develop good readers who are able to purposely and flexibly use a variety of strategies in a variety of reading situations and in conjunction with prior knowledge (Pressley et al., 1994). Research on skilled readers indicate that these children and adults select and use a variety of comprehension strategies intentionally and flexibly (e.g., National Reading Panel, 2002; Pressley, 2000; Smolkin & Donovan, 2002). One of the primary goals of strategy instruction is to teach struggling and novice readers to do the same. As opposed to skills, which proficient readers use unconsciously, strategies are used intentionally and are under the control of the reader (Afflerbach et al., 2008; Dole et al., 1991). Research has shown that using a gradual release of control model to teach less proficient readers to engage in a small number of strategies while reading can be an effective way to promote reading comprehension (Pearson & Gallagher, 1983; Pressley, 2000; Roehler & Duffy, 1984).

There are many comprehension strategies that seem to be effective and can be taught to young children (K-3). Some of the most commonly taught strategies in intervention studies and studies of classrooms in which students show relatively strong comprehension growth include retelling with a focus on text structure (e.g., Morrow, 1985), predicting (e.g., J. Hansen, 1981), activating prior knowledge (e.g., Hansen, 1981), visualizing (e.g., Center, Freeman, Robertson, & Outhred, 1999), drawing conclusions (e.g., Morrow et al., 1999), using structural analysis/story grammar (e.g., Baumann & Bergeron, 1993; Garner & Bochna, 2004), responding to the text orally/text talk (e.g., Beck & McKeown, 2001), summarizing (e.g., Boulware-Gooden, Carreker, Thornhill, & Joshi, 2007), using knowledge of the author or illustrator (e.g., Morrow et al., 1999), and posing literal and inferential questions (e.g., Tharp, 1982), among others.

This list may seem overwhelming, but is remarkably reflective of the range of strategies good readers employ. Good, experienced readers are extraordinarily adept at adopting and flexibly using a multitude of strategies (Dole et al., 1991; Pressley & Afflerbach, 1995).

This study, in light of its relatively short duration (5 sessions over 10 weeks) and the literature that indicates that instruction needs to be iterative in order to be effective (e.g., Brown, Pressley, Van Meter, & Schuder, 1996; Pressley et al., 1994), only focused on four of the commonly taught strategies that have been shown to have a positive impact on young children's comprehension: retelling, attention to story structure, activation and use of prior knowledge, and talking about text (a scaffold for productive independent thought about text).

Retelling and story structure in the classroom. In comparison to answering questions provided by someone else after reading or listening to a text, it is believed that retelling may be more effective for stimulating deep processing of information because it requires readers to integrate information and reconstruct the text independently, as opposed to teacher/caregiver-initiated questions, which often inadvertently give clues that direct thinking (C. L. Hansen, 1978). As Hansen writes,

When retelling a story a person relies on his/her memory for factual details and relates these in some organized manner. In addition, gaps in remembered details are supplemented by means of suitable inferences about the passage. Thus, all the skills necessary for reading comprehension must be synthesized and integrated when a story is retold. (p. 62)

While retelling, like most other comprehension strategies, has been more widely studied in older grades, it does have some history of being implemented successfully in the primary grades, as early as kindergarten and first grade (Baumann & Bergeron, 1993; Chow & McBride-Chang, 2003; Morrow, 1985; Morrow et al., 1999). For example, Morrow (1985) found that kindergarten students who gave prompted retellings of stories that they had been read outperformed peers who drew pictures about what they had been read on experimenter-designed comprehension assessments that included questions about story structure elements, literal questions, and inferential questions.

In Morrow's study (1985), as well as others, the teaching of retelling was accompanied by instruction in text structure. Retellings, like the stories they are meant to convey, are typically chronological and include the characters, setting (time and place), episodes, problem, and resolution--the elements of story structure. Thus, instruction on story structure, even with young children, is a logical accompaniment to teaching retelling. Studies of text structure instruction show that it seems to improve comprehension, as measured by both retelling and more traditional question/answer assessments. While most research on the impact of teaching the text structure of stories comes from the older grades, Baumann and Bergeron's (1993) study of first-grade students stands out as an exception. In that study, four classes of first graders were read to by teachers and then independently retold the same books, but two classes were taught to use story structure elements to create story maps, while the other two were not. The researchers found that the children in classrooms that received the explicit instruction on story structure gave better retellings in terms of length, coherence, and sequential organization. They also outperformed counterparts in the control condition on measures

that tapped their ability to identify important parts of the story and select good summaries.

Instruction on text structure, alone, has also been demonstrated to promote gains in comprehension. In their study of first grade students, Garner and Bochna (2004) found that, compared to peers in control conditions, students who received instruction in story structure via direct explanation and guided practice in identifying main characters, settings, problems, episodes, and resolutions gave more details for character, setting, problem, and resolution in prompted retellings of stories read to them by a teacher. Notably, these advantages also transferred to books they read independently.

Activation and use of prior knowledge in the classroom. Although rarely examined in isolation, activation and use of prior knowledge has figured prominently in a number of interventions that employ multiple strategies (e.g., Brown et al., 1996; Guthrie et al., 2004; J. Hansen, 1981). For example, Hansen's study provides compelling data supporting its use. In the study, 24 second grade students were assigned to one of three groups before instruction on 10 passages from a basal reader: using prior knowledge during pre-reading to make predictions, answering questions using a combination of inference and prior knowledge, and a control (instruction following the teacher's manual). Results indicated that children in both experimental groups outperformed the control group on standardized and experimenter-designed comprehension measures. While not conclusive, the fact that the common denominator was activation and use of prior knowledge does indicate its utility.

All readers use their prior knowledge to bring meaning to texts (Anderson & Pearson, 1984). Therefore, it stands to reason that the more relevant prior knowledge a

reader has, and the greater his or her ability to access and use that knowledge, the greater the likelihood of successful comprehension. Not surprisingly in light of the strong role background knowledge plays in comprehension, its use in combination with other strategies has been shown to be effective in increasing readers abilities to comprehend both narrative and expository texts (Gersten et al., 2001), and presumably plays a role in understanding what to expect within certain genres' text structures (Meyer, Brandt, & Bluth, 1980), drawing inferences (Duke et al., 2004; J. Hansen, 1981), and making accurate predictions (McIntyre, 2007). In short, children's *use* of their prior knowledge related to a text determines, at least in part, how they read and the strategic decisions they make (Pressley et al., 1994).

Talking about text in the classroom. "Language mediates experiences and transforms mental functions" (Mariage, 1995, p. 216), and is therefore essential to the construction of meaning. Because so many comprehension strategies involve talking about text with peers or other adults in an effort to better understand it, talking about text is one strategy that is inextricably intertwined with others. Nonetheless, the fact that it facilitates other strategies does not warrant the assumption that children will learn to interact with others around text in meaningful ways without explicit attention being paid to talking about text as a strategy in its own right.

Talking about text also has a strong base in the research (Murphy, Wilkinson, Soter, Hennessey, & Alexander, 2009; Nystrand, 2006; Stahl, 2004). Encouraging children to use the strategy of talking about the text and their understandings of it with others before, during, and/or after the reading of text can foster comprehension as the accountability for saying something necessitates on-topic thought. According to

Vygotsky, growth is “more likely when one is required to explain, elaborate, or defend one’s positions to others as well as to oneself; striving for an explanation often makes the learner integrate and elaborate knowledge in new ways” (1978, p. 158), and talking through a text or topic can be an essential strategy for building understanding for many readers.

Talking about text, among other benefits, can help children gain access to book text, which is often decontextualized (Beck & McKeown, 2001). Engaging in this type of talk, while intellectually challenging for young children, is possible for children as young as preschoolers (Dickinson & Smith, 1994) and kindergarteners (Beck & McKeown, 2001; Blank & Sheldon, 1971), especially with adequate scaffolding from adults. For example, Dickinson and Smith (1994) found that children in preschool classrooms characterized by a high amount of teacher and student interaction and student talk during reading showed significant gains in vocabulary, a known contributor to comprehension (Baumann, 2008; National Reading Panel, 2000), as well as modest gains in story comprehension as compared to students in classrooms characterized by less or no discussion during reading.

Additional support for student interaction with more knowledgeable others around the meaning of text comes from studies that have found that this type of interaction facilitated the creation of meaning by children in kindergarten through third grades (Bergman, 1992; Brown et al., 1996; Pressley et al., 1994; Tharp, 1982). However for students to truly make progress toward comprehension, at some point they have to take charge of the talk themselves (Bergman & Schuder, 1992; Brown et al., 1996; McIntyre, 2007; Palincsar & Brown, 1984; Pressley et al., 1994), using socially constructed

knowledge to support the development of inner dialog, or self talk, which in turn coordinates independent thinking (Vygotsky, 1978; Walker, 2005). Thus, by supporting children as they think out loud about text, we also endeavor to support them as they form the habits of mind to engage in similar thinking as they read silently and independently.

In summary, this study sought to help parents integrate strategy instruction, specifically the strategies of retelling, addressing story structure, activation and use of prior knowledge, and talking about text, into their parent-child read alouds. Research supports both the potential of parents to positively influence their children's literacy growth and the use of comprehension strategy instruction with young children who are not yet reading independently.

Methods

Design

This study utilized an experimental design in order to address the research questions. Parent-child dyads were placed in matched pairs on the basis of child comprehension (i.e., one parent-child dyad matched to another parent-child dyad in which the child scored similarly on an assessment of comprehension), and then randomly assigned to the experimental or control condition. Parents assigned to the experimental condition attended sessions during which they learned to integrate strategy instruction (i.e., retelling, attention to story structure, activation and use of prior knowledge, and talking about text) into their one-on-one read alouds with their children. Parents assigned to the control condition attended sessions during which they were given information on the importance of book reading in general and encouraged to engage in significant amounts of book reading at home. Quantitatively, the independent variables were

condition, parents' implementation (within the experimental condition), gender, and SES. The dependent variable was children's comprehension, as measured by a commercially-available test of comprehension and by a retelling measure, both of which are described in the materials section of this article. Patterns of interaction during parent-child read alouds for both control and experimental dyads (i.e., turn taking, conversational initiation, length of utterances, and proportional use of strategies) were also examined as dependent variables in relation to the same independent variables described above.

Participants

To ensure diversity of the sample, parents or other primary caretakers and children (hereafter referred to as parent-child dyads) were recruited from three types of settings -- urban Head Start, suburban preschool and developmental kindergarten classrooms, and tuition-based childcare. In order to be eligible for the workshops, the children had to be enrolled in their final year of preschool or childcare before entering kindergarten. While all parent-child dyads completing the consent form and accompanying survey were invited to attend the workshops, children who did not speak English as their first language or who were receiving special education services were not included in the data analysis as it was thought that there might be significant differences between these populations and native English speakers not receiving special services, and including these groups would not render enough participants in any one group to draw conclusions as to the efficacy of the intervention for that group.

Twenty child-parent pairs (10 control, 10 experimental) attended the workshops and completed all stages of data collection (a total of 49 parents signed up for the workshops, but 29 either never attended or did not attend with enough regularity to be

included in the final analyses). Students were assigned to matched-pairs based on initial comprehension scores, however, group composition changed due to attrition. While there were still no significant differences in group means on the ELSA pre-test, demographic information across groups varied somewhat. In both groups, children's ages were fairly evenly distributed between four and six years of age and there were equal numbers of boys and girls across conditions. The parent-reported demographic breakdown for the child participants' socioeconomic statuses and ethnicity can be found in Table 1.

Data Collection Measures and Procedures

During the course of this study, data were collected on both parents' implementation (Research Question 1) and children's comprehension (Research Question 2). Data on experimental group parents' implementation was obtained by audio recording parent-child read alouds pre- and post-intervention. (Implementation was also measured by collecting logs from parents recording frequency of parent-child read alouds, number and titles of books read, and strategies used, however, uneven rates of return and the strong possibility of selection bias in regards to which participants returned the logs compromised the integrity of this measure and precluded its use in the final analyses.) Comprehension was measured by a commercially available measure of comprehension, the *Early Literacy Skills Assessment (ELSA)* (DeBruin-Parecki, 2005) and researcher-designed retelling protocols (Roberts, in progress). For all child participants, the *ELSA* and retelling measures were administered pre- and post-intervention.

Implementation measures. The conclusions we can draw based on the results of this study depend heavily on its implementation. If there were changes in comprehension, it is important to have some idea of which strategies parents did and did not implement to

bring about those changes. Recordings of parent-child read alouds were collected at the pre- and post-intervention workshops and subsequently analyzed for evidence of target strategy use.

All parent-child dyads read one of two comparable books (Henkes, 1993; Pilkey, 2004) at the beginning of the pre- and post-intervention sessions (described later in this session). The order in which these books were read was randomly assigned by matched pair (due to varied patterns of attrition, 6 dyads in each condition read one book at each time point and four read the other). Parents were instructed to read with their child as they would at home, using provided audio recorders to record their reading and interactions. The recordings were then analyzed to come up with implementation scores, as described in the data analysis section.

Child measures.

Early Literacy Skills Assessment (ELSA, DeBruin-Parecki, 2005). The *ELSA*, an assessment for preschool- and kindergarten-aged children in which a storybook is read aloud to a child with questions asked of the child periodically during the reading, was administered both pre- and post-intervention to all study participants. The assessment taps three constructs of comprehension (prediction, retelling, connection to life), which are scored in terms of number of correct, chronological responses to open-ended questions. The *ELSA* also measures phonological awareness, alphabetic principle, and concepts about print; however, they were not analyzed in the present study.

Extensive evaluation of this assessment as a global measure of early literacy has shown it to have high concurrent validity with the Woodcock Johnson (Woodcock, McGrew, & Mather, 2001) and Pre-CTOPP (Lonigan, Wagner, Torgesen, & Rashotte,

2002) assessments for children in pre-school and kindergarten. Unfortunately, there is no measure of concurrent validity for the comprehension construct alone, as there was not an acceptable comparison test available at the time of publication. Using an item response theory (IRT) model, the reliability for the comprehension section of the ELSA was calculated based on a diverse sample of 1040 children drawn from head start and center-based childcare programs. The sample was fairly evenly distributed by gender and ranged in age from 50.9 to 58.4 months. In these respects, the sample used to calculate reliability and the sample for this study were fairly similar. However, the reliability sample did include more low-SES children (60-65% were enrolled in subsidized programs) than the sample for this study (30% were classified as low SES based on maternal education). In addition, the reliability sample included children with special needs (5% of the sample), whereas students identified as having special needs were excluded in the present study. Reliability for the original sample was adequate at .89 (Cheadle, 2007). It is unclear whether the difference in demographic variables between groups affected the reliability of the measure for this group, however, it seems unlikely that the effects, if any, would be significant, as the groups were more similar than different.

Although the comprehension questions asked in this assessment are open-ended, with many relying on individual experiences and personal connections, the responses are recorded and analyzed quantitatively, with scores based on the number of relevant and chronologically accurate responses given per question. The ELSA assessment scoring protocol advises administrators to convert raw scores to one of three developmental levels. However, based on the pilot work for this study, the three levels were judged to

provide insufficient variation to facilitate the formation of matched pairs and to examine the effects of the intervention, so raw score were used.

The ELSA has two forms, *Dante Grows Up* and *Violet's Adventure*. The forms are approximately equal in length and ask identical questions at parallel points in the book; the recording sheets are identical. Although the administration guide calls for the same form of the assessment to be administered at each time point in order to gauge student progress, alternate forms were administered pre- and post-intervention because it seemed probable that children' memory of the text might interfere with the accuracy of both the prediction and retelling segments of the assessment.

All research assistants who administered the ELSA were trained per the publisher's recommendations, using the publisher-provided video cases. Subsequently, research assistants were also given the opportunity to ask questions of the lead investigator. Interrater reliability was calculated with the uncorrected score sheets based on the video cases at 0.98.

Retelling measure. Retelling has been used in multiple studies as a strategy for or indicator of comprehension (e.g., Gambrell & Jawitz, 1993; C. L. Hansen, 1978; Morrow, 1985; Morrow et al., 1999; Pearson & Duke, 2002). The major strength of retelling as a comprehension measure, as compared to answering comprehension questions, is that retelling requires that the participant reconstruct the story based on his or her own understanding, whereas comprehension questions often give clues about the expected responses (C. L. Hansen, 1978). Each child in both conditions gave audio-recorded retellings of a story read to them by an RA both pre- and post-intervention. After listening to a story read by one research assistant, each child was prompted by a second

research assistant to “start at the very beginning and tell me as much as you can remember of the story”. When children appeared to be finished, they were given the prompt “Anything else?” until they responded by indicating that there was not. The second research assistant was not present during the reading of the story, setting an authentic purpose for the retelling: telling a story to entertain or inform someone who has not already heard it (Romero, 2005).

The recoded retellings were scored using protocols (see Appendix A for an example), the format of which was piloted and refined during the pilot study for this research. Each protocol was designed as a checklist of items organized by weighted categories based on story elements (i.e., characters, setting, problem, resolution, and episodes). So as to hold constant the number of possible points across books and protocols, each category is given a maximum number of possible points: two points for character names, two for setting, four for the problem, three for the resolution, and five for the episodes of the story. Maximum point allowances for each category were determined based on the relative importance of each category to comprehensible retellings of stories, in general (e.g., referring to the characters by name is not allotted as many points as explaining the problem of the story because the gist of the story could be conveyed without character names, but not without the problem). This format also made it possible for participants to earn partial credit in a section. If, for example, a child retold one problem in the story but not the second, he or she could have earned one or two of four possible points (depending on the weight assigned to the problem based on its importance to the overall story). In addition, it helped to mitigate the differences in length and complexity across stories and makes it possible to make comparisons across stories.

Without creating artificial texts, it would be impossible to ensure that all books were the same length and contained the same number of story elements.

Fifty percent of all retellings (20 protocols) were independently scored by the researcher and another expert in the field. Interrater reliability was 0.95.

Conditions and Procedures

Participants in this study were paired within site based on their raw overall ELSA comprehension scores, with most pairs within 0-2 points of each other (scores ranged from 1 to 13), and then one member of each pair was randomly assigned to each condition (control and experimental). Although attrition occurred unevenly across groups, there were no statistically significant differences in pre-intervention group means for the final sample of children on comprehension or implementation measures.

Experimental Treatment. Parents of children assigned to the experimental group attended four informational sessions at two-week intervals (spanning six weeks), which lasted forty minutes to an hour each, during which they were taught ways in which to effectively integrate strategy instruction into their one-on-one read alouds with their children. Additionally, they attended a final session in which the workshop series was debriefed and children were administered final assessments. The first four sessions involved (a) a description of the focal strategy for that week, (b) instruction on how to integrate the strategy into read alouds, (c) a video model of a parent implementing instruction using the target strategy during a read aloud, (d) time for discussion and questions, and (e) time for parents to preview a book and practice reading it with their child, using the strategies, and receive guidance about it on an as-needed basis from the researcher. However, very few parents took advantage of this final component. Finally,

beginning with the second session, parents had the opportunity at the beginning of each session to share their experiences with the previously learned strategy or strategies and ask questions prior to learning a new strategy.

Written materials were also distributed at and in between sessions. At each of the first four sessions, parents received a tip sheet on the focal strategy to take home with them (see appendix C for an example). In addition, a bookmark containing reminders about the focal strategy (see Appendix D for an example) and a fictional narrative book to be used for practice were mailed to participants between sessions, for a total of four mailings. Books selected to be used for practice met the following criteria: fictional narrative genre, included all common story structure elements (characters, setting, problem, episodes, solution), age appropriate in both length and content, included story structure elements, and highly engaging (based on pilot work).

Control. Participants in the control condition attended an initial session that closely mirrored the structure of the session attended by their counterparts in the experimental condition, with the exception that they did not receive any information on strategy instruction. Instead, they received information on the importance of reading with their children in general and basic information about how to facilitate lap reading. This was designed intentionally to reflect advice commonly given to parents (i.e., to read more often), without specific information as to how to improve the quality of the reading. Data (identical to the data described above for the experimental groups) was collected from the control groups during their first and second/last sessions, which corresponded chronologically to the first and fifth sessions for experimental participants.

Participants in the control group were also given a handout (on lap reading) at their first session (similar in format to the one found in Appendix C, but differing in content) and were mailed the same books on the same schedule as the experimental group. They met for one initial session the same week as the experimental group, during which they received information about the importance of reading with their children, then did not meet again until the post-intervention data collection session. Mailed books included bookmarks that included reminders only of the importance of lap reading and its facilitation.

Analyses

Implementation. Discourse analyses were performed in order to determine (a) the frequency with which parents engaged in each strategy and all strategies, combined (engagement was defined as modeling the use of the strategy, encouraging the child to engage in the strategy, or talking explicitly about the strategy), (b) the range of strategies used (i.e., did they use one, two, three, or all four strategies during the read aloud), (c) initiation of text-related comments and conversations (initiating an exchange about the text, e.g., “He lives alone?”), and (d) uptake (responding to the other person’s comment related to the text, e.g., child: “He lives alone?”, parent: “No, the doggy has a family, remember?”) on initiated topics. Analyses were conducted by transferring transcripts of parent-child read alouds to a spread sheet with columns to code parent and child turns (utterances bounded by reading of the printed text, utterances by the other party, or a combination), parent and child initiation and uptake, and strategy use (with all talk relevant to the text that was not clearly use of another strategy coded as “talking about text”). Prior to final scoring, to obtain interrater reliability on the coding of the parent-

child read aloud sessions, six randomly selected transcripts were scored using a codebook created by the primary researcher in order to refine the codebook and resolve coding disagreements. Interrater reliability was then estimated at 0.95 by having two researchers independently code twenty-five percent of the transcripts and comparing across raters. After coding the remaining transcripts, *t* tests were run to determine whether there were significant differences between group means at either the pre- or post-intervention time point and to determine whether there were significant changes in scores from pre- to post-intervention between time points.

Comprehension. Several *t* tests were used in order to determine differences between means both pre- and post-intervention and between and across conditions on both the *ELSA* and retelling measures. In addition, negative binomial regressions were run using the *ELSA* and retelling scores (separately) as dependent variables and condition, gender and socioeconomic status and pre-intervention scores as independent variables. Finally, negative binomial regressions were run in order to determine whether there was a relationship between implementation and post-intervention comprehension scores for the experimental group. For these analyses, post-intervention *ELSA* comprehension scores and retelling scores were used as the dependent variables (in separate analyses) and frequency and range of strategy use were used as independent variables.

Assumptions for negative binomial regression were met. All observations were independent and the pilot study for this research indicated that final scores changed linearly with exposure to the intervention.

Results

Parent Implementation

Frequency and range of strategy use. Prior to the intervention, *t* tests revealed that there were no statistically significant differences between the experimental (E) and control (C) groups in the number of instances of strategy use, either for individual strategies (i.e., retelling, attention to story structure, activation of prior knowledge, talking about text) or total number of instances of strategy use during parent-child reading. Post-intervention, the participants in the experimental group included, at a level of statistical significance, more retelling than the control group ($p = .026$), more attention to story structure ($p = .035$), and more talking about text ($p = .013$). They also had more instances of activation and use of prior knowledge, although not quite at a $p < .05$ level of statistical significance ($p = .076$). Dyads in the experimental condition also were also coded for statistically significantly more instances of strategy use ($p = .002$) and used a statistically significantly wider range of strategies ($p = .017$) during read aloud sessions. The effect sizes for all of these differences were large, ranging from $d = 0.87$ to $d = 1.64$. Further statistical information for each outcome measure can be found in Table 2.

Turns, initiation, and uptake. There were no statistically significant differences between group means for either parents or children pre-intervention in terms of the total number of turns taken or instances of initiation or uptake. Post-intervention, however, there were statistically significant differences between group means with large effect sizes (ranging from $d = 0.87$ to $d = 1.717$) for all of these counts except initiations for both parents (which was not statistically significant at $p = .421$) and children (which approached statistical significance at $p = .087$). Post intervention, parents and children in

the experimental condition talked more about the text as they read ($p = .002$ for parent turns; $p = .005$ for child turns) and were more likely to respond to topics raised by one another than to switch topics or ignore the initiation of a topic ($p = .007$ for parent uptake; $p = .003$ for child uptake). Further statistical information for each of these measures can be found in Table 3.

Effects of implementation on comprehension. Negative binomial models revealed that the relationship of the number of instances of strategy use to comprehension approached significance ($p = .109$) for the retelling measure. There were no significant relationships for instances of strategy use on comprehension as measured by the ELSA or on either comprehension measure for the range of strategies used.

Child Comprehension

Early Literacy Skills Assessment (ELSA). There were no statistically significant differences at $p < .05$ between total ELSA scores pre- and post- for the control group. There were, however, statistically significant differences in means within the experimental group pre- and post-intervention ($p = .027$, $\bar{X}_{\text{pre-intervention}} = 5.30$, $\bar{X}_{\text{post-intervention}} = 9.00$) and a large effect size. Even though growth for the experimental group in ELSA was statistically significant, and the growth for the control group was not, there were no statistically significant differences between control and experimental groups at time point one or two. Post-intervention statistical information for the experimental group can be found in Table 4.

Retelling Measure. There were no statistically significant differences within condition between time points for either group on retelling scores. In raw terms, the mean scores for the control group were 3.10 pre-intervention and 3.78 post-intervention ($d =$

.19); while the mean scores for the experimental group were 4.80 pre-intervention and 4.55 post-intervention ($d = -.08$). There were also no significant differences between the control and experimental groups on children's total scores post-intervention. Further statistical information for this measure can be found in Table 4.

Comprehension in relation to implementation. Level of implementation was determined by considering the total number of turns taken during read alouds, as well as the number of instances of strategy use and the number of target strategies used (ranging from using one to four of the target strategies). A negative binomial regression using *ELSA* post-intervention total scores as the dependent variable and total number of turns, number of strategy use instances, and number of strategies used as independent variables showed effects approaching statistical significance at $p = .05$ for all three independent variables ($p = 0.075, 0.086, \text{ and } 0.186$, respectively), indicating that level of implementation likely influenced comprehension scores.

Negative binomial regressions were also run to determine the influence of socioeconomic status and gender on comprehension, as measured by the *ELSA*. Analyses of the interaction of gender and socioeconomic status within condition showed no statistically significant differences for either variable, which is encouraging in terms of generalizability. However, given the small cell sizes, these results should be interpreted with caution.

Discussion

The guiding questions for this study were “To what extent are parents able to implement comprehension strategy-based instructional practices (specifically retelling, attention to story structure, activation and use of prior knowledge, and talking about text)

into lap reading with their children in response to workshops on the topics?” and “What are the effects on children’s comprehension of parents’ attempts to infuse comprehension strategy instruction (specifically retelling, attention to story structure, activation and use of prior knowledge, and talking about text) into lap reading of fictional narrative texts with their children?” Results suggest that parents are able to implement comprehension strategy instruction and that it does have a positive influence on children’s comprehension.

The results of this investigation indicate that a relatively low-intensity series of workshops and between workshop activities can have a significant influence on parents’ interactions with their children as they read, as evidenced by increased interaction and attention to strategies over time. For example, in this study, eight out of ten parent-child dyads in the experimental condition broadened the range of strategies that they used, as compared to only two parent-child dyads in the control condition. Parents in the experimental condition also increased the frequency with which they engaged their children in strategy use, which parents in the control group did not. Finally, post-intervention, parents in the experimental group were more likely to use strategies that were seldom used by either group pre-intervention. Retelling is an excellent example of this phenomenon: initially, only three dyads in each condition engaged in any type of retelling during their shared reading. Post-intervention, seven of the ten dyads in the experimental condition engaged in some form of retelling, as compared to one dyad in the control condition.

Results also suggest that these changes in parent-child reading patterns were beginning to have some effect on children’s reading comprehension. After eight weeks, at

a $p < .05$ level of statistical significance, children in the experimental group showed statistically significant increases at $p < .05$ on *ELSA* total scores ($d = 1.04$). In contrast, children in the control group showed no statistically significant increases.

The Potential of Parent-Child Read Alouds

Children who are not reading on grade level by third grade are unlikely to catch up (National Reading Panel, 2002). Depending upon whether children attend kindergarten, schools have three to four years to teach all children to read. Undoubtedly, formal schooling is essential for most children to learn to read. However, lackluster test scores (e.g., on the National Assessment of Educational Progress, United States Department of Education, 2009) indicate that schooling alone is not enough for many of our children. Schools work under constraints of limited time, high student-to-teacher ratios, and curricula that cannot be tailored to all children at all times, among others. Families, on the other hand, while perhaps lacking the teaching expertise, are much more likely to be in a position to spend time with children one-on-one. In addition to reinforcing the common recommendation to read with their children, this intervention highlights one way of building some level of expertise in caregivers in order to make the time they spend reading with their children as effective as possible. Four workshops, in combination with mailed reminders and small number of inexpensive materials, were enough to affect change in the ways in which parents engaged with their children around narrative texts. They interacted more often, were more likely to respond to topics initiated by their children, and more likely to model strategy use and scaffold use of strategies for their children. More importantly, after only eight weeks, the beginnings of change were apparent in children's comprehension, an effect that may continue to grow over time.

Young Children Learning to Comprehend

The results of this study lend further support to the argument that young children can benefit from comprehension instruction before they are independently reading. Although post-intervention differences between groups fell short of significance, this low-intensity intervention produced measurable gains on ELSA total comprehension scores with a large effect size. In addition, analyses revealed that children assigned to the experimental condition were significantly more likely to verbally interact with the text and their caregivers in ways that supported active meaning making. The mean total number of text-related turns per story (both parents and children) for dyads in the experimental group at the end of the intervention was 85.7 (with a range of 27 to 146 and median of 91), as compared to a mean of 33.3 turns for the control group (with a range of 14 to 54 and a median of 31.5). In the case of the experimental group, it should also be noted that parents and children were statistically significantly more likely to build off of one another's comments as opposed to cross talking (as evidenced by relatively high counts of initiation with very few instances of uptake at time point one, and the reverse at time point two), which stood in stark contrast to both groups at time point one and the control group at the final time point. Socio-cognitive theory (e.g., Rogoff, 1990; Vygotsky, 1978) holds that this joint meaning making process is imperative to children's later abilities to make meaning on their own.

It is important to note that the time frame of the study may have affected the results. It is possible that, given more time between the last instructional session and post-assessment, the children's score might have improved more due to parents implementing the intervention for a longer period of time. As opposed to rote skills (e.g., names of

letters), measureable comprehension growth often requires a much longer time period (Sénéchal & Leferve, 2002). It is also possible that results would diminish over time in the event that parents reverted back to their previous reading styles over time. More research is needed in order to determine maintenance effects.

Promise of this Intervention

Budgetary factors are always a concern when considering any intervention. In the current economic climate, interventions must be budget friendly if they are even going to merit consideration. The cost of this intervention is extremely low in terms of material and human resources. In terms of supplies, the workshops require only paper copies of a limited number of materials, 4-6 books (which can be library books at no cost or low-cost paperbacks), demonstrations of strategy use (easily and inexpensively video recorded or live), and snacks to encourage attendance. The only human resources needed are the time of one project leader (about 1.5 hours per session, including preparation time) and staff or volunteers to provide childcare during the sessions. The cost effectiveness of this intervention also increases capacity; schools would be able to serve large numbers of families without substantial budgetary increases. This last point is especially important given the push to help *all* children read at or above grade level by the end of third grade.

Anecdotally, many parents in the experimental condition reported a sense of confidence in their implementation of the intervention. One parent, for example, said that she never knew how to help her daughter understand books because she had never been a good reader and often did not fully understand them herself. She went on to state that she feels good about reading with her kids now because she knows how to help them understand the books. On several occasions, other parents noted that they had never

considered that their children might not fully understand the books that they read together; the workshops had made them more cognizant of and better able to monitor for and address misconceptions. The sense of efficacy that these parents demonstrated is important because research tells us that parents are much more likely to participate in their children's educations if they feel that they know what to do and that they are able to do it (Hoover-Dempsey & Sandler, 1997).

Finally, it is encouraging that variation in gender and SES were not predictive of post-intervention comprehension scores. In fact, there was an imbalance between groups in terms of socioeconomic status favoring the control group (2 middle and 5 high) over the experimental group (6 middle and 1 high), yet the children in the experimental group still managed to make significant gains from pre- to post-intervention on the ELSA, while their counterparts in the control group did not.

Limitations

As with all fields of research, research into the home literacy practices of parents and their young children is not without limitations. One such limitation that carries with it particularly important implications is the fact that the nature of this research lends itself to self-selected participants. Researchers are not in a position to force unwilling parents to be studied or to modify their interactions with their children, and it was disheartening how few parents agreed to participate in such a low-intensity activity. In addition to limiting the reach of the intervention, this recruitment and participation difficulty is also likely to lead to severe selection bias in many, if not all, studies of home literacy practices. The work of several researchers indicates that parents who are resistant to participation likely share one or more common characteristics such as low self-efficacy

(Drummond & Stipek, 2004; Lareau, 1987; Li, 2006; McKay, 1993), inflexible obligations to care for other children in the home (Hoover-Dempsey et al., 2005), little perceived time and energy to dedicate to the effort (Green, Walker, Hoover-Dempsey, & Sandler, 2007), and a perception that they and their contributions are not valued and welcomed by the school (Green et al., 2007). These commonalities make it possible, and even likely, that the parents who are not represented in the research are more different from those parents who choose to participate than they are alike. In this study, this was certainly the case as attrition was very uneven -- there was a much higher rate of attrition among low-SES participants than occurred in their middle- and higher-SES peers, the former may have been more likely to have lower self-efficacy due to lower levels of schooling themselves, as well as to face more environmental stressors related living in poverty.

Of course, this is not to say that all of the parents who are choosing not to become engaged in their children's academic pursuits in a public way are making similar choices in the privacy of their home. In fact, there is evidence that this is not at all the case in some families (Green et al., 2007). It does, however, make it seem likely that many of the parents who could most benefit from programs designed to increase or maximize the potential of their involvement in their children's educations, such as this one, are the very parents who are least likely to willingly avail themselves to the learning opportunities provided by schools or researchers.

On a related note, a limitation of this study specifically was the small number of participants. Of the approximately 300 eligible families, 49 parent-children dyads consented to enrollment in the study. Of those 49, 29 were lost to attrition, many before

attending the first session. This pattern was particularly apparent in the Head Start population. A few parents gave reasons such as new job schedules, but the vast majority did not respond to contact attempts made by the researcher. The power of this study was undoubtedly affected by the relatively small amount of data generated for analyses. However, the effect sizes found mitigate this somewhat, allowing us to conclude that it is likely that at least a portion of the effects are attributable to the intervention. More research with a larger number of participants is certainly needed.

Conclusions

Home literacy practices influence later literacy achievement; this is well established. However, especially in comparison to the amount of support given to practicing teachers, there is very little attention given to preparing parents to take on this role. Providing parents with the support they need to maximize their contributions to their children's learning is one way in which we can help ensure that all of our children become readers. This intervention, in which parents were taught to model their own use of comprehension strategies and support their children to use those same strategies, proved to be an effective way of influencing parent-child interactions, increasing parent efficacy, and improving children's comprehension of fictional narrative text. As a relatively low cost intervention (both in terms of time and resources), the series of workshops described in this article are a practical way in which schools might support families to become more involved with their children's literacy learning. In addition, this study contributes to the bodies of research on both family literacy and comprehension strategy instruction in the early childhood years, providing a framework upon which future interventions in this critical area can be built.

References

- Afflerbach, P., Pearson, P. D., & Paris, S. G. (2008). Clarifying differences between reading skills and reading strategies. *The Reading Teacher, 61*, 364-373.
- Anderson, R. C., & Pearson, P. D. (1984). A schema-theoretic view of basic processes in reading. In P. D. Pearson, R. Barr, M. L. Kamil & P. B. Mosenthal (Eds.), *Handbook of reading research* (pp. 255-292). New York: Longman.
- Baumann, J. F. (2008). Vocabulary and reading comprehension: The nexus of meaning. In S. E. Israel & G. G. Duffy (Eds.), *Handbook of research on reading comprehension*. Mahwah, NJ: Lawrence Erlbaum.
- Baumann, J. F., & Bergeron, B. S. (1993). Story map instruction using children's literature: Effects on first graders' comprehension of central narrative elements. *Journal of Reading Behavior, 25*, 407-437.
- Beck, I., & McKeown, M. G. (2001). Text talk: Capturing the benefits of read-aloud experiences for young children. *The Reading Teacher, 55*, 10-20.
- Bergman, J. L., & Schuder, T. (1992). Teaching at-risk students to read strategically. *Educational Leadership, 50*(4), 19.
- Blank, M., & Sheldon, F. (1971). Story recall in kindergarten children: Effects of method of presentation on psycholinguistic performance. *Child Development, 42*, 299-312.
- Boulware-Gooden, R., Carreker, S., Thornhill, A., & Joshi, R. M. (2007). Instruction of metacognitive strategies enhances reading comprehension and vocabulary achievement of third-grade students. *The Reading Teacher, 61*, 70-77.
- Brown, R., Pressley, M., Van Meter, P., & Schuder, T. (1996). A quasi-experimental validation of transactional strategies instruction with low-achieving second grade readers. *Journal of Educational Psychology, 88*, 18-37.
- Bus, A., & van Ijzendoorn, M. H. (1995). Mothers reading to their three-year-olds: The role of mother-child attachment security in becoming literate. *Reading Research Quarterly, 40*, 998-1015.
- Bus, A., van Ijzendoorn, M. H., & Pellegrini, A. D. (1995). Joint book reading makes for success in learning to read: A meta-analysis on intergenerational transmission of literacy. *Review of Educational Research, 65*, 1-21.
- Center, Y., Freeman, L., Robertson, G., & Outhred, L. (1999). The effect of visual imagery training on the reading and listening comprehension of low listening comprehenders in year 2. *Journal of Research in Reading, 22*, 241-256.

- Cheadle, J. E. (2007). *The Early Literacy Skills Assessment (ELSA) psychometric report for both English and Spanish versions*. Retrieved November 20, 2007, from <http://www.highscope.org/file/Assessment/ELSAJacobs.pdf>.
- Chow, B. W., & McBride-Chang, C. (2003). Promoting language and literacy development through parent-child reading in Hong Kong preschoolers. *Early Education and Development, 14*, 233-248.
- Clay, M. (1993). *An observation survey of early literacy achievement*. Portsmouth, NH: Heinemann.
- Cohen, P. A., Kulik, J. A., & Kulik, C.-L. C. (1982). Educational outcomes of tutoring: A meta-analysis of findings. *American Educational Research Journal, 19*, 237-248.
- Cunningham, A. E., & Stanovich, K. E. (1997). Early reading acquisition and its relation to reading experience and ability 10 years later. *Developmental Psychology, 33*, 934-945.
- DeBaryshe, B. D. (1993). Joint picture-book reading correlates of early oral language skill. *Journal of Child Language, 20*, 455-461.
- DeBruin-Parecki, A. (2005). *Early Literacy Skills Assessment (ELSA)*. Ypsilanti, MI: High/Scope Press.
- Dickinson, D. K., & Smith, M. W. (1994). Long-term effects of preschool teachers' book readings on low income children's vocabulary and story comprehension. *Reading Research Quarterly, 29*, 104-122.
- Dole, J. A., Duffy, G. G., Roehler, L. R., & Pearson, P. D. (1991). Moving from the old to the new: Research on reading comprehension instruction. *Review of Educational Research, 61*, 239-264.
- Dooley, C. M., Matthews, M. W., Matthews, L., & Champion, R. N. (2009). Emergent comprehension: The role of intentions during early print experiences. In K. M. Leander, D. W. Rowe, D. K. Dickinson, M. K. Hundley, R. T. Jimenez & V. J. Risko (Eds.), *58th yearbook of the National Reading Conference* (pp. 261-276). Oak Creek, WI: National Reading Conference, Inc.
- Drummond, K. V., & Stipek, D. (2004). Low-income parents' beliefs about their role in children's academic learning. *The Elementary School Journal, 104*(3), 197-213.
- Duke, N. K., & Pearson, P. D. (2002). Effective practices for developing reading comprehension. In A. E. Farstrup & S. J. Samuels (Eds.), *What research has to say about reading instruction* (3rd ed) (pp. 205-242). Newark, DE: International Reading Association.
- Duke, N. K., Pressley, M., & Hilden, K. (2004). Difficulties with reading comprehension. In C. A. Stone, E. R. Silliman, B. J. Ehren & K. Apel (Eds.), *Handbook of*

- language and literacy development and disorders* (pp. 501-520). New York: Guilford.
- Durkin, D. (1966). *Children who read early*. New York: Teachers College Press.
- Edwards, P. (1994). Responses of teachers and African-American mothers to a book-reading intervention program. In D. Dickinson (Ed.), *Bridges of literacy: Children, families, and schools* (pp. 175-208). Cambridge, MA: Blackwell, Inc.
- Entwisle, D. R., & Astone, N. M. (1994). Some practical guidelines for measuring youth's race/ethnicity and socioeconomic status. *Child Development*, 65, 1521-1540.
- Gambrell, L. B., & Jawitz, P. B. (1993). Mental imagery, text illustrations, and children's story comprehension and recall. *Reading Research Quarterly*, 28, 264-276.
- Garner, J. K., & Bochna, C. R. (2004). Transfer of a listening comprehension strategy to independent reading in first-grade students. *Early Childhood Education Journal*, 32, 69-74.
- Gersten, R., Fuchs, L. S., Williams, J. P., & Baker, S. (2001). Teaching reading comprehension strategies to students with learning disabilities: A review of the research. *Review of Educational Research*, 71, 279-320.
- Goldenberg, C. (2006). Literacy for all children in the increasingly diverse schools of the United States. In R. B. Ruddell & N. J. Unrau (Eds.), *Theoretical models and processes of reading* (pp. 1636-1666). Newark, DE: International Reading Association.
- Green, C., L., Walker, J. M. T., Hoover-Dempsey, K. V., & Sandler, H. M. (2007). Parents' motivations for involvement in children's education: an empirical test of a theoretical model of parental involvement. *Journal of Educational Psychology*, 99, 532-544.
- Gregory, A. E., & Cahill, M. A. (2010). Kindergarteners can do it, too! Comprehension strategies for early readers. *Reading Teacher*, 63, 515-520.
- Gregory, L. P., & Morrison, T. G. (1998). Lap reading for young at-risk children: Introducing families to books. *Early Childhood Education Journal*, 26, 67-77.
- Guthrie, J. T., Wigfield, A., Barbosa, P., Perencevich, K. C., Taboada, A., Davis, M., ... Tonks, S. (2004). Increasing reading comprehension and engagement through Concept-Oriented Reading Instruction. *Journal of Educational Psychology*, 96, 403-423.
- Hansen, C. L. (1978). Story retelling used with average and learning disabled readers as a measure of reading comprehension. *Learning Disability Quarterly*, 1(3), 62-69.

- Hansen, J. (1981). The effects of inference training and practice on young children's reading comprehension. *Reading Research Quarterly*, 16, 391-417.
- Henkes, K. (1993). *Owen*. New York: Troll Associates.
- Hewison, J., & Tizard, J. (1980). Parental involvement and reading attainment. *British Journal of Educational Psychology*, 50, 209-215.
- Hood, M., Conlon, E., & Andrews, G. (2008). Preschool home literacy practices and children's literacy development: A longitudinal analysis. *Journal of Educational Psychology*, 100, 252-271.
- Hoover-Dempsey, K. V., & Sandler, H. M. (1997). Why do parents become involved in their children's education? *Review of Educational Research*, 99(1), 3-42.
- Hoover-Dempsey, K. V., Walker, J. M. T., Sandler, H. M., Whetsel, D., Green, C., L., Wilkins, A., Clossen, K. (2005). Why do parents become involved? Research findings and implications. *Elementary School Journal*, 106(2), 105-131.
- Institute of Educational Sciences. (2007). *The nation's report card: Reading 2007: National assessment of educational progress at grades 4 and 8*. Washington, DC: U.S. Department of Education.
- Jordan, G. E., Snow, C. E., & Porche, M. V. (2000). Project EASE: The effect of a family literacy project on kindergarten students' early literacy skills. *Reading Research Quarterly*, 35, 524-546.
- Justice, L. M., & Ezell, H. K. (2000). Enhancing children's print and word awareness through home-based parent intervention. *American Journal of Speech-Language Pathology*, 9, 257-269.
- Lareau, A. (1987). Social class differences in family-school relationships: The importance of cultural capital. *Sociology of Education*, 60, 73-85.
- Leseman, P. P. M., & de Jong, P. F. (1998). Home literacy: Opportunity, instruction, cooperation and social-emotional quality predicting early reading achievement. *Reading Research Quarterly*, 33, 294-316.
- Li, G. (2006). *Culturally contested pedagogy: Battles of literacy and schooling between mainstream teachers and Asian immigrant parents*. Albany, NY: State University of New York Press.
- London, J. (2003). *Froggy Eats Out*. New York: Scholastic.
- London, J. (2005). *Froggy's Sleepover*. New York: Scholastic.
- Lonigan, C. J., Shanahan, T., Cunningham, A. E., & The National Early Literacy Panel. (2008). Impact of shared-reading interventions on young children's early literacy

- skills. In *Developing early literacy: Report of the National Early Literacy Panel* (pp. 153-172). Louisville, KY: National Center for Family Literacy.
- Lonigan, C. J., Wagner, R., Torgesen, J., & Rashotte, C. (2002). *Preschool Comprehensive Test of Phonological and Print Processing (Pre-CTOPP)*. Tallahassee, FL: Department of Psychology, Florida State University.
- Mariage, T. (1995). Why students learn: The nature of teacher talk during reading. *Learning Disability Quarterly, 18*, 214-234.
- McIntyre, E. (2007). Story discussion in the primary grades: Balancing authenticity and explicit teaching. *The Reading Teacher, 60*, 610-620.
- McKay, S. L. (1993). Family agendas for second language literacy. In *Agendas for second language literacy* (pp. 75-97). Cambridge, United Kingdom: Cambridge University Press.
- Meyer, B. J. F., Brandt, D. M., & Bluth, G. J. (1980). Use of top-level structure in text: Key for reading comprehension of ninth-grade students. *Reading Research Quarterly, 16*, 72-103.
- Morrow, L. M. (1985). Retelling stories: A strategy for improving young children's comprehension, concept of story structure, and oral language complexity. *Elementary School Journal, 85*, 647-651.
- Morrow, L. M., Tracey, D. H., Woo, D. G., & Pressley, M. (1999). Characteristics of exemplary first-grade literacy instruction. *Reading Teacher, 52*, 462-476.
- Murphy, P. K., Wilkinson, I. A. G., Soter, A. O., Hennessey, M. N., & Alexander, J. F. (2009). Examining the effects of classroom discussion on students' high-level comprehension of text: A meta-analysis. *Journal of Educational Psychology, 101*, 740-764.
- National Assessment Governing Board. (2008). *Reading framework for the 2009 National Assessment of Educational Progress*. Washington, DC: Author.
- National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups*. Washington, DC: National Institute of Child Health and Development.
- National Reading Panel. (2002). *Report of the National Reading Panel*. Washington, DC: Government Printing Office.
- Neuman, S. B. (1996). Children engaging in storybook reading: The influence of access to print resources, opportunity, and parental interaction. *Early Childhood Research Quarterly, 11*, 495-513.

- Nystrand, M. (2006). Research on the role of classroom discourse as it affects reading comprehension. *Research in the Teaching of English*, 40, 392-411.
- Oakhill, J., & Cain, K. (2007). Introduction to comprehension development. In J. Oakhill & K. Cain (Eds.), *Children's comprehension problems in oral and written language: A cognitive perspective* (pp. 3-40). New York: Guilford.
- Palincsar, A. S., & Brown, A. L. (1984). Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. *Cognition and Instruction*, 2, 117-175.
- Pearson, P. D., & Duke, N. K. (2002). Comprehension instruction in the primary grades. In C. C. Block & M. Pressley (Eds.), *Comprehension instruction: Research-based best practices* (pp. 247-258). New York: Guilford Publications.
- Pearson, P. D., & Gallagher, M. C. (1983). The instruction of reading comprehension. *Contemporary Educational Psychology*, 8, 317-344.
- Pellegrini, A. D., Perlmuter, J. C., Galda, L., & Brody, G. H. (1990). Joint reading between black Head Start children and their mothers. *Child Development*, 61, 443-453.
- Pilkey, D. (2004). *Dog Breath*. New York: Scholastic.
- Pressley, M. (2000). What should comprehension instruction be the instruction of? In M. L. Kamil, P. B. Mosenthal, P. D. Pearson & R. Barr (Eds.), *Handbook of reading research* (Vol. III, pp. 545-561). Mahwah, NJ: Lawrence Erlbaum.
- Pressley, M., & Afflerbach, P. (1995). *Verbal protocols of reading: The nature of constructively responsive reading*. Hillsdale, NJ: Lawrence Erlbaum.
- Pressley, M., Almasi, J., Schuder, T., Bergman, J., Hite, S., El-Dinary, P. B., et al. (1994). Transactional instruction of comprehension strategies: The Montgomery County, Maryland, SAIL program. *Reading and Writing Quarterly: Overcoming Learning Difficulties*, 10, 5-19.
- Pressley, M., El-Dinary, P. B., Gaskins, I. W., Schuder, T., Bergman, J., Almasi, J., et al. (1992). Beyond direct explanation: Transactional instruction of reading comprehension strategies. *Elementary School Journal*, 92, 513-555.
- Purcell-Gates, V. (1998). Growing successful readers: Homes, communities, and schools. In F. Lehr & J. Osborn (Eds.), *Literacy for all: Issues for teaching and learning* (pp. 51-72). New York: Guilford Publications.
- Purcell-Gates, V. (2000). Family literacy. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson & R. Barr (Eds.), *Handbook of Reading Research* (Vol. III, pp. 853-870). Mahwah, NJ: Lawrence Erlbaum.

- RAND Reading Study Group. (2002). *Reading for understanding: Toward an R & D program in reading comprehension*. Santa Monica, CA: RAND.
- Roberts, K. L. (in progress). *Retelling: A measure of primary students' fictional narrative comprehension*.
- Roberts, K. L., & Duke, N. K. (2009). Comprehension in the primary grades: A review of the research. In K. Ganske & D. Fisher (Eds.), *A Comprehensive Look at Comprehension* (pp. 23-45). Guilford: New York.
- Roehler, L. R., & Duffy, G. G. (1984). Direct explanation of comprehension processes. In G. G. Duffy, L. R. Roehler & J. Mason (Eds.), *Comprehension instruction: Perspectives and suggestions* (pp. 265-280). New York: Longman.
- Rogoff, B. (1990). *Apprenticeship in thinking*. New York: Oxford University Press.
- Saint-Laurent, L., & Giasson, J. (2005). Effects of a family literacy program adapting parental intervention to first graders' evolution of reading and writing abilities. *Journal of Early Childhood Literacy*, 5, 253-278.
- Sénéchal, M. (2006). Testing the home literacy model: Parent involvement in kindergarten is differentially related to grade 4 reading comprehension, fluency, spelling, and reading for pleasure. *Scientific Studies of Reading*, 10, 59-87.
- Sénéchal, M., & LeFevre, J. (2002). Parental involvement in the development of children's reading skill: A five-year longitudinal study. *Child Development*, 73, 445-460.
- Sénéchal, M., & Young, L. (2008). The effect of family literacy initiatives on children's acquisition of reading from kindergarten to grade 3: A meta-analytic review. *Review of Educational Research*, 78, 880-907.
- Shanahan, T., Mulhern, M., & Rodriguez-Brown, F. (1995). Project FLAME: Lessons learned from a family literacy program for linguistic minority families. *The Reading Teacher*, 48, 586-593.
- Smolkin, L. B., & Donovan, C. A. (2002). "Oh excellent, excellent question!": Developmental differences in comprehension acquisition. In C. C. Block & M. Pressley (Eds.), *Comprehension instruction: Research-based best practices* (pp. 140-157). New York: Guilford Press.
- Snow, C. E., Burns, M. S., & Griffin, P. (Eds.). (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.
- Sporer, N., Brunstein, J. C., & Kieschke, U. (2009). Improving students' reading comprehension skills: Effects of strategy instruction and reciprocal teaching. *Learning and Instruction*, 19, 272-286.

- Stahl, K. A. D. (2004). Proof, practice, and promise: Comprehension strategy instruction the primary grades. *The Reading Teacher*, 57, 598-610.
- Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly*, 21, 360-407.
- Tharp, R. (1982). The effective instruction of comprehension: Results and description of the Kamehameha Early Education Program. *Reading Research Quarterly*, 17, 503-527.
- United States Department of Education. (2009). *The Nation's Report Card: Reading 2009*. Washington, DC: Institute for Educational Sciences.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Cambridge, MA: Harvard University Press.
- Walker, J. M. T., Wilkins, A., Dallaire, J. R., Sandler, H. M., & Hoover-Dempsey, K. V. (2005). Parental involvement: Model revision through scale development. *Elementary School Journal*, 106, 84-103.
- Wasik, B. (1998). Volunteer tutoring programs in reading: A review. *Reading Research Quarterly*, 33, 266-292.
- Wasik, B., & Bond, M. A. (2001). Beyond the pages of a book: Interactive book reading and language development in preschool classrooms. *Journal of Educational Psychology*, 93, 243-250.
- Weigel, D. J., Martin, S. S., & Bennett, K. K. (2006). Contributions of the home literacy environment to preschool-aged children's emerging literacy and language skills. *Early Childhood Development and Care*, 176, 357-378.
- Whitehurst, G. J., Epstein, J. N., Angell, A. L., Payne, A. C., Crone, D. A., & Fischel, J. E. (1994). Outcomes of an emergent literacy intervention in Head Start. *Journal of Educational Psychology*, 86(4), 542-555.
- Whitehurst, G. J., Zevenbergen, A. A., Crone, D. A., Schultz, M. D., Velting, O. N., & Fischel, J. E. (1999). Outcomes of an emergent literacy intervention from Head Start through second grade. *Journal of Educational Psychology*, 91, 261-272.
- Woodcock, R. W., McGrew, K. S., & Mather, N. (2001). *Woodcock-Johnson III Tests of Achievement*. Itasca, IL: Riverside Publishing.

Appendix A

Example of a Retelling Scoring Protocol

Book: Froggy's Sleepover (London, 2005)

ID Number

Date

Time Point:

Pre

Post

Characters:

1- Froggy

.5-Froggy's mom

.25- Froggy's dad

1- Max

Total (max 2)

Setting:

1- Froggy's House

1- Max's House OR his friend's house

.5- Outside

.25- at night

Total (max 2)

Problem:

1- Max told scary stories and Froggy was scared

1- Max had a tummy ache and wanted to go home

2- They kept changing their minds about where to stay (OR Froggy was scared, Max wanted his pillow, Froggy wanted lemonade) and going back and forth

Total (max 4)

Episodes:

1- Froggy got ready for his first sleepover/he packed

1- Froggy kept forgetting things and going back to get them (or specifically mentions forgetting either the toothbrush or Huggy/doll- .5 pt. for each one mentioned)

1- Froggy got all ready for bed, but it was too early (or mentions any of the following in place of "got all ready for bed": set up his sleeping bag, brushed his teeth, got called a baby by Max)

1- After dinner/then, they went to bed

.5- Froggy knocked over the lamp and/or fish bowl

1- Froggy's mom made them popcorn

1- They went back to bed

1- Froggy and Max had a pillow fight

Total: (5 max)

Resolution:

1- Froggy and Max went to Froggy's house

1- Froggy and Max went to Max's house

2- Finally, it was morning and they fell asleep at Max's house

Total: (max of 3)

TOTAL RETELLING POINTS: /16



Prior Knowledge



Summer Reading Workshops

What is it and why should I do

What is it?

You and your child have had lots of experiences and have a lot of information stored in your brains. You can use that information to help you understand what you read.

Why should I do it?

Connecting to prior knowledge lets kids build on what they already know, which can make stories easier to understand.



How do I do it before reading?

Talk about what you think the book will be about. Help your child think of things they know that relate to the topic. For example:

- *This book is called Danny and the Dinosaur. Look at the picture; he's walking the*

dinosaur like he's a dog. You have walked the dog before. Do you think it would be as easy to walk a dinosaur? Why or why not? Would a dinosaur make a good pet? Why or why not?

- *What do you know about dinosaurs?*

Tips:

- ☺ Read in a comfortable place with few distractions.
- ☺ Try to bring the story to life by reading with expression.
- ☺ Keep the attitude positive—this should be a treat, not a chore.
- ☺ After you are finished, let your child know how much you enjoyed your time together.

How do I do it during reading?

Continue to relate the events of the story to things that your child already knows or has experienced. Point out places in the book where you or your child can make a connection. For example:

- *Now he's using the dinosaur as a slide! Wouldn't that be fun? I love the slides at the park, so I bet Danny is having a*



good time sliding down the dinosaur's back. What do you think?

- *It's starting to get late. What do you have to do when you are playing outside and it starts to get late? Do you think Danny will have to do that, too?*
 - *Have you ever...*
 - *Do you remember when...*

How do I do it after reading?

- Try to help your child relate the story to other stories or to his or her life. For example:
- *In this story, Franklin got lost. Have you ever been lost? How did you feel? How do you think Franklin felt when he was lost?*
- *You knew a lot about going to the zoo before we read this book. Did you learn anything*

new?

- *There was a wolf in this story just like in Little Red Riding Hood. How were they the same?*
- That book re-minded me of...



Remember! When you help your child activate prior knowledge, be sure to relate what he or she already knows to the new things in

What kinds of prior knowledge might you and your child have?

Stories in General

- You and your child know about story structure. You expect to read about characters, setting, at least one problem, events, and at least one solution.
- You might have tried to do the same thing that the characters are doing and know how it worked out for you (for example, if the character breaks the rules in school).

Personal Experience:

- You might have been in a similar situation that can help you understand how the characters feel (for example, if the character is afraid of the dark and has to find a way to be

Other Books:

- You may have read books with similar stories or problems



Dates to Remember:



Appendix C

Example of a Strategy Bookmark



Prior Knowledge:

**What do you
already know
about...**

- ✓ The topic?
- ✓ The characters?
- ✓ The book series?
- ✓ The kinds of things that happened in the book?
- ✓ How the characters might feel?

Table 1

Child Participant Demographic Information

	Condition	Control n (%)	Experimental n (%)
Gender	Male	6 (60)	6 (60)
	Female	4 (40)	4 (40)
Ethnicity	Caucasian	6 (60)	7 (70)
	Chicano/Mexican-American	2 (20)	0 (0)
	Hispanic	1 (10)	1 (10)
	Asian-American	0 (0)	1 (10)
	African-American	0 (0)	1 (10)
	Other	1 (10)	0 (0)
Socioeconomic	Low	3 (30)	3 (30)
Status*	Middle	1 (10)	5 (50)
	High	6 (60)	2 (20)

Note: For the purposes of sample description, mother's highest level of education was used as a proxy for socio-economic status (Entwisle & Astone, 1994): low SES was defined as the mother having at 12th grade education or less, middle SES as mother having completed a two- or four-year college degree, and high as having completed a masters or doctoral degree.

Table 2

Post-Intervention Implementation Means and Effect Sizes Based on Strategy Use from Analyses of Parent-Child Read Alouds

	Condition	n	Mean	SD	d^a	df
Retelling	control	10	0.10	0.32	1.18**	9.32
	experimental	10	2.10	2.38		
Story structure	control	10	0.90	0.88	1.02**	18.00
	experimental	10	2.00	1.25		
Activation and use of	control	10	1.60	1.43	0.84*	10.82
Prior knowledge	experimental	10	4.40	4.48		
Talking about text	control	10	8.30	2.58	1.23**	18.00
	experimental	10	13.00	4.76		
Total strategy use instances	control	10	10.80	3.08	1.64†	11.22
	experimental	10	21.50	8.72		
Total number of different strategies used	control	10	2.40	0.84	1.18**	18.00
	experimental	10	3.30	0.68		

** $p < .01$, * $p < .05$, † $p < .10$

^a Cohen's $d = M_1 - M_2 / S_{\text{pooled}}$

Note: Only scores for the post-intervention time point are included as there were no statistically significant differences pre-intervention.

Table 3

Post-Intervention Implementation Means and Effect Sizes Based on Turns, Initiation, and Uptake Analyses of Parent-Child Read Alouds

	Condition	n	Mean	SD	d^a	df
Number of parent turns	Control	10	19.10	5.63	1.85†	10.34
	experimental	10	47.00	20.57		
Number of child turns	Control	10	14.20	5.87	1.59†	10.40
	experimental	10	38.70	20.96		
Number of parent initiations	Control	10	8.80	3.99	1.68	18.00
	Experimental	10	16.70	5.31		
Number of child initiations	Control	10	3.80	2.49	0.87*	18.00
	Experimental	10	7.10	4.73		
Number of parent uptakes	Control	10	10.30	4.11	1.50†	9.90
	Experimental	10	30.30	18.40		
Number of child uptakes	Control	10	10.40	4.33	1.72†	10.17
	Experimental	10	31.60	16.92		

* $p < .01$, † $p < .10$

^a Cohen's $d = M_1 - M_2 / S_{\text{pooled}}$

Note: Only scores for the post-intervention time point are included as there were no statistically significant differences pre-intervention.

Table 4

Pre- and Post-Intervention Means and Effect Sizes Based on Group Comprehension

Scores

	N	Mean	SD	Mean	SD	d^a	df
		(pre)	(pre)	(post)	(post)		
Total ELSA							
Experimental	10	5.30	2.67	9.00	4.24	1.04**	9
Control	10	5.20	3.74	6.80	4.34	0.39	9
Total (retelling)							
Experimental	10	4.80	2.53	4.55	3.25	-0.09	9
Control	10	3.10	3.77	3.78	3.31	0.19	9

** $p < .05$

^a Cohen's $d = M_1 - M_2 / S_{\text{pooled}}$

MANUSCRIPT TWO: TEACHING PARENTS TO INFUSE COMPREHENSION
INSTRUCTION INTO PARENT-CHILD READ ALOUDS: A LOW-COST, HIGH-
IMPACT APPROACH

Abstract

Although parents are often encouraged to read to their children, they typically do not receive much information as to how to make the most of those reading sessions. The instructional sessions described in this article can be an effective way to help parents make the most of the time they spend reading with their children.

Last spring, as five-year-old Nora and I walked down the hall to read a story together, she said to me “I like reading books with you. My mom tries to read books with me, but then she stops because it makes her mad.” I racked my brain, as I often do when trying to infer missing information in my conversations with young children. What could she mean by that? Did her mother feel passionately that the Big Bad Wolf hadn’t gotten a fair shake or that Curious George should be held accountable for his actions? So I asked her, and she replied, “My mom gets mad because I interrupt, and that’s not what you’re supposed to do when you read books.”

Many parents do not seem to understand the value of talking about text before, during, and after reading with their children. In my own work with children, comprehension gains have hinged upon our habit of thinking aloud and our conversations about text. However, the anecdotal evidence I had collected along the way left no uncertainty that this style of interactive reading with children was far from ubiquitous in the home. Thus, teaching children *alone* to engage in these strategies would likely never be enough; the change would have to come from both the reader *and* the listener. In this paper, I describe a series of parent workshops designed to teach parents how to infuse comprehension strategy instruction into their at-home read alouds with their children.

Comprehension

Although young children often lack independent reading skills and the abilities to accurately express their understanding, they are capable of higher level thinking (Pearson & Duke, 2002). Regarding comprehension, in particular, emergent and beginning readers are capable of comprehending texts that are much more complex than those that they can

independently read (New Standards Primary Literacy Committee, 1999) and their listening comprehension later transfers to independent reading comprehension (Garner & Bochna, 2004). Furthermore, shared reading for meaning (as opposed to teaching letter names or sounds, for example) in the home is linked to higher receptive vocabulary and, subsequently, later reading comprehension (Sénéchal & LeFevre, 2002). Thus, it stands to reason that providing our youngest learners with comprehension instruction even before they are reading conventionally is just as important as working on other literacy skills, such as letter recognition or name writing, to their literacy growth.

Good readers/comprehenders are strategic (e.g., Duke & Pearson, 2002). That is, they are conscious of when they are and are not understanding a text, and use meaning-making strategies accordingly. How can we teach emergent readers to be strategic? One theory is that this type of knowledge can be constructed socially, through interaction with more knowledgeable others (Rogoff, 1990; Vygotsky, 1978). In the case of listening comprehension, this translates to children learning to strategically comprehend by observing more proficient readers comprehend, interacting with them to jointly make meaning of text, and eventually making meaning on their own. The first of these steps can easily be done within the walls classrooms; teachers simply make the typically invisible act of comprehension visible by explaining their thinking during read alouds, and explicitly teaching and modeling comprehension strategy use. This type of strategy instruction has proven effective in the primary grades (e.g., Baumann & Bergeron, 1993; Brown, Pressley, Van Meter, & Schuder, 1996), and has the potential to work with younger children, as well. The last step, independent meaning making, can take place under just about any circumstances, as long as the child is reading independently or is

provided with aural text through some means. The middle step, joint meaning making, is a bit trickier. The level of interaction needed in this stage of learning is quite high, often requiring one-on-one, or at least small group, settings. Class sizes make it quite difficult for teachers to spend a great deal of time working small groups and individuals, and curricular mandates can limit the amount of time available for comprehension instruction. This is not to say that teachers can't interact with their students during group read alouds, in fact, it appears to be beneficial if they do (e.g., Beck, McKeown, Hamilton, & Kucan, 1997; Santoro, Chard, Howard, & Baker, 2008). However, because adult-to-child ratios in homes are much smaller and the demands of the curriculum are nonexistent, the conditions are ideal for engaging in joint meaning making experiences during read alouds.

Literacy in the Home

Numerous studies have confirmed that interaction around literacy in the home is related to children's literacy skills and attitudes (e.g., Bus, van Ijzendoorn, & Pellegrini, 1995; Cunningham & Stanovich, 1997; DeBaryshe, 1993; Hood, Conlon, & Andrews, 2008; Justice & Ezell, 2000; Neuman, 1996; Sénéchal, 2006; Stanovich, 1986; Weigel, Martin, & Bennett, 2006). Building on this literature, interventions have been implemented and studied, focusing on increasing and improving these interactions (for an overview of such studies, see the meta-analytic reviews of Bus et al., 1995; and, Sénéchal & Young, 2008). Curiously, despite their foci on techniques such as talking about the text and giving evaluative feedback on children's responses to text, the outcome measures of many of these studies involve word reading (e.g., Chow & McBride-Chang, 2003; Kraft, Findlay, Major, Gilberts, & Hofmeister, 2001) or early literacy skills other than

comprehension (e.g., Foster & Bitner, 1998). In addition, while there are many studies that employ frequency of reading as a variable (e.g., DeBaryshe, 1993; Scarborough, Dobrich, & Hager, 1991), very few look at qualitative differences across parent-child pairs in joint book reading.

So, what *do* we know about successful family literacy interventions?

- Although the exact reasons why are debated, we know that parent-child interventions are most beneficial *before* children are reading conventionally (for a discussion of this, see Bus et al., 1995).
- Book reading events in which parents and children interact with each other and the text can increase children's comprehension (Jordan, Snow, & Porche, 2000).
- Interventions are most effective if the adults intervening are taught to do so in specific ways (Cohen, Kulik, & Kulik, 1982; Sénéchal & Young, 2008) and have access to feedback and opportunities to ask questions (Wasik, 1998).
- Given the current state of the economy and the constant competing demands for parents' time, it is important to note that interventions with parents do not need to span large amounts of time in order to have effects on their children (Cohen et al., 1982).

What don't we know? We do not know whether workshops designed to improve the quality of parent-child interactions around text actually change the nature of their read aloud experiences. We also don't know, if changes occur, if they subsequently influence children's comprehension.

The Present Study

With the above insights in mind I developed a series of parent workshops and designed a study to test both parents' abilities to implement the strategies taught in the sessions and subsequent changes in children's comprehension. The study addressed the following questions:

1. To what extent are parents able to implement comprehension strategy-based instructional practices (specifically explaining and modeling the use of retelling, attention to story structure, activation and use of prior knowledge, and talking about text) into lap reading with their children in response to workshops on the topics?
2. What are the effects on children's comprehension of parents' attempts to infuse this comprehension strategy instruction into lap reading of fictional narrative texts with their children?

The results of this study provide information as to whether educators, given a relatively small amount of time with parents, can influence the ways in which parents read with their children, and whether the time invested in the endeavor pays off in terms of increased student comprehension skills for emergent readers.

Setting and Participants

Parents (or other primary caretakers) and children from three types of settings (urban Head Start, suburban preschool and developmental kindergarten classrooms, and tuition-based childcare) were invited to participate in the study. In order to be eligible for the workshops, the children had to be enrolled in their final year of preschool or childcare before entering kindergarten. Although all children whose parents expressed interest were

invited to attend the workshops, data was only analyzed for children who spoke English as their first language and were not receiving special education services.

Twenty child-parent pairs (10 control, 10 experimental) attended the workshops and completed all stages of data collection (significantly more parents signed up and did not attend or did not attend with enough regularity to be included in the final analyses). Students were matched based on initial comprehension scores on the *Early Literacy Skills Assessment (ELSA)* (DeBruin-Parecki, 2005) and then randomly assigned to condition; therefore demographic information across groups varied, somewhat. The final sample included a range of racial/ethnic and socioeconomic groups.

Parent Workshops

Parents and children who were randomly assigned to the experimental condition were invited to participate in a series of four workshops, each lasting 45-60 minutes, at two-week intervals. During these workshops, parents received instruction on engaging their children in strategy use (retelling, use of story structure, activating and using prior knowledge, and talking about text; see Table 5 for further description of each strategy) in the context of “lap reading”, or parent-child read alouds, and then practiced implementing strategy instruction. The second through fourth meetings also included time at the beginning to discuss how strategy instruction was going at home and to address any questions or concerns that may have arisen between sessions. An outline of a typical session can be found in figure 1; a timeline of sessions can be found in figure 2.

Materials

Strategy handouts. At the beginning of the instructional portion of each workshop, parents were given a handout describing the target strategy (see figure 3 for an example). Each handout included the following sections:

- What is it and why should I do it?
- How do I do it before reading?
- How do I do it during reading?
- How do I do it after reading?

In addition, each handout had a section related to a particular aspect of the target strategy. For example, the handout on retelling included a section with suggestions for an authentic audience, while the handout on story structure included definitions of each of the story structure elements.

Video examples. After going over the handout and discussing any questions and concerns, parents were shown a short (approximately five-minute) video of a parent and child using the strategy in an authentic read aloud situation (these videos could easily be replaced by a live or recorded read aloud of by parent or other non-professional educator who has been trained on the strategy in advance). The parents in the video used in the study were not educators of young children by profession and had been given only the same information as the parents attending the workshop. The read alouds were unrehearsed. The decision to showcase imperfect examples was made for two related reasons: (1) the videos were authentic to how parents' first attempts at using the strategies would likely transpire, which would hopefully set realistic expectations for their first attempts with their own children; and, (2) examples of a professional educator and a child

skilled at the strategy would likely be intimidating for parents and/or lead them to believe that the success of the strategy was contingent upon existing skills and knowledge of the parent or child. To compensate for imperfect implementation of the strategy, the videos were paused several times to discuss both exemplary strategy use and missed opportunities or ways in which the strategy use could be improved. For example, in the video on story structure, the parent modeled the attention to all five story structure elements (characters, setting, problem, episodes, and solution) beautifully, but did not give enough attention to any single element to support the child in beginning to look for the elements, himself. At several points in the video, I paused to point out her excellent introduction of an element or modeling of attending to it, but I also advised that they only focus on one element at a time.

Follow-up packets. Because workshops were scheduled at two-week intervals, follow-up packets were sent to help parents maintain momentum between sessions. Packets included a reminder to try out the strategies, a fictional narrative children's book to practice with, and a bookmark summarizing information pertinent to the strategy (see figure 4 for an example).

Control Condition

Parents and children in the control condition attended an initial session the same week as the experimental group and received follow-up packets on the same schedule. The content of the session and packets, however, focused on the importance of reading often with children as opposed to how to make that time more beneficial for the child; this was done in order to mirror the typical "read more" advice that parents often get

(Anderson, Hiebert, Scott, & Wilkerson, 1985). Upon completion of the study, all participants in the control condition were offered the workshops.

Did the Workshops Make a Difference?

Parents' Implementation

Transcript analyses. Each parent-child pair was recorded pre- and post-intervention as they engaged in a read aloud. Transcripts of these read alouds revealed that there were no statistically significant differences between the experimental and control groups in terms of strategy use before the intervention began. However, after the intervention, parents and children in the experimental condition were statistically significantly more likely to engage in retelling, discussion of story structure, and talk about text. Results also approached statistical significance for talking about prior knowledge. Participants in the experimental condition also used a significantly wider range of strategies.

Conversations like the one with Nora recounted in the beginning of this article also led me to be concerned with the amount of talk during read alouds and who was doing it (the parent or the child). For this reason, it seemed important to analyze who was talking (number of turns), who was initiating conversations (number of initiations), and whether or not the parents and children built on each other's comments (instances of uptake) or tended to change the subject or ignore each other. Before the intervention, there were no significant differences between groups on any of these measures. After the workshops, parents and children in the experimental group scored significantly higher on all measures. In other words, while initial counts for both groups were nearly identical, there was a significant increase in the amount of strategy use and interaction, in general,

for the experimental group between time points. This is important not only because talk is a necessary vehicle for strategy use, but also because children's talk can help parents identify when there is a comprehension breakdown that might be able to be resolved through a think aloud of their own strategy use and thinking about text. For example, after the first two workshops (retelling and story structure), this conversation took place between a parent and child while reading *Clifford and the Big Storm* (Bridwell, 1995):

P: Where's Clifford?

C: He's in that big pile of sand-

Text: Surprise!

C: So are the trees and the puppies.

P: Why do you think he was under the sand?

C: So he could sleep.

P: So he could sleep! You think so? What was...

C: So he could surprise, I think.

P: Let's see. Let's go back here and see what it said. (reading) "He piled the trees in the back of grandma's house and covered them with sand. The sand pile would block the waves." So why do you think he was under the sand, now?

C: Because he didn't want grandma's house to blow away.

P: What does it say here? (reading) "The sand pile would block the waves."

C: The sand pile would block the waves so Clifford guard grandma's house.

P: So, wasn't- do you think the trees were enough under the sand to, like, block the waves?

C: Um, yeah.

P: You think? If it was, then he wouldn't be under the sand.

Text: Surprise! Clifford was covered with sand, but Grandma was so happy she gave him a hug anyway. We were all glad to be together again. Thank you, Clifford!

P: The end. I think he was under the sand to make it higher. That way the waves can't-

C: Mm-

P: Go over the sand pile-

C: MmHm. Yeah.

In this instance, the parent noticed that the child didn't realize that Clifford was under the sand in order to act as a barricade, protecting grandma's house. Once she became aware of the misconception, she then proceeded to model how she, as a skilled reader, used the text to come to that conclusion. This was a perfect teachable moment which, based on my analysis of parents' read aloud before the workshops, likely would have gone unnoticed had the parent not engaged in strategy instruction (in this case, talking about text).

Demographic variables. As with any intervention, not all people (children or adults) will respond in the same way. In this study, girls tended to talk more and build on topics initiated by their parents more often. The parents of the girls in study also tended to talk more about the text than the parents of boys. Parents and children of high socioeconomic status (SES) made more attempts to use the strategies than their lower and middle SES peers. However, low SES pairs engaged in retelling significantly more often than the other two groups. While the intervention did differ in some ways along the lines

of SES and gender, it is important to note that whether or not they attended the workshops always had a stronger influence.

Children's Comprehension

Once it had been established that parent-child interactions for participants attending the strategy workshops had indeed changed to reflect the content of those sessions, the next question was, did it make a difference in children's comprehension? In order to answer this question, children's comprehension of read alouds was gauged using two measures both pre- and post-intervention: the *Early Literacy Skills Assessment (ELSA)*, DeBruin-Parecki, 2005) and a researcher-designed retelling assessment (Roberts, in preparation).

The *Early Literacy Skills Assessment (ELSA)*. The *ELSA* is an assessment for preschool- and kindergarten-aged children in which a storybook is read aloud to a child with questions asked of the child periodically during the reading. The assessment taps three constructs of comprehension (prediction, retelling, connection to life), which are scored in terms of number of correct, chronological responses to open-ended questions. Pre-intervention scores for the two groups were not significantly different. Post tests, however, revealed that the children in the experimental group experienced significant increases, while those in the control group did not.

The retelling measure. Retelling has been used in multiple studies as a strategy for or indicator of comprehension (e.g. Gambrell & Jawitz, 1993; C. L. Hansen, 1978; Morrow, 1985; Morrow et al., 1999; Pearson & Duke, 2002). The major strength of retelling as a comprehension measure, as opposed to answering comprehension questions, is that retelling requires that the participant reconstruct the story based on his or her own

understanding, whereas comprehension questions often give clues about the expected responses (C. L. Hansen, 1978). Triangulating this data with that provided by the *ELSA* provides a much richer data set.

At the first and last sessions, each child was read a story by one research assistant and then prompted to retell the story to a research assistant who was not present during the reading of the story, setting an authentic purpose for the retelling (telling a story to entertain or inform someone who has not already heard it). The recoded retellings were then scored using protocols designed as checklists of items organized by weighted categories based on story elements (i.e., characters, setting, problem, resolution, and episodes). Each category was given a maximum number of possible points which was held constant across books and protocols: two points for character names, two for setting, four for the problem, three for the resolution, and five for the episodes of the story. Maximum point allowances were determined based on the relative importance of each category to a comprehensible retelling of the story (e.g., referring to the characters by name was not allotted as many points as explaining the problem of the story because the gist of the story could be conveyed without character names, but not without the problem). This format also makes it possible for participants to earn partial credit in a section. If, for example, they retell one problem in the story but not the second, they might earn two of four possible points.

Each protocol had a maximum point value of 16, regardless of the number of characters, settings, problems, episodes, and resolutions. This helped to lessen the effects of differences in length and complexity across stories and made it possible to make comparisons across stories. In some instances participants were able to earn full credit for

a category without retelling everything listed on the protocol. For example, a protocol might have listed seven or eight episodes, each worth one point. If a student correctly retold five episodes, he or she would have received the maximum of five points for the category. If a student retold seven episodes, he or she would have also received the maximum of five points (for an example protocol, see figure 5).

Surprisingly, there were no significant differences within or between groups for any of the story structure elements or total scores pre- or post-intervention—essentially, group means remained stagnant for both groups. The reason for the differences between the retelling and *ELSA* measures of comprehension is not clear. Perhaps the retelling measure puts too great of a demand on oral expression resources for children at this age. Alternatively, retelling may be a skill that requires some level of practice before it can be accurately used as an assessment tool. This is certainly a point that merits more investigation. A summary of the results of both assessments can be found in table 6.

Concluding Comments

Working together, families and educators have the potential to have a far greater impact on children's learning than either could hope to have alone. As educators, we are trained and, in most cases, receive a great deal of support when it comes to best practices to help our students become strong literacy learners. Families, who almost unilaterally have less training when it comes to literacy learning, also receive very little support. Research tells us that interventions implemented by non-professional educators tend to be more successful when parents (or tutors) are taught to intervene in specific ways (Cohen et al., 1982; Sénéchal & Young, 2008) and are given frequent opportunities for feedback and to ask questions (Wasik, 1998). We also know that competing priorities make it

difficult for parents and teachers alike to commit to time-intensive interventions outside of school hours. The intervention format described here, a series of four, 1-hour workshops, meets all of these needs.

The effects of this intervention were not overwhelming, but were indicative of a positive change in both parent-child interactions during reading and children's comprehension. In spite of its relatively short duration (approximately nine weeks between assessment points), this study showed that workshops are an effective way to influence parents' interactions with their children around text and that doing so can increase their children's comprehension strategy use and comprehension, in general. However, if parents continue to use the strategies after the conclusion of the workshops, it is possible that the effects will continue to compound. This is an area that is certainly ripe for research.

Working with parents has its share of challenges, though many of them can be ameliorated with careful planning. First, unlike teachers who are obligated to attend professional development sessions, parents do not have built in time reserved for such endeavors. For most parents, attending workshops comes at an opportunity cost in terms of time spent with family, shuttling children to extracurricular activities, or work. In addition, workshops need to be planned in ways that are sensitive to families needs for childcare during the workshops, feeding themselves and their children if the sessions are planned near meal times, and ability to physically get to the workshop site. In this study, I found that the parents with the highest rates of attendance were those who had an additional reason, such as picking up the child, to be at the workshop location at the correct time. Parents also reported that missed sessions were easiest to make up if they

were tagged onto the following session. Finally, workshop leaders need to be sensitive to families' access to materials. In this study, parents were offered help filling out library card applications, given directions to the nearest local library, and mailed low-cost books with which to practice the strategies at home.

Although planning and implementing family workshops is without a doubt an effortful endeavor, the rewards merit the time spent. While effects on comprehension are certainly worth celebrating, there were also less quantifiable benefits to this intervention. One parent summed up what she gained from the workshops as follows: "I struggled with reading myself as a child and even now, perhaps because I didn't know how to make meaning of it. It feels good to be doing this with both of my girls. They used to only listen for a few minutes and then run off to do something else, now they listen to the whole story and seem interested." Another parent commented that the workshops prompted him to start reading more often with his boys and to extend their reading sessions to other parts of the day beyond bedtime. He also reported that the concrete suggestions for how to use the strategies helped him to interact with his children around books in ways beyond behavior management and engage them in "real conversations".

Along these same lines, the question and answer portion of the sessions allowed parents to ask many questions that were key to their continuing the intervention (e.g., one parent was concerned because using the strategies seemed to make it more difficult for her child to sit through a whole story, to which I replied that perhaps there was too much focus on the strategies and the child was losing track of the story line). If this intervention had only offered support in the form of notes home or suggestions in newsletters, these opportunities would have been lost and some parents may have given up.

Parents and children alike seemed to both benefit from and enjoy these family reading workshops. With a little bit of time, patience, planning, and flexibility, these workshops around comprehension strategy use can be a feasible, low-cost way to harness the power of families to guide their young children on their journeys to become readers in your school, as well.

References

- Anderson, R. C., Hiebert, E. H., Scott, J. A., & Wilkerson, I. A. (1985). *Becoming a nation of readers: The report of the Commission on Reading*. Washington, DC: National Institute of Education.
- Baumann, J. F., & Bergeron, B. S. (1993). Story map instruction using children's literature: Effects on first graders' comprehension of central narrative elements. *Journal of Reading Behavior*, 25, 407-437.
- Beck, I., McKeown, M. G., Hamilton, R. L., & Kucan, L. (1997). *Questioning the author: An approach to enhancing student engagement with text*. Newark, DE: International Reading Association.
- Brown, R., Pressley, M., Van Meter, P., & Schuder, T. (1996). A quasi-experimental validation of transactional strategies instruction with low-achieving second grade readers. *Journal of Educational Psychology*, 88, 18-37.
- Bus, A., van Ijzendoorn, M. H., & Pellegrini, A. D. (1995). Joint book reading makes for success in learning to read: A meta-analysis on intergenerational transmission of literacy. *Review of Educational Research*, 65, 1-21.
- Chow, B. W.-Y., & McBride-Chang, C. (2003). Promoting language and literacy development through parent-child reading in Hong Kong preschoolers. *Early Education and Development*, 14, 233-248.
- Cohen, P. A., Kulik, J. A., & Kulik, C. C. (1982). Educational outcomes of tutoring: A meta-analysis of findings. *American Educational Research Journal*, 19, 237-248.
- Cunningham, A. E., & Stanovich, K. E. (1997). Early reading acquisition and its relation to reading experience and ability 10 years later. *Developmental Psychology*, 33, 934-945.
- DeBaryshe, B. D. (1993). Joint picture-book reading correlates of early language skill. *Journal of Child Language*, 20, 455-461.
- DeBruin-Parecki, A. (2005). *Early Literacy Skills Assessment (ELSA)*. Ypsilanti, MI: High/Scope Press.
- Duke, N. K., & Pearson, P. D. (2002). Effective practices for developing reading comprehension. In A. E. Farstrup & S. J. Samuels (Eds.), *What research has to say about reading instruction* (3 ed., pp. 205-242). Newark, DE: International Reading Association.
- Foster, S. M., & Bitner, T. R. (1998). A read-aloud project for at-risk kindergarten children and their parents. *The Indiana Reading Journal*, 30, 50-55.

- Garner, J. K., & Bochna, C. R. (2004). Transfer of a listening comprehension strategy to independent reading in first-grade students. *Early Childhood Education Journal*, 32, 69-74.
- Hood, M., Conlon, E., & Andrews, G. (2008). Preschool home literacy practices and children's literacy development: A longitudinal analysis. *Journal of Educational Psychology*, 100, 252-271.
- Jordan, G. E., Snow, C. E., & Porche, M. V. (2000). Project EASE: The effect of a family literacy project on kindergarten students' early literacy skills. *Reading Research Quarterly*, 35, 524-546.
- Justice, L. M., & Ezell, H. K. (2000). Enhancing children's print and word awareness through home-based parent intervention. *American Journal of Speech-Language Pathology*, 9, 257-269.
- Kraft, B. L., Findlay, P., Major, J., Gilberts, G., & Hofmeister, A. (2001). The association between a home reading program and young children's early reading skill. *Journal of Direct Instruction*, 1, 117-136.
- Neuman, S. B. (1996). Children engaging in storybook reading: The influence of access to print resources, opportunity, and parental interaction. *Early Childhood Research Quarterly*, 11, 495-513.
- New Standards Primary Literacy Committee. (1999). *Reading and writing grade by grade: Primary literacy standards for kindergarten through third grade*. Pittsburgh: National Center on Education and the Economy and the University of Pittsburgh.
- Pearson, P. D., & Duke, N. K. (2002). Comprehension instruction in the primary grades. In C. C. Block & M. Pressley (Eds.), *Comprehension instruction: Research-based best practices* (pp. 247-258). New York: Guilford Publications.
- Rogoff, B. (1990). *Apprenticeship in thinking*. New York: Oxford University Press.
- Santoro, L. E., Chard, D. J., Howard, L., & Baker, S. K. (2008). Making the very most of classroom read-alouds to promote comprehension and vocabulary. *Reading Teacher*, 61, 396-408.
- Sénéchal, M., & LeFevre, J. (2002). Parental involvement in the development of children's reading skill: A five-year longitudinal study. *Child Development*, 73, 445-460.
- Sénéchal, M. (2006). Testing the home literacy model: Parent involvement in kindergarten is differentially related to grade 4 reading comprehension, fluency, spelling, and reading for pleasure. *Scientific Studies of Reading*, 10, 59-87.

- Sénéchal, M., & Young, L. (2008). The effect of family literacy initiatives on children's acquisition of reading from kindergarten to grade 3: A meta-analytic review. *Review of Educational Research*, 78, 880-907.
- Silverstein, S. (1964). *The Giving Tree*. New York: Harper Collins.
- Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly*, 21, 360-407.
- Sulzby, E. (1985). Children's emergent reading of favorite storybooks: A developmental study. *Reading Research Quarterly*, 20, 458-481.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Cambridge, MA: Harvard University Press.
- Wasik, B. (1998). Volunteer tutoring programs in reading: A review. *Reading Research Quarterly*, 33, 266-292.
- Weigel, D. J., Martin, S. S., & Bennett, K. K. (2006). Contributions of the home literacy environment to preschool-aged children's emerging literacy and language skills. *Early Childhood Development and Care*, 176, 357-378.

| Literature Cited

Bridwell, N. (1995). *Clifford and the big storm*. New York: Scholastic.

Steig, W. (1987). *Sylvester and the Magic Pebble*. New York: Aladdin Books.

Table 5

Descriptions of Individual Story Comprehension Strategies

Strategy	Definition	Examples of questions or comments involving the strategy
Retelling	Chronologically recounting a story after having read or listened to it using enough detail to support coherence	Can you tell me what has happened so far in the story? Now it's your turn. Can you use the pictures to tell me the story?
Attending to Story Structure	Paying conscious attention to characters, setting (time and place), episodes, problem, and resolution	Hm, after reading this page, I think I know what the problem will be in this story. Who did Little Red Riding Hood meet in the woods?
Activation and Use of Prior Knowledge	Using what you already know or have experienced to make sense of new information	Franklin is lost. Have you ever been lost? How did you feel? How do you think Franklin feels? Owen has a blanket just like yours. Would you let the blanket fairy take your blanket? Why or why not? That makes me think Owen isn't going to let her take his.

Talking	Interacting around text	Oh, I can see the wolf hiding behind the
about Text	with others in	tree. I bet he's going to try to get Little
	meaningful ways.	Red Riding Hood.
		Why do you think Minerva did that?

Table 6

Mean Pre- and Post-Intervention Comprehension Scores

	Number of	Mean Score	Mean Score
	Children	(pre)	(post)
Total ELSA			
Experimental	10	5.30	9.00
Control	10	5.20	6.80
Total (retelling)			
Experimental	10	4.80	4.55
Control	10	3.10	3.78

5-10 Minutes- Each parent “lap reads” a story with his or her child (recorded for data collection purposes)

10-15 Minutes- Children leave to engage in arts and crafts or outdoor play with helpers. Parents talk about previous target strategies, sharing success stories and addressing concerns and questions (in sessions two through four, only).

15-20 Minutes- Parents are introduced to a new strategy via discussion, a handout, and a video of the strategy in action.

There is also time to ask questions.

15-20 Minutes- Parents are invited to choose a book, preview it, and read it with their children using the new strategy. The workshop facilitator is available to answer questions and give support as needed during this time.

Figure 1. Outline of a typical workshop teaching parents about infusing comprehension strategies into parent-child lap reading.

Pre-Intervention	Assessment of children and collection of demographic information
Week One	Workshop on retelling
Week Two	Follow-up packet on retelling mailed
Week Three	Workshop on story structure
Week Four	Follow-up packet on story structure mailed
Week Five	Workshop on activation and use of prior knowledge
Week Six	Follow-up packet on activation and use of prior knowledge mailed
Week Seven	Workshop on talking about text
Week Eight	Follow-up packet on talking about text mailed
Week Nine	Workshop wrap-up and celebration, Assessment of children

Figure 2. Timeline for workshops and follow-up mailings.

Figure 3. Example of a strategy handout.



Retelling

What is it and why should I do it?

What is it?

Stopping during the story to review what has happened so far;

helping kids tell the whole story after reading



Why should I do it?

With your help, kids learn to focus on the most important things in a story, which in turn helps them to remember them and understand the story better.

How do I do it before reading?

Give your child a reason to practice retelling. For example, maybe she will tell the story to a relative or friend who hasn't heard it later in the day or maybe she will use the pictures to help them "read" the

book to a brother or sister later on. You can also take turns "reading" with your child. You read the book first, then your child can use the pictures to "read" (retell) the book to you.

Summer Reading Workshops

Tips:

- ☺ Read in a comfortable place with few distractions.
- ☺ Try to bring the story to life by reading with expression.
- ☺ Keep the attitude positive—this should be a treat, not a chore.
- ☺ After you are finished, let your child know how much you enjoyed your time together.



How do I do it during reading?

Stop once or twice and ask your child to tell you the story to that point. If your child leaves out something important, you can give a reminder. Some reminders you might give:

- *How did the story start?*
- *Where were they?*

- *What happened next?*
- *And then...*
- *Why did they do that?*
- *And then what happened?*
- *Who did that?*

You only need to stop once or twice or when your child seems to be confused to review what has happened so far in the story.

How do I do it after reading?

If you stop more often, your child may lose interest in the story.

If your child is not going to retell the story to someone else until later on, have him practice retelling it to you right after reading. Be sure, then, to follow up and give

him a chance to tell it to someone else.

If you are taking turns reading, hand the book over and let your child "read" it to you. If your child is getting antsy, take a break and do the second "reading" later on.

Remember! Retelling stories or parts of stories yourself will give your child a good model of what a retelling should sound like.

Figure 3 (continued). Example of a strategy handout.

How do I find an authentic audience?

You might have your child retell a story to:

- Younger siblings, relatives, or neighbors
- Grandparents
- Aunts and Uncles
- Parents
- Baby sitters



What if there is no one close by?

You might:

- Arrange to call someone on the phone.
- Have your child tell the story to you as you write it in a letter to mail to someone special.

Just be sure that the person your child retells the story to was not there when you read the story together; this gives your child a real reason to give a good retelling.

Dates to Remember:



Figure 3 (continued). Example of a strategy handout.

What are the parts of story structure?

- 1. Characters- Who?**
- 2. Setting- Where and When?**
- 3. Problem(s)- What went wrong?**
- 4. Solution(s)- How did they fix it?**
- 5. Events- What else happened?**



Figure 4. Example of a strategy bookmark.

Book: *Sylvester and the Magic Pebble*

Name: _____

Date: _____

Strategy: _____

Add point values to determine total scores for categories and overall retell

Characters:

___1- Sylvester

___ .5- parents

___ .5- lion

___ .5- police

___ .5- children (baby animals)

___ .5- all the dogs

___ .5 a wolf

Total: ___ (maximum of two points possible)

Setting:

___ .5- the field where the rock was

___ .5- home

___ .5- the police station

___ .5- any naming of seasons

Total: ___ (maximum of two points possible)

Episodes:

___ 1- Sylvester found a magic pebble that made wishes come true

___1- He saw a lion and wished to turn into a rock

___1- His parents didn't know where he was and went looking for him

___1- Sylvester stayed a rock for a long time

___1- His parents went on a picnic by the rock

___1- Sylvester tried to talk to them, but he couldn't

Total: ___ (maximum of five points possible)

Resolution:

___1- his parents saw the pebble

___2- they wished Sylvester was there and it came true

___1- They put the pebble away

Total: ___ (maximum of three points possible)

TOTAL RETELLING POINTS:___

*Figure 5. Sample retelling scoring protocol for *Sylvester and the Magic Pebble* (Steig, 1987).*

Appendix A (Full Dissertation)

The following are materials requested by the dissertation committee to fulfill the requirements of the dissertation, but that are not explicitly referred to in the articles.

Negative Binomial Statistics for Effects of Gender and Socioeconomic Status on Post-Intervention Comprehension Measures

Negative Binomial Statistics for the Effects of Implementation on Comprehension as Measured by the Retelling Measure

	B	Standard Error	Significance
(Intercept)	.399	1.892	.528
Instances of Strategy Use	2.566	.060	.109
Variation in Strategy Use	.772	.738	.379
Pre-Intervention Retelling Score (doubled)*	1.535	.074	.215

*Pre- and post-intervention retelling scores are doubled to allow for modeling with whole numbers

*Goodness of Fit Statistics for Negative Binomial Model of the Effects of Implementation
on Post-Intervention Retelling Scores*

	Value	Df	Value/df
Deviance	1.358	6	.226
Scaled Deviance	1.358	6	
Pearson Chi-Square	1.435	6	.239
Log Likelihood	1.455	6	

Note: Pre- and post-intervention retelling scores are doubled to allow for modeling with whole numbers.

Negative Binomial Statistics for the Effects of Implementation on Comprehension as Measured by the Early Literacy Skills Assessment (ELSA)

	B	Standard Error	Significance
(Intercept)	.870	2.465	.724
Instances of Strategy Use	.573	.896	.522
Variation in Strategy Use	-.056	.070	.426
Pre-Intervention ELSA Score	.112	.163	.491

*Goodness of Fit Statistics for Negative Binomial Model of the Effects of Implementation
on Post-Intervention Scores on the Early Literacy Skills Assessment*

	Value	Df	Value/df
Deviance	1.290	6	.215
Scaled Deviance	1.290	6	
Pearson Chi-Square	1.016	6	.169
Log Likelihood	1.016	6	

MICHIGAN STATE UNIVERSITY LIBRARIES



3 1293 03063 6058