Parent education for dialogic reading during shared storybook reading: Multiple case study of online and face-to-face delivery models

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Parent education for dialogic reading during shared storybook reading: Multiple case study of online and face-to-face delivery models

by

Beth Beschorner

A dissertation submitted to the graduate faculty

In partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Major: Curriculum and Instruction

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ABSTRACT

This study examined the impact of a parent education program on the frequency of shared storybook reading and dialogic reading techniques. Additionally, the contextual factors that influenced the outcomes of the program were explored. Seventeen parents completed a nine-week face-to-face parent education program and fifteen parents completed a nine-week online program. This study was designed as a multiple case study (Yin, 1993) and utilized multimethods for data collection and analysis. Qualitative data sources included interviews, observations, responses to prompts following the sessions, and comments on a time diary. Analysis of these data sources was completed using an inductive approach (Miles & Huberman, 1994). Quantitative data sources included a time diary of minutes read per day and pre- and post-intervention video recordings of each parent-child dyad sharing a storybook. The time diaries were analyzed by determining the mean number of minutes read per family. The pre- and post-intervention video recordings were analyzed using the Adult Child Interactive Reading Inventory (DeBruin-Parecki, 2006) and were analyzed using the Wilcoxon signed-rank test (Elliott & Woodward, 2007). Parents receiving both delivery methods increased their use of dialogic reading techniques while sharing storybooks. There were no significant differences between the online and face-to-face groups on the use of dialogic reading techniques for adults or children. The contextual factors that influenced the online group were online access and design and delivery of content. The contextual factors that influenced the face-to-face group were engagement, time, and group dynamics. Implications for the design of parent education are discussed.
CHAPTER ONE

NATURE OF THE PROBLEM

Background

Considering that children’s knowledge of what literacy is and is for emerges over time based on their experiences (Teale & Sulzby, 1986), young children’s experience with print prior to their entry into school is important (Snow, Burns, & Griffin, 1998; Purcell-Gates & Dahl, 1991). Thus, the role of the child’s family, their primary caregivers, in developing understanding of literacy cannot be understated (Taylor, 1983; Teale, 1986; Taylor & Dorsey-Gaines, 1988; Purcell-Gates, 1996). One particularly important experience with print is when a parent and child engage in shared storybook reading together (Senechal & LeFevre, 1998; Bus, vanIJzendoom, & Pelligrini, 1995). Furthermore, the ways in which the adult and child communicate while sharing storybooks influences the child’s vocabulary development (Reese & Cox, 1999; Senechal, LeFevre, Hudson, & Lawson, 1996; Senechal, LeFevre, Thomas, & Daley, 1998; Hargrave & Senechal, 2000), understanding of comprehension processes (Yaden, Smolkin, & Conlon, 1989), and emergent literacy knowledge (Martinez & Teale, 1993).

One approach to communicating with children while reading is through dialogic reading (Whitehurst, Falco, Lonigan, Fischel, & DeBaryshe, 1988). Dialogic reading encourages parents to: (a) use open-ended questions and expansions; (b) respond to children’s attempts to answer these questions; and (c) diminish reading without dialogue (Whitehurst, et al., 1988). This approach to shared storybook reading increases vocabulary development (Whitehurst, et al., 1988), writing and print concepts
(Whitehurst, Epstein, Angell, Payne, Crone, & Fischel, 1994), and emergent literacy skills (Lonigan, Anthoney, Bloomfield, Dyer, & Samwel, 1999). Consequently, providing parents with educational programming that promotes the use of dialogic reading may be of value (Lonigan & Whitehurst, 1998; Blom-Hoffman, O’Neill-Piozzi, Volpe, Cutting, & Bissinger, 2006). Specifically, parent education could increase the quantity and quality of the interactions between parents and their child(ren) surrounding storybooks (Jordan, Snow, & Porche, 2000). This type of parent education has typically been delivered in a face-to-face format. However, delivering parent education via the Internet using online teaching tools is now possible. Both types of delivery methods could impact the reading behaviors of parents and their children while the latter could make parent education courses available to a broader audience.

Considering the promising nature of both types of parent education to support families’ interactions while sharing storybooks, it is important to determine the contextual factors that influence the success of a parent education program in online and face-to-face settings. Contextual factors are the activities or considerations that influence the parents’ experiences in the program. For example, contextual factors may include the physical environment of a face-to-face course, the organization of an online course, etc. Understanding these factors could help shape more effective methods of delivering parent education programming. The importance of determining these contextual factors has increased considering that there are innovative possibilities for offering parent education face-to-face, online, or a hybrid of both delivery methods. Additionally, examining the impact of the program on the families’ shared storybook reading behaviors is important in determining the effectiveness of such programming.
Historically, parent education workshops of this nature have been conducted as face-to-face courses (ie. Sharif, Ozuah, Dinkevich, & Mulvihill, 2003). Some of these workshops have relied upon video recordings of dialogic reading training as the primary delivery model (ie. Blom-Hoffman, O’Neill-Pirozzi, & Cutting, 2005). Yet, this work rarely considered the aspects of the program that impact the parents’ experiences and effectiveness of the program. Furthermore, considering the rapid influx of online teaching tools, it is now possible to conduct parent education courses using the Internet, which changes the nature of the instruction that is possible. Yet, there is a paucity of research exploring parent education programming online. Therefore, little is known about the viability of offering parent education online or the aspects of such programming that might influence the program’s outcomes. Therefore, the purpose of this study was two-fold: (1) to investigate the contextual factors influencing the outcomes of parent education programs about the use of dialogic reading during shared storybook reading that are delivered in face-to-face and online settings, and (2) to examine the resulting changes in families’ shared storybook reading behaviors.

In the present study, the audience of the parent education workshop was parents of young preschool aged children and their child(ren). The workshops aimed to encourage the use of dialogic reading techniques during shared storybook reading. Thus, the current study draws upon three perspectives relevant to young children’s literacy development: emergent literacy (Teale & Sulzby, 1986), the social learning perspective (Vygotsky, 1978, Goodman & Goodman, 1975), and family literacy theory. These perspectives support the view that access to, and communication about, print is an
important feature of young children’s literacy learning. Each perspective is introduced in the subsequent sections.

**Defining Emergent Literacy**

The emergent literacy perspective hinges on the notion that children’s knowledge of literacy emerges over time through their experiences with the written language in their world (Teale & Sulzby, 1986). The emergent literacy perspective supports the idea that listening, speaking, reading, and writing are interrelated (Morrow, 2005) and as children experience print, they acquire knowledge about the functions of and purposes for written language (Kantor, Miller, & Fernie, 1992). Thus, children’s development of emergent literacy is influenced by their individual experiences with print in their communities (Moll, Amanti, Neff, & Gonzalez, 2011) and with their families (Taylor & Dorsey-Gaines, 1988; Purcell-Gates, 1996). Accordingly, children’s experiences in their daily lives in their homes, in their communities, and in early childhood classrooms contribute to their understanding of reading, writing, and other literate behaviors. There is, however, inevitable variation in the experiences of children in an individual home or community. For example, some families may regularly read storybooks together, write letters or emails to friends, and/or visit the library, while other families may tell oral stories, provide children with paper and crayons, and/or read magazines together. These multifaceted, varied experiences with print, the pathways to literacy, are known as multiple literacies (Smith, 2001; Kantor, Miller, & Fernie, 1992). The multiple literacies children experience are important to recognize and understand, because, the types of exposure to print that children experience in their homes and communities influence children’s conceptions of what literacy is and is for (Purcell-Gates, 1996). One aspect of the
multiple literacies that research suggests is particularly important, and which will be discussed at length later in the paper, is shared storybook reading (Senechal, LeFevre, Hudson, & Lawson, 1996).

Shared storybook reading is usually defined as a child and adult engaging with a book together (Saracho & Spodek, 2010). Shared storybook reading has been shown to facilitate development of receptive and expressive language abilities and emerging and early literacy skills (Hammett, VanKleek, & Huberty, 2003) and is, therefore, considered an important activity for the development of emergent literacy (Neuman, 1996). However, the interactions between the child and adult influence the literacy learning that takes place during shared storybook reading (Whitehurst, et al. 1988). Therefore, as a child and adult share a storybook, their social interactions are important. Thus, the social learning perspective serves as an additional theoretical framework for the study.

The Social Learning Perspective

The social learning perspective compliments the perspective of emergent literacy. As scholars in the field of reading and writing argue that children’s understanding of literacy emerges as they experience print with the adults in their lives (Goodman & Goodman, 1975), Vygotsky (1978) similarly argued that knowledge is a social product. Vygotsky suggested that it is through social interaction that adults pass on the practices, values, and goals of their culture to children (Gauvain & Cole, 2005). This social learning perspective reinforces the conceptualization of emergent literacy that suggests adults pass on the practices, values, and goals of literacy to children by exposing them to multiple literacies (Purcell-Gates, 1996).
Similarly, Kenneth and Yetta Goodman’s (1975) argument that language learning is natural provides an example of specific work that supports this close alignment between emergent literacy and social constructivist theory. Although Goodman and Goodman’s work pre-dates both the emergent literacy and social constructivist perspectives (in the United States), it closely aligns with what was later called emergent literacy and social constructivist theory (Vygotsky, 1978). Specifically, similarly to the emergent perspective, the Goodmans (1975) contended that learning language is natural; it emerges because a literate society uses language to communicate, and a person must acquire that language in order to participate in such a society. In addition, they argued that learning language is social by suggesting that children acquire language easily and naturally by interacting with parents, siblings, and others. This convergence of emergent literacy and social constructivist theory suggests that a child’s family may be an important aspect of their development as a reader and writer.

**Family Literacy Theory**

Considering the social learning perspective, the critical role of the family and community in developing young children’s emerging understanding of print cannot be ignored (Buell, Gamel-McCormick, & Unger, 2010). Accordingly, Taylor (1983) coined the term ‘family literacy’, suggesting that, “… reading and writing are cultural activities intrinsic to their [the families] experiences. Consequently, reading and writing are introduced to the children as essential features of their language. Reading and writing join with speaking and listening in an elaboration of the families’ existing associations” (p.79). Thus, availability and opportunity to engage in written language events within the
family’s environment is an important feature of a child’s literacy learning (Harste, Burke, & Woodward, 1981).

The importance of availability and opportunity of written language events indicates that exposing children to print in every-day life is essential to build their understanding of what literacy is and is for (Butler & Clay, 1987). Experience with written language comes through the multiple literacies (Smith, 2001) particular to the child’s unique experience, such as reading signs in the community, writing letters or emails to friends and family, or witnessing adults reading newspapers or magazines. In addition, shared storybook reading is a particularly important way to expose children to print (Taylor & Strickland, 1986). In fact, although research suggests that many experiences contribute to literacy (Snow, Burns, & Griffin, 1988), the shared storybook experience is regarded by some as the most important (Neuman, 1999).

**Factors Influencing Storybook Reading**

When caregivers share storybooks with children they help children think and talk about stories, teach them informally about print, model what readers and writers do, expand their children’s vocabulary, and provide opportunities for children to view books as sources of pleasure and information (Taylor, & Strickland, 1986). Accordingly, children primarily come to understand the functions and structure of language by listening and responding to stories (Seneschal, LeFevre, Thomas, & Daley, 1998).

Although the positive outcomes of storybook reading have been well-documented (Senechal & Cornell, 1993; Durkin, 1966), there are qualitative differences in the types of interactions children and adults have while sharing a book that affect the outcome(s) of
the experience. First, literacy is used within the home for different purposes. Second, caregivers’ perception of their role in a child’s development varies. To describe the variation in literacy uses within the home, Teale (1986) suggested nine activities, which relate to literacy. These activities are (1) daily living routines, (2) entertainment, (3) school-related activities, (4) work, (5) religion, (6) interpersonal communication, (7) participation in information networks, (8) storybook time, and (9) literacy for the sake of teaching/learning literacy. These practices are found in varying degrees in different households, and each uniquely influences the child’s emerging understanding of literacy (Teale, 1986).

Additionally, caregivers’ perceptions of their role in a child’s development also vary and influence a child’s development of emergent literacy. For example, Weigel, Martin, & Bennett’s (2006) examination of mothers’ literacy beliefs led to the description of facilitative and conventional roles. Mothers that hold facilitative roles believe in teaching their children at home, whereas parents with conventional beliefs assume that schools hold responsibility for teaching their children. Weigel et al. (2006) found that children from families with facilitative mothers have more literacy opportunities and print knowledge.

Another difference in adult-child interactions with books is the ways in which adults interact with children while reading. Some adults read the text while interacting very little with the child as they read, while other adults question, scaffold dialogue, offer feedback, give or extend information, restate information, direct discussion, and relate real-life experiences to the text (Morrow, 1998). It is important to recognize that the quality of parent-child interactions while reading storybooks influences the child’s
learning and attitudes toward reading (Teale & Sulzby, 1987), as well as the child’s literacy development (Heath, 1982). The dialogic reading technique is intended to increase the quality of parent-child interaction to promote oral language development (Whitehurst, et al., 1988), writing and print concepts (Whitehurst, Epstein, Angell, Payne, Crone, & Fischel, 1994), and emergent literacy skills (Lonigan, Anthoney, Bloomfield, Dyer, & Samwel, 1999). Therefore, the purpose for reading, the adult’s beliefs about reading, and the interaction between adult and child are important elements of children’s development of emergent literacy through storybook reading. Thus, the adult plays an important role in storybook reading.

However, only 52% of children are currently read to everyday by a parent (Kuo, Franke, Regalado, & Halfon, 2004). Providing education for parents could potentially increase this percentage by encouraging parents to read more often with their children and, also, impact the quality of the parent-child interactions while reading, and, therefore, capitalize on the benefits of shared storybook reading, which have been well-supported by research (Senechal & LeFevre, 2002). Specifically, parent education may ensure that children have access to books and may also teach caregivers to be facilitators of their child’s learning by interacting with their children while reading. Additionally, increasing parents’ knowledge about the importance of storybook reading could influence children’s knowledge of emergent literacy, and assist in preparing them for the literacy demands of schooling.
Purpose of the Study

Shared storybook reading is an important component of a child’s emergent literacy learning (Neuman, 1996) and is therefore an important topic for parent education. Typically, parent education courses on storybook reading have been conducted face-to-face (Cronan, Walen, & Cruz, 1994; Jordan, Snow, & Porche, 2000; Morrow & Young, 1997; Sharif, Ozuah, Dinkevich, & Mulvihill, 2003), but the contextual factors that influenced the outcomes of the parent education were rarely studied. Additionally, the Internet now provides a platform for online parent education courses. It is possible that online platforms for parent education may offer accessibility to parents who were typically unable to attend the face-to-face classes. In addition, offering courses online may be more cost-effective for organizations. Considering the potential for online parent education courses, it is important to explore face-to-face and online delivery models to consider the unique contextual factors of the online environment and determine what aspects of instruction might differ in the online environment. Thus, the purpose of this study was to examine the impact of the parent education program, delivered in a face-to-face and online setting, on families’ shared storybook reading behaviors and to investigate the contextual factors that influenced the program.

Significance of the Problem

Some face-to-face parent education programming has been effective in supporting families to promote literacy learning (ie. Jordan, Porche, & Snow, 2000). However, the contextual factors of such effective programming were not studied. Furthermore, while the Internet provides a new possibility for parent education through online learning, it is
not yet clear if this digital environment can effectively support parents in a way that may encourage their children’s emerging understandings of literacy or what aspects of an online program might influence the outcomes of such a program. Considerable research has been conducted in online learning environments created for college students (Johnson, Aragon, Shaik, & Palma-Rivas, 2000). However, there is a paucity of research in online learning environments designed for parental education. Although college courses have been designed for adult learners, there is an important difference between a college course and parent education. A college course is designed for the adult participant. However, parent education is often designed for adult participants and their children (ie. Sharif, et al., 2003). Therefore, exploring the aspects of parent education that influence the experience of parent education delivered face-to-face and online, in addition to measuring the extent to which the program changes the shared reading behaviors of families, could potentially provide guidance for creating more effective learning environments for parents. It is important to understand the unique considerations of each environment and how instruction may need to differ in each environment. To this end, the current study explores face-to-face and online delivery models of parent education.

If delivering parent education online is effective, it is possible that: (1) access to education courses could broaden because distance and time factors which may have inhibited an individual from participating in face-to-face instruction could be eliminated; (2) organizations could reduce the cost of providing parent education by diminishing the payroll of instructors to teach face-to-face courses and limiting the necessity of printed paper copies of handouts; (3) parent education courses could be taken, and reviewed, over time, in contrast with the one-shot approach of the face-to-face model of many
parent education courses. Therefore, if deemed valuable, offering online parent education courses could be an effective, and potentially transformative, alternative for organizations and participants.

**Research Questions**

Specifically, this study examined if educating parents about dialogic reading changes families’ shared storybook reading behaviors. Additionally, the contextual factors of online and face-to-face settings that influenced the parent education program were examined. The following questions guide the study:

1. How does parent education in online and face-to-face settings influence shared storybook reading behaviors of families?

2. What are the contextual factors that influence the experiences of participants in a parent education program on shared storybook reading in online and face-to-face settings?

**Definition of Terms**

*Contextual factors.* Contextual factors are the aspects of a parent education program that influence the outcomes of the program and the experiences of the participants.

*Emergent literacy.* The emergent literacy perspective supports the notion that literacy emerges over time through their experiences with the written language in their world (Teale & Sulzby, 1986) and the idea that listening, speaking, reading, and writing are interrelated (Morrow, 2005).
**Dialogic reading.** The premise of dialogic reading is that adults (a) encourage children to talk as opposed to being passive listeners; (b) should provide expansive feedback to children’s answers; and (c) must consider a child’s development over time when reading to their child(ren) (Whitehurst, et al., 1988).

**Face-to-face settings for parent education.** Parent education delivered in face-to-face settings is conducted by inviting participants to attend a session, or series of sessions, which they attend at a set location for a specific amount of time. In the present study, five face-to-face sessions were conducted at the local University and a local church approximately every other week for nine weeks.

**Family literacy.** This term is used in two unique ways. First, the term describes the types of reading and writing that are intrinsic to a family’s experiences within their homes and communities (Taylor, 1983). Specifically, family literacy describes the availability and unique opportunities to engage in written language events within the family’s environment (Harste, Burke, & Woodward, 1981). Second, the term is also used to describe parental education programs or interventions designed to increase parents’ knowledge of literacy practices within the home that encourage literacy development and school-readiness (Purcell-Gates, 2000).

**Online settings for parent education.** Parent education delivered in online settings is conducted by using online teaching tools on the Internet. Although a variety of options exist for creating online parent education programs, in the present study participants completed five sessions, which were time released approximately every other week for nine weeks, on Blackboard.
**Shared storybook reading.** The interaction that takes place when a child and adult mutually engage with a book (Saracho & Spodek, 2010).

**An Overview of the Study**

A child’s family, as primary caregivers, plays a crucial role in the child’s development of emergent literacy (Taylor & Dorsey-Gaines, 1988; Buell, Gamel-McCormick, & Unger, 2010). Therefore, providing parent education courses is worthwhile and can support parents’ abilities to engage in literate activity with their child(ren) (Jordan, Snow, & Porche, 2000). There are many at-home literacy practices, which are valuable and could serve as possible topics of study in such parent education courses. However, in this case, a focus on dialogic reading while storybook reading is particularly valuable considering its importance to the development of emergent literacy and correlation with later reading ability (Whitehurst, Falco, Lonigan, Fischel, DeBaryshe, Valdez-Menchaca, & Caulfield, 1988; Lonigan & Whitehurst, 1998; Bus, van Ijzendoorn, & Pellegrini, 1995). Additionally, storybook reading aids in the development of receptive and expressive language development and contributes to knowledge of emergent and early literacy skills (Hammett, Van Kleeck, & Huberty, 2003). Considering the impact of storybook reading on later reading achievement and language development, education aimed to assist parents in enhancing the storybook reading experience may increase the frequency and duration of parent-child storybook reading. Additionally, parent education may also improve the quality of dialogue parents and children have while reading storybooks and, thus, influence literacy learning. If parents are able to read with their children more frequently and increase their dialogue
about the storybook, then their children can benefit from the well-documented effects of such practices (i.e., Hargrave & Senechal, 2000).

Additionally, although parent education has typically been conducted in face-to-face meetings, the Internet may offer new possibilities for parent education. However, little research has explored the contextual factors of either of these possibilities. Thus, it is important to determine what influences the outcomes of parent education in face-to-face and online programs. In the current study thirty-eight parents received education about dialogic reading while sharing storybooks in one of two settings: (1) face-to-face, or (2) online using a course developed on Blackboard Course Sites. The face-to-face education was designed as five sessions that took place over nine weeks. Similarly, the online course consisted of five online sessions to be completed over nine weeks. The focus of the sessions was to enhance the shared storybook experience through dialogic reading. The primary goal of both programs was for parents to gain an awareness of the importance of shared storybook reading and to learn the strategy of dialogic reading (Whitehurst, et al., 1988).

The present study is designed as a multiple case study design (Yin, 1993) and utilized multiple methods of inquiry and analysis. Accordingly, multiple types of data were collected and analyzed to describe each case. First, to explore how parent education in online and face-to-face settings influences the reading behaviors of families, parents were asked to complete a time diary over the nine-week period of instruction to: (1) measure the self-reported frequency with which parents read with their children, (2) record who was doing the reading, and (3) provide a sample of the books read, and comments about the interaction. Additionally, each parent, or set of parents, was video
recorded while sharing a storybook with their child(ren) before and after participating in
the program. The dialogue that occurred in the interactions during shared storybook
reading was evaluated using pertinent sections of the Adult/Child Interactive Reading
Inventory ([ACIRI]; DeBruin-Parecki, 2006), a reading inventory designed as an
observational tool for measuring the qualities of one-on-one book reading. See Appendix
F for a copy of the ACIRI. The ACIRI specifically focuses on adult and child behaviors
in three areas: enhancing attention to text, promoting interactive reading and supporting
comprehension, and using literacy strategies. The pre- and post-intervention score for
each family was analyzed to determine if the parent education course increased the
frequency with which the parents used dialogue to enhance the shared storybook reading
experience when sharing a storybook with their child. Additionally, children’s
involvement in the shared storybook reading process was also evaluated using the ACIRI.

Next, to explore the contextual factors that influence the success of a parent
education program on shared storybook reading in online and face-to-face settings,
observations of the face-to-face sessions were conducted and users’ actions in the online
program were monitored. Participants from the face-to-face course and participants from
the online course were interviewed. The participants’ general impressions of each session
or module were collected at the end of each face-to-face session via an exit slip and
similar discussion threads created as part of the online course. These data were analyzed
using an inductive approach (Miles and Huberman, 1994).

In the subsequent chapter, chapter two, literature deemed relevant to the study is
reviewed. The topics include: (a) social learning perspective; (b) emergent literacy
theory; (c) family literacy theory; (d) the importance of storybook reading; (e) parent
education to support emergent literacy learning; and (f) online learning environments.

Finally, in chapter 3, research questions and research hypotheses are presented, the sample population is discussed, and data collection and data analysis are described.
CHAPTER TWO
REVIEW OF THE LITERATURE

Introduction

The strong relationship between shared storybook reading and children’s language acquisition and literacy skills has been well documented (Senechal, LeFevre, Thomas, & Daley, 1998; Lonigan & Whitehurst, 1998). In addition to increasing language acquisition and literacy skills, shared storybook reading also influences children’s motivation to read (Morrow, 1983). Furthermore, the amount of interactive dialogue parents have with their children while sharing storybooks is important to maximizing these outcomes (Lonigan & Whitehurst, 1998). One approach to increasing the amount of dialogue between parents and children is to teach parents the dialogic reading technique (Whitehurst, et al., 1988). This technique encourages the adult to become the listener, the prompter, and the questioner, while the child becomes actively involved in using oral language to tell the story.

However, only 52% of children are currently read to everyday by a parent (Kuo, Franke, Regalado, & Halfon, 2004). Previous research suggests providing education about storybook reading for parents (Burger & Landerholm, 1991; Cronan, Walen, & Cruz, 1994; Morrow & Young, 1997; Neuman 1996) and the use of dialogic reading techniques can have a positive effect upon children’s language and literacy acquisition (Whitehurst, et al., 1992; Lonigan & Whitehurst, 1998). Thus, providing parents with a parent education program aimed to support parents’ ability to use interactive dialogic reading with their child(ren) while sharing storybooks could potentially increase the frequency with which parents share storybooks with their children as well as the quality
of the interactions while reading. Consequently, increasing parents’ knowledge about the importance of engaging in dialogue while sharing storybooks, could positively impact children’s knowledge of emergent literacy, and assist in preparing them for the literacy demands of schooling.

Although providing education for parents regarding literacy practices is well supported (ie. Jordan, Snow, & Porche, 2000) the research has generally focused on literacy-related outcomes for the child and the experiences of parents in parent education courses have rarely been studied. Therefore, studying the experiences of parents participating in a parent education program, as well as the effectiveness of such a program, is valuable. Furthermore, exploring both face-to-face and online delivery methods will provide insight into the viability, affordances, and constraints of each method.

Exploring the possibilities of an online parent education program is particularly useful, because teaching tools on the Internet offer new, and potentially innovative, ways of providing educational courses to parents. However, although considerable research has been conducted in online learning environments created for college students (ie. Curtis & Lawson, 2001; Garrison & Cleveland-Innes, 2005; Song, Singleton, Hill, & Koh, 2004), there is a paucity of research in online learning environments designed for parental education. Therefore, it is not yet clear if this digital environment is an effective learning environment for parents. Thus, studying the experiences of parents in an online parent education program, as well as measuring the online program’s effectiveness at changing reading behaviors during shared storybook reading, will address a current gap in parent education research.
To this end, this chapter will first explain the theoretical perspective for the present study and review the literature supporting shared storybook reading between adults and children. Next, the premise of dialogic reading will be explained and literature on parent education for literacy development will be discussed. Finally, the chapter will conclude with a discussion of research on effective online learning environments, which guided the development of the online parent education program in the current study.

**Conceptual Framework**

This study is based on the idea that the socialization during shared storybook reading between a child and an adult is an important aspect of a child’s development of oral language (Arnold, Lonigan, Whitehurst, & Epstein, 1994; Lonigan & Whitehurst, 1998; Senechal, Lefevre, Hudson, & Lawson, 1996) and emerging knowledge of literacy (Reese & Cox, 1999; Bus, van Ijzendoorn, & Pellegrini, 1995; Neuman, 1996). To this end, participants in the current study completed a parent education program to teach parents to use dialogic reading techniques during shared storybook reading. Therefore, the conceptual framework for this study is based upon three related theories: social learning, family literacy, and emergent literacy. Each of these theories, and the relationship between them, is discussed in the following sections.

**Social Learning Perspective**

The social learning perspective “emphasizes the importance of social influences and social interaction on literacy learning” (Tracey & Morrow, 2006, p. 100). In support of this notion, Vygotsky (1978) suggested that children learn through social interactions with others. In addition, he argued that children’s learning is affected by their mastery of
the sign systems of language and that children learn about these sign systems from the people they interact with around them (Tracey & Morrow, 2006). Similarly, Goodman & Goodman (1975) have argued that children acquire language easily and naturally by interacting with parents, siblings, and others. Specifically, they have argued that learning language is natural, because a literate society uses language to communicate, and a person must acquire that language in order to participate in such a society.

Shirley Brice Heath’s (1982) seminal work gives further support that children learn about language and literacy through social interactions with their families. Heath studied three different communities in the southeastern United States in the early 1970s, which she calls: Maintown, Roadville, and Trackton (pseudonyms). She characterized Maintown as a middle class and school-oriented culture, Roadville as a white working-class community “steeped for four generations in the life of the textile mill” (p.59), and Trackton as a “black mill community of recent rural origin” (p.102). Distinct differences in the literacy practices were found in each community. Children in Maintown were read to as early as six months, were read to often and learned to listen to stories, looked at illustrations, and answered different types of questions about the story. In contrast, adults in Roadville often simplified the language of the story for children and focused on elements of the storybook such as letter recognition. Finally, in Trackton, children often heard stories told orally rather than listening to books adults read out loud. Children in this community were encouraged to develop their own stories rather than developing skill in reading print-based storybooks. Heath describes these differences as the “ways of taking” literacy events and explains, “children’s learning follows community paths of language socialization” (p. 70). Therefore, this work lends support to the social learning
perspective by suggesting that children learn about language and literacy through social interactions with adults in their families and communities.

**Family Literacy Theory**

As evidenced by Heath (1982), the social learning perspective emphasizes the role of the families and communities in communicating the practices, values, and goals of literacy to children. Thus, family literacy theory also guides this study. This theory is defined as “the ways families, children, and extended family members use literacy at home and in their communities” (Morrow, 2009, p. 378) and contends that families help children construct meaning of literacy by providing an intergenerational transfer of language, culture, thought, values, and attitude about print (Zygouris-Coe, 2001). Furthermore, family literacy theory asserts that children observe and utilize the listening, speaking, writing, and reading values, practices, routines, and rituals of the members of the community to which they belong (Kantor, Miller, & Fernie, 1992). However, the ways in which literacy is used within families and their communities varies widely. These varying uses are the pathways to how children come to understand literacy and are known as multiple literacies (Short & Pierce, 1995; Labbo, 1996). Family literacy theory contends that the multiple literacies used within the child’s home and community influence how the child comes to know and understand literacy (Purcell-Gates, 1996). Furthermore, there is not one pathway to literacy, rather there are multiple pathways to becoming literate (Smith, 2001). Morrow (1995) explains this by stating:

> Family literacy encompasses the ways parents, children, and extended family members use literacy at home and in their community. Sometimes, family literacy occurs naturally during the routines of daily living and helps adults and children
“get things done”. These events might include using drawings or writings to share ideas; composing notes or letters to communicate messages; making lists; reading and following directions; or sharing stories and ideas through conversation, reading, and writing. Family literacy may be initiated purposefully by a parent or may occur spontaneously as parents and children go about the business of their daily lives. Family literacy may also reflect the ethnic, racial, or cultural heritage of the families involved (p. 7-8).

Denny Taylor was the first to use the term ‘family literacy’ in her seminal work entitled *Family Literacy* (1983). The book is the report of a three-year long ethnographic study of six families with young children and documents the ways in which they use of literacy in their daily lives. Taylor (1983) suggests that “… reading and writing are cultural activities intrinsic to their (the families) experiences. Consequently, reading and writing are introduced to the children as essential features of their language. Reading and writing join with speaking and listening in an elaboration of the families’ existing associations” (p.79). Thus, according to family literacy theory, availability and opportunity to engage in written language events within the family’s environment is an important feature of a child’s literacy learning (Harste, Burke, & Woodward, 1981).

Following this initial work, Taylor, along with Dorsey-Gaines (1988), conducted a follow-up ethnographic study of the literacy practices of six African-American families living in impoverished urban areas and published their work in a book entitled *Growing Up Literate: Learning from Inner-City Families*. The findings of this study suggest that there were rich reading and writing experiences offered within these homes as well. The
inner-city families used literacy for a variety of purposes. In fact, the parents in this study went to great lengths to give their children access to the forms and functions of literacy.

Similarly, Purcell-Gates (1996) studied the literate practices of twenty low socio-economic status homes by observing the types and frequency of literacy events within the home and the emergent literacy knowledge of the children within the homes. The following types of family activities were observed: (1) Daily literacy routines- Literacy related to the practices of everyday life, (2) Entertainment- Literacy related to activities for pleasure and relaxation, (3) School-related activity- Literacy related to school, (4) Interpersonal communication- Literacy related to communicating with family members and friends who are distant, (5) Literacy for the sake of learning or teaching literacy- Literacy whose purpose is to help another person learn to read or write, (6) Storybook reading- Reading a book or story to a young child, (7) Religion- Literacy related to the practice of religion, (8) Participating in information networks- Literacy to participate in the exchange or reporting of information, and (9) Work- Literacy related directly to employment (Purcell-Gates & L-Allier, & Smith, 1995). These practices provide a framework for family literacy theory by identifying the types of multiple literacies families engage in, which, according to emergent literacy theory described in the subsequent section, contributes to a child’s growing knowledge of literacy.

**Emergent Literacy Theory**

The final theory guiding the study is emergent literacy theory. Emergent literacy is a term used to describe the period of time between birth and when a child can read and write conventionally (Tracey & Morrow, 2005). Specifically, emergent literacy is in stark contrast to the reading readiness perspective (Durkin, 1970), which contends that children
become ready to read only at a certain time in development. Conversely, emergent theorists suggest that children do not become ready to read at a certain time (Teale & Sulzby, 1986). Rather, children come to know literacy through their experiences with language beginning at birth (Heath, 1982). Specifically, emergent literacy theorists maintain that children “learn written language through active engagement with their world. They interact socially with adults in writing and reading situations; they explore print on their own, and they profit from modeling of literacy by significant adults, particularly their parents” (Teale & Sulzby, 1986, p. xviii). Therefore, children have considerable knowledge of how written language works before they are able to conventionally read (Clay, 1972; Goodman & Goodman, 1976).

Marie Clay (1966) was the first to use the term emergent literacy. Her work, as well as the work of Dolores Durkin (1966; 1968; 1970), provided much of the converging evidence base that later supported emergent literacy theory. Clay conducted a longitudinal study of children aged five in New Zealand (Clay, 1967). Data were collected through weekly observations of a sample of one hundred children’s reading behavior and through administration of a test battery within two weeks of each child turning 5 years old, 5 years 6 months, and 6 years old. The test included measures of language skill, auditory memory, visual perception, and reading readiness. Results of the study indicated that children had acquired, or could acquire, reading behaviors even before they could conventionally read (Clay, 1967). Additionally, in Reading: The Patterning of Complex Behavior (1972), Clay acknowledges that children have knowledge about written language before they can read and write conventionally.
school learning is to love books, and to know that there is a world of interesting ideas in them. Parents who love to share books with children transmit their feelings, their understanding and their language patterns to the listener” (p. 17), which offers support to the conception that young children’s exposure to language supports their emerging understandings of literacy.

Similarly, Goodman and Goodman (1976) paved the way for emergent literacy theory. They argued that learning to read is natural, and similar to the process of learning to speak. Their work addressed the interrelated nature of listening, speaking, reading, and writing that was later a central tenet of emergent literacy theory. In addition, they contended that literacy is learned through a child’s interaction with their environment. For example, Goodman and Goodman (1976) recognized that children become aware of books and signs, containers, logos, and handwriting in their daily living routines. Additionally, children may recognize their names, scribble letters, or recognize their favorite brand of cereal. Thus, the Goodmans acknowledged that children acquire knowledge about literacy through their daily experiences with language and print in their homes and communities, which is also a foundation of emergent literacy theory.

Accordingly, emergent literacy theorists argue there is no one point at which literacy learning begins, rather a child’s understanding of literacy emerges over time (Morrow, 2005). Additionally, emergent literacy theory is categorized by the notions that: (a) Literacy development begins well before formal teaching; (b) Children use reading and writing in informal settings at home and in their communities; (c) Children develop abilities to listen, speak, read, and write concurrently; and (d) The functions of literacy during real-life activities are an integral part of learning about literacy (Teale & Sulzby,
Therefore, the underlying premise of emergent literacy is that children’s experience with language, oral and written, influences their emerging conceptions of literacy.

**Relationship between theories**

The social learning perspective, family literacy theory, and emergent literacy theory are used together as the conceptual framework for this study. Therefore, it is important to explain the relationship between these theories for the present study. Social learning theory is the widest lens used in this study, asserting that learning takes place through social interaction with others. Family literacy theory is a narrower lens, but still emphasizes social interactions. However, family literacy theory focuses specifically on the interactions around written language, which take place within the family. This theory focuses explicitly on the role of the family for literacy learning by asserting that children come to know and understand literacy by observing the multiple literacy practices of their family and community. Therefore, emergent literacy theory overlaps with family literacy theory (Tracey & Morrow, 2006), because emergent literacy theory also maintains that children learn about literacy through their interactions from birth to the time that they read and write conventionally (Teale & Sulzby, 1986). One of the ways in which children’s knowledge of literacy emerges is through sharing storybooks with the adults in their family.

**Shared Storybook Reading**

Shared storybook reading, or joint storybook reading, is generally defined as the process of an adult and child mutually engaging with a book. Although there is some
variability among researcher’s view of the relative importance of shared storybook reading to subsequent reading achievement (Scarborough & Dobrich, 1994), storybook reading is generally considered an important aspect of a young child’s knowledge of literacy (Bus, van Ijzendoorn, & Pelligrini, 1995). The short and long term positive effects of storybook reading at home (Crain-Thoreson & Dale, 1992; Senechal, LeFevre, Thomas, & Daley, 1998; Senechal, LeFevre, Hudson, & Lawson, 1996; Senechal & LeFevre, 2002; Britto, Brooks-Gunn, & Griffin, 2006) and at school (Morrow, 1988; Morrow, 1990; Dickinson & Smith, 1994) on language development and literacy learning have been well documented. Specifically, shared storybook reading contributes to oral language development (Senechal, LeFevre, Thomas, & Daley, 1998; Elley, 1989; Whitehurst, et al., 1988) knowledge of print (Crain-Thoreson & Dale, 1992; Neuman, 1996) and comprehension (Yaden, Smolkin, & Conlon, 1989). When children are read to aloud they discover the features of written language, that print carries meaning, and there are sounds for the printed words on a page (Morrow & Gambrell, 2000). The report of the National Institute of Education, *Becoming a Nation of Readers*, supports the importance of shared storybook reading as it states that “the single most important activity for building the knowledge required for eventual success in reading is reading aloud to children” (Anderson, Hiebert, & Wilkinson, 1985, p.23).

**Dialogic Reading**

The benefits of shared storybook reading are well documented. Yet, it is important to note that several studies (ie. Whitehurst et al., 1988; Morrow, Rand, & Smith, 1995) report the adult’s style or approach to shared storybook reading can influence the quality of the experience, and, therefore the child’s ‘take away’ (Heath, 1983) from the
book. The influence of the adult’s approach to storybook reading is not surprising considering that the social nature of literacy learning and the important role that a child’s family plays in the development of emergent literacy knowledge. In the past two decades distinct types of reading behaviors have been identified in regards to how adults naturally read aloud to children (Yaden, Rowe, & MacGillivray, 2000). Generally, these reading behaviors can be classified into two types: (a) the describer labels objects and describes simple action while sharing a storybook and (b) the comprehender makes inferences and links the story to the child’s experience (Manz, Hughes, Barnabas, Bracaliello, & Ginsburg-Block, 2010).

Considering that adults utilize different reading styles naturally, researchers have developed a number of techniques to encourage adults to prompt the child to engage with the story in ways that elicit the child’s use of oral language and comprehension of the story (Yaden, Rowe, & MacGillivray, 2000). Although each suggested approach to engaging children in dialogue while sharing storybooks has a nuanced difference, generally the approaches hinge on the ability of the adult to elicit and engage the child in rich-language experiences using open-ended questions and discussion about the text, characters, and pictures while making connections between the text and the family’s experiences. These approaches to interactive storybook reading are closely aligned with the previously described, widely regarded, intervention known as dialogic reading (Zevenbergen & Whitehurst, 2003). The premise of dialogic reading is that adults (a) encourage children to talk as opposed to being passive listeners; (b) should provide expansive feedback to children’s answers; and (c) must consider a child’s development over time when reading to their child(ren) (Whitehurst, et al., 1988).
Two acronyms, PEER and CROWD, are frequently used to describe and explain the dialogic reading technique to educators and parents (Zevenbergen & Whitehurst, 2003). In order to encourage children to talk, parents are taught to (P)rompt, (E)valuate, (E)xpand, and (R)espond. Using this technique parents prompt the child to say something, evaluates the child’s response, expands the child’s response by providing new information, and encourages the child to repeat the information to insure understanding (Fung, Chow, & Chang, 2005). The CROWD acronym supports the use of PEER by providing parents with a variety of methods to prompt the child to engage with the story. The acronym stands for (C)ompletion, (R)ecall, (O)pen-ended questions, (Wh-) questions, and (D)istancing prompts. When utilizing completion prompts, adults read a sentence and or phrase and leave out the final word or phrase and the child completes the sentence or phrase for the adult. Recall questions prompt the child to answer questions about a book or a portion of a book that they have already read. Open-ended prompts encourage the child to use oral language and often utilize the picture for the discussion. For example, the adult might say, “Tell me about this picture.” Wh- questions also encourage the child to use expanded language by asking questions that often require multiple word, expanded answer. For example, the adult might ask, “Why do you think he is doing that?” The final prompt, distancing, nurtures the child’s ability to make connections between the story and his or her experiences.

Considering the importance of the dialogue that can take place during shared storybook reading using these dialogic reading techniques, and its potential influence on a child’s language development and literacy learning, dialogue during shared storybook
reading may be considered an important topic for parents to be aware. One possibility for increasing this awareness is through participation in parent education.

**Parent Education for Promoting Literacy Development**

As noted previously, the term family literacy was originally coined by Denny Taylor (1983). However, the term family literacy is also frequently used to describe parental education programs or interventions designed to increase parents’ knowledge of literacy practices within the home that encourage literacy development and school-readiness (Purcell-Gates, 2000). There are conflicting reports regarding the effectiveness of such family literacy parent education interventions, which are sometimes referred to as family literacy programs. Some programs have had relatively little impact on the literacy development of children (ie. St. Pierre, Ricciuti, & Rimdzius, 2005), yet other programs have shown more promise (ie. Neuman, 1996). These contradictory findings lend support to the importance of understanding the contextual factors that influence the outcomes of parent education.

Some research suggests that the impact of parent education is limited. For example, the Even Start Family Literacy Program was created as a large scale, federally-funded intervention and designed to provide families with early childhood education for their children, adult education, parenting education, and parent-child literacy activities. However, no significant difference on measures of child literacy, adult literacy, or child-parent interactions was found among the 463 families that participated in the Early Start Literacy program for two years and the control group (St. Pierre, Ricciuti, & Rimdzius, 2005). St. Pierre, Ricciuti, & Rimdzius (2005) contend that the lack of large scale significant results may be due to a lack of full participation of the families and poorly
developed curriculum and instructional design. Therefore, when designing parent education it is imperative to consider the nature and intensiveness of the programming as well as the specific needs of the families participating.

Contrary to this evidence, The National Early Literacy Panel Report indicated parent and home intervention programs had a statistically significant positive impact on the oral language skills and general cognitive abilities of young children (National Early Literacy Panel, 2008). The report included studies with large variation in the form of delivery and goals for parent education. The interventions, which involved home-based visits, interventions for children with special needs, and two studies that trained parents to use dialogic reading covered a wide array of possible interventions. It is of note that none of the widely used parent education models, such as Parents as Partners or Parents as Teachers, were included in the Report. Accordingly, the Report of the National Early Literacy Panel has been criticized for the studies that were included and excluded from the meta-analysis (Dail & Payne, 2010). However, while the method of intervention varied widely, the Report suggests that parents can be effective as the agent of the intervention with their child(ren) (National Early Literacy Panel, 2008).

One such family literacy intervention, which focused specifically on parent education for literacy development, is Project Early Access to Success In Education (EASE) (Jordan, Snow, & Porche, 2000). Project EASE was designed as a one-year parent education intervention to support parent(s) in cultivating the language development of their child. Families of 177 kindergarten students participated in the program. The intervention was comprised of five parent coaching sessions and followed-up by parent and child activities that corresponded with the sessions. Results of the
intervention suggest that focused parent education can influence children’s literacy learning and, furthermore, the amount of participation by the parents influences effect size. The intervention had a larger statistically significant impact on students who had low scores on the given pre-test than on students that had higher scores on the pre-test.

Similarly, Neuman (1996) designed an intervention lasting three months that was aimed at providing mothers and children with a once-per-week book club experience where parents and children read and discussed storybooks. At the conclusion of the intervention, there was significant growth in the children’s vocabulary, as measured by the Peabody Picture Vocabulary Test (PPVT), and the children’s knowledge of print conventions. Additionally, Neuman and Gallagher (1994) created an intervention designed to teach teenage mothers cues to encourage literacy development during play and exploration. Following the intervention, an increase in interactional cues during play was demonstrated. In addition, children’s engagement in literacy activity increased and gains on the Peabody Picture Vocabulary Test were significant.

Several other studies suggest parent education programs effectively increase children’s ability to write (Saint-Laurent & Giasson, 2005), to increase frequency of reading (Primavera, 2000) develop oral language (Reese & Newcombe, 2007), and influence emergent literacy knowledge (Jordan, et al., 2000; Aram & Levin, 2009; Justice & Ezell, 2000). In addition to these studies, which support parent education for literacy learning, several studies have specifically evaluated parent education programs for teaching dialogic reading behaviors.
Parent Education for Dialogic Reading

Parent education promoting the use of dialogic reading during shared storybook reading has been studied widely (Reese, Sparks, & Leyva, 2010). There have been a considerable number of studies (ie. Whitehurst, et al., 1988), which will be described in the subsequent section, that support the use of parent education to increase the amount of dialogue between adults and children during shared storybook reading. The parent education programs in these studies have been conducted face-to-face and through video recorded training. While there are several studies that support the use of dialogic reading in preschools (ie. Lonigan, Anthony, Bloomfield, Dyer, & Samwel, 1999) and daycares (Valdez-Menechaca & Whitehurst, 1992) within the United States and internationally (ie. Chow & McBride-Chang, 2003), this research is outside the purview of the present study and is, therefore, not discussed. Rather, the following literature focuses on programming that was specifically designed to teach parents to use dialogic reading techniques.

Face-to-face parent education for dialogic reading.

Whitehurst, et al. (1988) studied the impact of a parent education intervention on parent reading behaviors during shared storybook reading and children’s expressive language ability. Parents were taught to increase their use of open-ended questions, function/attribute questions, and expansions; to respond when children attempted to answer their questions; and to decrease their frequency of straight reading and questions that could be answered by pointing. Parents received this instruction during two twenty-five to thirty minute face-to-face meetings at the local University. During these sessions the technique was explained, modeled, role-played with the parents, and a handout was
provided explaining the technique. Parents recorded their reading sessions at home.

Results from the recordings indicated that parents complied with the instruction in the parent education program. Furthermore, at the conclusion of the study, children in the control and experimental groups were given the Peabody Picture Vocabulary Test (PPVT). Children in the experimental group statistically outperformed the control group. These differences, although diminished, remained after nine months.

Huebner (2000a) also studied the effectiveness of providing parent education for the use of dialogic reading techniques on reading behaviors during shared storybook reading and measured children’s expressive vocabulary using the PPVT. However, the parent education program in this program was conducted in conjunction with a city-wide public library system. Two-thirds of the participants received the intervention aimed at supporting parents to utilize dialogic reading prompts, while one-third received typical library service programming. Similarly to the work of Whitehurst, et al. (1988), parents that received the six-week intervention showed a significant difference in their parent-child reading style in the experimental and control groups and differences in children’s expressive language ability were statistically significant.

It is also evident that parent education for the use of dialogic reading can increase the frequency of at-home reading and children’s enjoyment of shared storybook reading (Huebner, 2000b; Lonigan & Whitehurst, 1996). Moreover, parent education for dialogic reading can increase children’s knowledge of print concepts and writing development (Whitehurst, et al., 1994). As suggested above, parent education for dialogic reading can effectively be delivered face-to-face. However, evidence suggests that parent education for dialogic reading can also be delivered effectively via video recorded instruction.
Video training parent education for dialogic reading.

Arnold, Lonigan, Whitehurst, and Epstein’s (1994) research using video-training modules for providing parent education workshops also provides guidance for the development of parent education to support family literacy and children’s literacy learning and language development. Arnold et al.’s work (1994) pre-dates the widespread use of the Internet to create learning environments. However, the aim of the research was to determine the effectiveness of using video-training modules to support a parent’s ability to use dialogic reading (Whitehurst, et al., 1988) while sharing a storybook with their child. Sixty-four children and their mothers participated in the study. The parent-child pairs were split into three groups: a control group, a video-trained group, and a face-to-face instruction group. Results indicated that both training groups statistically outperformed the control group in oral language achievement measures. In addition, the video-trained group outperformed the face-to-face group on one measure of oral language achievement and there was no difference between groups on another measure. This suggests that parents receiving video training to support their ability to use dialogic reading, similarly to what could be done using multimedia tools online, are equally able to utilize the technique as parents who receive the instruction face-to-face.

Lonigan and Whitehurst (1996) replicated the previous study completed by Arnold, et al. (1994) in order to determine if the importance of who participated in the dialogic reading with the child. To this end, children that attended subsidized daycare were randomly assigned to one of four conditions: (1) no treatment control, (2) a school condition in which children were read to in small groups by their teacher, (3) a home condition in which children were read to by their parents, and (4) a combined school plus
home condition. While this study was conducted within a daycare center it is included in the review, because there was a parent education and at home reading component. Parents and teachers were trained in dialogic reading via an instructional videotape. Statistically significant differences in children’s oral language development were found for all three treatment groups. However, the effects were the largest for the groups that utilized an at-home reading component.

Huebner and Meltzoff (2005) also explored the viability of using instructional videotapes for parent education in dialogic reading. The research was conducted as a comparison study of parent education delivered by video recorded instruction alone, video recorded instruction with a follow-up phone call, or face-to-face instruction. Generally, after parents received any type of parent education, they used dialogic reading four times more than prior to the intervention. However, in contrast with Arnold, et al.’s (1994) findings, Huebner and Meltzoff (2005) findings suggest that parents participating in the face-to-face instruction were most effectively able to utilize the dialogic reading model.

The use of instructional videotapes to teach parents the dialogic reading techniques has also been utilized in local community health centers (Blom-Hoffman, O’Neil-Pirozzi, & Cutting, 2006). In this study, caregivers were assigned to control or treatment groups. Adults in the treatment group viewed instructional videotapes while visiting the doctor’s office. Adults in the control group received a handout explaining activities to promote oral language development. Results indicated that adults in the treatment group learned, and used, dialogic reading behaviors as a result of viewing the
instructional videotapes. Furthermore, the children of the adults in the treatment group spoke more while sharing storybooks than those in the control group.

These studies of utilizing instruction video recordings lend credence to the notion that parents can effectively learn in formats other than face-to-face and their learning enhances child(ren)’s literacy learning and language development. Although the aforementioned studies provide insight into providing parent education using methods other than face-to-face, providing parent education online affords different, expanded possibilities, which may impact the outcomes of the parent education program.

Several parent education programs designed to increase young children’s ability to read, write, listen, and speak have been described. However, most of these studies have failed to give an account of contextual factors that influenced the outcomes of the program or the parent’s perceptions. Yaffe and Williams’ (1998) is an exception. This study of the women who joined the Even Start Literacy Program holds valuable insight into some of the effective elements of parent education, even though Even Start did not meet its large-scale goals. In this study, the reasons why women joined the program, their expectations for the program, and the components of the program the women were satisfied with. Results of the study indicated that the women joined the program for various reasons, but most indicated that they wanted to learn, and also appreciated the relationships and rapport that were built in the program. In addition, this research illuminates the elements of the program that the women were highly satisfied with. These elements, which can provide guidance for the development of effective parent education programming, are: (a) the supportive environment; (b) the focus on individual needs; and (c) the removal of barriers to participation (ie. free child care was provided,
transportation was arranged). These findings are similar to that of St. Pierre, Swartz, Gamse, Murray, Dack, & Nickel (1995) who also documented the aspects of programming which improved retention of participants in the Even Start Family Literacy program. The results of the study were similar but additionally identified the importance of providing food to participants and giving parents materials to use at home (ie. books).

The families participating in another, large-scale family literacy program, Project FLAME, an intervention aimed at serving Hispanic families to promote literacy in the home, noted the importance of networking with other families and reported increased self-efficacy (Rodriquez-Brown, 2004). These considerations can serve as a guide for the implementation of parent education intervention in face-to-face settings. However, online learning environments may require a different set of features to be considered effective.

Due to the limited research exploring the experiences of parents participating in parent education programs, exploring the contextual factors that influence the outcomes of the program is worthwhile. Furthermore, the present study utilizes both face-to-face and online delivery models and offers insight into the purposes and experiences of parents using both delivery models. Considering the paucity of research in the use of the Internet for parent education, a discussion of what is known about effective online learning environments for college students follows below. This research guides the development of a learning environment for parent education.

**Online Learning Environments**

Students have been accessing education from a distance for many years. Historically, distance education has been available through correspondence courses (Pittman, 2003). These distance education practices have been, and continue to be,
influenced by the technology available at the time. Currently, the Internet creates new possibilities for distance education. For example, with the emergence of Web 2.0, there are increasing opportunities for users to access and publish information on the Internet with relative ease. Consequently, many colleges and universities are currently offering courses online (Parsad & Lewis, 2008) and the rate of growth for online course enrollment is far greater than that of the enrollment for traditional face-to-face higher education courses (Allen & Seaman, 2011). As a result, 31% of all higher education students take at least one class online (Allen & Seaman, 2011). The large number of students that choose to participate in online courses could be due to the (a) flexibility that it affords; (b) access to multimedia content that these technologies enable; and (c) unique opportunities for learning the technologies afford (Naidu, 2003). Therefore, considerable research, which suggests that online learning is viable and worthwhile for higher education has been conducted in these settings (Johnson, Aragon, Shaik, & Palma-Rivas, 2000).

However, research on using online learning tools for parent education does not exist at this time. Although the *Handbook of Distance Education* (2003) includes a section entitled Different Audiences in Distance Education, there is no mention of parent education. Therefore, considering the paucity of research conducted in online environments created for parent education, this review of literature will focus primarily on research conducted in college courses. Participants in college courses are adults and, therefore, are a similar audience to the adult participants in the current study.
Creating Effective Online Learning Environments

The design of an online course can affect the level of student satisfaction with a course (West, 2012). For example, Bures, Amundsen, & Abrami (2002) argued that intrinsic and extrinsic motivational factors can influence student satisfaction. Specifically, the student’s outcome expectations, self-efficacy, their relative enjoyment of the tasks, and the perceived relevance of the task all influenced the learners’ satisfaction levels in their study. This study also indicates that the student’s interest in the content and the belief that they could master the course content were also predictive of the student’s satisfaction with an online course. Therefore, the motivations of online learning participants must be carefully considered when designing an online course. However, motivations of the student are not the only factors to consider. The designer must also consider the use of multimedia.

Using digital technology does not ensure high-quality teaching. Rather, technology must be selected skillfully to support the learner in accessing the content of the online course. To effectively utilize digital technology in online courses, Ruhleder and Twildale (2000) suggest creating an environment including (a) collaboration; (b) opportunities for participants to develop over time through practice; (c) exemplars of practice; and (d) spaces for reflection to create a supportive online environment for learning. All of these aspects of an effective online learning environment are important elements of creating an effective learning environment and will be considered in the design of the current study. However, because parents have identified that they often consider relationships that they form during a parent education workshop to be a valuable aspect of their participation in the intervention (Yaffe & Williams, 1998), creating an
environment that allows for social interaction between participants is particularly essential and will be discussed with more detail in the subsequent sections.

**Collaboration.**

One of the strengths of using technology to create online learning environments is the possibility of creating spaces for dialogue and collaboration between learners (McConnell, 2000). Through synchronous and asynchronous forms of communication online, virtual communities can be created on the Internet (Blanchard, 2004) that can work together collaboratively (Curtis and Lawson, 2001). In fact, groups formed in online environments may develop a stronger bond than groups formed during face-to-face instruction (Walther, 1996).

To create these communities, participants may be placed into small groups. The most effective group size is between three to five members (Fisher, Thomas, & Silverberg, 2004). An individual’s contribution to the group is typically based on the need for social interaction, technical skills and equipment, and the ability to effectively use language, netiquette, and emoticons (Carabajal, LaPointe, & Gunawardena, 2003). Therefore, creating a space for social interaction amongst group members using simple or intuitive equipment may influence learners’ ability to contribute to the group, which may increase their satisfaction with the course.

**Spaces for reflection.**

Effective online learning environments should include a space for participants to reflect on their learning (Ruhleder & Twidale, 2000). Using digital technology can be especially useful for reflection, because inherent to most multimedia content used in an
online learning environment is that content may be recorded, viewed or listened to multiple times, and shared with others (Sammons, 2003). This feature of online learning environments allows participants to revisit course content.

**Summary**

The strong relationship between storybook reading and children’s language acquisition and literacy skills has been well documented (Senechal, LeFevre, Thomas, & Daley, 1998; Bus, et al., 1995, Lonigan & Whitehurst, 1998). In addition to increasing language acquisition and literacy skills, shared storybook reading also influences children’s motivation to read (Morrow, 1983). However, only 52% of children are currently read to everyday by a parent (Kuo, Franke, Regalado, & Halfon, 2004). Providing parents with a parent education program aimed at supporting parents’ ability to involve their children in dialogic reading while sharing storybooks could increase the frequency with which parents read with their children as well as the quality of the interactions while reading.

Although providing education for parents regarding literacy practices in addition to the current multiple literacy practices within the home is not a novel idea, studying the contextual factors that influence the outcomes of the course is valuable, because understanding these factors could help shape more effective methods of delivering parent education programming. The importance of determining these contextual factors has increased considering innovative possibilities for offering parent education face-to-face, online, or a hybrid of both delivery methods. Additionally, this study explores the impact of this parent education program on reading behaviors. Specifically, the impact of the program on reading frequency and the use of dialogic reading techniques is addressed.
CHAPTER THREE

RESEARCH DESIGN AND PROCEDURES

Introduction

Children’s experience with print prior to their entry into school is important to their developing conceptions of literacy (Teale & Sulzby, 1986) and later literacy development (Snow, Burns, & Griffin, 1998; Purcell-Gates & Dahl, 1991). Therefore, the role of the child’s family in developing understanding of literacy is vital (Taylor, 1983; Teale, 1986; Taylor & Dorsey-Gaines, 1988; Purcell-Gates, 1996). One particularly important experience with print is shared storybook reading (Senechal & LeFevre, 1998; Bus, vanIJzendoorn, & Pelligrini, 1995). Furthermore, the ways in which the adult and child communicate while sharing storybooks influences the child’s vocabulary development (Reese & Cox, 1999; Senechal, LeFevre, Hudson, & Lawson, 1996; Senechal, LeFevre, Thomas, & Daley, 1998; Hargrave & Senechal, 2000), understanding of comprehension processes (Yaden, Smolkin, & Conlon, 1989), and emergent literacy knowledge (Martinez & Teale, 1993).

One approach to communicating with children while reading is through dialogic reading (Whitehurst, Falco, Lonigan, Fischel, & DeBaryshe, 1988). Dialogic reading encourages parents to: (a) use open-ended questions and expansions; (b) respond to children’s attempts to answer these questions; and (c) diminish reading without dialogue (Whitehurst, et al., 1988). This approach to shared storybook reading increases vocabulary development (Whitehurst, et al., 1988), writing and print concepts (Whitehurst, Epstein, Angell, Payne, Crone, & Fischel, 1994), and emergent literacy
skills (Lonigan, Anthoney, Bloomfield, Dyer, & Samwel, 1999). Consequently, providing parents with educational programming promoting the use of dialogic reading may be of value (Lonigan & Whitehurst, 1998; Blom-Hoffman, O’Neill-Piozzi, Volpe, Cutting, & Bissinger, 2006). Specifically, parent education could increase the quantity and quality of the interactions between parents and their child(ren) surrounding storybooks (Jordan, Snow, & Porche, 2000). This type of parent education has typically been delivered in a face-to-face format. However, delivering parent education via the Internet using online teaching tools is now possible. Both types of delivery methods could impact the reading behaviors of parents and their children.

**Problems and Purposes Overview**

Although some parent education programs have not met their intended literacy learning outcomes (e.g. St. Pierre, Ricciuti, & Rimdzius, 2005), there is a large body of research that suggests that providing parent education can help parents to effectively support their child(ren)’s literacy development (National Early Literacy Panel, 2008). Considering the promising nature of both face-to-face and online delivery models of parent education to support families’ interactions while sharing storybooks, it is important to determine the contextual factors that influence the success of a parent education program in online and face-to-face settings. Contextual factors are the activities or considerations that influence the parents’ experiences in the program. For example, contextual factors may include the physical environment of a face-to-face course, the organization of an online course, etc. Understanding these factors could help shape more effective methods of delivering parent education programming. The importance of determining these contextual factors has increased considering innovative possibilities for
offering parent education face-to-face, online, or a hybrid of both delivery methods. Additionally, examining the impact of the program on the families’ shared storybook reading behaviors is important in determining the effectiveness of such programming.

Research Questions

This study examined if educating parents through a parent education program delivered online and face-to-face about dialogic reading changes families’ shared storybook reading behaviors. Additionally, this study explored the contextual factors of online and face-to-face settings that influenced the outcomes of the parent education program. The following questions guide the study:

(1) How does parent education in online and face-to-face settings influence shared storybook reading behaviors of families?

(2) What are the contextual factors that influence the experiences of participants in a parent education program on shared storybook reading in online and face-to-face settings?

To answer these questions, a multiple case study approach was utilized (Yin, 1993). Case study research is an approach in which the researcher studies a bounded system or systems over time through the collection of multiple sources of information and reports a case description and case-based themes (Creswell, 2007). Yin (2003) recommends utilizing multiple sources to describe the case by collecting six types of information: documents, archival records, interviews, direct observations, participant observations, and physical artifacts. Alternately, Patton (1987) suggests data collection in
the form of in-depth interviews, direct observations, and the collection of written documents.

In the present study the case studied is parent education and the context is the method of delivery, online and face-to-face. Thus, because one issue was studied in different contexts, the present study is a multiple case study (Yin, 1993). The types of information collected to describe this case were documents, interviews, direct observations, and physical artifacts. This information was gathered to describe parent education through case-based themes (Creswell, 2007) within the context of face-to-face instruction and within the context of online instruction.

A multimethod approach (Brewer & Hunter, 1989) was utilized for these case studies. Therefore data, which will be explained in detail in subsequent sections of this chapter, were collected. This multimethod approach was used, because “the employment of multiple research methods adds to the strength of evidence” (Brewer & Hunter, 1989, p. 89), and when multiple measures draw similar conclusions, there is a greater certainty of the results (Jick, 1979).

Furthermore, utilizing a multimethod approach makes the present study valuable in two important ways. First, although previous research has explored the relationship between teaching parents to use dialogic reading techniques and the parents’ ability to implement those methods (Whitehurst, et al., 1988), the contextual factors that influenced the experiences of the parents participating in the parent education and the outcomes of the program were not explored. A multimethod approach allows for a description of the contextual factors that influenced the experiences of participants in the parent education
program and an exploration of the impact of the program on reading behaviors, which
together shed new light on the issue of parent education and dialogic reading. Second, the
use of a multimethodological approach allows the teaching of dialogic reading to parents
to be explored across online and face-to-face delivery methods more effectively than if a
single methodology were employed. For example, if only observations, interviews, and
documents were collected, questions would remain about the effectiveness of the parent
education course in actually changing parent behavior and, conversely, if only pre- and
post-intervention videorecordings were conducted, the experiences of the participants
receiving the different delivery models would not be considered. Therefore, to more fully
discuss the contextual factors that influence the viability of face-to-face and online parent
education, a multimethod approach was most appropriate.

Participants

Background

This project was conducted in collaboration with Raising Readers in Story
County. Raising Readers in Story County is a non-profit group that was organized as part
of the Iowa Stories 2000 initiative. The organization is currently being supported
primarily through grants and boasts partnerships with the United Way and the Rotary
Club of Ames. The mission of Raising Readers is to improve language and literacy
development in children birth to age 8 and nurture healthy parent-child relationships. The
organization partners with the Ames Public Library on the “Books With Babies”
program, delivers literacy packets to new mothers at Mary Greeley Hospital, has
recruited the McFarland Clinic pediatricians to become a Reach Out and Read site, and
has created a Raising Readers Gift Book Program. In addition, in 2008 Raising Readers began a program entitled Raising Readers at Home. This program was designed to offer early literacy educational programming to families with infants and toddlers. Participants in the educational programming received a free book and information about early literacy strategies and at-home activities to promote literacy and prepare children for school. In the past, participants have attended any or all of four sessions offered throughout the year. The sessions have been focused on various aspects of literacy development and are titled as follows: (a) Talk to Me- Ways to Build Your Child’s Vocabulary Development; (b) Fun with Rhymes; (c) Beyond the ABCs- Exploring Writing; and (d) Fun with Books- How to Build Your Child’s Love of Books, Retell Stories, and Use Book Reading Strategies. The parent education program delivered as a part of this research project was modeled after aspects of Raising Readers at Home and the Fun with Books sessions previously offered by Raising Readers.

**Parent Education Program Participants**

In accordance with the typical procedure of the organization, the Raising Readers Program Coordinator, Mary, (all names are pseudonyms) assisted in marketing the face-to-face and online parent education program. She sent emails to potential participants approximately one month prior to the date of the first session, inviting them to participate in the face-to-face or online program. The email was sent to all of the approximately 2,000 parent(s) of young children for which the Program Coordinator has obtained email addresses (addresses were obtained through the partnerships with Mary Greeley Hospital and the pediatricians at the local health care clinic). Additionally, she delivered flyers to
area preschools and daycares. Finally, she posted information about the project on the organization’s website.

Forty-seven families responded to the call for participation by emailing or calling the coordinator of Raising Readers. To obtain more information about potential participants and how to group them, each family that registered was sent an email containing a link to a questionnaire that was delivered using Qualtrics survey software. The two families that did not have regular access to the Internet were called via the telephone. Families interested in participating in either version of the program submitted the following information on the survey: (a) Name(s) of parent(s); (b) Name(s) and ages of children three to five; (c) Name(s) and ages of other children in the home; (d) Whether or not the child has a speaking vocabulary of at least fifty words; (e) Interest in participating in online program, face-to-face program, or no preference; (f) If interested in online program, level of comfort with technology; (g) Previous participation in other parent education programs; (h) Frequency of family visits to the library; (i) Approximate number of children’s books available in the home; and (j) Frequency of storybook reading. See Appendix A for a copy of the questionnaire.

Although forty-seven families registered for the program, only thirty-eight of these families responded to further correspondence, including emails and/or phone calls. From the responses that were collected, groups were formed for the face-to-face and online programs according to parent preference. Seven parents indicated that they would prefer the face-to-face program. Sixteen parents indicated that they would prefer the online program, and fifteen parents indicated they would participate in either the face-to-face or online program. A group of twenty families were selected to participate in the
face-to-face program and a group of eighteen families were selected to participate in the online program. All of the families had a child, or multiple children, between the ages of three and five at the time of the study. Although some children were able to read independently at various levels of proficiency, most of the children were not yet reading on their own. Table 3.1 provides a further description of the participants.

Table 3.1  
*Descriptive Participant Information*

<table>
<thead>
<tr>
<th></th>
<th>Face-to-Face Program</th>
<th>Online Program</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Children in the Family</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 child</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>2 children</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>3 children</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>4 children</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td><strong>Attended Daycare</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>No</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td><strong>Previous parent education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>No</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td><strong>Library Use</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not at all</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Less than once a month</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Once a month</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Two or three Xs/month</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>
The twenty families selected to participate in the face-to-face program were divided into small groups of five to seven families each according to the availability. The workshops were conducted at a local church. The eighteen families selected to participate in the online program were divided into two smaller groups of eight and ten. These groups were formed based on the recommendation of Fisher, Thomas, & Silverberg (2004), who suggest that smaller groups create more effective online learning environments. However, six families were unable to complete the study for various reasons, which will be explained in more detail in the results. Seventeen families that participated in the face-to-face program and fifteen families that participated in the online program completed the study.

Table 3.1 continued

<table>
<thead>
<tr>
<th>Reading Frequency</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Everyday</td>
<td>17</td>
<td>11</td>
</tr>
<tr>
<td>Four or five Xs/week</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>About once/week</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Books in the Home</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 500</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Between 200 and 500</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Between 50 and 200</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Between 20 and 50</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>
Methods

The Intervention

The intervention was designed as a parent education program entitled Shared Talking and Reading (STAR). As explained previously, participants selected their preference for delivery model, online or face-to-face, for this intervention. Participants that chose to attend the face-to-face program attended five workshops with their child(ren), which were approximately two weeks apart and focused on the importance of shared storybook reading and the use of dialogic reading (Whitehurst, et al., 1988) while sharing storybooks. Similarly, participants that chose the online delivery model for the parent education program participated in five sessions, which were released on Blackboard Learn approximately every two weeks. These sessions also focused on the importance of shared storybook reading and the use of dialogic reading (Whitehurst, et al., 1988) while sharing storybooks. The face-to-face and online sessions of the program, which will be described more specifically in the subsequent sections, were designed consistently with the same intended learning outcomes and an emphasis on modeling and practice of the dialogic reading techniques.

Content and Structure of the Face-to-Face Sessions

The groups in the face-to-face program attended five parent education workshops. The primary topics for all of the workshops, which are listed in Table 3.2, focused on using dialogue during shared storybook reading. Huebner’s (2000) intervention, designed to teach parents how to use dialogic reading in small group settings at a local library, provided guidance for the content of the sessions. Specifically, Heubner (2000) followed
the recommendations of Arnold and Whitehurst (1994) by asking parents to “diminish reading behaviors that minimized the child’s verbal participation in favor of evocative techniques that facilitate the child’s active participation in telling the story” (p. 518). To facilitate such interactions, parents were taught to ask questions about functions and attributes of the text, encourage repetition and completion, praise their child(ren) often, use verbal expansions of the child’s language, and use open-ended questions while sharing a storybook. At the conclusion of each session the program participants completed an exit slip. The purpose of the exit slips was to collect information regarding what the participants felt they learned from the session, how they planned to practice what they had learned at home, and to provide a platform to ask further questions about the content of the session. The exit slips were collected as the participants left the session and were read prior to the next session. The information was used formatively to gauge what the participants were learning and also to insure that participants’ questions were being answered. Participants were also asked to complete a daily time diary. See Appendix B for a copy of the time diary. The purpose of the daily diary was to gather information regarding: (1) frequency and duration of shared storybook reading each day, (2) who was doing the reading, (3) what books were being read, and (4) parents’ comments about the shared storybook experience. Each session of the program is outlined more specifically in subsequent sections. After completing the first and last sessions of the program, each family selected a free book for participating in the program.

**Session one.**

The first session of the parent education program was conducted as a one-on-one workshop between the researcher and the parent(s) and child(ren). This session of the
program was designed to last approximately thirty minutes. Accordingly, the researcher conducted this session every thirty minutes between 9:00 A.M. and 8:00 P.M. on a scheduled Thursday, Friday, or Saturday, which each family signed up for when they registered for the parent education program. The researcher facilitated this first session of the program. The purposes of the first session of the program were: (a) to video record the families engaging with the storybook, *The Day the Goose Got Loose* (Lindbergh, 1995), and (b) to discuss the importance of shared storybook reading. The video recording procedures are explained in detail in a subsequent section of this chapter entitled video recording.

Following the conclusion of the video recording, the family met briefly for approximately fifteen minutes with the researcher. The main focus of this meeting was to discuss the importance of shared storybook reading and to encourage the parents to read with their children.

**Session two.**

During the second session of the parent education program, families met in small groups of three to six families for a forty-five minute whole-group workshop. Parents attended this session of the program with their child(ren), so they could practice utilizing the dialogic reading techniques with their child(ren). The primary focus of this session of the program was to define dialogic reading (Whitehurst, et al., 1988), introduce the strategies of dialogic reading, and explain the purpose of using such techniques. Whitehurst et al.’s (1998) research suggests that discussion and open-ended questions are integral and important features of storybook reading. Therefore, the objective for this
session of the program was for the parent(s) to understand how their own language and
discussion during the storybook experience can enhance their child’s language
development (Whitehurst, et al., 1988) and literacy learning (Martinez & Teale, 1989)
consistent with the recommendations of Huebner (2000).

To that end, the presenter used the Gradual Release of Responsibility (Pearson &
Gallagher, 1983) model to present information on how to increase the quality of the
dialogue parents have with their child(ren) while storybook reading. The Gradual Release
of Responsibility model suggests that strategies should first be modeled for the learner,
then done with the learner, and finally the learner should have an opportunity for
independent practice. Therefore, each session of the program was designed to provide
information about a dialogic reading behavior, then model the dialogic reading behavior
for parents by reading to the children, then give parents and their child(ren) opportunities
to try the dialogic reading behaviors and ask questions, and finally, provide time for
independent practice with the dialogic reading behavior. This approach was taken so that
parents would have the opportunity to see the behaviors modeled and then practice using
them in a group setting before going home to try them independently.

In this second session of the program, the presenter began by describing the types
of discussion and questioning that elicit language and literacy learning explicitly
(Huebner, 2000). Next, the presenter modeled dialogic reading (Whitehurst, et al., 1988)
by reading an age-appropriate book, *The Little Cloud*, (Carle, 1996) to the children. As
the presenter introduced dialogic reading, a discussion of appropriate book selection was
infused. Then, parents practiced using dialogic reading with *The Snowy Day* (Bunting,
2000). As parents began trying the strategy, opportunities for discussing questions and
what parents perceived as potential obstacles were presented. After the families completed their dialogic reading practice, the children were given a paper on a clipboard and a pencil. The paper included a prompt, which stated, “I like to ________ outside.” The presenter explained that it is beneficial for children to continue thinking about the storybook by writing about it. Then, she gave the children an opportunity to draw and/or write to complete the prompt. Considering that most of the children were not yet able to read, she pointed to each word while she read the prompt out loud. Then, she asked the children, “What do you like to do outside?” before they started writing and/or drawing.

Many of the parents spoke with their children about what they were planning to write and/or draw. While the children wrote, the presenter provided concluding comments and offered an opportunity for parents to ask questions. As she spoke, some children asked their parents how to spell words and/or tried to engage in conversation with their parent about their writing. Finally, the session concluded with the opportunity for parents to ask questions and complete an exit slip, which asked: (1) Do you feel that you are already a dialogic reader? Why or why not?; (2) What, if anything did you learn that you will remember and practice; (3) What questions do you still have?.

Session three.

The third session of the program was conducted as a forty-five minute whole-group session. Families met in the same groups as in the previous session and attended with their child(ren), so they could practice utilizing the dialogic reading techniques with their child(ren). The primary focus for the third session of the program was to review, reinforce, and give additional practice with using dialogic reading while sharing a storybook. The specific focus of this session of the program was using the Prompt
Evaluate Expand Repeat (PEER) technique (Zevenbergen & Whitehurst, 2003) to encourage dialogic reading. When utilizing this technique the adult begins by prompting the child often by asking the child a question. This question is frequently about a picture. For example, the adult may point to a picture of a car and say, “What is that?” The child would then respond. The next step in the sequence is evaluate. During this step, the adult expresses to the child if their response was correct or incorrect. In the previous example, the adult would respond by saying, “Yes, that is a car.” Next, the adult expands the response by re-stating the child’s answer and infusing novel vocabulary into the expanded sentence. For example, the adult may take the child’s statement, “That is a car.” and say, “Yes, that is a car. That car is called a limousine. It is a limousine, because it is a long car and can seat many people.” Finally, the adult has the child repeat the new vocabulary that was inserted into the expansion. So, in the case the adult might say, “Can you say limousine?” The goal of this technique is to encourage the child to use dialogue, ask questions, and increase their vocabulary.

Similarly to the format in session two of the program, the presenter used the Gradual Release of Responsibility (Pearson & Gallagher, 1983) model to present information to parents how to use increase the quality of the dialogue they have with their child(ren) during shared storybook reading and provide practice opportunities. Although the delivery model was the same (the Gradual Release of Responsibility model) the emphasis of the session, the PEER technique, and the books used during the session were different than the previous session. Mary, the presenter, used Have You Seen My Duckling (Tafuri, 1984) for modeling dialogic reading. Parents used The Flower Garden (Bunting, 2003) to practice using the PEER technique to promote dialogic reading. At the
conclusion of the session, parents were asked to complete an exit slip, which asked: (1) Which part of the PEER strategy are you the most comfortable with?; (2) What did you learn today?; and (3) What will you practice at home?.

Session four.

The fourth session of the program was also conducted as a forty-five minute whole-group session. Families met with the same group as in the previous sessions and adults and their child(ren) attended, so that the adults could practice the dialogic reading techniques in the session. The primary focus of the fourth session of the program was to review, reinforce, and give additional practice using dialogic reading while sharing a storybook by presenting the CROWD technique (Zevenbergen & Whitehurst, 2003), which is an acronym for (C)ompletion, (R)ecall questions, (O)pen-ended questions; (W)h-prompts; and (D)istancing. The CROWD technique is complimentary to the PEER technique in that each of these are methods of prompting children to use language during shared storybook reading, which is the first step in PEER. While PEER is meant to elicit conversation around the storybook and is explicitly aimed at vocabulary expansion, The CROWD technique is meant to support the PEER technique by giving parents specific ways in which they might prompt their child to use dialogue during shared storybook reading that can then be evaluated, expanded on, and repeated. The CROWD types of prompts are meant to encourage more dialogue than one-word answers, such as the car example in the explanation of PEER. Therefore, using CROWD to support PEER can increase the amount of dialogue during shared storybook reading.
The first prompt, *completion*, encourages parents to stop and pause, which allows their child time to complete the statement in the book. This often works well with a line that rhymes or that repeats several times in the book. For example, in *The Day the Goose Got Loose*, the book read during the pre- and post-intervention videos, the line, “the day the goose got loose” repeats on nearly every page. When using the completion prompt during this story, a parent would stop and pause to provide the child with the opportunity to complete the line. The *recall* prompt is designed to encourage parents to ask their child questions about the story. These types of questions help children to understand the story and sequence it’s events. The next technique is asking *open-ended questions*. This prompt is meant to assist parents to move beyond asking questions that require a one-word answer into asking questions that require children to use long phrases of expressive oral language. Similarly, parents are also taught to use prompts beginning with Wh-question words like why, what, and who. These types of questions also allow the child to respond by using expressive oral language to explain their thinking in relationship to the story. One important type of question that was presented in this session was, “What do you think might happen?” In this way, parents were taught to have their children make predictions about the story. Finally, parents were taught to prompt *distancing*, which means to make connections to the story. For example, when reading *The Flower Garden* the parent might say, “Remember when you made me a birthday cake. That was so kind of you and you were so proud. The birthday cake you made for me was chocolate, but this cake is yellow.” These types of prompts assist the child in comprehending the story and expand their understanding of the world.
Similarly to the session format for sessions two and three of the program, the presenter used the Gradual Release of Responsibility (Gallagher & Pearson, 1983) model to teach parents how to increase their use of dialogue while sharing a storybook with their child(ren) by modeling the CROWD technique of encouraging dialogue. The primary emphasis of the session of the program was to increase the frequency with which parents: ask questions about functions and attributes, encourage repetition, use verbal expansions of the child’s language, and use open-ended questions while sharing a storybook. *The Three Little Pigs* (Kellogg, 2002) was used to model the CROWD technique and families were given a choice of multiple age-appropriate books with which to practice the technique. Several families read more than one book during the allotted time for practice using the strategy. Finally, the parents were asked to complete an exit slip at the conclusion of the session. The prompts on the exit slip were: (1) How do you think these prompts will help you to generate good dialogue between yourself and your children? and (2) What questions or concerns do you have?.

**Session five.**

Session five, the final session of the program, was aimed at offering activities that extended the shared storybook reading for participants. Families could attend this session anytime between 1:00 pm and 7:00 pm and could arrive and depart at their convenience. During this session families participated in a wide-range of reading activities, which were related to the books used for modeling during each of the three previous sessions of the program. These activities were completed in centers. For example, the first center was an extension of *The Little Cloud* (Carle, 1996). In this center children made a snack mix using several ingredients with similar appearance to clouds (ie. marshmallows, yogurt
covered raisin). While families participated in centers, the researcher and an assistant recorded each family reading *The Goose is Loose* (Lindbergh, 1995) in separate, quiet rooms. The recording procedures for the post-intervention video were similar to the recording procedures for the pre-intervention video and are described in more detail in a subsequent section entitled video recording. After completing the activities at the centers, each family received a book for participating in the project.

Table 3.2

*Face-to-Face Parent Education Sessions: Content and Structure*

<table>
<thead>
<tr>
<th>Session number</th>
<th>Meeting type</th>
<th>Content focus</th>
<th>Data collected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session one</td>
<td>One-on-one</td>
<td>The importance of shared storybook reading</td>
<td>Pre-intervention video recording; Explain and deliver time diary</td>
</tr>
<tr>
<td>Session two</td>
<td>Small group</td>
<td>Selecting appropriate books; Using dialogic reading</td>
<td>Observations; Time diaries; Exit slips</td>
</tr>
<tr>
<td>Session three</td>
<td>Small group</td>
<td>Reviewing dialogic reading with emphasis on diminishing reading behaviors (ie. asking yes/no questions)</td>
<td>Observations; Time diaries; Exit slips; Interviews</td>
</tr>
</tbody>
</table>

Using the PEER Technique
Table 3.2 continued

<table>
<thead>
<tr>
<th>Session four</th>
<th>Small group</th>
<th>Reviewing dialogic reading with particular emphasis on encouraging dialogue through CROWD techniques</th>
<th>Observations</th>
<th>Time diaries</th>
<th>Exit slips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session five</td>
<td>Large group</td>
<td>Reading extension activities</td>
<td>Post-intervention video recordings</td>
<td>Interviews</td>
<td>Time diaries</td>
</tr>
<tr>
<td></td>
<td>Drop-in session</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Online Sessions**

The online parent education program was also designed as five sessions using the website Blackboard Learn, a free course management system. Each of the sessions of the program had a specific content focus, which was aligned to the content focus of each session of the face-to-face parent education program. Therefore, the Gradual Release of Responsibility (Pearson & Gallagher, 1983) was considered. In the same design as the face-to-face program, parents listened to a presentation, watched a video modeling the technique, and then were encouraged to try practicing the technique with their child(ren). The content focus for each session of the program was identical to the content focus for each session of the face-to-face program, is listed in Table 3.3, and is explained in more detail in the subsequent sections. The same Power Point presentations, handouts, and resources were provided to the participants in the face-to-face and online parent education programs.
The features of Blackboard Learn that participants used in each session of the parent education program were the ability to: watch videos created by the researcher and videos published on YouTube, view researcher created Power Point presentations, read and print handouts that supported the Power Point presentations, and post questions and comments at the end of each session. Although several participants were not familiar with the site, explicit instructions on how to navigate the site were included for each session. For example, the main page included a Welcome to Raising Readers at Home introductory video. This video welcomed parents to the course and included directions on how to complete session one of the program. Written directions were also provided for each session.

In conjunction with the Gradual Release of Responsibility model (Pearson & Gallagher, 1983), Ruhleder and Twildale’s (2000) recommendations for creating effective online learning environments were considered. Therefore, the Blackboard Learn course allowed for (a) collaboration, (b) opportunities for participants to develop over time through practice, (c) exemplars of practice, and (d) spaces for reflection to create a supportive online environment for learning. Specifically, spaces for collaboration and reflection were created through discussion forums designed to promote socialization around parents’ reflections on, and response to, practicing dialogic reading. Instructional video recordings serve as exemplars of practice that modeled dialogic reading with children and also gave participants time to practice using dialogic reading. Within each session, participants were reminded to complete their time diary, which was used to gather information regarding frequency and duration of shared storybook reading, who was doing the reading, a sample of the books being read, and comments each night.
Session One.

Similarly to the participants in the face-to-face parent education program, the initial meeting for the online participants was also a face-to-face meeting with individual adults and their child(ren). During this initial session of the program parents were video recorded reading *The Day the Goose Got Loose* (Lindbergh, 1995) to their child(ren). Following the video recording, the parent(s) were presented with directions for enrolling in the Blackboard Learn course. Specifically, each parent was informed that they would receive an email invitation the following Monday, which included a link to enroll.

Following the pre-intervention video recording, participants were invited to join the Blackboard Learn page via email and were given instructions to watch a video, which welcomed them to the course site and provided more complete directions for completion of the online component of session one. The content for session one focused on the importance of storybook reading, which was a duplication of content offered to the face-to-face groups during their first session of the face-to-face program. However, the Power Point contained audio-recorded voice over, which included the same explanation of the importance of storybook reading given to the face-to-face participants in session one. Following the video, participants were encouraged to post questions, comments, or reflections to a discussion board created within the site. The discussion prompt for session one stated:

Please introduce yourself. You may want to include your reasons for taking this course or anything else you would like you “classmates” to know. Additionally, please discuss if any of the
reading reasons surprise you. If so, which one(s)? Do you have any questions? You may answer this using text of by uploading a video if you wish. You may also view one another’s posts and respond to each other.

The researcher monitored the discussion board and promptly responded to posts.

**Session Two.**

In congruence with the face-to-face sessions of the program, the primary focus of this session of the program was to define dialogic reading (Whitehurst, et al., 1988), introduce the strategies of dialogic reading, and explain the purpose of using such techniques. Whitehurst et al.’s (1998) research suggests that discussion and open-ended questions are integral and important features of storybook reading. Therefore, the objective for this session of the program was for the parent(s) to understand how their own language and discussion during the storybook experience can enhance their child’s language development (Whitehurst, et al., 1988) and literacy learning (Martinez & Teale, 1989) consistent with the recommendations of Huebner (2000).

To that end, an audio-recorded lecture was created using the Power Point presentation from session two of the face-to-face program to present the tenants of dialogic reading (Whitehurst et al., 1988). Next, the participants watched a video created by the researcher, which modeled dialogic reading. In the video the researcher shared a storybook with a child and specifically demonstrated the types of discussion and questioning that elicits language and literacy learning explicitly (Huebner, 2000). After the parent(s) watched this initial video, they were asked to stop and try the technique with
their child(ren). To support their efforts, a folder containing seven reading guides, which were also provided as resources in the face-to-face program, were included in the materials for the session. These reading guides included sample recall questions, open-ended questions, and vocabulary for age-appropriate books. Finally, parents were encouraged to post a response to their experience on the discussion board. The questions were the same questions given to the face-to-face program participants on their exit slip. Thus, the following guiding questions were posted on the discussion board: (1) Which part of PEER do you feel most comfortable with? (2) What did you learn from this module? and (3) What will you continue to practice after this module? The researcher monitored the discussion board and responded promptly to posts submitted by participants.

**Session Three.**

The primary focus for the third session of the program was to review, reinforce, and give additional practice with using dialogic reading while sharing a storybook by presenting the PEER technique (Zevenbergen & Whitehurst, 2003), which was explained in the previous face-to-face section. Similarly to the format in session two of the program, the Power Point presentation used with in the face-to-face program, with a corresponding audio-recorded lecture, was presented within the module first. Additionally, a handout with the information written in bullet-point form was provided as a supplement to the Power Point presentation. This handout was also given to the face-to-face participants to support their understanding of the content. Next, participants viewed a video created by the researcher aimed at modeling the use of the PEER technique during shared storybook reading. In the video the researcher used the PEER technique
while reading a book with her three year-old son. After parents viewed the video, they were asked to try using the PEER technique while sharing a storybook with their child. Additionally, the following guiding questions were posted on the discussion board to prompt discussion: What book did you choose to read with your child and why?” and, “How did it go?” Although these questions were not identical to the questions given during the face-to-face program, they are similar. The researcher monitored the discussion board regularly and promptly responded to posts.

**Session Four.**

The primary focus for the fourth session of the program was to review, reinforce, and give additional practice using dialogic reading while sharing a storybook by using the CROWD technique (Zevenbergen & Whitehurst, 2003), which was explained in detail within the section of this chapter explaining the face-to-face instruction. The emphasis of the session was to increase the frequency with which parents used the following prompting techniques while sharing a storybook: (C)ompletion; (R)ecall; (O)pen-ended questions; (W)h- questions; and (D)istancing. Similarly to the format in sessions two and three of the program, the exact Power Point from the face-to-face program for session four, with the addition of an audio-recorded lecture, was used to initially present the content of the session. There was also a handout included in the session’s folder that provided the information from the Power Point presentation in bullet form. This handout was also given to the participants in the face-to-face program. The parents were directed that they could use the handout as a reference when they shared a storybook with their child. Next, participants viewed two videos created by a teacher that explained and modeled using CROWD prompting techniques for dialogic reading. The videos were
found on YouTube and were included within the Blackboard Learn course. After the parents viewed the videos, they were encouraged to try dialogic reading and then post to the discussion board. The prompts on the discussion board were: (1) Which prompt do you use most often? and (2) Which prompt do you find most difficult to use?. Finally, there were links to two informational pamphlets created by the Raising Readers coordinator. The content of each focused on continuing to support children as they begin to read independently. These resources were shared during the fourth session of the face-to-face session, so were included in the online session as well.

**Session Five**

The fifth, and final, session of the program presented activities for extending literacy play similarly to the fifth session of the face-to-face program. These activities were introduced using pictures and written directions. Video was not used in this session of the program, because no modeling of behaviors was done. Rather, pictures were provided to illustrate the types of activities that can support and extend a storybook. The written instructions provided the rationale for such projects as well as directions for each activity that was provided. The questions, “Which of these activities did you try?” and “How did it go?” were posted on the discussion board. The researcher monitored the board and responded when appropriate. During the week this final, fifth session was available, participating families scheduled a final face-to-face meeting. During this meeting parents completed a post-intervention video recording of *The Day the Goose Got Loose* (Lindbergh, 1995) with their children as described in the subsequent section entitled Video Recording.
Table 3.3

*Online Parent Education Sessions: Content and Structure*

<table>
<thead>
<tr>
<th>Session number</th>
<th>Meeting type</th>
<th>Content focus</th>
<th>Data collected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session one</td>
<td>Face-to-face pre-intervention video recording and online content delivery</td>
<td>The importance of book reading</td>
<td>Pre-intervention video recording; Explain and deliver time diary survey</td>
</tr>
<tr>
<td>Session two</td>
<td>Online</td>
<td>Using dialogic reading</td>
<td>Observations of online activity, Time diary</td>
</tr>
<tr>
<td>Session three</td>
<td>Online</td>
<td>Reviewing dialogic reading with emphasis on using the PEER technique</td>
<td>Observations of online activity, Time diary, Interviews</td>
</tr>
<tr>
<td>Session four</td>
<td>Online</td>
<td>Reviewing dialogic reading with particular emphasis on encouraging dialogue through CROWD prompts</td>
<td>Observations of online activity, Time diary</td>
</tr>
<tr>
<td>Session five</td>
<td>Online content delivery and face-to-face post-intervention video recording</td>
<td>Reading extension activities</td>
<td>Post-intervention video recordings, Time diary, Interviews</td>
</tr>
</tbody>
</table>
Data Sources

Data for the face-to-face program were collected using pre- and post-intervention video recordings of shared storybook reading, a time diary survey, exit slips at the conclusion of each face-to-face session, interviews, and observations. Data for the online program were collected using pre- and post-intervention video recordings of shared storybook reading, a time diary survey, posts made to the online discussion board within Blackboard Learn, and interviews. The collection processes is outlined in Table 3.4 and explained in the subsequent sections.

Table 3.4

Data Collection Procedures

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Face-to-Face</th>
<th>Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-intervention video</td>
<td>Session one</td>
<td>Session one</td>
</tr>
<tr>
<td>Post-intervention video</td>
<td>Session five</td>
<td>Session five</td>
</tr>
<tr>
<td>Time Diary Survey</td>
<td>At each meeting</td>
<td>At the end of each module</td>
</tr>
<tr>
<td>Observations</td>
<td>Sessions one to five</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Exit Slips</td>
<td>At the conclusion of session two through four</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Discussion Board Posts</td>
<td>Not applicable</td>
<td>During and after each session</td>
</tr>
<tr>
<td>Participant Interviews</td>
<td>After session three</td>
<td>After session three</td>
</tr>
<tr>
<td></td>
<td>During session five</td>
<td>At the final face-to-face meeting</td>
</tr>
</tbody>
</table>
**Video Recording.**

Pre- and post-intervention video recording was conducted with all of the participants. The first video recording was conducted in a small room at the local University during a thirty-minute time frame selected by each participating family. During this meeting the face-to-face participants were recorded reading *The Day the Goose Got Loose* (Lindbergh, 1995) with their child(ren) and listened to a short presentation by the researcher on the importance of reading with young children. The online participants also took part in a thirty-minute initial face-to-face session for video recording and received instructions on how to access the online content. However, these participants viewed the presentation concerning the importance of sharing storybooks in Session One of the Black Board Course Site.

The post-intervention video was conducted during the final fifth session of face-to-face instruction and during the final week of the online program. The participants receiving the face-to-face program could attend this final session between 1:00 and 7:00 pm at a convenient time. During this session of the program, families worked in centers as previously described. Therefore, parents and their children were able to complete the video recording at various times either before, during, or after they completed the centers. The video recording took place in the same small room as the pre-intervention video recordings and was conducted by the researcher and an assistant. The same book that was read during the pre-intervention video recording, *The Day the Goose Got Loose* by Reeve Lindbergh, was also read for the post-intervention video recording.
Experience sampling method.

In order to determine the frequency and duration of reading the families completed between sessions, the experience sampling method (Christensen, Barrett, Bliss-Moreau, Lebo, & Kaschub, 2003) was used to collect data from all participants in the face-to-face and online programs. This method was employed because it can provide an account of the respondent’s thoughts, feelings, or actions in the context of everyday life (Christensen, Barrett, Bliss-Moreau, Lebo, & Kaschub, 2003). Parents were provided a form (See Appendix B) and asked to record the amount of shared storybook reading they did with their children each day, as well as who was doing the reading, a sample of the books being read, and comments about the reading experience after their child went to bed. Participants were reminded during each session of the parent education program to complete their time diaries on a daily basis. Face-to-face participants completed this record using a paper recordkeeping diary, which was provided at each session of the program. Online participants completed this record using an Excel sheet provided within Blackboard Learn. Participants were instructed to complete the time diary after their child(ren) went to bed in the evening because families are typically settled for the night after their child(ren) go to bed and may have just participated in a bedtime shared storybook routine that could have been easily recalled. The paper diaries were collected from the participants in the face-to-face program at the beginning of each session. The diaries were collected from the participants in the online program at the end of each session using Blackboard Learn or by email.

Although using paper and pencil for face-to-face participants to collect responses may reduce the timeliness of completion of the diary (Scollon, Kim-Prieto, & Diener,
2003), not all participants in the face-to-face program had access to technology for response. Additionally, response rates among types of experience sampling methods tend to be the highest for using paper and pencil collection methods (Christensen, et al., 2003). Therefore, paper and pencil diaries seemed to be the most effective choice for participants in the face-to-face program and a similar electronic tool for participants in the online program.

**Observations.**

The researcher recorded observations during each session of the face-to-face program. During these observations, particular emphasis was placed on parental engagement with their child(ren), communication between participants and the presenter, and the social interaction among participants. See Appendix C for the observation record form that was used.

**Exit slips.**

At the conclusion of each face-to-face session of the program, parents were asked to complete an exit slip. Although the questions on each exit slip were different, the goal of each was to ask what the participant learned in the session, how they felt they might use the information at home, and what questions they might still have. Specifically, these exit slips provided insight into what content parents were finding valuable in each course, how they were planning to use dialogic reading techniques during their at-home shared storybook reading, and gave them a platform for asking questions or giving feedback about each session of the program. For example, the exit slip provided at the conclusion
of session three asked: (1) Which part of the PEER strategy are you the most comfortable with?; (2) What did you learn today?; and (3) What will you practice at home?.

**Discussion board posts.**

Similarly to the exit slips completed at the conclusion of each session of the face-to-face program, participants in the online program were asked to post comments in response to a prompt on a discussion board within Blackboard Learn. The participants in the online program were directed to complete the discussion prompt at the conclusion of the information provided within each session. The goal of the prompts was to initiate discussion regarding what the participant learned in the session of the program, if or how they felt they may continue to use this information, and what questions they may still have. While the exit slips for face-to-face participants were written with the sole audience of the researcher, all of the participants could read and respond to posts on the discussion board. Thus, this board provided a platform for interaction between participants.

**Interviews.**

Several semi-structured interviews were conducted throughout the parent education program. The primary focus of all of the interviews was to ascertain a description of the family’s experiences during the parent education program and a description of the factors that contributed to their ability to implement dialogic reading during shared storybook reading. Participants in the face-to-face program were typically interviewed at the conclusion of their session, because it was difficult to conduct interviews during the presentation and practice times as the adults were often busy with their child(ren). Participants in the online program were typically interviewed over the
phone. However, several interviews were conducted during the final meeting following the post-intervention video recording. This setting proved conducive for most parents to discuss their perceptions with minimal interruption about their experience in the program. See Appendix D for a listing of the semi-structured interview questions that were used.

**Data Analysis**

**Analysis of Observations, Interviews, and Documents**

The present study, as many studies do, generated a voluminous amount of data (Patton, 1987) through the collection of observations, interviews, notes on the time diaries, exit slips or discussion board posts. Therefore, the first step in data analysis was to create a data book, which included copies of all of the generated data. The data were organized chronologically by the delivery method of parent education and type of document.

The data from the face-to-face and online programs were initially read and analyzed independently of one another. All of the data were read and descriptive notes were taken (Patton, 1990), using an inductive approach (Miles and Huberman, 1994), which is similar to open coding (Strauss and Corbin, 1990). As the data were read, notes explaining the initial impressions of the researcher were recorded and preliminary relationships between instances were noted. Next, all of the descriptive notes taken in the margins of the data were read and a memo (Miles and Huberman, 1984) was created. Glaser (1978) describes a memo as “the theorizing write-up of ideas about codes and their relationships as they strike the analyst while coding” (p. 83). Thus, in this case the purpose of the memo was to record the researcher’s impressions after the first read of the
data. This memo, as well as subsequent memos, was dated, entitled with key concepts, and linked to specific notes (Miles & Huberman, 1984).

After writing this reflective memo, provisional codes were created by putting segments of ideas into categories (Strauss, 1987). Specifically, data were separated into units, which were defined by ideas on the same topic or issue. For example, an observation record stated, “Most of the parents arrived right at 5:45 or a little bit later. Thus, we did not get started until about 5:50.” This was considered one unit and was coded as ‘time’, because both sentences described the time of the session. When generating these codes, Strauss and Corbin’s (1990) recommendation of developing codes in terms of properties, which can be dimensionalized by considering the frequency, extent, intensity, and duration of each instance, was taken into account. As these initial, provisional codes were generated and applied, marginal notes were continuously being produced. After these initial provisional codes were applied, another memo was written. The frequency with which each code was applied was tallied. Using the tally marks, marginal remarks, and memos, codes were then revised and refined. Patterns between themes were identified and some themes were folded into others according to their patterns during the revision process (Miles & Huberman, 1984). Table 3.5 illustrates the finalized coding scheme and provides an example each code.

Triangulation of data was carefully considered (Jick, 1979). First, this was considered within the interviews, observation records, exit slips, and notes on the time diaries. Thus, each theme generated was supported by multiple points of data. Next, the data from the pre- and post-intervention videos, which will be described in more detail in the next section, as scored using the ACIRI, and the frequency and duration of shared
storybook reading as recorded on the time diaries, were used to supplement and support the qualitative data. Using both of these forms of data created a more comprehensive view of the case, and, therefore, a greater confidence in its results (Jick, 1979).

Following the within case analysis, a cross-case analysis was conducted to deepen understanding and explanation across parent education delivery models (Miles & Huberman, 1994). During this step of the analysis all of the data from both cases were read and marginal notes were taken (Miles & Huberman, 1994). Then, provisional codes were created by putting segments of ideas into categories and inductively coding the data (Strauss, 1987). The frequency each code applied was tallied and the codes were then revised and refined. Patterns between themes were identified and some themes were folded into others according to their patterns during the revision process.

Table 3.5

**Coding scheme with examples from each code**

<table>
<thead>
<tr>
<th>Code</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Online</strong></td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td>What I liked about it was that I could do it on my own time, which is typically 11 o’clock at night, so when the kids are already in bed.</td>
</tr>
<tr>
<td>Re-visiting content</td>
<td>I went back and watched it again.</td>
</tr>
<tr>
<td>Inclusion of video/modeling</td>
<td>The videos of reading are helpful.</td>
</tr>
<tr>
<td>Discussion board use</td>
<td>I’ve looked at them [the discussion boards] and I know I have thought about the answer, but I don’t see other people doing that, so I am not, maybe I am just not getting them, but I am like, am I going to be the only one?</td>
</tr>
</tbody>
</table>
Table 3.5 continued

Face-to-face

<table>
<thead>
<tr>
<th>Children’s engagement</th>
<th>When each of the children finish reading with their parents, Mary gives each child a feather to play with while the parents complete the exit slip.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult engagement</td>
<td>I like the idea of having us both there and I like when they brought the kids over to do things, but I felt when they were just talking to parents there wasn’t enough for the kids to, because I felt like I couldn’t pay attention, because I kept focusing on her.</td>
</tr>
<tr>
<td>Physical space</td>
<td>The room is very large and some of the children used it as a track.</td>
</tr>
<tr>
<td>Time</td>
<td>It was more difficult than I expected to get there every time, even though it was every other week and stuff.</td>
</tr>
<tr>
<td>Relationships</td>
<td>Sadie asked Christa, “What department do you work in?” They continued to chat for 2 or 3 minutes.</td>
</tr>
<tr>
<td>Adaptations to the program</td>
<td>Mary brought in clipboards with paper on them and pencils for the children to draw/write a response to <em>Little Cloud</em>.</td>
</tr>
</tbody>
</table>

Analysis of Pre- and Post-Intervention Videos

The analysis of the pre- and post-intervention video recorded storybook readings was completed using the Adult/Child Interactive Reading Inventory (ACIRI) (De-Bruin-Parecki, 2006). The ACIRI is an observational tool for measuring the qualities of the interaction during the natural conditions of shared storybook reading. See Appendix E for a copy of the inventory. This inventory was selected as the measurement tool because it measures the behaviors of the adult and the child while sharing a storybook (De-Bruin-Pareck, 2006). The tool is designed to focus on the following three areas, which are closely aligned with the content presented in the parent education intervention: enhancing
attention to text, promoting interactive reading and supporting comprehension, and using literacy strategies. However, due to the focus of the intervention, only the second and third sections of the inventory were completed during this analysis. To determine if parent education influences the quality of interactions during storybook reading, pre- and post-intervention video recordings were analyzed for the frequency of the adult’s dialogic reading behaviors to include: questioning, pointing out pictures to assist in identification, making connections between the book and the child, answering the child’s questions, identifying visual cues related to the story, soliciting predictions, asking recall questions, and elaborating on the child’s ideas. Additionally, the child’s behaviors were analyzed including: the child’s response to the adult’s questions, the child’s response to adult cues focusing on pictures or words, the child’s ability to make connection between the book and their experiences, the questions the child poses, their response to visual cues, predictions made, and spontaneous ideas offered about the story. These behaviors are thoroughly described within the inventory’s manual. Thus, the reading behaviors were easily identified. Two of the participating families were bilingual; one spoke English and Russian and the other spoke English and Chinese. These families were told to read as they would in their homes. Therefore, both families did some reading and talking in English and their native language. These pre- and post-intervention video recordings were not used in the analysis.

Each of the aforementioned behaviors was scored numerically using the zero to three scale of the ACIRI Inventory. In this zero to three scale, zero indicates no evidence of the behavior (zero times), one indicates that the behavior occurs infrequently (one time), two indicates that the behavior occurs some of the time (two to three times), and
three indicates that the behavior occurs more of the time (four or more times). Therefore the each parent and child dyad received a score of zero to three on a total of eight adult behaviors and eight child behaviors. To insure accuracy, each extra-textual utterance that was considered to be one of these eight reading behaviors was transcribed on the inventory. Therefore, each inventory lists the scores of each adult and child, but also the transcribed language each used during shared storybook reading. Additionally, a mean score was generated for adults and children in two areas: (1) promoting interactive reading and supporting comprehension and (2) using literacy strategies. Finally, an overall mean score was determined for each adult and each child using the zero to three scores from all eight reading behaviors. Considering the relatively small sample size of these data, the assumption of normalcy was not meant and use of a non-parametric test was necessary. Therefore, the inventory results were analyzed using the Wilcoxon signed-rank test (Elliott & Woodward, 2007) to ascertain whether or not the parent education program was effective in teaching dialogic reading behaviors.

The time diaries were also analyzed inductively in order to provide insight into the frequency and duration of shared storybook reading for each family, time diaries were collected at the end of each session of the program. Furthermore, information regarding who was doing the reading, a sample of books being read, and the comments provided by the parents were recorded. The frequency and duration of shared storybook reading that was recorded on the time diary was used to determine the mean number of minutes read daily.
Summary

This study describes face-to-face and online delivery models for a parent education program that supports the use of dialogue during shared storybook reading and is designed as a multimethod, multiple case study (Yin, 1993). Participants for the study were recruited in conjunction with the community organization Raising Readers in Story County. Participants in the face-to-face program met five times in small groups of five to seven. The online program was designed, similarly to the face-to-face sessions, into five sessions and was delivered using Blackboard Learn.

Data were collected using pre- and post-intervention video recordings, time diaries of shared storybook reading between sessions, exit slips, discussion board posts, observations, and interviews. A multimethod approach was taken which utilized qualitative methods, for the descriptive information on the time diary, observations, exit slips, discussion board posts, and interviews, but also utilized quantitative methods through the collection of pre- and post-intervention video recordings and a time diary of frequency and duration of shared storybook reading, to support the qualitative data. The study’s findings describe the contextual factors that influence the outcomes of face-to-face and online parent education as well as the effectiveness of the parent education program in encouraging dialogic reading behaviors.
CHAPTER FOUR

RESULTS

This chapter reports the results from the present study. The discussion of results is organized by delivery method and the research questions guiding the study. First, the findings from the online parent education program are discussed. Next, the findings from the face-to-face parent education program are discussed. Finally, the cross case findings are presented.

**Online Parent Education Program**

Fifteen parents completed the online parent education program. First, the impact of the program on reading frequency and dialogic reading behaviors is described. Then, the contextual factors of the course that influenced the experience of participating parents are discussed. Specifically, the following questions guide the analysis:

1. How does parent education in online and face-to-face settings influence shared storybook reading behaviors of families?
2. What are the contextual factors that influence the experiences of participants in a parent education program on shared storybook reading in online and face-to-face settings?

To answer these questions, data were collected through pre- and post-intervention video recordings, time diaries of shared storybook reading between sessions, discussion board posts, and interviews. A multimethod approach was taken which utilized an inductive approach (Miles & Huberman, 1984) to analyze the descriptive information on
the time diary, discussion board posts, and interviews and quantitative methods to analyze the pre- and post-intervention video recordings and the record of shared storybook reading at home on the time diary.

To answer the first question regarding how parent education impacts the reading behaviors of families, pre- and post-intervention video recordings and the time diaries were analyzed. The analysis of the video recorded storybook readings was completed using the Adult/Child Interactive Reading Inventory (ACIRI) (De-Bruin-Parecki, 2006). The ACIRI is an observational tool for measuring the qualities of the interaction during the natural conditions of shared storybook reading and focuses on the following three areas of adult and child behavior during shared storybook reading: enhancing attention to text, promoting interactive reading and supporting comprehension, and using literacy strategies. However, due to the focus of the intervention, only the second and third sections of the inventory were completed during this analysis. Each parent and child dyad received a score of zero to three on a total of eight adult behaviors and eight child behaviors. The inventory results were analyzed using the Wilcoxon signed-rank test (Elliott & Woodward, 2007) to ascertain whether or not the parent education program was effective in teaching dialogic reading behaviors. Additionally to explore the impact of parent education on reading behaviors, the mean number of minutes read per day was calculated using the information provided on the time diaries.

To answer the second question regarding the contextual factors that influence the experiences of participants in parent education, the data from the online sessions were read and descriptive notes were taken (Patton, 1990), using an inductive approach (Miles and Huberman, 1994). The frequency with which each code was applied was tallied.
Patterns between themes were identified and some themes were folded into others according to their patterns during the revision process (Miles & Huberman, 1984).

**Research Question One: How Does Parent Education in Online Settings Influence the Shared Storybook Reading Behaviors of Families**

This study explored the impact of participating in a parent education program on shared storybook reading behaviors. Specifically, the question, which guided the analysis was: How does parent education in online settings influence the reading behaviors of families? To answer this question, both the amount of dialogue they, and their child(ren), used during shared storybook reading and the frequency with which parents were sharing storybooks with their child(ren) were examined. First, the analysis of the video recorded storybook readings was completed using the Adult/Child Interactive Reading Inventory (ACIRI) (De-Bruin-Parecki, 2006), which was introduced earlier in the current chapter. The inventory results were analyzed using the Wilcoxon signed-rank test (Elliott & Woodward, 2007) to ascertain whether or not the parent education program was effective in teaching dialogic reading behaviors. Then, the time diaries were analyzed and the mean number of minutes read per day per family was calculated. Finally, the qualitative interview data was examined for evidence of factors that influenced the amount of time that parents read to their children. In the subsequent sections, the impact of online parent education on dialogic reading behaviors of parents and their child(ren) and shared storybook reading frequency are discussed. Following this discussion, the results from the analysis of the pre- and post-intervention videos are presented.
Dialogic reading behaviors.

To determine the impact of the parent education program on the use of dialogic reading behaviors, pre- and post-intervention video recordings were conducted of parents and their child(ren) sharing *The Day the Goose Got Loose* by Reeve Lindbergh. The analysis of the video recorded storybook readings was completed using the Adult/Child Interactive Reading Inventory (ACIRI) (De-Bruin-Parecki, 2006). The ACIRI is an observational tool for measuring the qualities of the interaction during the natural conditions of shared storybook reading and focuses on the following three areas of adult and child behavior during shared storybook reading: enhancing attention to text, promoting interactive reading and supporting comprehension, and using literacy strategies. However, due to the focus of the intervention, only the second and third sections of the inventory were completed during this analysis. The pre- and post-intervention video recordings were analyzed for the frequency of the adult’s dialogic reading behaviors to include: questioning, pointing out pictures to assist in identification, making connections between the book and the child, answering the child’s questions, identifying visual cues related to the story, soliciting predictions, asking recall questions, and elaborating on the child’s ideas. Additionally, the child’s behaviors were analyzed including: the child’s response to the adult’s questions, the child’s response to adult cues focusing on pictures or words, the child’s ability to make connection between the book and their experiences, the questions the child poses, their response to visual cues, predictions made, and spontaneous ideas offered about the story.

Each of the aforementioned behaviors was scored numerically using the zero to three scale of the ACIRI Inventory. In this zero to three scale, zero indicates no evidence
of the behavior (zero times), one indicates that the behavior occurs infrequently (one time), two indicates that the behavior occurs some of the time (two to three times), and three indicates that the behavior occurs more of the time (four or more times). Therefore the each parent and child dyad received a score of zero to three on a total of eight adult behaviors and eight child behaviors. Additionally, a mean score was generated for adults and children in two areas: (1) promoting interactive reading and supporting comprehension, and (2) using literacy strategies. Finally, an overall mean score was determined for each adult and each child using the zero to three scores from all eight reading behaviors.

**Evidence of changes in adult behaviors.**

Most parents were using some dialogic reading techniques with their children while they shared storybooks before they started the program. Table 4.1 provides the mean scores for dialogic reading before and after the intervention. A score of zero indicates that there was no evidence of the behavior, 1 indicates the behavior was observed once, 2 indicates the behavior was observed two or three time, and 3 indicates the behavior was observed four or more times. Therefore, this information indicates that prior to participating in the program parents used several of the dialogic reading behaviors infrequently with mean scores of less than one. Following the intervention, the mean score of each dialogic reading behavior was between 1.15 and 3.00.

The Wilcoxon signed-rank test was used to determine whether there were statistically significant differences in the pre- and post- use of dialogic reading behaviors of parents. Thus, the pre- and post-intervention dialogic reading total scores were
compared. The Wilcoxon test was statistically significant ($Z = -3.18, p = .001$) and indicates that the program increased the frequency of the dialogic reading behaviors that were taught in the parent education course. Furthermore, the sub-scores of the ACIRI, which measure the use of interactive reading strategies ($Z = -3.19, p = .001$) and literacy strategies ($Z = -3.08, p = .002$) increased significantly. Specifically, as Table 4.1 shows, each of the reading behaviors increased significantly. Therefore, it is evident that parents were able to utilize the dialogic reading strategies they were taught during the online intervention program.

Table 4.1  

*Online Program: Pre- and Post-Intervention Adult Dialogic Reading Behaviors*

<table>
<thead>
<tr>
<th>Dialogic Reading Behavior</th>
<th>Pre-Intervn. Mean Score</th>
<th>Standard Deviation</th>
<th>Post-Intervn. Mean Score</th>
<th>Standard Deviation</th>
<th>$Z$ score</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactive Rdg. Strategies</td>
<td>1.20</td>
<td>.51</td>
<td>2.42</td>
<td>.26</td>
<td>3.19</td>
<td>.001</td>
</tr>
<tr>
<td>Solicits Questions</td>
<td>2</td>
<td>.96</td>
<td>3.00</td>
<td>.00</td>
<td>-2.81</td>
<td>.005</td>
</tr>
<tr>
<td>Pictures for Idtfn.</td>
<td>1.29</td>
<td>.99</td>
<td>2.92</td>
<td>.28</td>
<td>-3.10</td>
<td>.002</td>
</tr>
<tr>
<td>Personal Conntns.</td>
<td>.93</td>
<td>.92</td>
<td>2.00</td>
<td>1.16</td>
<td>-2.29</td>
<td>.022</td>
</tr>
<tr>
<td>Answers Questions</td>
<td>.57</td>
<td>1.02</td>
<td>1.77</td>
<td>1.09</td>
<td>-2.54</td>
<td>.011</td>
</tr>
<tr>
<td>Literacy Strategies</td>
<td>.77</td>
<td>.46</td>
<td>1.92</td>
<td>.28</td>
<td>-3.08</td>
<td>.002</td>
</tr>
<tr>
<td>Uses Visual Cues</td>
<td>1.71</td>
<td>1.14</td>
<td>2.85</td>
<td>.38</td>
<td>-2.40</td>
<td>.016</td>
</tr>
<tr>
<td>Solicits Predictions</td>
<td>.21</td>
<td>.58</td>
<td>1.54</td>
<td>1.05</td>
<td>-2.70</td>
<td>.007</td>
</tr>
</tbody>
</table>
Table 4.1 continued

<table>
<thead>
<tr>
<th></th>
<th>.29</th>
<th>.61</th>
<th>1.15</th>
<th>.80</th>
<th>-2.59</th>
<th>.010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asks Recall</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elaborates on</td>
<td>.86</td>
<td>.86</td>
<td>2.15</td>
<td>.80</td>
<td>-2.56</td>
<td>.010</td>
</tr>
<tr>
<td>Ideas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dialogic Rdg.</td>
<td>.97</td>
<td>.40</td>
<td>2.16</td>
<td>.18</td>
<td>-3.18</td>
<td>.001</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

_Evidence of changes in child behaviors._

The ACIRI was also used to analyze the children’s use of dialogue during shared storybook reading and was scored using the one to three scoring rubric explained in the previous section. The pre- and post-intervention video recordings of the parent and child(ren) sharing the storybook _The Day the Goose Got Loose_ indicated that children responded to their parents’ use of dialogic reading techniques with more dialogue. Table 4.2 illustrates the pre-intervention and post-intervention observations of the children’s dialogic reading behaviors. This table reveals that prior to the intervention several of the behaviors were observed infrequently, often less than once. However, following the intervention, as evidenced in Table 4.2, several of the behaviors were observed twice. Moreover, the average dialogic reading total score pre-intervention was .59 and post-intervention was 1.96.

The Wilcoxon signed-rank test was used to determine whether there were statistically significant differences in parents’ pre- and post- use of dialogic reading behaviors. The Wilcoxon test was statistically significant (Z= -3.30, p = .001) and indicates that the program increased the frequency of the dialogic reading behaviors that were taught in the
parent education course. Furthermore, the sub-scores of the ACIRI, which measure the use of interactive reading strategies (Z= -3.30, p=.001) and literacy strategies (Z= -3.19, p=.002) increased significantly. Specifically, as Table 4.2 represents, each of the reading behaviors increased significantly. Therefore, as parents used dialogic reading strategies they were taught during the online intervention program when reading with their children, the children accordingly exhibited increases in their own dialogic reading behaviors.

Table 4.2

*Online Program: Pre- and Post-Intervention Child Dialogic Reading Behaviors*

<table>
<thead>
<tr>
<th>Dialogic Reading Behavior</th>
<th>Pre-Intrvn. Mean</th>
<th>Standard Deviation</th>
<th>Post-Intrvn. Mean</th>
<th>Standard Deviation</th>
<th>Z score</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactive Reading Strategies</td>
<td>.73</td>
<td>.50</td>
<td>2.18</td>
<td>.35</td>
<td>-3.30</td>
<td>.001</td>
</tr>
<tr>
<td>Responds to questions</td>
<td>1.33</td>
<td>1.18</td>
<td>2.86</td>
<td>.36</td>
<td>-2.87</td>
<td>.004</td>
</tr>
<tr>
<td>Identifies pictures or words</td>
<td>.87</td>
<td>1.19</td>
<td>2.79</td>
<td>.43</td>
<td>-3.00</td>
<td>.003</td>
</tr>
<tr>
<td>Relates book’s content to experiences</td>
<td>.27</td>
<td>.59</td>
<td>1.57</td>
<td>1.22</td>
<td>-2.52</td>
<td>.012</td>
</tr>
<tr>
<td>Poses questions</td>
<td>.47</td>
<td>.92</td>
<td>1.64</td>
<td>1.15</td>
<td>-2.54</td>
<td>.011</td>
</tr>
</tbody>
</table>
Table 4.2 continued

<table>
<thead>
<tr>
<th>Literacy Strategies</th>
<th>.45</th>
<th>.50</th>
<th>1.75</th>
<th>.49</th>
<th>-3.19</th>
<th>.001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responds to visual cues</td>
<td>.47</td>
<td>.74</td>
<td>2.00</td>
<td>.78</td>
<td>-3.24</td>
<td>.001</td>
</tr>
<tr>
<td>Guesses what will happen</td>
<td>.13</td>
<td>.52</td>
<td>1.57</td>
<td>1.16</td>
<td>-2.82</td>
<td>.004</td>
</tr>
<tr>
<td>Recall information</td>
<td>.20</td>
<td>.56</td>
<td>1.31</td>
<td>.86</td>
<td>-2.72</td>
<td>.006</td>
</tr>
<tr>
<td>Offers ideas about story</td>
<td>1.00</td>
<td>1.13</td>
<td>2.07</td>
<td>.73</td>
<td>-2.68</td>
<td>.007</td>
</tr>
<tr>
<td>Dialogic Reading Total</td>
<td>.59</td>
<td>.39</td>
<td>1.96</td>
<td>.26</td>
<td>-3.30</td>
<td>.001</td>
</tr>
</tbody>
</table>

**Increase in time and attendance to reading.**

The number of minutes recorded on the reading logs provided evidence of shared storybook reading behaviors among the online participants. Although not all participants recorded their reading daily, thirteen online participants completed reading logs during at least one week of the program. The information reported on the reading log was used to calculate a mean number of minutes read per day. This information is presented in Table 4.3. Eleven of the parents indicated on the pre-survey prior to beginning the intervention that they read regularly, at least four or five times per week. The information reported on the reading logs supported that the parents who reported reading regularly continued to do so during the intervention. However, two participants initially indicated they read infrequently, approximately once per week. One of the parents who initially indicated
they read infrequently with their child read an average of 14.26 minutes per day during her participation in the program, while the other parent who initially indicated they read infrequently with their child read an average of 12.14 minutes per day. Additionally, although there were days both parents did not read, while participating in the program both parents usually read four or five days per week. Thus, these two parents that reported reading once per week prior to the study, increased the frequency with which they shared storybooks with their children while they participated in the program.

Table 4.3

*Online Program: Average Minutes Read by Pre-intervention Reported Reading Frequency*

<table>
<thead>
<tr>
<th>Reported Reading Frequency</th>
<th>Number of Participants</th>
<th>Mean Minutes Read per Day</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once per week</td>
<td>2</td>
<td>13.21</td>
<td>1.52</td>
</tr>
<tr>
<td>Four or five times per week</td>
<td>4</td>
<td>11.76</td>
<td>3.61</td>
</tr>
<tr>
<td>Everyday</td>
<td>7</td>
<td>20.37</td>
<td>5.30</td>
</tr>
</tbody>
</table>

**Research Question Two: What Are the Contextual Factors that Influence the Experiences of Participants in a Parent Education Program on Shared Storybook Reading in Online Settings?**

This section will address the second research question by discussing the contextual factors that influence the experiences of participants in an online parent education program on shared storybook reading. The following central themes that were found to influence the outcomes of the online program are discussed: (1) Online access,
which has three subthemes and (2) Design and delivery of online content, which also has three subthemes. Each of these two themes describes an element of the program that influenced the parents’ response to, and the outcomes of, the program. The frequency with which each of these themes was found in the qualitative data is shown in Table 4.4. Some of these themes are further supported with quantitative data, which is discussed within the presentation of the theme.

Table 4.4

<table>
<thead>
<tr>
<th>Name of Theme</th>
<th>Description of Theme</th>
<th>Instances Theme was Present in the Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Online Program</td>
<td>Characterizes the availability and open-access to the content</td>
<td>19</td>
</tr>
<tr>
<td>Design and delivery of online content</td>
<td>Characterizes the use of multiple forms of media to present the content</td>
<td>24</td>
</tr>
</tbody>
</table>

**Theme one: Access to the online program**

The materials for the online course were available to parents at any time they wished to view them. Thus, parents could access the course materials at their convenience. The parents expressed their appreciation of the flexibility that open access to the materials offered. Furthermore, due to the flexible access the parents had to the program, they reported revisiting sessions within the program and often sharing the content with other adults. Thus, open access to the content influenced the outcomes of the parent education program by providing flexibility, and offering the opportunity to re-visit content. Each of these ideas is elaborated upon in the subsequent sections.
**Flexibility.**

Parents expressed that they appreciated the flexibility that open access to the online course provided. This was evidenced by the varying times of day during which parents accessed the content and the participating parents’ expression of this idea in the interviews. For example, Allison, a working mother of four, stated, “Online worked for me, mostly because I could do it in the middle of the night when everyone else was sleeping.” Similarly, Jean, another working mother of two children expressed, “I liked that I could do it on my own time. Giving up an evening would be hard, but I just did it, usually at night.” Tammy, also a working mother, who had three children, expressed similar sentiments saying, “What I liked about it was that I could do it on my own time, which is typically eleven o’clock at night, so when the kids are already in bed.” Conversely, Cara, a mother of two who works from home two days per week, stated she completed the program during the day when she was at home. This variation in accessing the online content of the program is also demonstrated by the number of views across a day, which was information collected using the statistics tracking feature of Blackboard course sites. This information, which is presented in Table 4.5, supports the notion that parents were able to access the online content of the program at their convenience and chose to do so at many different times of day.
Table 4.5

*Time of Day Content was Accessed Online*

<table>
<thead>
<tr>
<th>Time of day</th>
<th>Module Two Presentation</th>
<th>Module Three Modeling Video</th>
<th>Module Four Handout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midnight to 2:00 am</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2:00 am to 5:00 am</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5:00 am to 7:00 am</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7:00 am to 9:00 am</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>9:00 am to 11:00 am</td>
<td>5</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>11:00 am to 1:00pm</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>1:00 pm to 3:00 pm</td>
<td>18</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>3:00 pm to 5:00 pm</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>5:00 pm to 7:00 pm</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>7:00 pm to 9:00 pm</td>
<td>1</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>9:00 pm to Midnight</td>
<td>8</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

The ongoing access to the content created flexibility that influenced the outcome of the program, because it allowed parents to participate that may not have been able to if they were required to meet face-to-face for a scheduled meeting. For example, some
families had other children, which made scheduling difficult. Other families felt their younger children may have made participating in a scheduled face-to-face program challenging. For instance, Kimberly, a stay-at-home mother with two children shared,

I think when I first signed up, I had said face-to-face, but then with, just thinking about it more with my younger son I didn’t know how that was going to work and I didn’t think I’d be able to find a sitter. He’s pretty high-maintenance just being a year and a half. So, I didn’t feel like I would be able to give my older son the full attention he needed and deserved to do this right, so it was kind of my second choice, but I think it is going fine. I like to just do things kind of on my own any way. I mean it is kind of nice to take it, okay, and read it myself, and then go, and, ya know, do it with them.

Thus, the flexible nature of the online program allowed parents to participate in spite of their demanding schedules and needs of the other children in their families.

However, even with the flexibility the online program offered, not all of the online participants were able to complete the program. Families are busy and often have demanding schedules, which are confounded by unanticipated events. Throughout the study, three parents emailed to express that they were unable to complete the program. Each parent expressed that they were busier than they had anticipated and had been unable to complete the online sessions because of time constraints. For example, a line from one email read, “Things are just too crazy right now.” More specifically, two of the three parents cited unanticipated alterations to their daily schedule (ie. sickness) that impeded their completion of the program. Follow up conversations with each of these
participants would have been ideal. However, these participants, with one exception, did not respond to further email inquiries. The exception to this was Brittany who agreed to come to the local University for a follow-up shared storybook reading and interview. However, on the morning of the scheduled interview, she sent an email explaining that her daughter was ill and they would be unable to attend the scheduled meeting. A request for rescheduling this meeting was not answered. Perhaps this lends further support to the notion that illness, or other unanticipated changes in daily life, are barriers to the completion of online parent education despite that the ongoing access to content creates a flexible space for learning. Thus, the busy nature of the lives of many families influences the outcome of parent education even when it is offered flexibly in an online environment. Similarly, there is no way to know if these parents would have been more likely to complete the sessions if they were participating in the face to face sessions. It’s possible that they might have felt more connected to the course and participants had they been participating in the face-to-face sessions. However, this query is beyond the scope of this project and cannot be answered with the current evidence.

Although some families faced challenges in completing the program, the majority of the participants were able to complete the sessions. Further, many of the participants often revisited the content of the sessions.

*Revisiting content.*

Several of the parents discussed the idea that open access to the program allowed them to come back to a session’s content. This discussion suggests that using the Internet to deliver parent education allows parents to view the content on multiple occasions over
time. For example, Kimberly, the stay-at-home mother who was concerned about caring for her younger child if she attended the face to face program said, “I know with the PEER thing, um, I think I went back and watched it again and the handout, especially with that one, was really nice, because it got me to think, okay, this is what P stands for and the E and the E and the R.” Likewise, Andrea, the mother who started a new job while completing the program shared, “I went back on the first one and also went back on the second one…I was more focused on what you were saying, because I realized that you were saying more things than what you wrote. It was helpful, so I think I went back once or twice.” Table 4.6 provides information regarding the number of times each type of content was viewed in each module. This evidence suggests that participants visited content multiple times, considering the number of views is considerably larger than the number of participants in the program. The large number of views for the materials in the second module is, perhaps, noteworthy. Although it is not possible to identify with certainty the reason for the disproportionately large number of views, there are a few possible explanations. The first possibility is that parents viewed these materials frequently because it was the initial presentation on the premise of dialogic reading and they may have wanted to review the content. Another possibility is that, because the content is slow to load, participants attempted to play the materials multiple times. As further evidence of parents’ multiple accesses of the content, at the conclusion of the study two parents asked how long the materials would be available to them, which provides further support that they accessed, and may continue to access, the content multiple times. Thus, accessibility to content over time is an affordance of offering parent education online.
Table 4.6

*Number of Visits to Content*

<table>
<thead>
<tr>
<th>Type of Content</th>
<th>Module One</th>
<th>Module Two</th>
<th>Module Three</th>
<th>Module Four</th>
<th>Module Five</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Point</td>
<td>13</td>
<td>47</td>
<td>27</td>
<td>22</td>
<td>NA</td>
</tr>
<tr>
<td>Video</td>
<td>NA</td>
<td>61</td>
<td>24</td>
<td>22</td>
<td>NA</td>
</tr>
<tr>
<td>Handout</td>
<td>NA</td>
<td>13</td>
<td>20</td>
<td>21</td>
<td>19</td>
</tr>
</tbody>
</table>

*Sharing content.*

Several parents indicated that one reason they took advantage of the open access and revisited the content of the program was to make notes about the content from the sessions and share them with their spouse. Many parents participating in the program found the content valuable and, therefore, felt it was important to share with the other adult or adults in the home. Therefore, some parents participating in the program would take notes for their spouse as they listened to, viewed, and read the online content. For instance, Jean shared that she would write out the acronyms for the dialogic techniques, leave them on her husband’s desk and tell her husband she took notes for him. Other parents revealed that they printed out or sent the materials directly to their spouses using email. For instance, Cara said, “I printed out everything that I could kind of keep handy to show Wayne too…For him who is not seeing your Power Points and videos so that he can read through that.” This evidence suggests that parents that participate in online parent education may share the content of the course with other adults in their home.
Sometimes this sharing was done digitally through email, while other times this sharing was done by printing or writing the information and sharing the paper copies of the material.

**Theme 2: Design and delivery of the online content.**

The way in which the online content is designed also influences the experiences of the participating parents and the outcomes of the program. The Internet, and more specifically Blackboard Learn, offers many possibilities for the composition and delivery of content. As explained in chapter three, sessions of the program often included a PowerPoint presentation, a video modeling the technique presented in the session, and supporting handouts. Additionally, a discussion board was used as a platform for reflection, questions, and further discussion. Parents explained that the varying modes of delivery appealed to different styles of learning. Specifically, the videos, which modeled dialogic reading, and the handouts providing information and example dialogic reading prompts, were beneficial. However, the discussion board was rarely used by parents. Each of the ideas is explained further through the following subthemes.

**Inclusion of video modeling and examples.**

Parents reported that they felt the sessions were designed in consideration of multiple learning styles and that different aspects of the sessions might appeal to different types of learners. One aspect that participants found particularly valuable was the use of video. Several parents reported that they videos were helpful because they were able to see the techniques in use. Generally, parents agreed that the videos supported them in understanding how the dialogic reading techniques could be utilized while sharing a
storybook with a child. For instance, Emily, a stay at home mother of two girls, talked more specifically about her preference as a learner, stating:

That’s how I learn, I guess. I am a visual person and, um, so that [the video] really is good and like, the examples help to see. Like, if you read it on a page just reading the, I think the first one, about dialogic reading, and I was reading the slides and I was like, I don’t get it. And then I watched the example and, it did, it made complete sense.

Similarly, Tammy identified her own learning style by stating, “I consider myself a visual learner, so when I watched the videos I was like, hey, I can do that.” In addition to finding the videos helpful for demonstrating the dialogic reading techniques, parents also expressed that they enjoyed watching another parent read with their child. For example, Natasha, a teacher and mother of two boys, said, “I liked the videos. I got to see how someone else does it. You never really get to see how someone else reads, so the videos were helpful.” While another explained, “It is nice to see another kid about the same age as mine. I mean I am not alone. This is how they act.” Therefore, the videos were helpful for parents as models of using dialogic reading during shared storybook reading, but they also providing an opportunity for parents to watch someone else read with a child, a practice that does not typically occur since parents often share storybooks with their children while in their own homes.

Another particularly useful aspect of the online course, according to the parents, were the handouts containing further information about the sessions’ topics and the handouts that included example dialogic reading prompts for age-appropriate books.
These handouts were accessed on multiple occasions, printed, and shared with other adults in the home. Regarding the handouts, Kimberly, who also shared she re-visited the content of the course multiple times, said, “I think the sample questions that you give in the handout, like when you give the book and then you have those questions, I think those were very good for, for me to, to think and to read…when I think about that material, having the book and the questions. I think that was most helpful.” The perceived importance of these types of documents is further supported by the frequency with which they were shared with other members of the family. These handouts were frequently printed off and shared as resources. Additionally, parents accessed these references at their convenience and were printed, sometimes multiple times, when they were deemed valuable enough to keep and use. Although the delivery of the program’s content through presentations, videos, and handouts was well received by the participants, the discussion board was used infrequently.

**Infrequent Use of the Discussion Board**

The discussion board was created as a space for collaboration and reflection, which are two of Ruhleder and Twildale’s (2000) recommendations for creating effective online learning environments. Thus, the purpose for the discussion board was to provide parents with a space to communicate with the researcher and with one another and reflect on their experiences with dialogic reading. In order to facilitate collaboration and reflection, the researcher posted a prompt at the conclusion of each session and encouraged the parents to respond to the prompt within each session. For example, within the content folder for session one below the content materials an item was created entitled, Posting to the Discussion Board. This item stated: “After you have viewed the
short presentation, please visit the discussion board. You can access the board by clicking on the word Discussions on the left side of the screen.” Similar items were created as a reminder to contribute to the discussion board within the content for each session. The prompts that were provided in each session were intended to elicit conversation and reflection amongst the participants. However, the discussion board was rarely used throughout the program. Table 4.7 displays the prompts and the number of responses for each session.

Table 4.7

*Discussion Board Prompts and Responses*

<table>
<thead>
<tr>
<th>Session</th>
<th>Prompt</th>
<th>Number of Responses to Prompt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session One</td>
<td>Please feel free to introduce yourself. Please discuss any of the reading reason that surprised you. You may answer this with text or by uploading a video if you wish. You may also view one another’s posts and respond to each other.</td>
<td>2</td>
</tr>
<tr>
<td>Session Two</td>
<td>Are you already a dialogic reader? Why or why not? What did you learn that you hope to practice in the future? What do you still want to learn more about?</td>
<td>4</td>
</tr>
<tr>
<td>Session Three</td>
<td>Which part of PEER do you feel most comfortable with? What did you learn from this module? What will you continue to practice?</td>
<td>1</td>
</tr>
<tr>
<td>Session Four</td>
<td>Which prompts do you feel you are already using? Which (if any) were new?</td>
<td>0</td>
</tr>
</tbody>
</table>
Table 4.7 continued

| Session Five | In what ways have you extended stories you have read? In what new ways might you try? | 0 |

Despite the infrequent use of the discussion board, it is important to note that the responses that were posted were generally thoughtful and reflective. For example, the following was a response written by Tammy to the prompt in session two:

I thought I was a dialogic reader. But I used the materials for The Snowy Day and realized that I wasn’t going as far in depth as I could have been these past few years. The questioning was really easy to do and my three-year-old daughter enjoyed answering the questions. I was amazed at how well she did. Now I must say I had to do this when I only had one of them to read too. When they are both sitting on my lap to read, my older one tends to get most of the talking in. So it was nice to see that my younger one had a chance to give her input too. The extension was a good idea, but I chose to take the girls on a walk and we did some of the things that Peter had done in the story. I feel that preschool kiddos need more of a hands-on activity v. drawing a picture. At this age, their artistic skills are not as developed so they have a hard time drawing and cannot remember what they intended to draw.

Every time a response was posted, the researcher promptly responded to the post and often included follow-up questions or prompts in the response. However, no one
responded to the follow-up posts. The participants’ reasons for not responding to the prompts varied.

For example, some parents suggested they did not respond to the discussion board prompts because they were self-conscious or did not want to be the only one responding. They were not interested in posting their thoughts or experiences to the board because “they just don’t want everyone to see”. Kimberly discussed this feeling of self-consciousness by stating,

I’ve looked at them [the prompts] and I know I have thought about the answer, but I don’t see other people doing that, so I am not, maybe I am just not getting them, but I am like, am I going to be the only one? … I guess that’s just being insecure about whether I should put something or not, but uh, I guess I am just not sure if other people are actually doing it and I am not seeing them and then I’d feel better.

Andrea similarly discussed being self-conscious, “I needed to do more of the homework. I needed to do more working with the material. And I think maybe people are self-conscious…like they don’t want to show they don’t know.”

Other parents suggested they simply chose not to respond to the prompts on the discussion board because of time constraints in their own schedule. For example, Emily said, “Honestly, I am like, gosh, I don’t have time to do that.” While Alyssa, a mother of four who woke from home shared, “I know that I didn’t use the discussion board as much as, at all. So, that for me, would have been, was a time issue and part of it was with the reading log I could just get it down when we were reading upstairs and the discussion
boards were harder for me to get to.” Thus, because the prompts were designed to be for reflecting on the application of the content of the session, some did not make the time to go back into the course after they had tried the dialogic reading technique to respond to the prompt. The discussion board was, perhaps, an underutilized portion of the online delivery model.

Face-to-Face Parent Education Program

Seventeen parents completed the face-to-face parent education program. The impact of the program on the reading behaviors was explored. The contextual factors, which influenced the outcomes of the parent education program were also examined. Specifically, the following questions guided the analysis:

(1) How does parent education in online and face-to-face settings influence shared storybook reading behaviors of families?

(2) What are the contextual factors that influence the experiences of participants in a parent education program on shared storybook reading in face-to-face settings?

To answer these questions, data were collected through pre- and post-intervention video recordings, time diaries of shared storybook reading between sessions, exit slips, observations, and interviews. A multimethod approach was taken.

Specifically, to answer the first question regarding how parent education impacts the reading behaviors of families, pre- and post-intervention video recordings and the time diaries were analyzed. The analysis of the video recorded storybook readings was completed using the Adult/Child Interactive Reading Inventory (ACIRI) (De-Bruin-
Parecki, 2006) similarly to the analysis of the pre- and post-intervention videos of the online participants. Thus, only the second and third sections of the inventory were completed during this analysis and each parent and child dyad received a score of zero to three on a total of eight adult behaviors and eight child behaviors. The inventory results were analyzed using the Wilcoxon signed-rank test (Elliott & Woodward, 2007) to ascertain whether or not the parent education program was effective in teaching dialogic reading behaviors. Additionally, to explore the impact of parent education on reading behaviors, the mean number of minutes read per day was calculated using the information provided on the time diaries.

To answer the second question regarding the contextual factors that influence the experiences of participants in a parent education program, the data from the face-to-face programs were read and descriptive notes were taken (Patton, 1990), using an inductive approach (Miles and Huberman, 1994). The frequency with which each code was applied was tallied. Patterns between themes were identified and some themes were folded into others according to their patterns during the revision process (Miles & Huberman, 1984).

**Research Question One: How Does Parent Education in Face-to-face Settings Influence the Shared Storybook Reading Behaviors of Families?**

This study explored the impact of participating in a parent education program on shared storybook reading behaviors. Specifically, the question, which guided the analysis was: How does parent education in face to face settings influence the reading behaviors of families? To answer this question, both the amount of dialogue they, and their
child(ren), used during shared storybook reading and the frequency with which parents were sharing storybooks with their child(ren) were examined.

To examine this question, the time diaries and pre- and post-intervention video recordings were analyzed. The analysis of the video recorded storybook readings was completed using the Adult/Child Interactive Reading Inventory (ACIRI) (De-Bruin-Parecki, 2006), which was introduced earlier in the chapter. The inventory results were analyzed using the Wilcoxon signed-rank test (Elliott & Woodward, 2007) to ascertain whether or not the parent education program was effective in teaching dialogic reading behaviors. The analysis of the time diaries was conducted by calculating the mean number of minutes read in each family per day. In the subsequent sections, the influence of face-to-face parent education on dialogic reading behaviors of parents and their child(ren) and shared storybook reading frequency are discussed.

**Dialogic reading behaviors.**

To determine the impact of the parent education program on the use of dialogic reading behaviors, pre- and post-intervention video recordings were conducted of parents and their child(ren) sharing *The Day the Goose Got Loose* by Reeve Lindbergh. The analysis of the video recorded storybook readings was completed, similarly to the analysis of the video recording of the online participants, using the Adult/Child Interactive Reading Inventory (ACIRI) (De-Bruin-Parecki, 2006). Therefore, the second and third sections of the ACIRI were completed during this analysis and each parent and child dyad received a score of zero to three on a total of eight adult behaviors and eight child behaviors. In this zero to three scale, zero indicates no evidence of the behavior
(zero times), one indicates that the behavior occurs infrequently (one time), two indicates that the behavior occurs some of the time (two to three times), and three indicates that the behavior occurs more of the time (four or more times). Therefore the each parent and child dyad received a score of zero to three on a total of eight adult behaviors and eight child behaviors. Additionally, a mean score was generated for adults and children in two areas: (1) promoting interactive reading and supporting comprehension and (2) using literacy strategies. Finally, an overall mean score was determined for each adult and each child using the zero to three scores from all eight reading behaviors.

**Evidence of changes in adult behaviors.**

Evidence from the study suggests that they learned the dialogic reading techniques, practiced them during the sessions, and continued to use them at home. While parents practiced dialogic reading techniques during the session their prompts and discussion could be heard. For example, Anna was using a technique with her four year-old son that had just been presented when she said, “What are they sitting in?” Her son answered, “A seat.” Then Anna said, “It is a kind of a seat. It is a cart.” On the next page she asked, “What are they doing?” and their dialogic conversation continued. During the same session another parent could be heard discussing types of birds in the book as well as the flower box in the picture. They also discussed braiding, because the little girl in the book had a braid.

Furthermore, parents suggested that they continued to utilize the techniques at home. Mary, the presenter, asked the parents at the beginning of each session if they had practiced the techniques at home and in each session they responded that they had.
Additionally, some parents took notes on their reading log regarding the implementation of dialogic reading techniques within their home. For instance, parents included notations such as, “This book prompted a lot of dialog,” and “I used prompting and evaluating on this book. We noticed new things and learned some new meanings.”

The pre- and post-intervention videos of families sharing the storybook *The Day the Goose Got Loose* provided further evidence that parents learned the dialogic reading techniques and were able to use them while sharing storybooks with their children. According to the analysis of the pre- and post-intervention video recording using the ACIRI, most parents were using some dialogic reading techniques with their children while they shared storybooks prior to participating in the program. Table 4.8 provides the mean scores for dialogic reading before and following the intervention.

The Wilcoxon signed-rank test was used to determine whether there were statistically significant differences in the pre- and post-use of dialogic reading behaviors of parents. Thus, the pre- and post-intervention dialogic reading total scores were compared. The Wilcoxon test was statistically significant ($Z=-3.42, p = .001$) and indicates that the program increased the frequency of the dialogic reading behaviors that were taught in the parent education course. This increase is illustrated by the pre-intervention mean for dialogic reading of .91, which doubled following the intervention to 2.02. This increase suggests that parents used twice as many dialogic reading behaviors following the parent education program intervention. Furthermore, the sub-scores of the ACIRI, which measure the use of interactive reading strategies ($Z=-3.43, p=.001$) and literacy strategies ($Z=-3.44, p=.001$) increased significantly. Specifically, as Table 4.8 shows, each of the reading behaviors increased significantly. Therefore, it is
evident that parents were able to utilize the dialogic reading strategies they were taught during the face-to-face intervention program.

Table 4.8

*Face-to-Face Program: Pre- and Post-Intervention Adult Dialogic Reading Behaviors*

<table>
<thead>
<tr>
<th>Dialogic Reading Behavior</th>
<th>Pre-Intrvntn. Mean</th>
<th>Standard Deviation</th>
<th>Post-Intrvntn. Mean</th>
<th>Standard Deviation</th>
<th>Z score</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactive Reading Strategies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solicits Questions</td>
<td>1.81</td>
<td>1.11</td>
<td>2.69</td>
<td>0.87</td>
<td>-2.93</td>
<td>.004</td>
</tr>
<tr>
<td>Pictures for Identification</td>
<td>1.50</td>
<td>0.97</td>
<td>2.63</td>
<td>0.81</td>
<td>-3.14</td>
<td>.002</td>
</tr>
<tr>
<td>Personal Connections</td>
<td>0.44</td>
<td>0.73</td>
<td>1.69</td>
<td>1.30</td>
<td>-2.87</td>
<td>.004</td>
</tr>
<tr>
<td>Answers Questions</td>
<td>0.56</td>
<td>0.81</td>
<td>1.38</td>
<td>1.09</td>
<td>-2.23</td>
<td>.026</td>
</tr>
<tr>
<td>Literacy Strategies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uses Visual Cues</td>
<td>2.00</td>
<td>0.85</td>
<td>2.69</td>
<td>0.79</td>
<td>-2.89</td>
<td>.004</td>
</tr>
<tr>
<td>Solicits Predictions</td>
<td>0.13</td>
<td>0.50</td>
<td>1.81</td>
<td>0.98</td>
<td>-3.35</td>
<td>.001</td>
</tr>
<tr>
<td>Asks Recall Questions</td>
<td>0.06</td>
<td>0.25</td>
<td>0.75</td>
<td>0.86</td>
<td>-2.60</td>
<td>.009</td>
</tr>
<tr>
<td>Elaborates on Ideas</td>
<td>0.87</td>
<td>1.09</td>
<td>2.56</td>
<td>0.81</td>
<td>-3.34</td>
<td>.001</td>
</tr>
<tr>
<td>Dialogic Reading Total</td>
<td>0.91</td>
<td>0.47</td>
<td>2.02</td>
<td>0.71</td>
<td>-3.42</td>
<td>.001</td>
</tr>
</tbody>
</table>
Evidence of changes in child behaviors.

It became evident that children responded to the adults’ increase in dialogic techniques by using more dialogue. For instance, as adults practiced the techniques within the sessions, their child(ren) responded by speaking more often with longer phrases. For instance, while Karie and her daughter, Sarah, rarely spoke during the first session, during the second session, they had a lengthy conversation about gardening tools while reading *The Flower Garden*. As Karie used the dialogic techniques, Sarah responded with lengthy responses, which often included connections to her own experience. Furthermore, the reading logs offer further evidence of changes in child behavior. For instance, Samantha, a working mother of a four year old boy, recorded, “He asked me a dialogic reading question- What is the fish going to do?” While Evelyn wrote, “She wanted to know about the names of the flowers in this book.” However, some parents reported their children were initially resistant to responding to the dialogic prompts. For example, Angie, a working mother of two children, wrote on the first day of the time diary, “He got a bit irritated with me asking him questions- perhaps I will ask fewer for now.” Though the same parent shared that their child became much more responsive, and even excited, over time. For instance, on later days the Angie recorded her child’s response to dialogic reading prompts more positively noting that when she was reading he made connections between things he can do and things the character in the book they were reading could do. On another day she recorded her surprise at his ability to remember a lot of details of the book as she asked questions.

The pre- and post-intervention video recordings of the parent and child(ren) sharing the storybook *The Day the Goose Got Loose* also indicated that children
responded to their parents’ use of dialogic reading techniques with more dialogue. Table 4.9 illustrates the pre-intervention observations of the children’s dialogic reading behaviors, which reveals several of the behaviors were initially observed less than once. Following the intervention, as evidenced in Table 4.9, the mean scores ranged from 0.75 to 2.75.

The Wilcoxon signed-rank test was used to determine whether there were statistically significant differences in the pre- and post- dialogic reading behaviors of the children. The Wilcoxon test was statistically significant (Z= -3.42, p = .001) and indicates that the program increased the frequency of the overall dialogic reading behaviors that were taught in the parent education course. The average dialogic reading total score pre-intervention was 0.56 and post-intervention was approximately three times that at 1.83. Furthermore, the sub-scores of the ACIRI, which measure the use of interactive reading strategies (Z= -3.19, p=.001) and literacy strategies (Z= -3.09, p=.002) increased significantly. Specifically, as Table 4.9 represents, each of the reading behaviors increased significantly with the exception of offering ideas. It is possible that the increase of the particular behavior was not as large due to the circumstance of the data collection process. Children may have been more inclined to offer their own, uninitiated ideas about the story if they had been in their own home, without being video recorded. Therefore, as parents used dialogic reading strategies they were taught during the online intervention program when reading with their children, the children accordingly exhibited increases in their own dialogic reading behaviors.
Table 4.9

*Face-to-Face Program: Pre- and Post-Intervention Child Dialogic Reading Behaviors*

<table>
<thead>
<tr>
<th>Dialogic Reading Behavior</th>
<th>Pre-Intrvtn. Mean</th>
<th>Standard Deviation</th>
<th>Post-Intrvtn. Mean</th>
<th>Standard Deviation</th>
<th>Z score</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactive Reading Strategies</td>
<td>0.63</td>
<td>0.47</td>
<td>1.98</td>
<td>0.80</td>
<td>-3.19</td>
<td>.001</td>
</tr>
<tr>
<td>Responds to questions</td>
<td>1.19</td>
<td>1.05</td>
<td>2.75</td>
<td>0.78</td>
<td>-3.22</td>
<td>.001</td>
</tr>
<tr>
<td>Identifies pictures or words</td>
<td>0.56</td>
<td>0.81</td>
<td>2.25</td>
<td>1.07</td>
<td>-3.11</td>
<td>.002</td>
</tr>
<tr>
<td>Relates book’s content to experiences</td>
<td>0.13</td>
<td>0.50</td>
<td>1.38</td>
<td>1.09</td>
<td>-3.03</td>
<td>.002</td>
</tr>
<tr>
<td>Poses questions</td>
<td>0.63</td>
<td>0.89</td>
<td>1.56</td>
<td>1.15</td>
<td>-2.46</td>
<td>.014</td>
</tr>
<tr>
<td>Literacy Strategies</td>
<td>0.52</td>
<td>0.37</td>
<td>1.67</td>
<td>0.73</td>
<td>-3.09</td>
<td>.002</td>
</tr>
<tr>
<td>Responds to visual cues</td>
<td>0.75</td>
<td>0.78</td>
<td>2.25</td>
<td>1.00</td>
<td>-3.23</td>
<td>.001</td>
</tr>
<tr>
<td>Guesses what will happen</td>
<td>0.06</td>
<td>0.26</td>
<td>1.75</td>
<td>0.93</td>
<td>-3.35</td>
<td>.001</td>
</tr>
<tr>
<td>Recall information</td>
<td>0.07</td>
<td>0.25</td>
<td>0.75</td>
<td>0.86</td>
<td>-2.59</td>
<td>.009</td>
</tr>
<tr>
<td>Offers ideas about story</td>
<td>1.19</td>
<td>1.17</td>
<td>1.94</td>
<td>1.18</td>
<td>-1.91</td>
<td>.056</td>
</tr>
<tr>
<td>Dialogic Reading Total</td>
<td>0.56</td>
<td>0.35</td>
<td>1.83</td>
<td>0.72</td>
<td>-3.42</td>
<td>.001</td>
</tr>
</tbody>
</table>
Reading frequency.

All of the parents in the face-to-face group indicated on the initial intake survey that they shared storybooks with their children daily. Therefore, it is difficult to ascertain whether they read more frequently as a result of their participation in the program. Table 4.8 reports the mean number of minutes read each day for by group. Although there is variability in these amounts, as indicated by the large standard deviations, this information supports the notion that these parents frequently shared storybooks with their children. However, there was a notable exception. Holly, a working mother of two initially indicated she read daily with her children, but as the program got started and she started completing reading logs she realized their family was not doing as much reading as she had thought. In fact, she shared that completing the reading logs was “extremely eye-opening for my husband and I”. She reported being embarrassed of the first reading log she submitted stating, “I was hoping it was anonymous. There were a couple of days we did not read anything.” At the final session, she shared that participating in the program had been quite powerful for her, because she became more aware of how little reading they were actually doing as a family. She said, “We have become committed to reading more often.”
Table 4.10

*Face-to-Face Program: Average Minutes Read*

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of Participants</th>
<th>Mean Minutes Read per Day</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday 5:45</td>
<td>5</td>
<td>27.23</td>
<td>9.67</td>
</tr>
<tr>
<td>Monday 6:30</td>
<td>8</td>
<td>21.86</td>
<td>10.57</td>
</tr>
<tr>
<td>Wednesday 10:45</td>
<td>4</td>
<td>24.91</td>
<td>16.25</td>
</tr>
</tbody>
</table>

**Research Question Two: What Are the Contextual Factors that Influence the Experiences of Participants in a Face-to-face Parent Education Program?**

In this section, the second question regarding the contextual factors that influence the outcomes of a parent education program is discussed through three central themes, which describe the factors that influenced the outcomes of the parent education program: (1) Engagement, (2) Time, and (3) Group dynamics. Each of these three themes describes elements of the program that influenced the parents’ response to the program. The frequency with which each of these themes was found in the data is shown below in Table 4.11.
**Table 4.1**

*Face-to-face Program Themes: Definition and Frequency*

<table>
<thead>
<tr>
<th>Name of Theme</th>
<th>Definition of Theme</th>
<th>Instances Theme was Present in Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement</td>
<td>The level of the adult and children’s engagement in the session was influenced by a number of factors (ie. location of the session)</td>
<td>56</td>
</tr>
<tr>
<td>Time</td>
<td>Time was a consideration for families’ participation</td>
<td>30</td>
</tr>
<tr>
<td>Group Dynamics</td>
<td>Groups were unique, relationships developed within the group that influenced the sessions</td>
<td>36</td>
</tr>
</tbody>
</table>

**Theme 1: Engagement.**

The level of the adult and children’s engagement in the session was influenced by many contextual factors. The first such factor was the location for the sessions. The participants in the face-to-face Shared Talking and Reading program attended five sessions, which were approximately forty-five minutes in length. Four of these five sessions took place within small groups. However, the location of these sessions varied. The first and fifth sessions took place on the campus of the local University and the parents met at a local church for the second, third, and fourth sessions of the program. The locations differed in numerous ways, and influenced the experience of families participating in the session. First, during the sessions at the local University, parking was limited. Prior to the meeting, parents received an email with directions to use the campus-wide bussing system as well as the location of nearby metered parking. This situation
presented considerable difficulty for some families since using the campus bussing system added a significant amount of time for the families. Using the metered parking also presented challenges for some families that used it because it was limited to a few spots that were sometimes full and the spots were restricted to thirty-minute usage. Additionally, the University building within which the parent education took place had many entrances and rooms. There were signs placed on all of the doors providing directions to the room, but after the parents had navigated parking and found the room, they often appeared flustered. Following the final session, Delaney sent an email, which stated, “The only part that I really didn’t enjoy were the sessions on campus. Carting the kids along, searching for rooms in a huge building…all were not super relaxing.” Additionally, Alicia and her son were only able to attend the final session for a matter of minutes, because they had to catch the campus bus to take them to their car. The difficulty of parking and navigating the large University’s campus frustrated some parents and made attending the first and fifth sessions more difficult.

Sessions two, three, and four were held at a local church where parking was easy and the room was simple to locate. However, the physical space within the room presented other challenges. First, the room was large, housing approximately twenty tables. Thus, the room was considerably larger than necessary for the small groups of adults and their child(ren). Therefore, the presenter rearranged the furniture in the room to be more conducive for a smaller group, creating rows of chairs and moving the unnecessary tables to the back of the room. Although this worked well for the presentation, the room was still quite big and gave children unnecessarily ample space to roam and move. Although the larger room did provide families to spread out for the
practice portion of the session, it is possible that in a smaller room, children would have stayed closer to their parents. Additionally, the room housed a small number of toys, including a plastic toy house. Children often wanted to play with these toys. Even when the toys were put away in a closet located near the entrance of the room, some children would search for the toys. Thus, the large space created an area that allowed for too much movement and the toys were distracting. Therefore, the physical space impacted the engagement of the adults and children in important ways.

*Children’s engagement.*

The sessions were designed for families to attend together, so a parent, or set of parents, attended each session with their child(ren). Therefore, the presentation of dialogic reading techniques was designed with the consideration of engagement for both the adults and the children. The sessions were designed in this manner for two primary purposes. The first reason was to enable parents to participate without needing to find daycare. The second reason was to allow parents an opportunity to practice the techniques as they learned them in the sessions.

The sessions began with Mary, the Raising Readers representative, presenting information about dialogic reading, which typically took approximately ten minutes. During this time, some children sat with their parents and others, most often in the Monday evening groups, moved about the room, which, as previously described had considerable space for roaming. In fact, several children were often drawn to move around the room and were interested in playing with the few toys that were in the large room. Thus, Mary actively tried to balance delivering content to the adults and engaging
the children in activity. As the children began to lose focus and begin moving around the large room, Mary started singing finger plays and songs, gave the children clipboards and crayons to write or draw, handed out scarves for movement activities, and had the children participate in a story retell using felt animals. The children regularly joined in during these activities. However, there were still occasions on which it seemed as though the children were seeking more activity. On these occasions, the large physical space of the room influenced the engagement level of the child by allowing them a space to move about freely. Kathleen, the working mother of two children who indicated her four daughter would read more frequently with her if time allowed, agreed and stated, “I liked the idea of the class being me and her together. I just thought- I mean you guys tried to have activities like coloring and stuff, but it wasn’t always during the time we were, you were giving us our part of the lecture. Like, it would have been nice if there was something, ya know, that would have kept her so that I could have listened for ten minutes.” In this way, the children’s engagement also influenced the engagement of the adult participants.

*Adult engagement.*

While it was relatively easy for parents to listen when their children were still and quiet, it became more difficult as children wandered around the large room often toward the toys, had needs to be attended to, or became restless. As this began to occur, parents began dividing their attention between the presentation and their children. Mallory, who often had all three of her children with her, expressed this well stating, “I know it is a little hard for Mary sometimes when she is trying to talk to us and we are listening with one ear, because we are listening to our kids too.” However, most parents expressed that
they enjoyed having their children at the session with them. For example, at the conclusion of the sessions, one parent said, “Emma really enjoyed her special reading night. We enjoyed going together.” Additionally, Sadie, who usually brought two of her three children with her, also stated, “I think it is a good format. I like how it engages the kids and how it alternates between the kids and talking with us.” One way in which Mary tried to facilitate this balance between talking to the adults and engaging the children in activity, as explained previously, was to infuse finger plays, songs, writing, and movement into the sessions. Parents were willing to participate in these activities, often reciting the finger plays, singing along to songs, encouraging and supporting their writing, or dancing.

After Mary presented the information about the dialogic reading technique she was focusing on for the sessions, she modeled the dialogic reading technique for the session by reading a book to the children. Parents were able to pay attention more easily during this portion of the session, because the children were listening and responding as they sat closely to Mary while she read. Some children sat on the floor in front of Mary as their parents stayed in their chairs, while other children sat with their parents in the chairs or on the floor. From either place, parents listened quietly to Mary model the techniques and appeared to be interested and were attentive.

The last portion of the session was an opportunity for the adult(s) to practice the techniques with their children. Parents actively applied the dialogic techniques during this time and valued the opportunity to do so. Sadie commented, “You get to practice it right there with your kids and I think you are less likely to remember it if you don’t try it.” Additionally, Mary shared that she found the practice component of the sessions
particularly valuable and, although she had never done so before, had begun infusing a practice component into each of the parent education sessions that she had been designing and delivering. She said she recognized that the parents learned the behaviors by doing them and were, perhaps, more likely to be able to utilize them if they had a chance to practice and, subsequently, ask additional questions. In this case, the large physical space may have assisted the activity of the session, because parents often spread about the large room when they practiced using the technique with their child(ren).

**Theme 2: Time.**

The families that participated in the Shared Talking and Reading program were busy and had demanding schedules full of family obligations, other activities, career demands, etc. Thus, regular attendance at multiple sessions over nine weeks was challenging for most of the families. Additionally, parents were often late to sessions. When the sessions were held at the University, the challenges of parking and locating the site of the session influenced this tardiness. However, parents were often approximately five minutes late to the sessions at the church as well. The sessions often started late because of this tardiness. While there were late parents in each group of every session, this was especially problematic for the Monday evening groups since there were two sessions scheduled back to back. Thus, when the first session started late, the presentation had to be condensed and the subsequent session, scheduled to begin after the first session was also late.

Some parents also had to miss entire sessions for various reasons including illness, career demands, and other commitments, all of which were typically related to
their children. While parents usually emailed to indicate they would not be attending, occasionally they did not. In some cases, parents attended an alternate session if they were unable to attend their regularly scheduled session. For example, typically Kathleen and her daughter attended the Monday evening sessions at 6:30. However, Kathleen served on the board of representatives for the preschool that her daughter attended and she needed to attend the board meeting at that time. Instead of missing the meeting, she attended the Monday evening session at 5:30. At the conclusion of the study, Kathleen shared, “I think it was more difficult than I expected to just get there every time, even though it was every other week and stuff. I do like the idea of meeting multiple times, but it was more difficult than I thought. Like halfway through it, I thought maybe I should have signed up for online, because I am having a really hard time getting here now.”

Determining times to offer the face-to-face sessions was also difficult. When structuring the time for the sessions, the researcher and the presenter’s schedules were considered first. Therefore, it was only possible to offer the program on Mondays and Wednesdays. Then, several time frames were offered to the participants. Many of the families were only able to attend the evening session, even though they would have preferred a session during the day because their children attended preschool on Monday and Wednesday mornings. While there were afternoon sessions offered, the parents shared there were additional challenges to attending sessions in the afternoon such as younger children’s napping schedule and needing to pick up older children from school. Christa shared, “I had a hard time getting there. I mean, it was late at night, which I didn’t really like. I mean, I would have much preferred during the day, but then I would have had my son, that would have made it much harder.” Similarly, Angie, a parent in the 5:45
Monday evening session commented at the final session, “I would have done either online or face-to-face. It actually got more challenging to attend as time went on. I got a different job and it made it even more difficult.” While Evelyn said, “I would have preferred a session during the day. During the evening time it was just one more thing to do. The night activities get pretty crazy, but she has preschool on Mondays, Wednesdays, and Fridays. I really wanted to do it during the day, because it would give us something to do, because I am at home, but I couldn’t because she is at preschool during the times you offered this during the day.” Thus, it was evident that the times the program was offered did not work well for everyone. However, the families were quite busy and challenges would have been present for some families at almost anytime the program was offered.

Families with multiple children often faced additional challenges in attending the sessions. First, if the parent(s) did not want their other children to attend, they had to make arrangements for childcare. For example, Sadie, who attended the Wednesday morning group, had her sister watch her nine month old, so that she could attend the session with her two older boys, ages two and four. However, one morning her sister was sick, so she had to bring her daughter to the session as well. Additionally, because she had not anticipated the illness, she was late to the session. Second, if their other children attended, they needed to insure they were taken care. For families with younger children, this often meant that parents had to watch over and entertain their children during the session, which made engaging in the session more difficult. For example, Mallory, another mother in the Wednesday morning group often brought her two-year-old daughter to the sessions, because she did not have other childcare. During one session,
the two year-old sat on her lap most of the time, but needed to use the restroom once and a tissue twice during the session. Evelyn, who had a young infant, often had to nurse her baby at the beginning of the sessions. Families with older children also had to consider what the older child would do during the session. Most of the older children read independently or worked on homework during the initial portion of the session and then joined in with their younger siblings as their parents practiced the dialogic reading technique that had been presented.

Considering the demanding schedules of most of the families, the sessions were usually only attended by one of the child’s parents. Typically the same parent, often the mother, attended each session. However, parents spoke of sharing the content of sessions with other family members within the home. Christa, who went back to work while participating in the program and is the mother of a four year-old girl and a nine year-old boy, stated, “So, when you guys say, when you all say something to me, I come home and I literally synthesize it for my family… Like, I just leave it [the information] on the chair on the kitchen area and then the family can like pick it up and say hmmm, what’s that about and it leads to conversation.” While Holly said, “I always made sure to share everything with my husband. I want my kids to have a male role model that reads.”

Furthermore, there were occasions where more than one parent would attend the session. Even though families faced demanding schedules and many had to consider the needs of multiple children, the face-to-face format allowed for multiple adults and/or children to attend. Therefore, mothers, fathers, grandmothers, and older brothers and sisters all attended various sessions occasionally. The ability for multiple adults and
children to attend the sessions impacted the number of adults that were able to engage with the content of the program.

**Theme 3: Group dynamics.**

Each of the three small groups was distinct. Therefore, the nature of each group influenced the participants’ experiences in the program. The formation of groups may have contributed to this difference. Participants were presented with several forty-five minute time periods and were asked to select all of the times that would work in their schedules. This information was used to create three small groups for instruction. The first group met Monday evenings from 5:45-6:30, the second on Monday evenings, from 6:30-7:15, and the third Wednesday mornings from 10:45 to 11:30. Initially, there was also a fourth group scheduled on Monday morning at 10:45. However, there were only two parents signed up for this session. Both of these parents were able to attend an alternate session, so they agreed to switch. These groups were formed solely on the availability of the families. Therefore, the groups were not identical. Table 4.1 provides descriptive characteristics of each group.

This descriptive information suggests that the 5:45 Monday evening and Wednesday morning groups were perhaps the most distinctly different. First, all of the families in the 5:45 Monday evening group had one or two children in their family, while the Wednesday morning group had only one family with one child and three families with three children. Furthermore, all of the children in the 5:45 Monday evening group attended daycare, while only one of the children attended daycare in the Wednesday morning group. In addition to these differences, one group, the 6:30 Monday evening
group, was larger than the others. Raising Readers typically offers parent education sessions to groups of five to seven parents. However, this group had eight participants, which was perhaps too large. Nonetheless, it was the only session that they were able to attend and, although it was larger, the size of the group did not seem to be problematic.

Table 4.12

*Face-to-Face Program: Group Characteristics*

<table>
<thead>
<tr>
<th></th>
<th>Monday 5:45-6:30</th>
<th>Monday 6:30-7:15</th>
<th>Wednesday 10:45-11:30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of participants</td>
<td>5</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Number of children in family</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Two</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Three</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Daycare attendance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attends Daycare</td>
<td>5</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Does Not Attend Daycare</td>
<td>0</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Library Usage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than once per month</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Once per month</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Two/three times per month</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Once per week</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Two/three times per week</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Previous parent education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>2</td>
<td>4</td>
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</tr>
<tr>
<td>No</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>
In addition to these characteristic differences, each group was functionally
different. For example, the children in the evening groups were typically louder and more
energetic than the children in the morning group. While the children in the evening
session were often interested in playing with each other, the toys in the back of the room,
and were more physically active, the children in the morning group were generally quiet
and often sat next to their parents while the presenter spoke. Similarly, when the families
were given time to practice using dialogic reading and the presenter, Mary, suggested the
families move to have more space, both of the evening groups moved around and found a
new spot away from the other participants, yet the morning group always continued to sit
in their chairs and did not move. This group practiced in their original seats, so they
remained fairly close together as they practiced. Also, the time each group spent
practicing was variable. Generally, the morning group practiced dialogic reading for
longer periods of time during the session. However, this could have been due to the more
relaxed nature of the schedule of Wednesday mornings, because there was only one
session offered and, therefore, insuring the session was finished within forty-five minutes
was less critical. Thus, the distinctive nature of each group also influenced the experience
of the program for individual participants and, the relationships that developed within the
groups.

**Relationships.**

The sessions allowed for communication between the parents, children, presenter,
and researcher, which built, or sustained, relationships and interaction. These
relationships were a contextual factor that influenced the nature of the program. It was
evident that some parents and children already knew each other, because they would
often greet each other when they entered the sessions. These relationships were often
developed through previous activities for the children like daycare, preschool, or
swimming lessons. For example, Delaney, a mother of three, and Kathleen, a mother of
two, knew each other because their children attended preschool together. They often
spoke together before the session began about events at the preschool and the challenges
of parenting. This was also true for two of the children, Cynthia and Christopher, that
attended daycare together. Although these families were not in the same group, they each
attended a Monday evening session. When the first group was leaving and the second
group was entering, the children often waved at each, said hello, and told one another
they would see each other the next day. The parents often exchanged pleasantries as well.

Although some parents and children knew each other before attending the
sessions, this was not the case for all families. However, group members did begin to
interact with one another. This interaction took place quickly for the children in the
groups. In fact, many of them were interested in playing with one another, even though
the sessions were not designed to facilitate such interactions. The children often initiated
play with one another, discussed their writing together, and shared materials easily.
However, this level of interaction did not come as quickly for the adult participants.

Initially, at the first session there was little communication between the adult
participants unless they were previous acquaintances. Over time, however, parents began
to chat with one another informally before the session began, during the session at times
when their children were engaged in activity, and as they left the session. The
conversation typically did not focus on the ideas being presented in the session, but rather
was informal dialogue about parenting issues like toilet training, preschool, or other
family-related activities. The conversation between the adult participants was often generated when they would overhear a conversation between the presenter, Mary, or researcher and other adult participants. For example, as parents were waiting for a Wednesday morning session, the researcher was discussing iPad apps for children with a parent, Robert, who was quite interested in young children’s use of technology. Two of the other parents, Mallory and Elizabeth, sitting in the room heard the researcher discussing these apps and began asking questions about apps, recommending apps to one another, and sharing how their children used technology within their homes. As a result of the brief conversation the parents began downloading some of the apps on their phones. Similarly, as parents waited to begin a 5:45 Monday evening session, Samantha a mother of one four year old boy, began asking the researcher and presenter about the weather. As a result, Samantha said she had recently been in another state and Karie, the mother of one five year old girl, joined in the conversation stating that she had also visited that state recently. This served as a catalyst for these parents to discuss their career responsibilities as well as the challenges they presented to parenting. Following this conversation, these two parents spoke to one another often before the sessions began. These relationships were also further developed because the families began seeing one another in other settings. This was most frequently the case for a number of families that had their children participating in swimming lessons on Monday evenings after they attending the program. They began recognizing each other at swimming lessons, and, therefore, the adults often discussed the busy nature of Monday evenings as they were getting ready to leave the session. The adults spoke about the challenges of attending swimming lessons after STAR with one another, which often included the difficulty of
finding time to have dinner, having overtired children, and rushed bedtimes. Just as the communication between participants was evident over time, so was the relationship between the presenter and the families.

Parents were willing to communicate with the presenter, Mary, openly and were willing to ask questions during the session. For example, when the PEER sequence had been presented and parents had been given the opportunity to practice, one parent asked if she should be allowing the child to look back at the book to answer the questions. Also, another parent asked how the dialogic reading techniques are supported by research. In addition to parents asking questions during the whole group presentation, Mary often circulated the room while parents were practicing the techniques. As she circulated, parents asked further clarifying questions about the techniques like, “Am I really supposed to ask him to repeat every time?”

In addition to asking questions, several parents discussed their experiences with their other children as readers. For example, one parent, Elizabeth, also had a child in high school that was a struggling reader. She often discussed with Mary the challenges of finding good reading materials for her older child, the reading instruction he had in school, and her fears for him as he enters college. Another parent also wanted to discuss her older child’s reading experiences. However, her child was reading above grade level. She was interested in learning how to support him as he continued in school. These parents developed a relationship with Mary that allowed her to become a source of information. Thus, as a result of some of these conversations about older readers, Mary spoke with the whole group about other parent education opportunities offered by Raising Readers. Additionally, she often referred them to the Raising Readers website and gave
them information about other local resources. Mary often took on the role of information resource. Relationships were established in each unique group that impacted the parents’ experiences in the program and influenced the presentation of each session.

**Adaptations to presentation.**

The presenter often made subtle changes to the presentation as she responded to the individual nature of each group and the relationships amongst the participants. Specifically, the relationships that developed in each group influenced the way in which the presenter engaged with the audience. For instance, after the first Monday evening sessions, she brought clipboards and crayons to the Wednesday morning session and engaged the children by having them write after she modeled the reading technique while she spoke with parents. Occasionally, she would sing songs with the children multiple times, while during other sessions she would only sing them once. Additionally, although she had notes that she followed as she modeled the dialogic reading technique during each session, she would make minor adaptations to be responsive to the young audience. During one session she stated, “I know it is getting late this evening and the weather outside is not good, so we will work together tonight to get through this.” In addition to the adaptations the presenter made to the delivery of content, she also changed the set up of the furniture in the room multiple times to increase engagement of the participants. All of these adaptations were made as an attempt at increasing the engagement of the adult and child participants and teaching them the content of the program, and in turn acted as contextual factors that led to the success of the program.
Cross-Case Findings of the Parent Education Programs

The following sections describe the findings of this study across delivery methods for online and face-to-face parent education. There is a particular emphasis in these sections on the similarities and differences between the online and face-to-face delivery methods. First, this section explains the impact of the online and face-to-face programs on shared storybook reading behaviors. Next, contextual factors that influenced parent education are discussed.

Research Question One: How Does Parent Education Influence the Shared Storybook Reading Behaviors of Families?

Dialogic reading behaviors.

The post-intervention ACIRI scores of dialogic reading behaviors were used to determine if there were significant differences in the amount of dialogic reading behaviors exhibited by adults and children in the online and face-to-face groups. The results of the analysis are described in the following sections.

Adult post-intervention dialogic reading behaviors.

The Mann-Whitney U test was used to determine whether there were statistically significant differences in the post-intervention dialogic reading behaviors of the adults in the online and face-to-face groups. The Mann-Whitney U test was not statistically significant (Z= -.126, p = .900) for the overall ACIRI score of dialogic reading, which indicates there was no difference in the post-intervention dialogic reading behaviors of the adults in the online and face-to-face groups. Furthermore, as Table 4.13 indicates,
there was no significant difference between groups for any of the specific dialogic reading behaviors. Thus, there was no difference in the frequency with which adult participants in the online and face-to-face groups utilized the dialogic reading techniques following the intervention.

Table 4.13

*Adults’ post-intervention use of dialogic reading: Online and face-to-face comparison*

<table>
<thead>
<tr>
<th>Dialogic Reading Behaviors</th>
<th>Z score</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactive Reading Strategies</td>
<td>-0.490</td>
<td>.624</td>
</tr>
<tr>
<td>Solicits Questions</td>
<td>-1.345</td>
<td>.178</td>
</tr>
<tr>
<td>Pictures for Identification</td>
<td>-1.316</td>
<td>.188</td>
</tr>
<tr>
<td>Personal Connections</td>
<td>-0.836</td>
<td>.403</td>
</tr>
<tr>
<td>Answers Questions</td>
<td>-0.665</td>
<td>.506</td>
</tr>
<tr>
<td>Literacy Strategies</td>
<td>-0.552</td>
<td>.581</td>
</tr>
<tr>
<td>Use Visuals Cues</td>
<td>-0.385</td>
<td>.700</td>
</tr>
<tr>
<td>Solicits Predictions</td>
<td>-0.527</td>
<td>.599</td>
</tr>
<tr>
<td>Asks Recall Questions</td>
<td>-1.580</td>
<td>.114</td>
</tr>
<tr>
<td>Elaborates on Ideas</td>
<td>-1.642</td>
<td>101</td>
</tr>
<tr>
<td>Dialogic Reading Total</td>
<td>-0.126</td>
<td>.900</td>
</tr>
</tbody>
</table>

**Child post-intervention dialogic reading behaviors.**

The Mann-Whitney U test was used to determine whether there were statistically significant differences in the post-intervention dialogic reading behaviors of the children in the online and face-to-face groups. The Mann-Whitney U test was not statistically significant ($Z = -0.251, p = .802$), which indicates there was no difference in the post-intervention dialogic reading behaviors of the children in the online and face-to-face
groups. Furthermore, as Table 4.14 indicates, there was no significant difference between groups for any of the specific dialogic reading behaviors. Thus, there was no difference in the frequency with which child participants in the online and face-to-face groups responded to the utilization of dialogic reading techniques following the intervention.

Table 4.14

*Children’s post-intervention use of dialogic reading: Online and face-to-face groups comparison*

<table>
<thead>
<tr>
<th>Dialogic Reading Behavior</th>
<th>Z score</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interactive Reading Strategies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responds to questions</td>
<td>-0.317</td>
<td>.751</td>
</tr>
<tr>
<td>Identifies pictures or words</td>
<td>-1.475</td>
<td>.140</td>
</tr>
<tr>
<td>Relates book’s content to experiences</td>
<td>-0.522</td>
<td>.602</td>
</tr>
<tr>
<td>Poses questions</td>
<td>-0.194</td>
<td>.847</td>
</tr>
<tr>
<td><strong>Literacy Strategies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responds to visual cues</td>
<td>-1.159</td>
<td>.247</td>
</tr>
<tr>
<td>Guesses what will happen</td>
<td>-0.443</td>
<td>.658</td>
</tr>
<tr>
<td>Recall information</td>
<td>-1.666</td>
<td>.096</td>
</tr>
<tr>
<td>Offers ideas</td>
<td>-0.135</td>
<td>.893</td>
</tr>
<tr>
<td><strong>Dialogic Reading Total</strong></td>
<td>-0.251</td>
<td>.802</td>
</tr>
</tbody>
</table>

**Reading frequency**

The information from the time diaries and interviews was used to examine the impact of the program across delivery methods. Parents receiving both types of parent education, online and face-to-face, indicated they became more aware of the frequency
with which they read, often suggesting they read more often as a result of participation in the program. For example, Emily, who participated in the online program said, “It’s good. It’s made me, um, think about reading more… Well, honestly, we’re taking more time. Making me take more time to read to them. We weren’t taking maybe ten minutes a night to read to them and now we are just taking more time to read.” While Holly, a parent participating in the face-to-face program shared at the final session, “I am thankful for this class. It has made me realize that I need to do more reading this my kids. I don’t read as much as I thought I did and I have started to change that.”

Although parents participating in both delivery methods expressed they were doing more reading, the parents in the face-to-face group read more minutes per day on average than the parents in the online groups. The parents in the face-to-face group shared storybooks with their children for an average of 24.91 minutes per day, whereas the parents in the online group shared storybooks with their children for an average of 16.51 minutes. A Mann-Whitney U test was performed to determine if this difference was significant. The results indicated that the difference between the average minutes read per day in the families participating in the online delivery and families participating in the face-to-face deliver was statistically significant ($Z= -2.120, p=.034$). However, pre-intervention data regarding average minutes read per day were not collected. Therefore, it is possible that this difference between groups existed prior to the intervention and is not a result of the parent education program. Nevertheless, parents in both online and face-to-face groups generally indicated that they felt that participating in parent education for dialogic reading increased the frequency with which they shared storybooks with their child(ren).
Although participants generally stated they were reading more often as a result of participating in the parent education program, some barriers to more frequent reading were discussed by parents during face-to-face sessions and interviews. First, families are often busy juggling many different activities. Most of the children participating in the program attended preschool, swimming lessons, had play dates with other children, and/or attended events in which their older siblings were participating. Thus, busy schedules interfered with more frequent reading. Second, the parents’ career demands can interfere with shared storybook reading. One parent, Andrea, who started a new job in the midst of her participation in the program, illustrated this by saying, “I figured out that when I was working, I got more disconnected…I was tired. After I started working, I started to become more tired and then many things, even the library material, I got so many books and then I didn’t read the books from the library.” Additionally, Holly, who traveled frequently for work noted on her reading log zero minutes of reading while she was out of town. It is important to note, however, that when a Mann-Whitney U test was conducted to determine if there was a difference between the average number of minutes read by parents whose child(ren) attended or did not attend daycare the results indicated no significant difference ($Z = .319, p = .805$). This test suggests that parents who sent their child(ren) to daycare read approximately the same amount of minutes per day as those parents that stayed home with their child(ren). However, in spite of these barriers to more frequent reading, analysis of the time diaries indicated the participating families did read with their children while they participated in the program.

In addition to reporting their increase in reading frequency, parents in both groups expressed the desire to read more frequently with their children. For example, one parent
said, “Some days we just don’t have the time.” Another parent shared this sentiment stating, “I mean, now, for me, it is just to be making the time for her to read.” The parents revealed that they wanted to read more often with their children, but sometimes did not have the time or energy to do so.

**Research Question Two: What Are the Contextual Factors that Influence the Experiences of Participants in a Parent Education Program?**

Considering that parents participating in both delivery methods were able to utilize dialogic reading techniques following the program, the contextual factors that influenced parent education across cases are important. Specifically, the cross-case analysis of contextual factors was conducted to deepen understanding and explanation across parent education delivery models (Miles & Huberman, 1994) and focused particularly on the similarities and differences between delivery methods. For the cross-case analysis all of the data from both cases were read and marginal notes were taken (Miles & Huberman, 1994). Then, provisional codes were created by putting segments of ideas into categories and inductively coding the data (Strauss, 1987). Patterns between themes were identified and some themes were folded into others according to their patterns during the revision process. Two themes were identified and will be discussed in the following sections: (1) Relationships and (2) Time.

**Theme 1: Relationships.**

The influence of relationships in the online and face-to-face groups differed. First, some participants considered the role of relationships when enrolling in the program. Some of the parents in the face-to-face groups viewed the STAR parent education
program as ‘something to do’ with their children. They indicated they were looking for an opportunity to socialize with other parents and children in addition to learning something new. For example, Kathleen in the face-to-face group said, “I like meeting people and talking to people and stuff, so that’s why I chose to do it in-person.” and Sadie, the mother of three children who often attended with her two boys while her sister watched her young infant daughter, said, “Well, honestly, I thought it would be good for my oldest. I wanted to get him out and engaging with other people, because he tends to be really shy.” This was particularly true of the stay-at-home mothers that were home with their children during the day. One of those mothers, Christa, stated, “Our nights get pretty crazy, but I am always looking for things to do during the day. I like to have things to do during the day with my kids, because I am at home with them.” Conversely, there were not any parents that participated in the online group that indicated they considered socializing or relationship development when enrolling in the program.

Next, relationships amongst the participants and between the presenter and the participants differed depending on the delivery method. Parents in the face-to-face group often spoke with one another before, during, and after the session. Additionally, the presenter in the face-to-face group often spoke with the participants informally before the session and during the session. Thus, there was frequent conversation and communication during the face-to-face group, which sometimes was about the content of the program, but was also about issues of parenting and family life. However, these same relationships were not present in the online group. Participants knew little, if anything, about the other parents completing the program. Furthermore, there was little communication between the facilitator of the online group and the participating parents. Although the discussion
board could have been used as a method for communication and the development of relationships, it was not.

Finally, the relationships developed in the face-to-face group influenced the presentation. As explained in detail in the description of the face-to-face case, minor adaptations were made by Mary, the presenter, to the face-to-face presentations. These adaptations were made according to the relationship between the participants, the engagement of these individuals, and the communication between the presenter and the participants. For instance, if the children appeared to be restless, Mary would end her presentation to the adults more quickly and begin to model the technique by reading a story to the children. This meant that the face-to-face presentation was responsive to the participants. Conversely, because such relationships were not established in the online group, such adjustments were not made to the online course. Considering there was relatively little interaction amongst the participants in the online group, such adaptations were not feasible. Rather, the online content was organized, displayed, and not adjusted throughout the program.

Although relationships were developed while participating in face-to-face sessions and similar relationships were not present in the online group, this did not influence the participants’ ability meet the goal of the course, to learn, and use, dialogic reading techniques. Therefore, families that desire an opportunity to network and communicate with other families with young children might find face-to-face sessions more satisfying. However, considering parents and children in the online and face-to-face groups utilized dialogic reading techniques equally following the program, the development of relationships does not appear to be necessary for learning within parent
education. In addition to the development of relationships, time and flexibility were also contextual factors to consider across delivery methods.

**Theme 2: Time and flexibility.**

Parents in both groups had busy lives, which made participating in parent education more challenging. The families that participated in both groups had career demands, often had children in preschool, and attended other activities like swimming lessons and dance. Therefore, time was an important consideration for parent education.

The face-to-face delivery method lacked flexibility because the participants were required to attend sessions at a specific time and place. Although participants in the face-to-face group selected the time that would work best for them, they often found it challenging to attend over time. Therefore, at each session more than one parent arrived at least five minutes late. Additionally, parents sometimes had prior commitments and were unable to attend a session. Ten participants attended all five sessions, six participants missed one session, and one participant missed two sessions. There were two instances when parents knew they would be unable to attend their session and, therefore, arranged to attend a different session. However, they more frequently just missed the session.

Conversely, the flexible nature of the online delivery method made fitting the program into the busy lives of families more convenient. These parents took advantage of the flexibility of the program and accessed the materials when it fit into their schedule, often when their child(ren) was sleeping. Jean demonstrated this opinion when she said, “I liked it online. I liked that I could just do it on my time. I am not sure that I could give
up an hour in the evening. I mean, it is good information, but I loved doing it on my own. Like, I would just do it at night.” In addition to accessing the materials at their convenience, the online delivery method allowed parents to complete the course within their home, alleviating the necessity for travel and childcare considerations for other children in the family, and allowed them to easily access the content of the course multiple times. Thus, the flexible nature of the online program was an important aspect of the parents’ experience in the program.

Families with multiple children participating in both delivery methods faced additional time constraints and challenges. For example, Evelyn, a mother of three small children and a participant in the face-to-face group, traveled approximately twenty-five minutes to attend the face-to-face session on Monday evenings and often arrived late. When she arrived, her youngest child, a baby, was often crying loudly, and needed to be nursed upon arrival. She reported that attending the evening session was difficult for her, because it conflicted with the baby’s feeding and nap schedule, but they could not attend the Wednesday morning session since their oldest daughter attended preschool at that time.

Having multiple children also influenced parents participating in the online group, because, even with the flexible nature of the program, it was challenging for some parents to find the time to access and view the materials. For instance, Allison, a mother of four, had difficulty completing session four because her children went to their grandparents’ house for Spring Break, which changed her schedule and work demands for the week. When the children returned, they each were participating in activities like gymnastics and soccer practice, Girl Scout meetings, and had homework to complete. Thus, this busy
schedule made it difficult for Amy to complete session four, even though it could be accessed at her convenience. Thus, parents with multiple children in both groups faced the challenge of limited time and meeting of the needs of each member of their family.

At the conclusion of the program, seven of the parents were asked if they would have been willing to participate in the program using the alternate delivery method than the one the participated in. Six of the parents in the face-to-face sessions expressed that they would have been willing to participate in the online program. The one parent that expressed that she would not be interested in completing the program online did not have Internet access within her home. Conversely, none of the parents that participated in the online program indicated that they would have been willing to participate in the face-to-face program. In fact, these parents indicated that, although they enjoyed the course and found it valuable, because of the nature of their lifestyle, they would not be able to regularly attend a scheduled face-to-face session. For instance, three indicated specifically that the needs of their other children would make their attendance at a face-to-face session more difficult, while four parents felt they could not regularly fit a face-to-face session into their demanding schedule. The demands of daily life were a challenge to participation in both groups.
CHAPTER FIVE

DISCUSSION

In the present study, seventeen parents completed a nine-week face-to-face parent education program and fifteen parents completed a nine-week online parent education program. The purpose of this study was to determine the impact of a parent education program designed to promote the use of dialogic reading techniques on the shared storybook reading behaviors of families and to describe the contextual factors that influenced the experiences of participants in the program. This chapter will discuss the findings of the present study in light of the literature reviewed in Chapter Two, discuss implications for the delivery of parent education, and provide possibilities for future research.

**Theoretical Implications**

This study suggests that parent education, whether delivered online or face-to-face, can be effective for teaching parents to utilize dialogic reading techniques. Given that dialogic reading can support child(ren)’s language and literacy learning (ie, Whitehurst, et al., 1988), that children learn about text from the experiences within their families (Taylor, 1983) and that children’s knowledge about language emerges through social interaction about text (Teale Sulzby, 1986), this finding is important. Specifically, parent education could, when contextual factors are considered, support parents’ interactions with their child(ren) and, therefore, influence the child’s learning. In considering the impact of parent education on shared storybook reading behaviors, Vygotsky’s (1978) assertion that children learn through social interactions with others is
important to contemplate, because the program taught the parents to interact with their child(ren) through the use of prompts while sharing storybooks. Thus, as a result of these social interactions, children will likely learn about language and literacy (Whitehurst, et al., 1988). Moreover, the multiple literacies that are used within the child’s home and community, like shared storybook reading, influence how the child comes to know and understand literacy (Purcell-Gates, 1996). Considering these ideas, parent education, delivered both online and face-to-face, could be an effective means to support parents’ interactions with their child(ren) and, therefore, impact their language and emerging understandings of literacy.

**Shared Storybook Reading**

Participating in a parent education program might influence the amount of reading families do. Although the data collected in the present study is insufficient to make a claim regarding the influence of participation in parent education on the frequency with which families read, it does suggest this topic might worth further exploration. In the present study, parents receiving both types of parent education, online and face-to-face, indicated they became more aware of the frequency with which they read, often suggesting they read more often as a result of participation in the program. While the number of minutes families spent engaged in shared storybook reading prior to the intervention is unknown, parents in both the online and face-to-face groups reported in the interviews that they were reading more frequently. These self-reports of increased reading frequency are similar to the findings in Huebner’s (2000b) study of the influence of participation in parent education programming on the frequency of at-home shared storybook reading, which suggested that parents doubled the amount of shared storybook
reading they did with their child(ren) following their participation in a parent education program. The increase in reading frequency as a result of participating in parent education, regardless of delivery method, is important, because the availability and opportunity for children to engage in written language events, like shared storybook reading, within their family’s environment are a central aspect of the child’s literacy learning (Harste, Burke, & Woodward, 1981). Thus, the impact of participation in parent education on at-home reading behaviors should be explored.

**Dialogic reading.**

The present study confirms previous research testing the effectiveness of face-to-face parent education interventions for the use of dialogic reading techniques in preschools (Whitehurst, et al., 1994), libraries (Huebner, 2000), health care centers (Blom-Hofman, O’Neil-Pirozzi, & Cutting, 2006), and daycare centers (Lonigan & Whitehurst, 1998, Valdez-Menchaca & Whitehurst, 1992). Additionally, this study adds to the research base by suggesting that delivering parent education for the use of dialogic reading techniques online is a viable option and can be as effective as a similar program offered face-to-face at teaching parents to utilize dialogic reading techniques while sharing storybooks. This finding is in direct contrast to Huebner and Meltzoff’s (2005) study of face-to-face and video recorded instruction, which indicates that face-to-face instruction is preferable to video recorded instruction. Huebner and Meltzoff (2005) compared (1) in-person instruction with videotaped explanation and examples presented to small groups of parents, (2) self-instruction by videotape with telephone coaching, and (3) self-instruction by videotape alone. In Huebner and Meltzoff’s study, participants in all three treatment groups significantly increased their use of dialogic reading techniques.
However, the face-to-face group used the techniques more frequently than those parents that participated in either of the self-instruction groups. However, there are two noteworthy differences between the face-to-face groups in Huebner and Meltzhoff’s (2005) study and the present study. The first difference is that in Huebner and Meltzhoff’s (2005) study the face-to-face groups viewed the same video as the self-instructed groups, but did so in a group setting and then were able to take the video home. In the present study, videos were not utilized with the face-to-face group. Rather, the presenter modeled the use of dialogic reading techniques with the children in attendance. The second difference is that, in Huebner and Meltzhoff’s (2005) study, parents attended their small groups without their child(ren) and imitated the expert by role-playing and receiving corrective feedback. Conversely, in the present study parents attended the sessions with their child(ren) and practiced using the techniques by reading with their child(ren) during the session. Although parents were encouraged to ask questions, explicit corrective feedback was not given. Therefore, it is possible that parents may use dialogic reading most frequently when they have seen the strategy during a face-to-face session without their child(ren) present and are given corrective feedback when practicing the technique. However, given that in both the present study and Huebner and Meltzhoff’s (2005) study all of the groups of participants, whether instructed in face-to-face group settings or self-instructed using videotapes or an online program, increased their use of dialogic reading techniques significantly, it is important to consider if these possible benefits outweigh the potential burdens such practices would place on the participating families. For instance, some parents might not be able to attend a regularly schedule face-to-face session because of previous commitments or career demands.
Furthermore, if parents are required to attend sessions without their child(ren), then they must arrange for childcare. This could potentially become a barrier for participation for some families and might override any potential advantages to attending a face-to-face program without their child(ren) that may exist.

**Considerations for Developing and Delivering Parent Education**

The two methods of delivery of parent education, online and face-to-face, are influenced by different contextual factors and result in different experiences for the participating parents. These differences create a unique set of features that should be contemplated when developing a parent education program. These features are discussed in the following sections. First, considerations for online programs and then considerations for face-to-face programs are presented.

**Online parent education.**

Given the factors, which are described in Chapter Four, online access and delivery of content, the following considerations should be made when developing an online parent education program.

* Differences from online environments for college coursework.*

There is currently a paucity of research on using the Internet to deliver parent education programming. Therefore, Ruhleder and Twildale’s (2000) recommendations for creating an online learning environment for college students were considered: (1) collaboration; (2) opportunities for participants to develop over time through practice; (3) exemplars of practice; and (4) spaces for reflection to create a supportive online environment for learning. However, the results of the present study indicate that these
recommendations may not be suited for designing parent education. Rather, some, but not all, of these features of online environments appear to be necessary for parent education.

**Modeling and examples.**

When designing online parent education programs, it may be useful to create video recordings that demonstrate the expected behavior or outcome of the program and develop handouts containing the key content for each session, which can easily be referred to again, printed, or shared electronically. In the present study, videos that modeled the dialogic reading techniques being utilized during shared storybook reading and handouts that supported the content being presented in each session were provided within the online program to meet the second and third criteria of Ruhleder and Twidale’s (2000) recommendations of providing: (1) opportunities for participants to develop over time through practice; and (2) exemplars of practice. Participants found both the use of video and handouts useful. Therefore, when developing an online parent education program, the use of video to model the behavior or expected outcome for the participants and handouts that reinforce the content and provide further examples are useful. Whereas the video recordings can serve as a model or exemplar, the handouts can be accessed on multiple occasions, printed, and shared with other adults in the home. Although opportunities for practice and exemplars of practice appear to be beneficial aspects of online parent education programs, the other two recommendations of Ruhleder and Twidale (2000), opportunities for collaboration and spaces for reflection may not be as useful.
Discussion board use.

Utilizing a discussion board within a parent education program may not be useful for participants. Bures, Amundsen, & Abrami (2002) suggest that the motivations of online learning participants must be carefully considered when designing an online course. Therefore, if the participants in an online parent education program are not motivated to participate in the program in order to develop relationships with other parents, the use of a discussion board may be unnecessary. It is also possible that participants in parent education programs have different motivation for participation than college students, because parents have volunteered to participate and are seeking new knowledge that they can apply directly to their lives to support their child(ren). Furthermore, it may not be necessary for participants in online parent education programs to reflect on the content of the course if the goal of the course is primarily to practice a new technique or behavior, like dialogic reading. Thus, while Ruhleder and Twidale’s (2000) recommendations of providing time for practice and exemplars of practice proved to be valuable aspect of the online parent education program, collaboration and reflection were not as important for the online program.

However, the use of a discussion board may be more valuable if the participants in an online parent education program were interested in socially interacting with other parents online. Carabajal, LaPointe, & Gunawardena (2003) indicate one of the factors that influences an individual’s contribution to an online group is the need for social interaction. Thus, it is possible that the parents that did not participate in the discussion board, because they did not desire social interaction, but other groups of parents might. In the event that a discussion board is deemed valuable for a group of parents that desires
social interaction, the purpose for participating in such online discussion should be explicitly stated to the participants (Pate, Smaldino, Mayall, & Luetkehans, 2009).

**Provide flexibility.**

Although teaching tools allow for synchronous learning, one of the contextual factors that influenced parents’ ability to participate was the flexibility it allowed them. When designing online parent education programs, flexible access to the course content should be considered valuable and use of synchronous online teaching tools should be contemplated carefully. Flexibility was a key feature that influenced the experience of the parents in the online program. The online format for the program allowed parents to access the content of the course at a time and place that was convenient for them. Additionally, because their access was flexible they were able to re-visit the content easily and often shared it with other members of the family. Thus, providing flexible access to an online learning environment for parent education allowed busy families with demanding schedules and multiple children to participate without the constraints of a fixed schedule. However, when face-to-face parent education programs are being designed, a different set of considerations should be contemplated.

**Face-to-face parent education.**

Given the factors, which are described in Chapter Four, engagement, time, and group dynamics, the following considerations should be made when developing a face-to-face parent education program.
**Engaging participants.**

When developing a professional development program, it must be decided if children will be invited to participate in the program along with the adults. Although previous research, like Huebner and Metzhoff’s (2005) study, which was previously described, has offered parent education programming for parents only, the results from the present study suggest that it is possible to incorporate children into a face-to-face parent education program and there are potential benefits of doing so. Inviting children to participate in the program with their parents eliminates the need for parents to find childcare, gives an opportunity for children to participate in read aloud and other literacy-based activities, and provides parents with the chance to practice the dialogic reading techniques with their children. However, children’s engagement during the session must be carefully considered. The presentation should encourage the children’s participation and offer developmentally appropriate activity throughout the session or it becomes difficult for the parents to attend to, and participate in, the program. For instance, in the present study, Mary, the presenter, tried to engage the children through writing and drawing, singing finger plays, and facilitating opportunities for movement. While this was relatively effective, it would have perhaps been even more effective to have volunteers facilitate hands-on activities for the children while the parents were engaged in listening and learning the dialogic techniques. This would allow parents to remain focused solely on the presentation rather than attending to the behavior and other needs of their child(ren).

Additionally, families that have multiple children should be considered when a developing a parent education program. It must be decided if siblings will be invited to
attend the sessions as well. If they are invited, appropriate activities for a broader developmental range should be offered to encourage active participation for all participants and, again, to allow parents to fully attend to the presentation.

**Time constraints.**

When designing parent education it is imperative to consider the intensiveness of the programming as well as the specific needs of the families participating (St. Pierre, Ricciuti, & Rimdzius, 2005), because participants are often limited by their busy schedules and have difficulty attending multiple sessions. In the present study, several times on Mondays and Wednesdays were offered for potential meetings. Although these options gave families more flexibility than assigning a specific time, many of the children attended preschool on Monday and Wednesday mornings and the families, therefore, had to enroll in an evening meeting, which they were hoping to avoid. Thus, other activities in the community and families’ availability must be carefully considered when designing a parent education program.

**Physical space.**

The location for programming requires careful planning, especially if the organization developing the programming hopes to utilize a space without cost. Thus, availability of parking, the size of the room, objects placed in the room, and seating are all important considerations for designing parent education and, if not considered carefully can become barriers for participation (Yaffe and Williams, 1998).
Relationship development.

The face-to-face program offered a platform for socialization and relationship building. Thus, if parents are seeking an opportunity to network with other families, they might find face-to-face programs valuable. This finding is similar to that of Yaffe and Williams’ (1998) study, which indicated that the women appreciated the relationships and rapport that were built in the program. Similarly, the families participating in another, large-scale family literacy program, Project FLAME, an intervention aimed at serving Hispanic families to promote literacy in the home, noted the importance of networking with other families and reported increased self-efficacy (Rodriquez-Brown, 2004).

It is important to note, however that in the present study the development of relationships does not appear to be an essential feature of learning to use dialogic reading because, following the intervention, parents in the online and face-to-face groups used the dialogic reading prompts equally. Moreover, the children of the parents in these groups responded to their parent’s use of dialogic reading prompts by using equal amounts of dialogue. Therefore, relationships can develop as a result of participation in parent education and, based on previous research (ie Rodriquez-Brown, 2004), parents might appreciate the opportunity to develop these relationships. However, the present study suggests that the development of relationships is not essential for learning the intended literacy-based outcomes of the program.

Limitations

The population of participants is a potential limitation of this study. First, the participants in this study lack diversity. Specifically, most of the parents that completed
the program reported they already read frequently with their child(ren), owned a relatively large number of books, and visited the library with their child(ren). It is possible that the results of parent education may be different for parents that read less frequently with their children, own fewer books, or do not access the library’s resources. Also, participants in the online parent education program needed regular access to the Internet and a basic ability to navigate Blackboard Learn to participate. Therefore, potential parent participants that did not meet these criteria were not included in the online group of this study.

**Implications for Practice**

This study suggests that both online and face-to-face delivery methods have different contextual factors that influence the outcomes of the program and, as a result, have different factors that should be considered when creating a parent education program. However, these affordances and constraints also suggest that a third, currently unstudied, option for delivering parent education programming using a hybrid of online and face-to-face methods of delivery. This hybrid method of delivery might entail infrequent face-to-face sessions with access to online resources, like videos and handouts containing information and examples, in between face-to-face sessions. This design could allow participants to experience the affordances of each delivery method. Specifically, the face-to-face portions of the program might allow for relationship development and in-person practice, while the online portion of the program might allow for flexibility and easily re-visiting content.
This hybrid delivery method might also increase the sustainability of participation for parents with demanding schedules, because the face-to-face sessions, which require a specific meeting time, would be reduced. Additionally, the hybrid delivery method might decrease the burden of parent education programs by offering some of the intervention online. Specifically, some online instruction might diminish the time a presenter is required to facilitate face-to-face sessions, reduce the time a meeting space is needed, and decrease the need for paper copies.

**Future Research**

This study also has implications for research. First, the present study should be replicated with parents who read less frequently with their children, own fewer books, and/or do not visit the library with their child to determine the effective and experience of parents who do not regularly share storybooks with their children. The present study illuminates the contextual factors that influence online and face-to-face participants, but these factors may vary among populations of parents and communities.

Additionally, there is a need for research exploring the delivery of parent education for other literacy topics. While parent education for dialogic reading is well-supported (ie. Whitehurst, et al., 1988; Blom-Hoffman, et al., 2008), fewer studies have examined parent education for other literacy activities (ie Jordan, Porche, & Snow, 2000). There is also a paucity of research regarding parent education aimed at parents of older children. Such research might further inform how parent education can enhance children’s literacy learning.
Parent education in online environments needs further exploration. While this study suggests providing parent education online is a viable option, further research is necessary to determine the most effective practices for doing so. Considering the large quantity of web-based learning platforms and ever-expanding possibilities for online teaching tools, a nearly infinite number of possibilities exist for the delivery of content. For example, one such possibility that should be studied is utilizing regular weekly or bi-weekly synchronous meetings throughout the online education program. It is possible that this might encourage the participants to commit to participate in the program, engage more frequently with the course content, and provide a platform to ask questions or discuss issues. These options should be explored as tools for providing parent education programming.
APPENDIX A

Initial Participant Interest Survey

1. Name(s) of parent(s): Open response option

2. Name(s) and ages of children birth to age five: Open response option

3. Name(s) and ages of other children in the home: Open response option

4. Does the child have a speaking vocabulary of at least fifty words: Yes or No

5. Are you interested in participating in the:
   (a) Face-to-face sessions
   (b) Online sessions
   (c) Either

6. If interested in online sessions, how would you describe your comfort level with using technology:
   (a) I am very confident using technology to access content on the Internet.
   (b) I am confident using technology
   (c) I am unsure about using technology to access content on the Internet, but I am willing to try.

7. Have you participated in parent education courses before: Yes or No
8. If yes, how many courses have you participate in:

   (a) More than five

   (b) Three or four courses

   (c) One or two courses

9. Do you visit the library with your child: Yes or No

10. If yes, how often do you visit the library with your child?

   (a) More than once a week

   (b) About once a week

   (c) About once every two weeks

   (d) About once a month

   (e) Less than once a month

11. Approximately how many books do you currently have in your home?

   (a) More than 500

   (b) Between 200 and 500

   (c) Between 50 and 200

   (d) Between 20 and 50

   (e) Less than 20
12. How often do you currently read with your child?

(a) Every day

(b) About four or fives times per week

(c) About two or three times per week

(d) About once a week

(e) Less than once a week
## APPENDIX B

### Time Diary Survey

<table>
<thead>
<tr>
<th>Date</th>
<th>Minutes Read</th>
<th>Title of Books Read</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>XX/XX</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XX/XX</td>
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<tr>
<td>XX/XX</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
Face-to Face Observation Record

<table>
<thead>
<tr>
<th>Date:</th>
<th>Presenter:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group:</td>
<td>Session:</td>
</tr>
</tbody>
</table>

Communication between participants and presenter

Parental engagement with children
Social interaction between participants

Other
APPENDIX D

Semi-structured Interview Questions

1. Describe your experiences as a participant in the parent education sessions.

2. What did you find to be the most valuable aspect of the education sessions?

3. What, if anything, would you change about the sessions?

4. What would you like to do more of? Less of?

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


Washington, DC.


Yaffe, D. & Willams, C. (1998). Why women chose to participate in a family literacy program and factors that contributed to the program’s success. *Journal of Adolescent and Adult Literacy, 42*(1), 8-19.

