THE INFLUENCE OF POSITIVE MOTHER-CHILD VERBAL INTERACTIONS

ON ADOLESCENT MOTHERS' LITERACY

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Abstract

The purpose of this six-month qualitative microethnographic case study was to determine what influence a family literacy program based on positive mother-child verbal interactions would have on the participating adolescent mothers' literacy skills. The design of the program was founded on the Hart and Risley study (1995) and their findings regarding the five categories of significant family experiences that enhance children's vocabulary: language diversity, feedback tone, symbolic emphasis, guidance style, and responsiveness. These experiences stress the importance of affirmative interactions between children and their parents.

The three adolescent mothers who participated in the study were single, white, of low socioeconomic status, and enrolled as high school seniors in the same school district in rural northwestern Pennsylvania. One participant was 11 weeks pregnant with a boy, one participant was parenting an 11-month old girl, and one participant was 18 weeks pregnant with a boy and parenting a one-year-old boy.

The study found that the girls who participated in this program showed a growth of one grade level in their expository text reading levels. The results also suggest a relationship between the participants' attitude and motivation scores and their participation level in the study. Finally, the researcher believes that external/ environmental factors may also have influenced the participants' participation level and the overall results.

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Acknowledgments

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Finally, I would like to say how much I enjoyed getting to know those young ladies who participated in this study. You are wonderful mothers and it makes me proud to know that together we will raise literate children.

Chapter 1: Introduction

"We realized how unique the first 3 years are in the lives of humans just because infants are so utterly dependent on adults for all their nurture and knowledge" (Hart & Risley, 1995, p. 175).

Influences

The seed for this qualitative study was planted by one of my former students. She had been enrolled in remedial reading classes that I taught and during her tenth-grade year she gave birth to a son with several debilitating medical problems. Contrary to what one might predict, these challenges did not hinder the young mother; instead, they spurred her into action and she became the best mother she knew how to be. She was very active in facilitating her baby's recovery and helping him with his daily activities.

During her senior year, at the annual "Senior Project Night," this young mother thanked me for teaching her the importance of reading. She wanted her son to learn that as well and went on to report that she was reading every day and that she was becoming a better reader. She was obviously proud of this fact, but then she whispered, "I am learning to read by reading children's books to my son." She appeared to be embarrassed by the fact that she was becoming a better reader by reading books written for young children, but I hugged her and said that what she was doing was perfect. I was proud of her and told her, "You have to start somewhere." During that brief conversation, she

started to understand the learning process and I subconsciously started thinking about my dissertation topic.

It is amazing how many elements are actually required for a seed to take root and start to grow into a dissertation. In addition to hearing the young mother's story of learning by reading to her child, I recalled a book I read during a graduate course at the University of Pittsburgh. The course instructor, Dr. Isabel Beck, assigned Hart and Risley's (1995) *Meaningful Differences in the Everyday Experiences of Young American Children*. This book described a study in which the authors had observed how parents' verbal interactions with their children influenced the children's vocabulary. I found the book very moving, but it did not occur to me at the time that it might have an impact on my academic career. Hart and Risley's work is the foundation for this study, but other critical elements for this dissertation had not yet come together.

When an administrator at the school where I am employed asked me how we could truly help our students read better, I replied, "We need to start being proactive rather than reactive. We need to prevent reading problems in the first place." The program I visualized would help children before they arrived in the classroom. With that idea crystallizing in my mind, the elements needed to develop and conduct this study were finally coming together.

The next step was to acquire a grant. I applied for the Unsung Heroes Award sponsored by ING, an international financial services group, and won third place. The resulting $7,000 corporate grant allowed me to initiate the LITERATE Program, for pregnant and parenting girls enrolled in the school district where I worked.

The School District

The site for this study was a small, public middle-high school located in rural northwestern Pennsylvania where the population falls into lower socioeconomic strata. The school district has a predominantly Caucasian population speaking standard American English with minor grammatical errors but no dialect (D. Brant, personal communication, March 24, 2010). Between the academic years of 2000 and 2007, the school district had an average of 12.42 pregnant and/or parenting mothers enrolled in the middle-high school each year. This number does not include the 0.85 miscarriages or abortions reported on average during those same years (C. L. Smith, personal communication, February 7, 2008).

The average percentage of students from low-income families enrolled in the middle school grades between the academic years of 2001 and 2007 was 55.22%. During those same years, 43.12% of the students enrolled in high school grades came from low-income families. All of these students receive free or reduced-price lunches (B. Obert, personal communication, February 7, 2009).

By December 2007, the school district had 350 female students enrolled in the middle-high school. Of those, 10 were pregnant or parenting, a figure representing roughly 2.85% of the female population or one in every 35 girls (M. Hunter, personal communication, February 7, 2008). Out of the 10 adolescent mothers, six received free or reduced-price lunches (B. Obert, personal communication, February 7, 2009).

Of the four performance levels (advanced, proficient, basic, and below basic) on the reading portion of the most recent Pennsylvania System of School Assessment

(PSSA) tests taken by the student body in the school district where the study site was located, four of the adolescent mothers scored at the basic performance level and four scored below basic. Two of the adolescent mothers had no PSSA scores.

According to the Pennsylvania Department of Education's website (2001 a & b), the PSSA is part of the Pennsylvania Accountability System, which has ensured that public schools in the state are in compliance with the requirements of the federal Elementary and Secondary Education Act of 2001 (also known as the No Child Left Behind Act, or NCLB). The website states that "the Pennsylvania System of School Assessment (PSSA) is a standards based, criterion-referenced assessment used to measure a student's attainment of the academic standards" (Pennsylvania Department of Education, 2001a, Assessment, para. 2). The criteria for each of the four performance levels are defined as follows:

1. Advanced: The Advanced Level reflects superior academic performance. Advanced work indicates an in-depth understanding and exemplary display of the skills included in the Pennsylvania Academic Content Standards.

2. Proficient: The Proficient Level reflects satisfactory academic performance. Proficient work indicates a solid understanding and adequate display of the skills included in the Pennsylvania Academic Content Standards.

3. Basic: The Basic Level reflects marginal academic performance. Basic work indicates a partial understanding and limited display of the skills included in the Pennsylvania Academic Content Standards. This work is approaching satisfactory performance, but has not been reached. There is a need for additional instructional

opportunities and/or increased student academic commitment to achieve the Proficient Level.

4. Below basic: The Below Basic Level reflects inadequate academic performance. Below Basic work indicates little understanding and minimal display of the skills included in the Pennsylvania Academic Content Standards. There is a major need for additional instructional opportunities and/or increased student academic commitment to achieve the Proficient Level. (Pennsylvania Department of Education, 2001a, Assessment: Pennsylvania's General Performance Level Descriptors, para. 5).

The cut scores for the PSSA are displayed in Table 1.

Table 1

Cut Scores for the Pennsylvania System of School Assessment

READING

Grade	3		4		5		6		7		8		11	
	low	high	low	high	low	high	low	high	low	high	low	high	low	high
Advanced	1442	and up	1469	and up	1497	and up	1456	and up	1470	and up	1473	and up	1492	and up
Proficient	1235	1441	1255	1468	1275	1496	1278	1455	1279	1469	1280	1491	1257	1491
Basic	1168	1234	1112	1254	1137	1274	1121	1277	1131	1278	1146	1256	1112	1256
High Basic	1201	1234	1183	1254	1206	1274	1199	1277	1205	1278	1213	1256	1184	1256
Low Basic	1168	1200	1112	1182	1137	1205	1121	1198	1131	1204	1146	1183	1112	1183
Below Basic	1000	1167	700	1111	700	1136	700	1120	700	1130	700	1111	700	1111
High Below Basic	1084	1167	906	1111	918	1136	910	1120	915	1130	923	1111	906	1111
Low Below Basic	1000	1083	700	905	700	917	700	909	700	914	700	905	700	905

Note. Adapted from Pennsylvania Department of Education, 2001a, Pennsylvania System of School Assessment Performance Level Cut Scores.

Therefore, of those eight adolescent mothers with state-provided reading scores, 50% scored at the basic level and 50% scored below basic. None of the girls enrolled at

the study site obtained the state-set goals of advanced or proficient performance in reading. Also, of the 10 adolescent mothers, five had at one point in their middle-high school careers been identified as needing special educational services.

The Nation

In conducting the literature review for this study, I noticed that the small rural school serving as the study site was in some ways a microcosm of the United States, reflecting some of the same problems faced by the nation as a whole but a smaller scale. According to a report issued by Save the Children (Geoghegan, 2004), of all industrialized nations, the United States has the highest teenage birth rate, with almost 900,000 such births each year. This report also shows that low socioeconomic status (SES) rural areas have a higher percentage of teen mothers than the nation as a whole and that young girls with low reading and math levels are more likely to become pregnant than those with higher reading and math skills. In addition, the Guttmacher Institute's report on U.S. teenage pregnancy statistics (2006) indicates that there are roughly 750,000 children born to mothers aged 15 to 19 each year.

Because the educational achievement and socioeconomic statistics of the school in which I worked closely resembled those of many schools nationwide, I decided it would be an ideal study site because the outcomes of the study might be applicable to many other American schools. I now had a starting place for my literacy program.

Statement of the Problem

As I began to delve into reports, research, and data, I asked myself numerous fundamental questions: How do children learn language? What role does spoken language play in developing one's literacy skills? Why is it easier for some children to learn literacy skills? Why are literacy skills intergenerational? What can be done to prevent intergenerational illiteracy? I found many answers to my questions in the literature, but one question in particular continued to resurface: What influence would a family literacy program have on the mothers' literacy skills?

This question regarding mothers' literacy skills continued to resurface because the literature I had read showed not only that parents have profound influence on their children's later literacy skills but also that parents' own language usage is the chief influence on children's literacy skills and future academic success (Center for Longitudinal Studies, 2005; Degotardi & Torr, 2007; Gilkerson & Richards, 2007; Hart & Risley, 1995; Korat, 2009; Myrberg & Rosén, 2009; Williams, 2010). More specifically, research showed that the mother's language skills were the most critical element influencing the child (Gilkerson & Richards, 2007; Oxford & Spieker, 2006), perhaps because the mother is traditionally the primary caregiver. Other research has investigated the speech patterns of mothers with young children. Catherine E. Snow's article, "Mother's Speech to Children Learning Language" (1972), explains how mothers actually modify their language when talking to their children. For example, when speaking to her child, a mother's sentences are shorter, choppier, and simpler, and she speaks to her child with high-pitched, rhythmic intonations, accentuating the vowel

sounds. This phenomenon appears to be one of the first steps in language teaching/learning (Snow, 1972; Snow et al., 1976). Research has definitively proven that parental language has an immense impact on children's overall language development (Hart & Risley 1995, 1999; Gilkerson & Richards, 2007, 2008; Wells, 1986).

However, very few studies have focused on helping parents improve their own literacy skills and their knowledge of literacy acquisition in order to help their children. This lack of attention may be an unintended result of the sociohistorical development of family literacy programs in the United States. The original goal of family literacy programs was to eliminate poverty in America by improving an entire generation's literacy skills and enabling that generation of adults to become employable. President Lyndon B. Johnson declared the "War on Poverty" in 1965, and from this declaration the Office of Economic Equality created Project Head Start. The main goal of Head Start at that time was to help break the cycle of poverty by educating children ages three to school age who came from low SES households and teaching job skills to the unemployed (ILHeadStart.org, 2006). Head Start programs focused more heavily on the emergent literacy skills of children rather than on those participating adults, however. Thus, the research conducted in conjunction with Head Start programs since the late 1960s has focused on children and revealed that the first three years of life are critical in the development of language skills.

In order to improve the literacy skills of children in any significant way, family literacy programs must also improve parents' literacy skills and their overall understanding of literacy acquisition. Sticht and McDonald (1990) stated that "educated

adults have more influence on their children's education; the children become literate

adults who, in turn, produce more educable children" (Sticht & McDonald, 1990,

document résumé: abstract, para. 1). It is because of this dynamic that family literacy

programs must address the ways in which their programs affect the literacy skills of

parents as well as children. If a family literacy program can educate the parent, the parent

can in turn educate the child, and the program and parent can then support what each

other is doing.

As I reviewed the literature on family literacy, the groundbreaking study by Hart

and Risley (1995) was repeatedly referenced, so I revisited *Meaningful Differences in the*

Everyday Experiences of Young American Children. In returning to that work that had so

impressed me in graduate school, my awareness of the critical importance of parent-child

verbal interactions and children's emerging and future literacy skills was reinforced. I set

out to design and implement in the school district where I work a family literacy program

that would assess how the five significant experiences of family interaction identified by

Hart and Risley (1995) would influence adolescent mothers' literacy skills.

Definition of Terms

Language. Harris and Hodges (1995) provide 10 definitions for the word

"language." The initial definition states that language is "'the systematic, conventional

use of sounds, signs, or written symbols in a human society for communication and self

expression (Crystal, 1992)'" (p. 132). For this study, the term "language" will be defined

as any system used to communicate.

Literacy. According to *The Literacy Dictionary* (Harris & Hodges, 1995), the term literacy is difficult to define due to the many factors affecting literacy acquisition, such as individual skills and abilities, culture, geography, and "the concept of literacy as a continuum" (Harris & Hodges, 1995, p. 140). However, in this paper, the term "literacy" will be used to refer to the ability to communicate effectively through the language systems referred to in the definition of language mentioned above, that is, the ability to use gestures, sounds, speech, reading, and writing to relay information efficiently to other individuals. Conversely, illiteracy is the inability to communicate successfully through gesturing, sounds, speech, reading, and/or writing.

Intergenerational literacy. This term refers to older family members' efforts to help themselves or other family members learn to read and write (Harris & Hodges, 1995). More specifically, however, for this paper, "intergenerational literacy" will refer to a situation in which the ability to communicate using spoken and written language is passed from one generation to the next. For this study, it is important to recognize that illiteracy can also be intergenerational.

Illiteracy. This term has been defined as "the inability to read and write a language" (Harris & Hodges, 1995, p. 112). Research has shown that, like literacy, an individual's lack of language and literacy skills is often intergenerational (Gadsden, 2004). In a logical reverse, just as literate parents possess knowledge and transfer it to the child, illiterate parents cannot pass on knowledge about literacy because they do not possess such skills. A mother cannot give what she does not possess, but a parent who

does possess skills can pass them on to his/her child. Literacy skills can be taught through conscious or unconscious instruction.

Guided participation. According to Rogoff (1990) guided participation is a method used to transfer knowledge to a learner. Guided participation is the idea of guiding or aiding an individual's learning through self-modeling and direction. In this study, the participants were explicitly taught how to use guided participation methods when talking with their children. This transfer of literacy knowledge from parent to child is called family literacy.

Family literacy. Wasik and Herrmann (2004) define family literacy as the "literacy beliefs and practices among family members and the intergenerational transfer of literacy to children" (Wasik and Herrmann, 2004, p. 3). Because literacy and illiteracy tend to be intergenerational (Gadsden, 2004), many family literacy programs have been created to help battle illiteracy within family units that struggle with the ability to communicate successfully through spoken and or written language. The study I developed is based on the theory of family literacy because it sought to determine what effects a family literacy program based on the verbal interactions (spoken language) between a mother and her child would have on the mother's literacy level.

Verbal interactions. Hart and Risley (1995) found that verbal interactions, that is, the way children and parents talk to one another, play a critical role in children's vocabulary development. Literature on language development shows that children's vocabulary acquisition has an impact on their overall literacy learning (Otto, 2010). Hart

and Risley (1995) identified five types of significant family experiences that affect a child's vocabulary growth.

Significant family experiences. Hart and Risley (1995) identified certain interactions between parent and child as "significant family experiences" that affect vocabulary development in children. The five interactions or experiences are defined as follows:

1. *Language diversity* is the number of words used when talking and the variation of terms used when referring to items or experiences.

2. *Feedback tone* is the verbal tone (positive versus negative) one uses when speaking to another.

3. *Symbolic emphasis* is the emphasis or importance placed on explaining things or experiences to the learner.

4. *Guidance style* is how one guides another's behavior through the use of invitations (requests) or imperatives (demands).

5. Responsiveness is how one listens, recognizes another's verbal contribution, and encourages another to verbally interact (Hart & Risley, 1995, p. 192).

The terms defined in this section, along with the description of the school in which the study took place, the state of teen pregnancy in our nation, and the statement of the problem provide the necessary background information for understanding the discussion that follows.

Chapter 2: Literature Review

Theory

While the practical underpinnings of the family literacy program I developed for this study are found in Hart and Risley's (1995) research, it is Lev Vygotsky's idea that children's cognition develops through social interactions that provides the theoretical foundation (Vygotsky, 1978). According to Vygotsky, it is these interactions and the implicit or explicit teachings of others that help children learn about the world around them. Vygotsky conceptualized this type of social learning in what he called the Zone of Proximal Development (ZPD), which he described as the stage of learning that occurs between the point when the learner progresses without assistance and when the learner cannot progress without the help of another. Vygotsky stated that the learner is able to reach the ZPD through what he referred to as "scaffolding." Scaffolding is present when the teacher helps the learner to obtain information more effectively by gradually increasing the complexity and difficulty level of the information to be learned and by utilizing the individual's ZPD (Vygotsky, 1978).

Bronfenbrenner's Ecological Model supports Vygotsky's theory and the idea of family literacy. This model shows that individuals perceive themselves to be at the center of their world. Bronfenbrenner believed that an individual's world is made up of four environmental systems: the microsystem, the mesosystem, the exosystem, and the macrosystem. Each of these environmental systems surrounds the individual, but they exist as if in concentric circles, with each successive system farther away from the individual at the center. According to the Ecological Model, the family is situated in the

innermost circle, the microsystem, which thus has the most direct influence on the individual (Wasik & Herrmann, 2004).

Nel Noddings argued that a caring home environment can ultimately affect society at large and even influence social policy (Noddings, 2002). In other words, the formulation of a positive, nurturing social policy actually begins in the home, when parents teach their children how to care for others by caring properly for them. Noddings has suggested that this caring way of life also, more directly, influences the education of children (Noddings, 2002, 2003), which should naturally, she argued, begin at home (Noddings, 2002).

Early Literacy Learning

Gopnik, Meltzoff, and Kuhl (1999) have referred to the human baby as "the most powerful learning machine in the universe" (p. 1). This metaphor underscored the fact that what—and how—individuals are taught in the initial years of life greatly influences how they will continue to learn new information for the remainder of their existence. Those initial years of life are often narrowed down to the first three, and Golinkoff and Hirsh-Pasek (2000) focused on the critical role that those first three years play in a child's language development. McGuinness (2004) broadened the scope slightly, focusing on the importance of the first five years in a child's life with regard to future reading skills.

Among the numerous scholarly works from various disciplines relating to early learning and early literacy (Barone & Morrow, 2003; Dickinson & Neuman, 2006;

Dickinson & Tabors, 2001; Gilkerson & Richards, 2007; Kamil, Mosenthal, Pearson, &

Barr, 2000; Neuman & Dickinson, 2002) is a common theoretical thread: the earlier

children are exposed to all aspects of language, the more successful those children will be

in acquiring and using literacy skills to their advantage. Sousa (2005) explained from a

cognitive neuroscience perspective that "how quickly and successfully the brain learns to

read is greatly influenced by the spoken language competence the child has developed"

(p. 11). This competence can be taught and learned through specific tasks such as shared

readings or intentional vocabulary development, which have both been shown to help

improve the language and literacy skills of young children (Beck, Perfetti, & McKeown,

1982; Biemiller, 2006; Holdaway, 1979; Ninio and Bruner, 1978; Sénéchal, Ouellette,

and Rodney, 2006; Wells, 1986). Research has also shown that this spoken language

competence can be easily and naturally taught simply by talking to children and by

allowing children to talk without interrupting them (Gilkerson & Richards, 2007; Hart &

Risley, 1995, 2003; Juel, 2006; Paley, 2004; Snow et al., 1976; Wells, 1986). Zero to

Three Zero to Three: National Center for Infants, Toddlers, and Families, a national

nonprofit organization dedicated to informing parents and professionals about the

developmental importance of the period from infancy through toddlerhood, has identified

oral language (talk or informal speech) as one of the 11 "bridges" that lead to literacy

(Rosenkoetter & Barton, 2002).

A considerable body of research has shown that, as the name Zero to Three

suggests, children begin learning, understanding, and using language to communicate at a

very young age (Dickinson & Tabors, 2001; Gilkerson & Richards, 2007; Rice, 2002;

Wells, 1986) and that these processes are greatly influenced by social factors (Gilkerson & Richards, 2007; Hart & Risley, 1995, 1999; Heath, 1983; Paley, 2004; Vygotsky, 1978; Wells, 1986). To observe how children actually learn language in various social contexts, researchers have conducted a number of in-depth studies.

Heath (1983) carried out an ethnographic study, observing how the families in two working-class towns interacted with their young children. The population of one town was predominantly Black, while most of the other town's residents were White. Each town had its own distinct cultural ways of interacting with their children. This study clearly showed how social and cultural factors play a critical role in children's language development and school success.

Showing results similar to those of Heath (1983), Dickinson and Tabors (2001) looked at both the home and the school environments of 74 low-income children who participated in their study from the age of three until the end of their kindergarten year. Once again, this study showed that the home environment affects language development and that early facility with language leads to literacy success in the future.

These research findings underscoring the importance of social environment for language development are reflected in the more ethnographic work of individuals such as Vivian Paley (2004). Writing of her experiences as an elementary school teacher, Paley stressed how early verbal communications employed in the course of children's "fantasy play" influence youngsters' language and literacy development. Paley argued that a child's "work" is necessarily "play" because children unconsciously work on

strengthening their language skills during the early years of formal schooling through natural play and verbal interactions in the course of unstructured play.

Like Paley (2000, 2004), Delpit (2002, 2006) also emphasized the importance of utilizing natural language to aid in language development. Both Paley and Delpit asked that teachers be more aware of how they verbally interact with students and that they pay particular attention to their interactions with those students who have different cultural and racial backgrounds than themselves. Both stress that, by allowing children time to explore the world around them through language and by fostering and nurturing each child's facility with his or her own language, teachers will be more successful at teaching students the academic formalities of language.

Sociological and psychological research regarding language and literacy development like the examples cited above (especially Dickinson & Tabors, 2001; Delpit, 2002, 2006; and Paley, 2000, 2004), has moved from the theoretical realm to application as educators and school administrators have affirmed the importance of "talk" for young children's literacy development. Kalmar's (2008) article, "Let's Give Children Something to Talk About! Oral Language and Preschool Literacy," which discusses the value of talk in the classroom, is just one example of how a theory regarding early language development has been affirmed by educators as having classroom applications.

Also addressing the need for educators to better understand how literacy emerges in young children and what role oral language plays, several respected organizations have brought the matter to the attention of their members (Deason, 2009; National Association for the Education of Young Children, 1998; Rosenkoetter & Barton, 2002). The

International Reading Association (IRA) and the National Association for the Education

of Young Children (NAEYC) published a joint position statement on developmentally

appropriate reading and writing practices for young children (National Association for

the Education of Young Children, 1998). The National Head Start Association (NHSA)

published an article about the importance of talk in preschool classrooms (Deason, 2009),

and Zero to Three: National Center for Infants, Toddlers, and Families published an

article on how language-based routines early in a child's life can lead to later success in

school (Rosenkoetter & Barton, 2002). Much of the research cited in these articles comes

from scholars who have observed verbal interactions between parents and infants and

have concluded that this very early "talk" experience has a profound impact on children's

future language and literacy development.

Intergenerational Literacy

Gordon Wells's so-called "Bristol Study" (1986) followed young children in

Britain from infancy to the end of their elementary school careers. Wells found that the

quantity or amount of parent-child talk that occurred in the home played a significant role

in the child's language development. He explained that although the amount of talk is

critical to language development, the one-to-one conversations between parent and child

play an equally vital role in healthy language growth.

According to a substantial number of studies, language growth is hindered in

disadvantaged homes. These studies show that vocabulary size differs greatly between

children coming from advantaged homes, especially homes with highly educated parents,

and those coming from households with lower socioeconomic status or homes with less educated parents (Hart & Risley, 1995; Gilkerson & Richards, 2007; Wells, 1986). Children living in more advantaged homes have much larger vocabularies even at a very early age, and with each passing year, the advantaged children's vocabularies continue to grow larger, widening the gap between the two groups (Hart & Risley, 1995). Stanovich (1986) refers to this increasing gap as the "Matthew Effect."

The Matthew Effect occurs when children have an advantage from the beginning and that advantage increases rapidly due to prior experiences and practice while the children who have fewer advantages spend their time trying to catch up to the others. It is analogous to the saying, "The rich get richer while the poor get poorer." That this gap between the two groups continues to widen becomes extremely apparent during what Chall, Jacobs, & Baldwin (1990) termed the "Fourth-Grade Slump." One reason for this observable decline may be that the language used in most books written for the fourth-grade reading curriculum becomes more sophisticated, requiring students to have a much larger vocabulary in order to comprehend the text successfully. Students with larger vocabularies make the transition to fourth-grade reading more easily than others because they have greater resources to employ when reading the more advanced material. When students from disadvantaged or low-income homes encounter the more advanced fourth-grade material, their reading scores drop, suggesting that they have smaller vocabularies than their more advantaged peers and thus even fewer tools with which to tackle the more challenging reading material.

It was this observable lack of vocabulary among children attending the Turner House Preschool (for students from lower SES homes) that inspired Hart and Risley to conduct research on the verbal interactions of parents and their children (Hart & Risley, 1995). They were curious to see if there was something that the parents were doing while interacting with their children to affect the rate at which their children's vocabularies grew. The researchers noticed significant differences between the number of words spoken by children of parents receiving public assistance, those of working-class parents, and those of children whose parents were professionals. The children coming from professional households heard roughly 1,500 more words in an hour than those children coming from households on public assistance. Thus, the children of professional parents had much larger vocabularies. From this study it was obvious that socioeconomic status played a significant role in the vocabulary growth of the participating children.

After many years of research and through much data analysis, Hart and Risley (1995) discovered that the children of professional parents in their study were not only exposed to a larger quantity of words but also were spoken to in a very different fashion. These children received more quality interactions, that is, compared to the other children in the study, they were spoken to more frequently, they were listened to more carefully and more often, their parents spoke kindly to them more regularly, they were provided with choices more often, and new objects and experiences were explained to them on more occasions.

As noted earlier, Hart and Risley (1995) labeled these types of interactions "significant family experiences." They divided this collection of interactions into five

categories: (a) language diversity, meaning that the quantity of talk directed at the child

increases the number of nouns and modifiers the child hears; (b) feedback tone, which is

the encouragement or discouragement a parent gives a child; (c) symbolic emphasis,

which, through verbal interactions, is the naming and labeling of objects, events, and

relations; (d) guidance style, or the use of invitations (asking) or imperatives (demands);

and (e) responsiveness, or how often a parent responds to the child or initiates the child to

speak (p. 192).

In their longitudinal study, Hart and Risley (1995) discovered another critical

aspect of language development: language features were intergenerational and fully intact

by the age of three. Thus, by the age of three, children will already have acquired all the

characteristics of their parents' language style. For example, if a child's parent(s) uses

more prohibitions than affirmations and their overall tone is more negative than positive,

the child's language will mirror that of his/her parent(s) and vice versa. For example,

when children have difficulty sharing and are accustomed to negative tones, they might

shout, "It's mine!" rather than, "You can use it when I'm finished." They also found this

to be true with regard to the amount of talk. If the parents talked a lot, the child talked a

lot; if the parents did not talk much, neither did the child.

Hart and Risley (2003) conducted further research on how parents' language and

behavior patterns affect their children's speech and possibly their future parenting

behaviors. "When we listened to the children," they wrote, "we seemed to hear their

parents speaking; when we watched the children play at parenting their dolls, we seemed

to see the futures of their children" (Hart & Risley, 2003, What We Found sec., para. 12).

Building on Hart and Risley's earlier (1995) study, Gilkerson and Richards (2007) used advanced technology to analyze children's language use. Working for Infoture, Inc., Gilkerson and Richards employed LENA, a noninvasive automatic language environment analysis system. Using this system, they placed recording devices in 314 infant and/or toddler participants' clothing. LENA recorded the children's verbal interactions for 12 continuous hours, once a month for six to 11 months. Data analysis revealed that children who were spoken to frequently had more advanced language skills than those who were not. These results were very similar to those of the Hart and Risley study, again confirming that parents have a direct influence on their child's language skills.

The enormous impact of parental language on children's speech and future literacy is very apparent when it comes to adolescent mothers. Burgess (2005) found that teenage mothers on the whole provide their children with fewer literacy experiences than mothers who are older. Oxford and Spieker (2006) believe that this lower quantity of literacy experiences is due to the low education levels of the mothers. Their study found that a reasonably accurate predictor of low language performance in preschoolers is having an adolescent mother with low verbal abilities.

The findings described above all provide evidence that the literacy skills of children appear to be influenced by those of their parents and that language development is learned through intergenerational interactions. Research thus supports the idea that the use of family literacy programs can enhance language skills within families.

Family Literacy Programs

A considerable amount of research supports the view that a child's language and emergent literacy skills develop well before school age (Dickinson & Tabors, 2001; Hart & Risley, 1995; Snow, 1972, 1977; Pan, Rowe, Singer, & Snow, 2005; Neuman, 2001; Wells, 1986) and that this literacy education begins at home (Dickinson & Tabors, 2001; Hart & Risley, 1995, 2003; Landry & Smith, 2006; Neuman & Gallaher, 1994; Wells, 1986). Based on the findings of this research, an early literacy movement began to gain momentum after passage of the federal No Child Left Behind Act of 2001 (NCLB). NCLB mandates that every state must have a set of rigorous educational standards that students must meet at various stages in their education. Education and government officials recognized that in order to successfully meet the demands of NCLB, children needed to begin school primed and prepared to learn. As a result, early education initiatives blossomed across the country, including the federally funded Good Start, Grow Smart program (2002) and the NCLB offshoot grant program Early Reading First (2002). Extant programs such as Head Start (1965) and the Even Start Family Literacy Program (1988) got a boost. Aside from the federal NCLB mandates, research such as the federal "Synthesis of Local and State Even Start Evaluations" (St. Pierre, Ricciuti & Creps, 2000), the statewide evaluation of Pennsylvania's family literacy programs (Van Horn, Kassab, & Grinder, 2002), and others (Padak & Rasinski, 2003) suggests that the use of family literacy programs to help improve the literacy skills of both children and adults produced numerous benefits for family members and society. According to the results of the statewide evaluation of Pennsylvania's family literacy programs (Van Horn et al.,

2002), parents and children who are involved in family literacy programs spend more time participating in literacy activities, such as reading together (one to another) and visiting libraries. The results also showed that the participating parents' abilities in the areas of language usage, spelling, and reading showed improvement, that the participating children were better prepared to enter school, and that parents became more active in their children's education and often in their own as well (Van Horn et al., 2002). These research results, which offer hope and numerous potential benefits to families facing literacy challenges, inspired my decision to create a family literacy program for young mothers who might choose to participate.

Sticht (2002) emphasized that educating parents will enhance the probability that their children will in turn be more likely to seek education for themselves. His research on how the education of adults impacts their children supports the use of family literacy programs to aid in the battle against intergenerational illiteracy. Sticht notes that helping mothers better understand the importance of literacy skills and how to improve those of their children will likely make those children become the generation of change. A longitudinal study conducted by Wells (1986) showed, conversely, how children can repeat a pattern of low literacy and remain at that low achievement level. Wells found that children's rank order of achievement relative to others changed very little through the duration of the study. Thus, those children starting school with more advanced language skills remained ahead and those starting out behind remained behind. He explained that children who enter school knowing little about literacy often lose confidence because they have such difficulty learning to read and write. Wells's (1986)

early learning research also supports the idea of intergenerational literacy dynamics.

Wells discovered that

> if some lower-class children did suffer from linguistic disadvantage, therefore, it
>
> was not in relation to their command or experience of oral language, but in the
>
> relatively low value placed on literacy by their parents, as shown by their own
>
> very limited use of these skills, by the absence of books—either children's or
>
> parents'—in the home, and by the infrequency with which they read to their
>
> children, if they ever did so at all. (Wells, 1986, p. 144)

Wells's findings underscore the idea that parent(s) play a critical role in children's

literacy, not just by using a certain quality and quantity of language but also by

conveying to a child the value they place on acquiring and improving literacy skills.

Literacy is thus intergenerational in more ways than one (National Center for Family

Literacy, 2003; St. Pierre et al., 2000; Sticht, 2002; Van Horn et al., 2002; Wells, 1986).

My Topic Question

The research findings discussed above seemed to answer the fundamental

questions that led to this study (How do children learn language? What role does spoken

language play in one's literacy skills? Why is it easier for some children to learn literacy

skills? Why are literacy skills intergenerational? What can be done to prevent

intergenerational illiteracy? How does a family literacy program influence the mothers'

literacy skills?). With the knowledge that early language learning is an extremely

important factor in children's success in acquiring literacy skills, that the way parents

interact verbally with their children has a profound effect on the children's literacy skills, that children's parents' own literacy skills have a direct impact on their children's literacy skills, that family literacy programs have positive effects on both the participating children and parents, and that all of these things are intergenerational, I was able to narrow my investigative path into one topic question: How would positive mother-child verbal interactions based on Hart and Risley's (1995) five significant family experiences influence the participating adolescent mothers' literacy skills?

Susan G. Doneson (1991), a teacher of adolescent parents in Okemos, Michigan, encapsulated the research findings about early literacy learning, parent-child verbal interactions, family literacy programs, and the idea of intergenerational literacy skills in her observation that "the potential multigenerational impact of teaching is most apparent in a classroom of pregnant and parenting teens" (p. 220). I resolved to set up a study that would offer the possibility of that multigenerational impact by designing a literacy program based on Hart and Risley's (1995) five significant experiences. I also started to explore different research designs and methodologies that would most suit my inquiry. The following chapter discusses the theories and models that support my study, the design of my study, the study participants, and how the study data were gathered and analyzed.

Chapter 3: Methodology

The information gained from my review of relevant scholarship as well as from my own background experiences in education influenced the design of the LITERATE Program I developed.

The Plan

By combining elements from Vygotsky's sociocultural theory of learning (Vygotsky, 1978), Bronfenbrenner's Ecological Model (Wasik & Herrmann, 2004), Noddings's philosophical theory of caring (Noddings, 2002), and Hart and Risley's research (Hart & Risley, 1995), I began to design the LITERATE Program while simultaneously laying out a plan for my dissertation study. I should note here that because the LITERATE Program was the basis for my dissertation study and evolved into a single project, I refer to the LITERATE Program as "the study" throughout the remainder of this work.

Keeping in mind my research question (How would positive mother-child verbal interactions based on Hart and Risley's [1995] five significant family experiences influence the participating adolescent mothers' literacy skills?), I decided that the mothers participating in the program should be taught literacy activities based on the findings of the Hart and Risley (1995) study and the five significant family experiences important to a mother's verbal interactions with her child. The participating mothers and their children would receive materials such as children's books, letter manipulatives, nursery rhyme CDs, puppets, and the like, all provided using the monies from the ING

grant. These materials were intended to help the mothers incorporate into their daily lives the literacy activities they learned throughout the study.

I then decided on a particular method of teaching to use with the study participants. The method I chose would not only help the participants better understand the information provided but also allow me to model a technique based on Vygotsky's (1978) theory that they would in turn be able to use with their own children.

Pedagogical Approach

The method/approach used to teach these literacy activities to the participants came from Rogoff (1990). Since the late 1970s, when Vygotsky introduced the concept of a learner's Zone of Proximal Development (1978), much research has been done to find the best way to access the learners' point of understanding, that is, the area between what they can do alone and what they can do with assistance. Barbara Rogoff (1990) has conducted some of that research. She coined the term "guided participation." Guided participation is a style of teaching and learning. It suggests that through a method similar to that of an apprenticeship, teachers guide the learners' knowledge acquisition by linking what the learners are being taught to what they already know. This method focuses on accessing the learner's zone of proximal development. This is done by guiding learners from what they can do independently to what they can do with teacher instruction, through connecting what is being taught to their prior knowledge. Thus, the teacher is helping the child better master what is being learned and the student is less likely to experience frustration.

I planned to model Rogoff's guided participation concept (1990) and teach the participants how to use this style of teaching/learning with their own children. One way I planned to do this was by explaining to the young mothers that they can teach their children new words and concepts by using the environment around them, for example, teaching a child about shapes and colors while grocery shopping. A parent can do this by describing to the child the items she puts into the shopping cart: "Look, honey, this rectangular cereal box has a brown bear on it. Let's count the sides of the box together." An activity like this allows the parent to introduce new words and concepts (the color brown, the word rectangle, and the idea that rectangles have four sides) to something the child may already be familiar with (bears and cereal boxes). Simple activities like this one allow the parent to scaffold the information to meet the child's prior knowledge and abilities. It also aids in the connection between what the child is learning at that moment to something that he/she already knows, all through the use of guided participation.

My next step was to determine a research design that would meet the needs of my program and was conducive to the question I wanted to answer: How would positive mother-child verbal interactions based on Hart and Risley's (1995) five significant family experiences influence the participating adolescent mothers' literacy skills?

Study Design

In formulating the research design for this study, I employed the qualitative paradigm. Qualitative research is an investigative and descriptive method that does not utilize a direct approach or focus on a specific question to answer (Bogdan & Biklen,

2007). I chose the qualitative approach because of the type of data collection tools used and the way data are analyzed in that paradigm (Bogdan & Biklen, 2007; Creswell, 2002; Salkind, 2006). I chose to use an assessment, a survey, field notes, and researcher observations. Although I wanted to know how the verbal interaction between mother and child would influence the mother's literacy skills, I also wanted to see if there were any recurring themes or patterns emerging during the study that might ultimately influence the participants' literacy skills (Creswell, 2002).

A microethnographic case study design was used because of the nature of the research being done for this study, which focused exclusively on the adolescent pregnant/parenting girls enrolled in the Union City Area School District in northwestern Pennsylvania. Microethnographies are described as anthropological type studies, which involve research conducted on small portions of a larger whole (Bogdan & Biklen, 2007). This study was a microethnography due to the cultural factor of the participants being studied (Bogdan & Biklen, 2007) as well as the qualitative paradigm (Creswell, 2002) employed for the research design. The cultural factor was that participants in the study were all adolescent, pregnant and/or parenting mothers, enrolled in the same small, rural, low SES school district. Therefore, the participants represented a small portion of the school district and the overall community's population.

Before the LITERATE Program I designed could be put into action, I had to have permission from the school district. In addition, the entire research study had to be approved by the University of Alaska's Institutional Review Board because I was

planning to work with human subjects. Finally, I had to have the consent of the participants and their parents.

Approvals and Recruitment

The school district in which I worked was aware of my planned study and fully supported the program. To make the district's support official, the superintendent granted me written permission to use a classroom in the middle-high school building for the program and my study.

With permission in hand to conduct the study at the school, I began working on my University of Alaska Fairbanks Protocol Application (University of Alaska Fairbanks, 2008) to gain approval for my study. I completed and submitted an Institutional Review Board (IRB) Protocol Application to the Office of Research Integrity at the University of Alaska Fairbanks in December 2008 and requested an expedited review. In January 2009, I received IRB approval for my study (Appendix A). While awaiting that approval, I had completed and successfully passed the Collaborative IRB Training Initiative (CITI) (Collaborative IRB Training Initiative, 2008) and begun advertising the LITERATE Program to attract participants. (See Appendix B for a timeline of the study.)

I advertised the LITERATE Program by hand delivering informational letters and fliers (Appendices C and D) to those female students who were pregnant and/or parenting by December 2008 and were enrolled in the Union City Area School District, which primarily serves a rural, predominantly white, low SES community in northwestern

Pennsylvania where the language of the student population is standard American English with no dialect.

At the start of the 2008–2009 school year, the school district had four pregnant and/or parenting female students. One girl withdrew from school during the first semester and another became pregnant (C. L. Smith, personal communication, December 12, 2008). I handed out four invitations on December 16, 2008, three weeks before the study would begin. All four girls responded and voluntarily agreed to participate in this qualitative microethnographic case study. All of the parents and the four students signed consent and assent forms, respectively (Appendices E and F).

Shortly after the study began, one student communicated in writing that she was withdrawing because her father did not want her to participate. The other three students remained throughout the study.

Participants

The three remaining participants were single white seniors in high school. For privacy purposes, I have given the participating mothers pseudonyms.

Amy was 18 years old and 11 weeks' pregnant with a boy when the study began. Amy's own mother was 20 years old when she was born, the oldest child in a two-parent home. Her mother was not working at the time Amy was enrolled in kindergarten. She was never retained, and during her 11th-grade year, she scored at the proficient level on the writing portion of the state standards-based, criterion-referenced assessment Pennsylvania System of School Assessment (PSSA). She scored at the basic level on the

reading portion. Amy continued to live at home with her parents and two siblings and received reduced-price lunches during her senior year of school. The father of Amy's child does not plan to play a role in the child's life.

Beth was 17 years old and parenting an 11-month-old girl when the study began. Beth's mother was 26 years old when Beth was born three weeks early. Beth's mother was 19 when she had her first daughter. At the time Beth was enrolled in kindergarten, her mother was employed at a farm equipment dealership and was a single parent. Beth was never retained, and during her 11th-grade year she scored at the proficient level on the writing portion of the PSSA and at the basic level on the reading portion. During the study, Beth lived at home with her daughter, mother, stepfather, older sister (20 years old), and niece (five months old) and did not receive free/reduced-price lunches during her senior year of school. The father of Beth's child does not play a stable role in the baby's life.

Carrie was 18 weeks' pregnant with a boy and parenting a one-year-old boy when the study began. She had just turned 18 years old. Carrie's mother was 24 years old when Carrie, an only child, was born. Her mother was not working when Carrie was enrolled in kindergarten. Carrie was raised in a two-parent home. Carrie and the father of her children were living together off and on throughout the course of this study, and she worked part time. Carrie was never retained. During her 11th-grade year she scored at the proficient level on the writing portion of the PSSA and on the reading portion as well. She received free lunches during her senior year of school.

Data Gathering

The study I designed comprised a series of meetings with three pregnant and/or

parenting adolescent girls over a six-month period, from January to June 2009. Each

month there were to be two 60-minute meetings. I referred to the initial gathering each

month as a "Meeting" and the second gathering as the "Discussion Group." Field notes

were taken during and after every Meeting and Discussion Group. The gatherings were

held on the second and fourth Tuesdays of each month. These meeting days were chosen

so that they would not coincide with days when school was not in session (e.g., holidays

and teacher in-service days). In total, I met with the girls 12 times. There were 12 hours

of meeting time, six hours of guided instruction, and six hours of group discussion.

(Additional time was spent assessing the mothers.) Field notes were hand written during

and after every session.

The informational letter (see Appendix C) hand delivered to the four pregnant

and/or parenting mothers outlined the program and its intentions, invited the mothers to

attend, and informed them of their option to participate in the study. One week prior to

the initial 60-minute Meeting, I met with those mothers who wanted to participate in the

study to assess their reading skills and attitude. Each girl received a personal reminder

one week before the assessments were administered.

The participating adolescent mothers' reading skills were assessed using the

Qualitative Reading Inventory-4 (QRI-4) (Leslie & Caldwell, 2006). This individually

administered assessment allows the administrator to look closely at how the taker

decodes and identifies words and comprehends text. The QRI-4 does provide quantitative

scores, but it is essentially qualitative in nature because the test administrator must take into account the type of text the passage is written in (narrative or expository), the test taker's prior knowledge, and how the test taker's comprehension is assessed (retellings or implicit/explicit questioning).

The mothers' attitudes regarding learning and study habits were assessed using the *Learning and Study Strategies Inventory* (LASSI) (Weinstein, Palmer, & Shulte, 2002). The LASSI is a paper/computer-based questionnaire. It assesses a student's attitude toward and uses of learning and study strategies. It focuses on both a student's hidden thoughts or attitudes and their observable behaviors related to learning.

The data gained from these two assessment tools set a baseline for the final assessment, which was conducted one week after the final month's Discussion Group. The earlier consultation, employing the two assessment tools, was also an occasion in which to explain the study in more depth to the participants and their parents and to get consent, assent, and confidentiality assurance forms signed (Appendices E–G). I used the first Meeting of each of the six months to teach the participants simple, language-inducing activities to use with their children. I created these activities based on Hart and Risley's (1995) five significant family experiences of language diversity, feedback tone, symbolic emphasis, guidance style, and responsiveness (p. 192), which are described in depth under the Literature Review: Early Learning section of this paper. While discussing these activities with the participants, I gave examples of and/or modeled the activities using the guided participation method (Rogoff, 1990) based on Vygotsky's Zone of Proximal Development (1978).

The first month (January), I offered two activities. These initial activities differed from those of the following five months in that they were specifically intended to ease the mothers into the study process. The first activity asked the participants to be aware of how much time they were actually spending interacting with their child(ren) at the present. The second activity for the month asked the participants to simply begin talking a little more to their child(ren). The activities offered during the remaining five months of the study were more interactive, language-intense activities (Appendix H).

With the grant monies from ING, I was able to provide the participants with various materials (Appendix I), such as children's books, CDs, a DVD, games, puppets, and blocks, to enhance their experiences. During our first Meeting, each participant also received a binder divided into five sections: introduction, charts, journal, literature, and word-family books (Appendix J).

I asked the participants to track their usage of the language activities at home on the Tracking Chart that I had developed (Appendix H). Each set of monthly language activities was longer, increasing in 10-minute increments; this approach progressively lengthened the amount of time the mothers were to spend interacting with their children each month so that they could ease into the process more comfortably. I planned to assess the Tracking Charts using a rubric I developed (Appendix K). However, even with repeated encouragement, the participants did not utilize the tracking charts consistently or accurately.

The second meeting each month (Discussion Group) was used to discuss any concerns the mothers had and to talk about the progress they were or were not making.

During these meetings, we also read and discussed short articles and/or publications relating to early literacy (Appendix L). Each Discussion Group session was held from 3:00 to 4:00 p.m. in a classroom at the participants' school. In addition to holding these meetings, I called each participant at various times throughout the study to determine whether they had any questions for me to answer and/or to remind them of the next meeting. Hand-written field notes were taken after each telephone call.

In total, the data for this study came from five face-to-face Meetings, five face-to-face Discussion Groups, and, due to an unexpected hospitalization, one Discussion Group conducted via telephone, and one Meeting conducted via written correspondence. There were also between six and 12 telephone calls made to each participant throughout the course of the study. All of these contacts with the study participants resulted in roughly 30 double-sided pages of hand-written field notes as well as the QRI-4 and LASSI assessments gathered in a three-inch binder. Additional data and information about the participants was derived from letters they wrote to me, student files that are kept in the school's guidance office, and my interactions with the school nurse and the school's cafeteria manager. All of the data gathered was analyzed and inferences were made. The next sections describe the analysis of the data gathered over the course of this six-month study.

Data Analysis

The plan. I used three data collecting tools over the course of this six-month, qualitative, microethnographic case study. They were the *Qualitative Reading Inventory-4* (QRI-4)

results, the *Learning and Study Strategies Inventory* (LASSI) results, and the results of the participants' Tracking Charts. I selected these tools—the QRI-4, the LASSI, and the Tracking Charts—for the study because they allowed me to observe changes in the participants' reading skills, their attitude toward learning, and the amount of time they spent interacting with their children. I believed that the information derived from these tools would give me a well-rounded perspective on the participants' overall knowledge and perception of literacy. To help analyze the data collected, I used these tools as my preassigned data coding systems, which are patterns and/or categories of information that develop from the qualitative style of research. Researchers determine preassigned data coding systems at the beginning of a study (Bogdan & Biklen, 2007).

I planned to triangulate the data from the Tracking Charts (Appendix H), the language skills assessment, the QRI-4, the attitude survey, and the LASSI to obtain the most accurate study outcome results possible. I planned to compare the results from the LASSI to the Tracking Charts (Appendix H) to see if there were any themes or patterns that appeared in the adolescent mothers' attitudes regarding learning and studying and the amount of time they spent interacting with their children. I also planned to compare the results from the QRI-4 to those of the Tracking Charts (Appendix H) to determine if the adolescent mothers' reading skills were affected by the amount of time they spent interacting with their children. However, because the participants did not utilize the Tracking Charts properly, the data from those charts were not very reliable. I therefore continued the study using the data that I did have.

The Preassigned Data Coding Systems

With solid data from both the QRI-4 and the LASSI, I reviewed the outcomes. In order to find the participants' overall QRI-4 results, I compared their initial assessment results to their end-of-study results using comparison charts. This comparison (Appendices M) allowed me to see in what areas the participants made improvements, remained the same, or regressed.

In order to find the participants' overall LASSI results, I needed to compare their initial assessment results to their end-of-study results using comparison charts. This comparison (Appendix N) allowed me to see in what areas the participants made improvements, remained the same, or regressed.

When I finished this comparison of initial results versus end-of-study results, I reassessed all the data I had collected from the QRI-4 results, the LASSI results, the Tracking Charts, any participant notes, participant letters, field notes, and observations. While reviewing all of this material, I noticed that how often the participants did attempt to use the Tracking Charts and how well they succeeded at that attempt seemed to be associated with how well they participated in the study. Using another comparison chart, I compared the Tracking Chart data (amount of notes taken) to the participants' attendance level for the 10 meetings and their contributions. The participants' contribution level was determined by how many times they spoke up during the Meetings and Discussion Groups. This information was included in my field notes. After making these comparisons, I decided to combine my assessment of the quantity of notes taken by each participant, her attendance, and her overall contribution into one coding system,

which I titled Participation Level (Appendix O). I then used Participation Level, rather than the Tracking Charts, as one of the three preassigned data coding systems (Bogdan & Biklen, 2007). Therefore, the three preassigned data coding systems used to begin triangulating the data were the QRI-4 results, the LASSI results, and the Participation Level for each participant.

After analyzing the data from the three preassigned data coding systems, I compared the results from the LASSI to the QRI-4 to see if there were any themes or patterns linking the adolescent mothers' attitudes and their reading skills. Rather than use the Tracking Charts, I used the participant's Participation Level during the meetings to compare to the LASSI and the QRI-4 to see if there were any themes or patterns that appeared to link the participants' Participation Levels and their attitudes regarding learning and studying or their reading skills. Also, the field notes taken during and after each meeting and individual telephone calls were used to better understand the findings from these assessment tools. I analyzed all of these data using comparison charts to determine how the literacy skills of the participating adolescent mothers may have been affected by this six-month family literacy program based on parent-child verbal interactions.

Triangulating the Preassigned Data Coding Systems

I compared the participants' QRI-4 results (Appendix M) and their LASSI results (Appendix N) by examining the results and looking for any similarities.

I then compared each participant's overall QRI-4 results to her Participation Level (Appendix P) as well as each participant's overall LASSI results to her Participation Level (Appendix Q). I also used the previously compared QRI-4 results and LASSI results (Appendices M and N). This process triangulated the three preassigned data coding systems (Bogdan & Biklen, 2007).

Other Coding Classifications

As I continued to review both the data from the field notes taken during and after each Meeting and Discussion Group and the information from student files and school statistics, I discovered that there were three distinct situation codes. Situation codes are conditions/circumstances that continuously appear in the research data (Bogdan & Biklen, 2007). The three situation codes I noticed in this study were: (a) participants who were pregnant, (b) participants who were parenting, and (c) participants who were both pregnant and parenting. I also noticed some setting/context codes emerging from the data. Setting/context codes are patterns that develop in the research data that aid in the understanding of the surroundings in which the study took place (Bogdan & Biklen, 2007). The setting/context codes were the school district statistics on previously enrolled adolescent mothers and the statistics of this study. For example, in past years there was an average of 12.42 pregnant and/or parenting adolescent mothers enrolled in the district. The year of this study there were four (C. L. Smith, personal communication, December 12, 2008). Thus, I decided to look at these data more closely to see if I noticed any patterns.

I used comparison charts to review the data. I compared the three situation codes (participants who were pregnant, participants who were parenting, and participants who were both pregnant and parenting) to the previously analyzed data regarding the QRI-4 results, the LASSI results, and the participants' Participation Level (Appendices R–T).

To analyze the setting/context codes more closely, I created three charts showing the data for adolescent mothers enrolled in the school district at the end of December for the years of 2007, 2008, and 2009 (Appendices U–W). I then created a comparison chart (Appendix X) to compare the school district's statistics on previously enrolled adolescent mothers to the statistics of the district's adolescent mothers during this study and the statistics for the year following the study. I compared the average number of adolescent mothers enrolled in the school district in past academic school years to the number enrolled in the academic year of the study and the year following the study. I also compared the past adolescent mothers' PSSA reading and writing scores (Pennsylvania Department of Education, 2001b) to the scores of the participants in this study and those of the adolescent mothers enrolled in the district during the year following the study. Finally, I compared the free and reduced-price lunch status of the past adolescent mothers enrolled in the district to the statuses of the participants in this study and the statuses of those adolescent mothers enrolled in the district during the year following the study (see Appendix X).

After comparing all of these data, I found that this study not only provided an answer to my topic question (How would positive mother-child verbal interactions based on Hart and Risley's [1995] five significant family experiences influence the participating adolescent mothers' literacy skills?) but also offered some interesting additional findings.

Chapter 4: Results

The results of this qualitative microethnographic case study are presented in the order in which the data were reviewed. The data were organized using data coding systems (Bogdan & Biklen, 2007), and most of the data were analyzed using comparison charts.

Results of the QRI-4

The *Qualitative Reading Inventory-4* (QRI-4) (Leslie & Caldwell, 2006) assessment tool, which is designed to assess the test taker's reading skills, was used to assess each of the participant's reading skills one week before the study began and again one week after the study ended to see if there was any improvement in skills over the course of this six-month study (Appendix M).

The results show that both Amy's overall instructional narrative text reading level and instructional expository text level increased by one grade level. Beth's instructional narrative text level remained the same, and her instructional expository text level increased by one grade. As for Carrie, both her instructional narrative text level and instructional expository text level increased by one grade. All three participants' instructional reading levels remained the same or increased by the end of the study. However, what is most significant in these results is that all of the participants' instructional expository reading levels increased by one grade.

Results of the LASSI

The *Learning and Study Strategies Inventory* (LASSI) (Weinstein et al., 2002) was used to assess the participating mothers' attitudes regarding learning and study habits. This assessment tool was used to assess each of the participant's attitudes one week before the study began and again one week after the study ended to see if there were any changes in the participants' attitudes regarding learning and study habits (Appendix N).

These results show that Amy's attitude, information processing, motivation, self-testing, selection of main ideas, and use of study aids all improved over the course of the study. Her anxiety score and concentration score toward academics went down, showing that her anxiety levels were higher and her ability to concentrate was lower at the end of the study. Amy's time management and testing strategies remained constant. Amy had six learning and study strategies scores improve, two decrease, and two remain constant.

Beth's anxiety, attitude, concentration, and test strategies scores increased by the end of the study. Her information processing, self-testing, selection of main ideas, use of study aids, and time management scores all decreased at the end of the study. Beth's motivation remained constant. Beth had four learning and study strategies scores improve, five decrease, and one remain constant.

Carrie's information processing, use of study aids, time management, and test strategies scores increased by the end of the study. Her anxiety, attitude, motivation, and self-testing scores decreased and her concentration and selection of main ideas scores

remained the same. Carrie had four learning and study strategies scores improve, four decrease, and two remain constant.

Results of the QRI-4 and LASSI Review

After reviewing scores from the QRI-4 and the LASSI assessment tools, I determined that there was no relationship between the QRI-4 scores and the LASSI scores.

Participation Level Results

I originally designed this study to compare the self-designed Tracking Charts (Appendix H) to both the participants' QRI-4 scores and their LASSI scores to utilize triangulation and obtain the most accurate outcome possible. Because none of the girls utilized the Tracking Charts with consistency, I decided to triangulate the data from the QRI-4 and LASSI assessments to each girl's overall participation. Each participant's Participation Level was determined by the number of meetings each girl attended, the notes they did turn in to me, and the amount they contributed during each meeting (Appendix O).

Due to my own emergency hospitalization, I was able to meet with the participants in person for only 10 of the 12 scheduled meetings. We did not meet for the fourth month's Discussion Group and the fifth month's Meeting. However, each girl was contacted by telephone and sent a letter (Appendix Y) outlining what would have been covered during those two meetings if we had met. Of those nine meetings Amy attended nine, Beth attended eight, and Carrie attended three.

It can be concluded from these results that Amy's participation was high, Beth's was average, and Carrie's was low. In addition, Amy was rather consistent with the notes she took for the study, Beth was sporadic in her note taking, and Carrie took very few notes. Amy contributed frequently to the Meeting and Discussion Group conversations, Beth contributed some, and Carrie did not contribute much.

Amy generally contributed to the discussions by providing examples of how she utilized the literacy activities with a three-year-old cousin, and she frequently contributed new ideas of how to "talk with children instead of talk to them." On more than one occasion, she explained how she used language diversity by using more specific terms to describe the different types of cows they saw on an outing, and on a separate occasion she used the proper names for the individual pieces of silverware. She also described a time that she used the puppets she was given to talk in detail about different animals (exemplifying the symbolic emphasis family experience). She told the group that she found that "[her cousin] learns more quickly when you do something with her rather than just talk to her." On a separate occasion, Amy told the group that she now "explain[s] everything" to all of the children in her life. This statement is clearly supported by a Tracking Chart entry she made: "Talked to my belly before bed recapping what all I did during the day and what I planned to do the next day." This entry was not the only one that showed her desire to communicate with her unborn child. She mentioned in her entries numerous times that she "talked to her belly" about future plans or sang to it. She even had close friends sing to the unborn child.

Amy frequently stated throughout the study that the program was helping her to become more patient with children. She said on one occasion that "I've really learned a lot. I thought I knew a lot, but I found out [the child] needs to learn more, and this has helped me practice and become more patient." She also mentioned that she was sharing the activities and ideas we discussed in the study with other parenting friends.

Beth informed me that she had done a lot of the activities that we covered in our study already but that she had become more conscious of them because of the study. She described this situation clearly in her first Tracking Chart entry: "First day of class, and I learned a lot. I'm going to try to listen a little better to [my child]." Beth would give brief examples during the Discussion Groups about how she implemented the activities in her interactions with her daughter. On one occasion, Beth talked about connecting the activities to what her daughter liked: "[My daughter] likes doggies, so I am teaching her animal sounds."

Beth's comments during Discussion Groups and her few Tracking Chart entries suggested that she had become extremely interested in the concept of explaining things to her daughter. According to Hart and Risley's (1995) five significant family experiences, this ongoing activity of explaining would be considered symbolic emphasis. An example of symbolic emphasis activity from Beth's Tracking Charts was the following entry: "Busy day, we only got a few minutes to talk. We put on our snow boots. Today we sung about what made us happy. I explained why we wear shoes. I asked her to get her shoes. Then I explained their different names. At the store we had a conversation about cereal." A later entry said, "Today was our day. We sung about how the sun was shining. I

explained about the sun and what it helps with. Then again we had the shoe conversation. At the store we talked about the squares."

Because of Carrie's low attendance rate, she contributed very little to the Discussion Groups. However, on two separate occasions I received hand-written letters from Carrie regarding the study. In one letter Carrie describes how she used language diversity with her son:

> I've been extremely busy, so it's hard for me to journal, but I will recap what I have been able to do. Since the first meeting with the group I have constantly gone into detail when describing objects. For example, instead of saying shoes all the time, I identify sneakers, crocks, boots etc. This is very noticeable because if you tell him to get his boots, he does. He knows the difference, which makes me proud. (personal communication, April 22, 2009)

Elsewhere in this letter and in her other correspondence with me, Carrie described several additional language activities in which she had engaged on various occasions.

Participant's QRI-4 Scores Compared to Participation Level

I compared the participants' QRI-4 scores to their Participation Levels (Appendix P), and the data suggest that there is no relationship between each participant's participation and her QRI-4 results. However, it should be noted that Carrie's initial reading level, based on both her QRI-4 scores and her Pennsylvania System of School Assessment (PSSA) scores, was abnormally high for the average adolescent mother enrolled in the school district. This result is further addressed in the Discussion section (Chapter 5).

Participant's LASSI Scores Compared to Participation Level

I compared the participants' LASSI scores to their Participation Levels (Appendix Q). The comparison data suggest that there may be a relationship between the participant's attitude, which is assessed by the LASSI, and her Participation Level. The data show that the participant whose Participation Level was high had an improved attitude score and the participant whose Participation Level was low had an attitude score that declined.

Participant's Status Compared to Her QRI-4 Scores

The participant's status was determined by her maternal status. In other words, her status depended on whether she was pregnant, parenting, or both. In this case study, there was one mother in each of those three categories. I compared the participants' statuses to their QRI-4 scores (Appendix R), and the comparison data suggest that there is no relationship between the participant's status and her QRI-4 scores.

Participant's Status Compared to Her LASSI Scores

I compared the participants' statuses to their LASSI scores (Appendix S). The comparison data suggest that there may be a relationship between the participant's attitude, which is assessed by the LASSI, and her participant (maternal) status. The mother who was pregnant and the mother who was parenting had improved scores in the attitude section of the LASSI. The mother who was both pregnant and parenting had a declining score in the attitude section of the LASSI.

Participant's Status Compared to Her Participation Level

I compared the participants' statuses to their Participation Levels (Appendix T). The comparison data suggest that there is a direct relationship between the participant's status and her Participation Level. The student who was pregnant had a high Participation Level. The participant who was parenting had an average Participation Level and the participant who was both pregnant and parenting had a low Participation Level.

Comparison of the Adolescent Mothers Enrolled in the District

In order to determine if the population of this study was representative of the school district's average adolescent mother population from year to year, I compared the statistics on the adolescent mothers enrolled in the district the year prior to the study and the year after the study. These statistics included the number of adolescent mothers enrolled in the district at the end of December 2007, 2008, and 2009. The information analyzed included the adolescent mothers' 11th-grade Pennsylvania System of School Assessment (PSSA) reading and writing scores (where applicable). Two of the adolescent mothers in the 2007 data withdrew from school before the state PSSA assessment was administered, so they had no 11th-grade scores. Their eighth-grade scores were used instead. The statistics also specified whether the mothers received any special education services while enrolled in middle or high school and whether they received free or reduced-price lunches (Appendices U-X). Appendix X shows the statistics regarding the adolescent mothers enrolled in the district in 2007–2009, including the average number of adolescent mothers enrolled in the district from 2000 to 2007.

The data presented here show that the population from the 2008 study may not have been highly representative of the overall averages for the school district. First, the number of adolescent girls who were pregnant and/or parenting in the district at the end of December 2008 was low. The data show that the average number of female students who were pregnant and/or parenting between 2000 and 2007 was 12.42. It also shows that the year prior to and the year after the study had twice as many or more adolescent mothers by the end of December than in the year of the study.

The study participants also had higher Pennsylvania System of School Assessment (PSSA) reading and writing scores than did the adolescent mothers enrolled in the district the year before (2007) and the year after the study (2009). Unlike the 2007 and 2009 statistics, in 2008, 33.3% of the mothers participating scored proficient on the reading portion and 100% of them scored proficient on the writing portion of the PSSA. Also, none of the adolescent mothers in the study scored below the basic level on either the reading or the writing portion of the PSSA. However, the year before and the year after the study approximately half the district's adolescent mothers score below basic on the reading portion, and 10 to 14% of them scored below basic on the writing portion of the PSSA. These data suggest that, overall, the study participants had higher literacy skills than the average adolescent mother attending the district's schools between 2007 and 2009.

Overall, three primary inferences can be made from this data analysis. The first is that the LITERATE Program employed in this study seemed to positively influence the participants' literacy skills. All of the participants' expository reading levels improved.

The second inference that can be made is that external/environmental factors appeared to have an impact on how much the adolescent mothers participated in the study and how well they performed overall. Finally, the data show that the participants' overall participation may have influenced their attitude and motivation or vice versa. These findings will be discussed in the next chapter.

Chapter 5: Discussion

Purpose of the Study

The purpose of this qualitative microethnographic case study was to determine

what influence a family literacy program incorporating Hart and Risley's (1995) five

significant experiences had on the participating adolescent mothers' literacy skills. The

results from Hart and Risley's (1995) study showed that merely interacting with a child,

that is, simply talking to the child, can have a profound effect on the child's vocabulary

development and later literacy skills. According to Hart and Risley's study, the level of

this parent/child interaction was highly correlated with socioeconomic status. In the Hart

and Risley (1995) study, the children whose parents were professionals heard twice as

many words spoken to them in an hour as children from working-class homes and three

times as many as children living in low SES households. Hart and Risley's (1995) data

show that by the age of three, the children from the low SES homes will have heard

roughly 30 million fewer words than the children in households headed by professionals.

Hart and Risley later discovered (2003) that the vocabulary advantage of the children

from high SES households was a predictor for later school success. In other words, those

children who had a larger vocabulary by the age of three performed better on a series of

literacy assessments at the ages of nine and 10 than those with a smaller vocabulary (Hart

& Risley, 1995, 2003). Gilkerson and Richards (2007) conducted similar research and

obtained the same results.

Although there are numerous studies examining the important role that

conversational interaction between young children and parents has on the child's

vocabulary growth and later literacy skills (Dickinson & Tabors, 2001; Hart and Risley, 1995, 2003; Heath, 1983; Wells, 1986), there is little data on how interacting with a child influences the adult's literacy skills. Therefore, the purpose of this study was to determine the influence of positive mother-child verbal interactions on adolescent mothers' literacy.

Interpretation of the Results

The LITERATE Program data I gathered clearly show that the participants' overall expository reading levels increased by one grade level and their narrative reading levels either increased or remained the same over the course of the six-month study. One could conclude that the study had an impact on the participants' expository text reading level.

However, while reviewing the data, I also noticed that external/environmental factors may have played a role in the adolescent mothers' participation levels in this study. Amy's home life appeared to be the most stable. She lived at home with her family (mother, father, sister, and brother) and often talked about the things she and her family did together. The father of the child played no role in their lives. She had the highest participation rate in the study.

Although Beth also lived at home with her family mother, stepfather, sister, niece, and her own daughter), it became apparent that Beth was not only raising her daughter but also spending a great deal of timing caring for her niece. The father of Beth's child was an occasional participant in the lives of Beth and her daughter. Beth also complained

frequently about her "childish" stepfather and how she would often have to clean up after him. She had a modest participation rate in the study.

Carrie worked part-time and lived off and on with the father of her children. She moved at least once during the study and complained once about having her "heat shut off." Near the end of the study, Carrie was put on bed rest twice before giving birth to her second son. Carrie's participation in this study was limited.

External factors may not only have influenced the adolescent mothers' participation; they may also have played a role in determining the overall results in the study.

Amy, who was still pregnant at the end of the study and had a stable family life, had not only the highest participation rate but also the greatest improvement in learning and study strategies scores. Her reading skills also improved. Beth, who was already parenting and had an unstable home life, also had improved reading skills, but she had a lower participation level and had fewer learning and study strategies scores improve. Carrie was pregnant and parenting during the study and was also living in a very unstable home. She, too, had improved reading skills but also had the lowest participation level and fewer improved learning and study strategies scores than Amy.

Thus, the participant with the lowest level of negative outside influences had the most improved scores and the best participation level, while the participant who had the most outside influences of a negative sort had the least improved scores and the worst participation level. In considering these findings, one might assume that outside factors play a role in a participant's overall results. Interestingly, there also appeared to be a

relationship between the participants' participation level and their attitude and motivation scores.

The study data revealed a close correlation between the adolescent mothers' participation levels and their attitude and motivation scores. Amy, who had a high level of participation, had improved attitude and motivation scores at the end of the study. Beth, who had an average participation level, also improved her attitude score; however, her motivation score remained the same. Carrie, whose participation level was low, had a decrease in her attitude and motivation scores. Again, all of these findings may suggest that environmental factors may influence how well an individual completely involves themselves in an undertaking such as this study.

Implications of the Results

The scholarly foundation for this study was the research data showing that verbal interactions between a parent and child have a positive influence on the child's vocabulary development and the child's later literacy and school success. This study's purpose was to see if parent-child verbal interactions/discourse would also influence the parents' literacy skills. The results from this study suggest that they do.

These positive results suggesting that a family literacy program based on Hart and Risley's (1995) five significant family experiences may have a positive influence on the participating mothers' literacy skills may show other family literacy researchers the need for parents to be educated about the important impact that talking has on both their

child's literacy skills and their own. The results also suggest that parents should be taught specific ways to interact using the five significant family experiences.

The results from this study also strongly suggest that family literacy program heads and/or researchers must address the critical role that external factors in participants' lives appear to play in their participation and overall results. The data indicate that the fewer the number of negative external factors/interferences a participant has, the better that person will perform and, conversely, the greater the number of negative external factors/interferences, the worse that person will perform. Thus, to have maximum effect, family literacy programs must address and then attempt to eliminate or negotiate the participants' negative external factors. Some possible means of addressing circumstances that negatively affect participation might be to offer the literacy program at times and locations that meet the participants' needs, for example, setting up home visits or conducting sessions at a pediatrician's office or any other place the participant is likely to frequent.

Overall, this study has contributed to the fields of literacy development and family literacy by showing that verbal interactions based on Hart and Risley's (1995) five significant family experiences can enhance not only the child's vocabulary development and future literacy skills but also the reading skills of the parent(s). This study also suggests that, for maximum effectiveness, family literacy programs need to address the participants' home lives and any negative external factors that may interfere with their overall participation in the program.

Limitations of the Study

Among the limitations of this study was the tool used to assess the participants' initial and final literacy skills, the *Qualitative Reading Inventory-4* (QRI-4) (Leslie & Caldwell, 2006). The QRI-4 appears to focus on an individual's reading skills rather than on other aspects of language skills, such as the understanding of spoken language both auditorily (receptive) and orally (expressive). Thus, the QRI-4 did not seem to assess all aspects of the participants' literacy knowledge. A more accurate assessment of the participants' literacy strengths and weaknesses might have been obtained if another assessment tool had been used. The Woodcock-Muñoz Language Survey–Revised might have better served this purpose because it assesses an individual's knowledge of all aspects of language use.

Another limitation of this study was the participant population. The data obtained from the school district showed that the participants in this study were not a very accurate representation of the average adolescent pregnant and/or parenting student population enrolled in the district. Statistics for the years before the study as well as from the year following the study showed a larger number of pregnant and/or parenting adolescent mothers attending the district's schools, and of those girls, a higher percentage received free/reduced-price lunches and had lower reading scores on their state assessments than did the study participants.

The study was also limited by the participants' failure to utilize their Tracking Charts with consistency. This caused a slight disturbance in the coding of the data. Although the coding problem was rectified, an alternative method of assessing how much

time the mothers spent interacting with their children should be considered for future studies.

Finally, the study could not be carried out according to the original plan because the researcher was unexpectedly hospitalized. Although the participants still received the information they would have obtained during the scheduled sessions, the limited number of opportunities to meet with participants face to face was a drawback.

With these limitations in mind, the next section addresses changes in research design and methods that may need to be considered for future research of this kind.

Suggestions for Future Research

Future studies of the link between parent/child language interaction and parental literacy improvement should make several adaptations to the study described here. First, the size of the participant population should be larger. The participant population in this study was extremely small even compared to the school district's average annual number of pregnant and/or parenting girls.

The second adaptation should address the cultural and ethnic diversity of the participants. The participants in this study were all from a rural community that is predominantly White and of low socioeconomic status. Two-thirds of the participants in this study met this description. Increasing the size of the participant population and including participants from different cultural and socioeconomic backgrounds would make a study and its findings more applicable to populations in other neighborhoods, school districts, and communities.

Another useful adaptation to this study would be to create a better method of documenting the amount of time a participant spends interacting with his/her child. In this study, participants did not fill in their Tracking Charts with any consistency. In future studies, the use of technology, such as audio or video recorders, would allow for more consistent and reliable data gathering.

A final suggestion for future research is that a follow-up study be conducted with the same participants to determine if the participants were still using the activities and strategies taught during the initial study. From such a follow-up study, the researcher might be able to learn a great deal more about the transfer of vocabulary and how this process might influence a family's intergenerational literacy, that is, the skills of both child and parent.

Conclusion

The results of this study suggest a relationship between the participants' attitude and motivation scores from the *Learning and Study Strategies Inventory* (LASSI) (Weinstein et al., 2002) and their participation level in the study. Those who participated regularly had improved attitude and motivation scores.

This study also shows that external/environmental factors may influence how well an individual participates in a family literacy program. That is, the fewer negative external factors an individual faces, the better he/she will perform.

Finally, this study also answered my topic question of how positive mother-child verbal interactions based on Hart and Risley's (1995) five significant family experiences

might influence the participating adolescent mothers' literacy skills. The participants who

participated in the six-month LITERATE Program had improved literacy skills. More

specifically, the participants' expository reading levels improved by one grade level each.

However, I would suggest that follow-up studies be conducted to confirm these results

due to the limiting factors that developed during this study.

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Appendix A

Institutional Review Board Approval

UAF
UNIVERSITY OF ALASKA
FAIRBANKS

Institutional Review Board

909 N Koyukuk Dr Suite 212 P O Box 757270 Fairbanks Alaska 99775-7270

January 16, 2009

To   Melissa Rickey, Ed D
        Principal Investigator

From   Bridget Stockdale, Research Integrity Administrator
        Office of Research Integrity

Re   IRB Protocol Application

Thank you for submitting the IRB protocol application identified below This protocol was determined to qualify for expedited review under federal regulations 45 CFR 46 110(F)(7) Therefore the review of your protocol application was done by representative members of the IRB On behalf of the IRB, I am pleased to inform you that your protocol has been approved

Protocol #	08-82
Title	*The Effects of Parent-Child Verbal Interaction Activities on the Reading Skills of Adolescent Mothers*
Level	Expedited
Received	December 9, 2008 (original) January 15, 2009 (final revisions)
Approved	January 16, 2009
Approval expires	January 16, 2010
Renewal	Continuing Review must be completed by January 16 2010 **Note:** We recommend you submit all continuing review documents approximately one month prior to the due date to prevent delays in your research

Any modification or change to this protocol must be approved by the IRB prior to implementation Modification Request Forms are available on the IRB website (http //www uaf edu/irb/Forms htm) Please contact the Office of Research Integrity if you have any questions regarding IRB policies or procedures

Appendix B

Timeline for LITERATE Program Study

December 16, 2008	Hand out LITERATE Program informational letters and invitations to all Union City Area School District pregnant and/or parenting female students.
December 23, 2008	Contact each invited girl and remind her of the first meeting.
January 6, 2009*	Meet with girls who are interested and their parents. Explain the LITERATE Program and the study in depth. Have Parental Consent Forms and Participant Assent Forms signed. Assess each girl who is interested in participating in the study using the QRI-4 and the LASSI to gather baseline data.
January 13, 2009*	Conduct Meeting #1.
January 27, 2009	Conduct Discussion Group #1.
February 10, 2009	Conduct Meeting #2.
February 24, 2009	Conduct Discussion Group # 2.
March 10, 2009	Conduct Meeting #3.
March 24, 2009	Conduct Discussion Group #3.
April 14, 2009	Conduct Meeting #4.
April 28, 2009	Conduct Discussion Group #4.
May 12, 2009	Conduct Meeting #5.
May 26, 2009	Conduct Discussion Group #5.

June 9, 2009   Conduct Meeting #6.

June 23, 2009   Conduct Discussion Group #6.

June 30, 2009   Administer the QRI-4 and the LASSI to those girls who

                      participated in the study.

*Actually conducted on January 20, 2009 due to Institutional Review Board approval.

Appendix C

LITERATE Program Letter to Potential Participants

December 15, 2008

Dear _____,

I am writing to invite you to attend LITERATE, a fun program designed to help you and your child become closer through simple games and activities. Enclosed with this letter you will find a description of the program. Please, take a minute to read it over.

If you have any questions or you are interested please contact Mrs. Baron in person or at 438-7673 ext. 4213 or at fthmb@uaf.edu ASAP, so that I may schedule a time to meet with you and your parent(s) to provide you both with an in-depth description of the study. I truly hope to hear from you!

Mrs. Baron

Appendix D

LITERATE Program Flier for Potential Participants

CALLING ALL PREGNANT OR PARENTING MOTHERS WHO ATTEND UCASD. YOU ARE INVITED TO:

LITERATE

An Early Literacy Outreach Research Project for Mrs Baron's education degree from UAF
Provided by the Union City Area School District (UCASD) and Mrs Heather-Lee Baron

What? An Early Literacy Outreach Research Project for Mrs Baron's education degree from UAF It is designed to help young mothers talk, read, and interact with their children, so that their children may be better prepared for literacy learning upon entering school.

Where? At the Union City Middle/High School in Mrs. Baron's room (213).

When? The 2nd and 4th Tuesday of every month beginning January 13, 2009 at 3:00 pm.
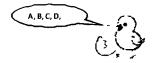
Why? To prepare our community's youth for the wonderful world of learning by teaching young parents how to enhance their own child's learning through positive interactions!

How? Through a gracious award provided by ING: a financial services company.

LITERATE invites ALL pregnant/parenting mothers who attend UCASD to attend, however, these young ladies will also have the opportunity to participate in a study that will be part of Mrs Baron's doctoral research for her schooling through the University of Alaska Fairbanks If you choose to participate in the 6-month study here's what will happen

- During the first meeting of each month, the participants (you) will receive fun activities and suggestions to help aid in the interactions and communication you have with your child(ren)
- During the second meeting each month, you will share your progress, any ideas, any comments, and/or any concerns regarding the program This is a time for YOU to share
- Each family will be allowed to keep at no cost all program materials used through the course of the project (including children's books, CDs, a DVD, games, puppets, blocks, and other literacy materials)
- You will be given $50 to thank your for your time and effort upon your completion of the study
- Each meeting will be educational, enlightening, fun and exciting!

If you have any questions or you are interested, please contact Mrs. Baron in person or at 438-7673 ext. 4213 or at fthmb@uaf.edu ASAP, so that I may schedule a time to meet with you and your parent(s) to provide you both with an in-depth description of the study. I truly hope to hear from you!

Appendix E

Parental Consent Form

HOW A FAMILY LITERACY PROGRAM ON PARENT-CHILD VERBAL INTERACTIONS AFFECTS
THE READING SKILLS OF ADOLESCENT MOTHERS

Description of the Study:
The goal of this study is to learn whether the interaction between your daughter and grandchild(ren) will help improve your daughter's reading skills. This study is being done as part of the Mrs. Baron's requirements for an education degree from the University of Alaska Fairbanks. Your daughter is being asked to take part in this study because she is or is going to be a young mother. Please, read this form and ask any questions you may have before you agree to allow your daughter to be in the study.

If your daughter participates in this study all of her information will be kept private. During the study, her reading skills and her attitude toward learning and studying will be tested before and after the study (January 6 and June 30). She will attend two 60-minute meetings each month for six months. During the first meeting each month, she will be taught different activities to use with her child(ren), and she will be asked to keep track of how often she uses these activities at home. A group discussion will take place during the second meeting each month. We will talk about the activities and the interactions your child is having with her child(ren). The second meetings will be tape-recorded and possibly used for the study. The researcher may also take notes during the meetings.

The meetings will take place at the Union City Area Middle-High School from 3:00-4:00 pm on the second and fourth Tuesday of each month (January 13 and 27, February 10 and 24, March 10 and 24, April 14 and 28, May 12 and 26, June 9 and 23).

Risks and Benefits of Being in the Study:
Risks:
There are no foreseen risks of being in this study. All of the participants' information **will be kept private** and confidentiality forms will be signed by all participants. Again, this study does not have anything meant to hurt your daughter or make her feel bad. If she does feel bad in any way she can stop being part of the study at anytime. Nothing bad will happen to her if she stops being in the study. However, she will not receive the remainder of the activity materials or the $50.00.

To stop participating all you or your daughter will need to do is notify Mrs. Baron in writing and stop attending the meetings.

Benefits:
Your daughter will have the opportunity to learn fun activities to use with her child(ren), and her reading skills may also improve.

Compensation:
Your daughter will be given roughly $250.00 worth of activity materials (e.g. puppets, children's books, nursery rhyme CDs, alphabet letters, etc.) to use with her child(ren). These materials are hers to keep. She will also be given $50.00 when the study is complete.

However, if your daughter misses more than 2 meetings she may be asked to withdraw from the study and/or if she does not complete the study she will not receive the remainder of the activity materials or the $50.00.

Confidentiality:
Every participant will be given a participant id number that they will use on any written forms. All of these materials will be kept locked-up. Because this is a study for educational purposes both Mrs. Baron and her four committee members will be able to see these materials. The committee members, however, will never know your child's name. They will only see your daughter's id number. Also, every participant who attends this study will be required to sign a confidentiality form asking them not to talk about the study outside of the meetings. This helps with privacy.

The researcher and her committee members are the only people who will be able to hear the audiotapes from the discussion meetings.

Voluntary Nature of the Study:
Your decision to allow your daughter to take part in the study is voluntary. Your daughter is free to choose not to take part in the study or to stop taking part at any time. If she decides to stop participating the information gathered on her will not be used in the study.

Contacts and Questions:
If you have questions, please ask Mrs. Baron in person, call her at (814) 438-7673 ext. 4213 or e-mail her at fthmb@uaf.edu.

If you have questions or concerns about your rights as a research subject, please contact the Research Coordinator in the Office of Research Integrity at (907) 474-7800 or 1-866-876-7800 or fyirb@uaf.edu.

Statement of Consent:

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree allow my daughter_____to participate in this study. I have been provided a copy of this form.   *Print your daughter's name*

If appropriate:

Please check the box that applies:

☐ My daughter **may** be tape recorded
☐ My daughter **may not** be tape recorded

Thank you for your cooperation in this important study.

_____

Print Parent/Guardian Name

_____

Signature of Parent/Guardian & Date

Appendix F

Participant Assent Form

HOW A FAMILY LITERACY PROGRAM ON PARENT-CHILD VERBAL INTERACTIONS AFFECTS THE READING SKILLS OF ADOLESCENT MOTHERS

Description of the Study:
The goal of this study is to learn whether interacting with your child will help improve your reading skills. This study is being done as part of the Mrs. Baron's requirements for an education degree from the University of Alaska Fairbanks. You're being asked to take part in this study because you are or are going to be a young mother. Your parent(s)/guardian(s) have given permission for you to be a part of this study. You also get to tell us if you want to be part of this study. Please, read this form and ask any questions you may have before you agree to be in the study. **If you decide to be part of this study, all of your information will be kept private.**

During the study, your reading skills and your attitude toward learning and studying will be tested before and after the study (January 6 and June 30). You will attend two 60-minute meetings each month for six months. During the first meeting each month you will be taught different activities to use with your child(ren) and you will be asked to keep track of how often you use these activities at home. A group discussion will take place during the second meeting each month. We will talk about the activities and the interactions your child is having with her child(ren). These meetings will be tape-recorded and possibly used for the study. The researcher may also take notes during the meetings.

The meetings will take place at the Union City Area Middle-High School from 3:00-4:00 pm on the second and fourth Tuesday of each month (January 13 and 27, February 10 and 24, March 10 and 24, April 14 and 28, May 12 and 26, June 9 and 23).

Risks and Benefits of Being in the Study:
Risks:
There are no foreseen risks of being in this study. All of the participants' information **will be kept private** and confidentiality forms will be signed by all participants.

Again, this study does not have anything meant to hurt you or make you feel bad. If you do feel bad in any way, you can stop being part of the study at anytime. Nothing bad will happen to you if you stop being in the study. However, you will not receive the remainder of the activity materials or the $50.00. To stop your participating all you or your parent will need to do is notify the Mrs. Baron in writing and stop attending the meetings.

Benefits:
We do not promise that you will get any benefit from helping with this study. However, you may learn fun activities to use with your child(ren). Your reading skills may also improve.

Compensation:
You will be given roughly $250.00 worth of activity materials (e.g. puppets, children's books, nursery rhyme CDs, alphabet letters, etc.) to use with your child(ren). These materials are yours to keep. You will also be given $50.00 when the study is complete. However, if you miss more than 2 meetings you may be asked to withdraw from the study and/or if you do not complete the study you will not receive the remainder of the activity materials or the $50.00.

Confidentiality:
Every participant will be given a participant id number that will be used on any written forms. All of these materials will be kept locked-up. Because this is a study for educational purposes both Mrs. Baron and her four committee members will be able to see these materials. The committee members, however, will never know your name. They will only see your id number.

Also, every participant who attends this study will be required to sign a confidentiality form asking you to promise not to talk about the study outside of the meetings. This helps with privacy.

The researcher and her committee members are the only people who will be able to hear the audiotapes from the discussion meetings.

Voluntary Nature of the Study:
Your decision to take part in the study is completely up to you. You are free to choose not to take part in the study or to stop taking part at any time. If you decide to stop participating the information gathered on you will not be used in the study.

Contacts and Questions:
If you have questions ask please ask Mrs. Baron in person, call her at (814) 438-7673 ext. 4213 or e-mail her at fthmb@uaf.edu.

If you have questions or concerns about your rights as a research subject, please contact the Research Coordinator in the Office of Research Integrity at (907) 474-7800 or 1-866-876-7800 or fyirb@uaf.edu.

Statement of Assent:
I know what this study is about and I have had my questions answered. I want to be part of this study.

<div align="center">

If appropriate:

Please check the box that applies:

☐ **I can** be tape recorded

☐ I **cannot** be tape recorded

</div>

Thank you for your participation and cooperation.

Print Participant's Name

Signature of Participant & Date

Appendix G

Participant Confidentiality Form

HOW A FAMILY LITERACY PROGRAM ON PARENT-CHILD VERBAL INTERACTIONS AFFECTS THE READING SKILLS OF ADOLESCENT MOTHERS

Confidentiality of Other Participants' Information:
You and your parents have been provided with a description of the above study and you understand the risks and benefits of participating. You also understand that ALL information related to this study is to be kept private. Both you and your parent(s) have signed forms giving permission for you to participate in this study.

This form is your way of promising not to share any of the participants' information with others. That includes anything that is discussed during the meetings.

If this should happen you may be asked to drop out of the study.

Contacts and Questions:
If you have questions ask please ask Mrs. Baron in person, call her at (814) 438-7673 ext. 4213 or e-mail her at fthmb@uaf.edu.

If you have questions or concerns about your rights as a research subject, please contact the Research Coordinator in the Office of Research Integrity at (907) 474-7800 or 1-866-876-7800 or fyirb@uaf.edu.

Statement of Confidentiality:
I know what this study is about and I have had all my questions answered. I want to be part of this study and will not share any of the other participants' information with anyone outside of the study.

Thank you for your participation and cooperation in this important study.

_____
Print Participant's Name

_____
Signature of Participant & Date

MONTH 1   LITERATE: FAMILY LITERACY PROGRAM - TRACKING CHART

Participant ID:

Activity ✓	Language diversity ✓	Feedback tone ✓	Symbolic emphasis ✓	Guidance style	Responsiveness ✓	✓
	Recognize how much time you actually spend talking to/with your child and try to add a couple mins each day	Recognize how you talk to/with your child Is it positive or negative? Try to be a little more positive	Recognize how often you explain things to your child Try to explain at least 2 things to your child each day	Recognize how you guide your child Do you ask them to do something or demand that they do it? Try asking	Recognize how often you listen to your child and how often you encourage him/her to speak Try starting a conversation with your child twice each day and take time to listen	
1=1						
	Use different words!!! Refer to things using generic and proper names Eg shoes=sneakers= tennis shoes=dress shoes Boots= rain boots= snow boots= hiking boots	Accentuate the words you use Sing the words!	Explain what each thing is and what it is for Eg "These are your dress shoes for church"	Help your child understand that things may have more than one name	When you see something or pick something up ask your child what it is Pause and let your child respond Then praise them or correct them accordingly	
1=2						
1=3	n/a	n/a	n/a	n/a	n/a	
1=4	n/a	n/a	n/a	n/a	n/a	
1=5	n/a	n/a	n/a	n/a	n/a	Time spent with child Goal: 10mins.
Day ✓ Description	✓ Description	✓ Description	✓ Description	✓ Description	Activity #:	Time:
Tue.						
Wed.						
Thur.						
Fri.						
Sat.						
Sun.						
Mon.						

MONTH 2
Participant ID:

LITERATE: FAMILY LITERACY PROGRAM - TRACKING CHART

Activity ✓	Language diversity ✓	Feedback tone ✓	Symbolic emphasis ✓	Guidance style ✓	Responsiveness ✓	✓
	Talk using puppets! Talking to a baby can be awkward at first, but puppets may make it easier	Be positive Smile Laugh	Using a puppet explain to him/her what you did today and how you felt about it "Today Mommy had a super day I went '	Place the puppet on your child's hand and allow them to talk to you Teach your child how to take turns Don't demand that they do	Listen to your child when they talk to you	
2=1						
	Sing the alphabet to your child as you rock him/her to sleep or sign the alphabet as you sing	Praise your child when they try singing or signing with you	Explain to your child that you are using sign language	Help your child make some of the signs with his/her hands E g 'O' and L' are easy signs to make	Be patient Pause to allow your child to sing or sign on his/her own	
2=2						
	Read a short story to your child Point out an object in the book that your child might like to discuss	If your child incorrectly refers to something in the story guide them to the appropriate response	Explain one new thing from the book about the object you selected to discuss to your child	Encourage your child to point to one item in the book and refer to it by name and talk a little about it	Ask your child to explain one thing to you or point to an item you have discussed	
2=3						
	Pull out the puppets and play!	Depending on the puppets that you received use the noises of the animals or change your voice to fit the character you are using Have fun!	Depending on the puppets that you received explain to your child what each one does	Ask your child what each puppet does	Allow your child to participate	
2=4						
	Create a little song using your child's name E g Little Nicole with big eyes so blue Oh, how I love you"	Sing the song to your child as you dance with them Don't be afraid to sing Trust me your child will love your voice	Make sure one line of your song describes your child E g ' Little Nicole with big eyes so blue "	Encourage your child to sing and dance with you Help them learn the words or dance Guide them	Ask your child to sing with you If your child is too young, periodically pause to allow them to babble	Time spent with child Goal: 20mins.
2=5						

Day ✓	Description ✓	Description ✓	Description ✓	Description ✓	Description	Activity #:	Time:
Tue.							
Wed.							
Thur.							
Fri.							
Sat.							
Sun.							

MONTH 3 LITERATE: FAMILY LITERACY PROGRAM - TRACKING CHART

Participant ID:

Activity ✓	Language diversity ✓	Feedback tone ✓	Symbolic emphasis ✓	Guidance style ✓	Responsiveness ✓	✓
	Sing four songs from the Nursery Rhymes CD with your child Don t forget to dance with them	Encourage your child to sing and dance with you and praise them	Create some easy gestures to go along with each song Teach them to your child E g The Ittsy Bittsy Spider'	Remember the gestures should be easy and your child may not do them as you do Help guide his/her gestures	As you sing the words to the song remember to pause and listen to your child sing Smile at them and encourage them to sing with you	
3=1						
	Select a few items out of the middle cubby of the Little Red Tool Box and explain them to your child Use different words!!!	If your child incorrectly refers to something guide them to the appropriate response Be positive	Explain what each thing is and what it is for E g This is a xylophone You play music on xylophones	Ask your child what things are. If he/she is still babbling That s OK Just remember to pause giving him/her a chance to respond and guide your child a responses to the correct answer	Ask your child what things are If he/she is still babbling That s OK Just remember to pause giving him/her a chance to respond	
3=2						
	Read Sandra Boynton's A to Z Choose a letter and say as many words as you can think of that start with that letter Don t forget to look around the house for words that begin with that letter'	Sing the words you come up with and/or emphasis the beginning letter sound HINT Young children may become bored quickly Therefore you may not be able to read every word in a book Remember that s OK	Explain the activity to your child and why some words may not work For example If your letter is c explain that c makes two sounds /k/ and /s/ so both the words cat and circus will work but kite wont Explain why	Encourage your child to participate and remember if he/she is still to young you should still try the activity He/she might not be talking but he is listening!	Allow your child time to think and come up with his/her own words You may guide their response by pointing to the cat but allow him to say the word first And clap and cheer when he does	
3=3						
	Read Sandra Boynton s Moo Baa La La La! Discuss the different animal sounds Try to think of other animal sounds or movements	If your child makes an error that s OK he/she is just learning Simply laugh and tell him/her the correct sound Kids love onomatopoeias' HINT Young children may become bored quickly Therefore you may not be able to read every word in a book	Explain to your child where you might see each of the animals and/or what each animal might eat	Go back to the book and ask your child to find a certain animal on each page Try to choose animals that your child already knows That way he/she will be successful	Give your child time to think of the animal sound or to find the animal in the picture Remember to clap and act very excited when your child responds correctly	
3=4						
	CREATE YOUR OWN ACTIVITY!	Remember to be positive	Explain something to your child Don t be afraid to use new words That s how they learn	If your child appears confused or becomes frustrated slow down and guide him/her Remember the activity should be FUN	Give your child his/her turn and allow them plenty of time to respond	Time spent with child Goal: 30mins.
3=5						

Day ✓	Description ✓	Description ✓	Description ✓	Description ✓	Description	Activity #:	Time:
Tue.							
Wed.							
Thur.							
Fri.							
Sat.							
Sun.							
Mon.							

LITERATE: FAMILY LITERACY PROGRAM - TRACKING CHART

Participant ID:

Activity ✓	Language diversity ✓	Feedback tone ✓	Symbolic emphasis ✓	Guidance style ✓	Responsiveness ✓	✓
4=1	Play with letters and sounds! Using the letters provided in the Little Red Tool Box and the whiteboard teach your child some letters and their sounds. Remember you don't have to teach letters in order	Encourage your child to select a couple letters and place them on the whiteboard	Tell your child what each letter's name and sound(s) are. You might also tell them some words that begin with each letter. Hint: Children LOVE to learn about themselves so, show your child what letter begins his/her name	Help your child select letters and place them on the whiteboard. Ask them what they think the letters are and what sounds they think they make	Don't become frustrated with your child if he/she names a letter wrong. Simply correct them and move on. But don't forget to praise your child when he/she is right! Remember. Do not allow your child to put any of the items from this research	
4=2	Play a name game. Choose your child's name, your name or the name of someone or something else and create a rhyming song for each name. E.g. "Heather Heather bo bether fee fi fo feather."	Sing and have fun	Explain to your child that everything has a name by asking "What is the name of this?" If necessary you may have to tell him/her	Allow your child to participate. If he/she can sing along - great. If he is still to young allow him to choose the names by saying them or pointing to someone or something	Give your child plenty of thinking time	
4=3	Play Where's that Shape? Pick a shape and try to find it in your house. E.g. rectangle = tissue box, cereal box, picture frame, etc	Like hide-and-seek this activity should be exciting. Act excited when you or your child finds an object in your home that is the same shape as the one that was chosen	Explain the shapes to your child. E.g. 'A square has four sides that are the same length." Remember, this builds your child's vocabulary	Allow your child to participate and encourage him/her to ask questions	Expect that your child may make some mistakes or he/she may even be too young to participate. That's OK. Still do the activity because your child is listening seeing and learning!	
4=4	Read Sandra Boynton's Doggies and start counting with your child. Find items around the house and count them	Praise your child when he/she participates. HINT Young children may become bored quickly. Therefore you may not be able to read every word in a book. Remember that s OK.	Count! Count everything you see. Count things in books. E.g. The Three Bears. This will teach your child that anything can be counted	When counting pause after a number and see if your child can fill in the next number. Remember. If your child is incorrect it's OK, simply correct him/her. Also if you have a very young child they may gurgle babble or attempt to say a word. This is	Allow your child time to count with you	
4=5	Read Sandra Boynton's Barnyard Dance and act out the dance with your child	Sing dance and be merry. Praise your child for participating. HINT Young children may become bored quickly. Therefore you may not be able to read every word in a book. Remember that's OK	Tell your child about barn dances or any other types of dances you may know about. E.g. ballet	Ask your child questions. E.g. "Are you having fun?", 'Do you want to be the dog or the horse?" "What do dogs say?", etc	Give you child plenty of time to participate and answer questions	spent with child Goal: 40 mins.

Day ✓	Description ✓	Description ✓	Description ✓	Description ✓	Description	Activity #:	Time:
Tue.							
Wed.							
Thur.							
Fri.							
Sat.							
Sun.							
Mon.							

MONTH 5

LITERATE: FAMILY LITERACY PROGRAM - TRACKING CHART

Participant ID:

Activity ✓	Language diversity ✓	Feedback tone ✓	Symbolic emphasis ✓	Guidance style ✓	Responsiveness ✓	✓
5=1	Read Sandra Boynton's Blue Hat, Green hat. Choose a color and try to find it everywhere	Be positive and encourage your child to look around the house with you. HINT Young children may become bored quickly Therefore you may not be able to read every word in a book Remember that's OK.	Show your child two or three different things that are the same color Explain that they are the same color	Ask your child to locate things of a certain color	Expect that your child may make some mistakes or he/she may even be too young to participate That's OK Still do the activity because your child is listening, seeing and learning!	
5=2	Do a picture walk! Using one of the Nursery Rhyme books discuss the pictures in the book	Be positive and encourage your child to participate	Explain to your child what certain things are in the book and what they are used for	Ask your child to find things on the page	Praise your child when he/she is successful	
5=3	Teach rhyming! Select a Word Family Tales book and read it to your child Try to come up with other words that rhyme with your book	Be positive and encourage your child to think of rhyming words too HINT Young children may become bored quickly Therefore you may not be able to read every word in e book Remember that's OK.	You may need to explain what some of the words are by defining them	Allow your child to participate After rhyming two or three words yourself pause to allow your child to say something	Be positive and encourage your child to think of rhyming words too Be patient and wait for a response from him/her HINT At this age, made up words are OK too! E g dog bog frog fog hog	
5=4	Make rhyming words using the Little Red Tool Box and whiteboard Create a rhyme such as -ing, and add different onsets to create different words E g sing king ring, fling, etc	Enjoy this activity and create as many words as you can Don't forget to include your child)	You may need to explain what some of the words are by defining them	Encourage your child to think of a word Help them find the letters to spell it	Give your child time to play with the letters and create his/her own words Remember Do not allow your child to put any of the items from this research experience into his/her mouth	
5=5	Watch Learning is Everywhere together and talk about what is going on Follow it up with your own activity	Hold your child as you watch the video and point things out to one another Smile, laugh and learn together	Don't be afraid to pause the video if you need to explain something to your child	Ask your child questions about what he/she sees or hears in the video Ask him if he remembers when the two of you	Allow your child plenty of time to interact with you Allow him/her to answer your questions, but don't forget to allow him time to ask questions too	Time spent with child **Goal: 50 mins.**

Day ✓	Description ✓	Description ✓	Description ✓	Description ✓	Description	Activity #:	Time:
Tue.							
Wed.							
Thur.							
Fri.							
Sat.							
Sun.							
Mon.							

MONTH 6

LITERATE: FAMILY LITERACY PROGRAM - TRACKING CHART

Participant ID:

Activity ✓	Language diversity ✓	Feedback tone ✓	Symbolic emphasis ✓	Guidance style ✓	Responsiveness ✓	✓
	Go for a walk and talk! Take a walk around the house, the store, the park, or down the street and talk about the things you see	Encourage your child to explore. Praise them when they try to discuss something new with you	Discuss things that you see with your child. Explain what they are and what they do	Guide your child's learning by asking them questions about things you see. If his/her answer is wrong guide them to the correct response	Remember to ask your child questions and allow time for him/her to respond	
6=1						
	Go shopping! Talk to your child about the different things you are buying	Encourage your child to ask questions about the things that he/she sees	Explain what different things in the store are used for	Ask your child to make a connection between something new and something they already know about. E.g. 'That is a bike helmet. It is kinda like a hat, but it protects your head. It keeps your head from getting a boo-boo'	Remember to allow your child time to ask you questions. Praise them for thinking about things and coming up with such 'good" questions	
6=2						
	Go for a ride! Talk to your child about all the things you see out the window and teach them directions	Act excited about the things you see	Use words like 'left' and 'right'. E.g "Look out the left window. What do you see?" or "Now we are going to turn right." Talk to your child and teach them about the different things that you see	Children ask A LOT of questions. Encourage them to do so (Even if it can be a little annoying) If they're asking, they're thinking!)	Remember to allow your child time to ask you questions. Praise them for thinking about things and coming up with such "good" questions	
6=3						
	Take a walk or ride and point out environmental print. Environmental print are words on signs such as, stop, McDonald's, slow, bank, store etc	Point to the words you see excitedly and say them aloud	Tell your child what letter the word begins with. E.g 'There is a stop sign. It says stop. Stp starts with the letter 's' and 's' makes the sounds /s/ '	Ask your child to point at words and you will read them aloud for him/her. Or ask your child questions such as "Hey, there's another stop sign! What sound does 's' make?"	Expect that your child may make some mistakes or he/she may even be too young to participate. That's OK. Still do the activity because your child is listening, seeing and learning!	
6=4						
	Sing and Dance! Pull out the CD and have a good time! Invite others to join you. By this time you shouldn't be embarrassed anymore. Learning is FUN!	Sing! Dance! Smile! Laugh! Learn! Love!	Sing, sing, sing that's enough for this one	Encourage your child to sing, sing, sing)	Allow your child to sing, sing, sing)	Time spent with child Goal: 1hr.
6=5						
Day ✓	Description ✓	Description ✓	Description ✓	Description ✓	Description	Activity #:	Time:

Day						Activity #:	Time:
Tue.							
Wed.							
Thur.							
Fri.							
Sat.							
Sun.							
Mon.							

Appendix I

Materials Given to the Participants during the Study

The following materials were given to the participants during the first meeting of each month.

Meeting #1   Universal Folding Cart (to store materials in), UPC 7-63960-24655-9

- *Sesame Street's happy, healthy, READY for school! Learning Is Everywhere: An Educational Lit for Parents and Children* (PNC Grow Up Great)

Meeting #2-   PLUSHPUPS puppets, www.plushpups.com (2003)

- *Boynton's Greatest Hits, Volume I,* by Sandra Boyton (four-book set), ISBN 0-689-82322-3

Meeting #3   - *Classic Nursery Rhymes,* CD by Susie Tallman & friends, ASIN: B00006594P

- *Little Red Toolbox: Alphabet Letters & Pictures Super Set,* by Scholastic, ISBN: 0-439-83864-9

- School Smart Magnetic Wipe-Off Board, 22" x 17 ½"

Meeting #4-   Melissa & Doug Wooden ABC-123 Blocks

- *Big Box of Boynton: For Small and Curious Kids,* by Sandra Boynton (3 book set), ISBN: 978-0761139898

Meeting #5   - *Classic Fairy Tales,* six-book set, ISBN: 9780618681174

- *Merriam-Webster's Alphabet Book,* by Ruth Heller, ISBN: 978-0-87779-023-5

Meeting #6   - *Children's Songs: A Collection of Childhood Favorites,* by Susie Tallman & friends, ASIN: B0002TG0LM

Appendix J

Contents of each LITERATE Program Binder

1. Introduction

   - LITERATE Participant Binders Contents Sheet

   - Sample Study Letter

   - Sample Flier

   - Sample Parental Consent Form

   - Sample Participant Assent Form

   - Sample Confidentiality Form

2. Charts

   - Month 1= LITERATE: Family Literacy Program Tracking Chart

   - Month 2= LITERATE: Family Literacy Program Tracking Chart

   - Month 3= LITERATE: Family Literacy Program Tracking Chart

   - Month 4= LITERATE: Family Literacy Program Tracking Chart

   - Month 5= LITERATE: Family Literacy Program Tracking Chart

   - Month 6= LITERATE: Family Literacy Program Tracking Chart

3. Journals

   - LITERATE: Family Literacy Program Journal

4. Literature

   - Babycenter.com article

     o "Toddler milestones: Talking," reviewed by the BabyCenter

Medical Advisory Board

- Scholastic.com articles

  o "20 Ways to Boost Your Baby's Brain Power," by Alice Sterling

  Honig, PhD

  o "The Meaning of Preliteracy," by Susan B. Neuman

  o "Baby's First Teacher," by Ellen H. Parlapiano

  o "Why Babies Need Books," by Kate Jack

  o "Choosing Books for Your Baby and Toddler," by Kate Jack

  o "Exploring Books with Babies," by Susan Straub

  o "Reading to an Infant," by Alice Sterling Honig, PhD

  o "Quick Click: Integrating Reading into Everyday Life for Birth–

  Age 2," by Scholastic Parents

  o "Raising a Reader," by Abby Margolis Newman

  o "Time to Rhyme," by Susan B. Neuman, PhD

- LittleScholastic.com

  o "How to Read with Your Baby and Toddler," by Susan B. Neuman

- National Institute for Literacy

  o "A Child Becomes a Reader: Birth through Preschool"

  o "Put Reading First: Helping Your Child Learn to Read; A Parent

  Guide (Preschool through Grade 3)"

  o "Dad's Playbook: Coaching Kids to Read"

- International Reading Association

- o "When Mama Can't Read: Counteracting Intergenerational

    Illiteracy," by Kathleen S. Cooter

  - American Sign Language Alphabet and Numbers Chart

5. Word Family Books

  - *Word Family Tales: Lessons, Activities & Reproducible Mini-Book*

    Versions of All 25 Storybooks (Grades Pre-K-2), published by Scholastic

    (2002). ISBN: 0-439-26246-1

  - These reproduced "Mini-Books" are part of the materials purchased by

    ING, a financial services company.

LITERATE: FAMILY LITERACY PROGRAM - RUBRIC
Participant ID
Date

	Use of Activities	Met Goal: Y/N		Use of Activities	Met Goal: Y/N
Tue.	Language diversity		Wed.	Language diversity	
Day 1	Feedback tone		Day 2	Feedback tone	
	Symbolic emphasis			Symbolic emphasis	
	Guidance style			Guidance style	
	Responsiveness			Responsiveness	
	Time spent with child			Time spent with child	

	Use of Activities	Met Goal: Y/N		Use of Activities	Met Goal: Y/N
Fri.	Language diversity		Sat.	Language diversity	
Day 4	Feedback tone		Day 5	Feedback tone	
	Symbolic emphasis			Symbolic emphasis	
	Guidance style			Guidance style	
	Responsiveness			Responsiveness	
	Time spent with child			Time spent with child	

	Use of Activities	Met Goal: Y/N
Mon.	Language diversity	
Day 7	Feedback tone	
	Symbolic emphasis	
	Guidance style	
	Responsiveness	
	Time spent with child	

COMMENTS:

Use of Activities   **Met Goal:**
                        Y/N

Thur.   **Language diversity**
Day 3   **Feedback tone**
         Symbolic emphasis
         Guidance style
         Responsiveness
         Time spent with child

Use of Activities   **Met Goal:**
                        Y/N

Sun.   **Language diversity**
Day 6   **Feedback tone**
        Symbolic emphasis
        Guidance style
        Responsiveness
        Time spent with child

Appendix L

Literature Read and Discussed during the First Meeting Each Month

Meeting #1   "20 Ways to Boost Your Baby's Brain Power," by Alice Sterling Honig, PhD

"The Meaning of Preliteracy," by Susan B. Neuman

Meeting #2 "Baby's First Teacher," by Ellen H. Parlapiano

"Toddler Milestones: Talking," reviewed by the BabyCenter Medical Advisory Board.

Meeting #3 "Why Babies Need Books," by Kate Jack

"How to Read with Your Baby and Toddler," by Susan B. Neuman

Meeting #4 "Choosing Books for Your Baby and Toddler," by Kate Jack

"Exploring Books with Babies," by Susan Straub

Meeting #5 "Reading to an Infant," by Alice Sterling Honig, PhD

"Quick Click: Integrating Reading into Everyday Life for Birth–Age 2," by Scholastic Parents

"A Child Becomes a Reader: Birth through Preschool"

Meeting #6   "When Mama Can't Read: Counteracting Intergenerational Illiteracy," by Kathleen S. Cooter

Appendix M

Qualitative Reading Inventory-4 Results Chart

			Amy	Beth	Carrie
Overall	narrative text @ instructional		↑ N5-N6	− N4-N4	↑ N6-NHS
	expository text @ instructional		↑ E4-E5	↑ E3-E4	↑ E6-UMS
Word identification			↑ 6-UMS	− 6-6	↑ UMS-HS
Oral reading	concepts @ instructional		↓ 83%F-75%F	↑ 40%F-66%F	↑ 50%F-89%F
	accuracy @ instructional		− 100%-100%	− 100%-100%	− 100%-100%
	retelling @ instructional				
Comprehension	4 explicit ?s @ instructional	narrative text	− 100%-100%	− 100%-100%	− 100%-100%
		expository text	− 75%-75%	↓ 100%-75%	75% - n/a
	4 implicit ?s @ instructional	narrative text	− 75%-75%	↑ 50%-75%	↑ 60%-80%
		expository text	− 75%-75%	↑ 50%-75%	100% - n/a
	narrative text @ instructional		− 88%-88%	− N4-N4	↑ N6-NHS
	expository text @ instructional		− 75%-75%	↑ E3-E4	− E6-E6

Appendix N

Learning and Study Strategies Inventory Results Chart

	Amy	Beth	Carrie
Anxiety	↓60-55	↑45-60	↓20-5
Attitude	↑55-65	↑45-75	↓10-5
Concentration	↓55-45	↑70-80	−1-1
Information processing	↑35-45	↓70-65	↑40-65
Motivation	↑45-60	−60-60	↓40-10
Self-testing	↑25-65	↓70-50	↓5-1
Selecting main ideas	↑35-80	↓55-45	−5-5
Study aids	↑15-20	↓90-45	↑10-65
Time management	−65-65	↓65-55	↑1-5
Test strategies	−65-65	↑40-60	↑1-5
Overall Areas of Growth	6	4	4

Appendix O

Participant's Participation Level Chart

	Amy	Beth	Carrie
Attendance	high 9/10	average 8/10	low 3/10
Notes	high	average	low
Contributions	high	average	low

Appendix P

Participant's QRI-4 Scores and Participation Level Comparison

		Amy	Beth	Carrie
QRI-4 Overall	narrative text @ instructional	↑ N5-N6	– N4-N4	↑ N6-NHS
	expository text @ instructional	↑ E4-E5	↑ E3-E4	↑ E6-UMS
Participation Level		high	average	low

Appendix Q

Participants' LASSI Scores and Their Participation Levels

Anxiety	Amy	Beth	Carrie	
Attitude	↓60-55	↑45-60	↓20-5	
Concentration	↑55-65	↑45-75	↓10-5	
Information processing	↓55-45	↑70-80	−1-1	
Motivation	↑35-45	↓70-65	↑40-65	
Self-testing	↑45-60	−60-60	↓40-10	
Selecting main ideas	↑25-65	↓70-50	↓5-1	
Study aids	↑35-80	↓55-45	−5-5	
Time management	↑15-20	↓90-45	↑10-65	
Test strategies	−65-65	↓65-55	↑1-5	
Overall Areas of Growth	−65-65	↑40-60	↑1-5	
Participation Level		6	4	4
	high	average	low	

Appendix R

Participants' Status + QRI-4 Results Chart

			Pregnant	Parenting	Both
Overall	narrative text @ instructional		↑ N5-N6	− N4-N4	↑ N6-NHS
	expository text @ instructional		↑ E4-E5	↑ E3-E4	↑ E6-UMS
Word identification			↑ 6-UMS	− 6-6	↑ UMS-HS
Oral reading	concepts @ instructional		↓ 83%F-75%F	↑ 40%F-66%F	↑ 50%F-89%F
	accuracy @ instructional		− 100%-100%	− 100%-100%	− 100%-100%
Comprehension	retelling @ instructional 4 explicit ?s @ instructional	narrative text	− 100%-100%	− 100%-100%	− 100%-100%
		expository text	− 75%-75%	↓ 100%-75%	75% - n/a
	4 implicit ?s @ instructional	narrative text	− 75%-75%	↑ 50%-75%	↑ 60%-80%
		expository text	− 75%-75%	↑ 50%-75%	100% - n/a
	narrative text @ instructional		− 88%-88%	− N4-N4	↑ N6-NHS
	expository text @ instructional		− 75%-75%	↑ E3-E4	− E6-E6

Appendix S

Participants' Status + LASSI Results Chart

	Pregnant	Parenting	Both
Anxiety	↓	↑	↓
Attitude	↑	↑	↓
Concentration	↓	↑	—
Information processing	↑	↓	↑
Motivation	↑	—	↓
Self-testing	↑	↓	↓
Selecting main ideas	↑	↓	—
Study aids	↑	↓	↑
Time management	—	↓	↑
Test strategies	—	↑	↑
Overall Areas of Growth	6	4	4

Appendix T

Participants' Status + Participation Levels Chart

	Pregnant	Parenting	Both
Attendance	high 9/10	average 8/10	low 3/10
Tracking Chart notes	high	average	low
Contributions	high	average	low

Appendix U

School District Data, 2007

Name	6 PSSA reading	6 PSSA writing	11 PSSA reading	11 PSSA writing	Special Services	Free/reduced lunches
1	basic	n/a***	basic	basic	no	no
2	below basic	n/a***	below basic	proficient	yes (exited)	yes-free
3	below basic	basic	withdrew*	withdrew*	yes	yesfree
4	basic	proficient	proficient	proficient	no	no
5	below basic	n/a***	below basic	proficient	yes	no
6	basic	n/a***	basic	proficient	no	yes-free
7	basic	proficient	basic	proficient	no	no
8	n/a****	below basic	withdrew**	withdrew**	yes	yes-free
9	below basic	n/a***	below basic	proficient	no	yes-free
10	basic	n/a***	n/a****	basic	yes	yes-free
Total = 10	9	4	9	10	5/10=50%	6/10=60%

*Withdrew before grade 11 test   grade 8 below b   grade 8 basic

**Withdrew before grade 11 test   grade 8 basic   grade 8 below b

Advanced	0/9=0%	0/4=0%	0/9=0%	0/10=0%
Proficient	0/9=0%	2/4=50%	1/9=11.1%	6/10=60%
Basic	5/9=55.5%	1/4=25%	4/9=44.4%	3/10=30%
Below Basic	4/9=44.4%	1/4=25%	4/9=44.4%	1/10=10%

***The state of Pennsylvania did not change their scoring to the 4-Level system until the following year

****No scores were available

Appendix V

School District Data, 2008

Name	11 PSSA reading	11 PSSA writing	Special Services	Free/reduced lunches
1	basic	proficient	no	yes-reduced
2	basic	proficient	no	no
3	proficient	proficient	no	yes-free
Total = 3	3	3	0/3=0%	2/3=66.6%
Advanced	0/3=0%	0/3=0%		
Proficient	1/3=33.3%	3/3=100%		
Basic	2/3-66.6%	0/3=0%		
Below Basic	0/3=0%	0/3=0%		

Appendix W

School District Data, 2009

Name	*PSSA reading	*PSSA writing	Special Services	Free/reduced lunches
1	basic	proficient	no	yes-free
2	below basic	n/a**	yes	no
3	below basic	below basic	yes	yes-free
4	proficient	proficient	no	yes-reduced
5	basic	proficient	no	yes-free
6	below basic	basic	no	yes-free
7	basic	basic	yes	yes-free
8	below basic	basic	yes	no
Total = 8	8	7	4/8=50%	6/8=75%
Advanced	0/8=0%	0/7=0%		
Proficient	1/8=12.5%	3/7=42.8%		
Basic	3/8=37.5%	3/7=42.8%		
Below Basic	4/8=50%	1/7=14.2%		

*Most recent score.

**No scores were available.

Appendix X

Statistics of Adolescent Mothers Enrolled in the District

	2000-2007	Dec-07	Study Dec-08	Dec-09
Number of adolescent mothers	12.42	10	4	8
PSSA Reading Scores		*		
Advanced score		0/9=0%**	0/3=0%***	0/8=0%
Proficient score		1/9=11.1%**	1/3=33.3%***	1/8=12.5%
Basic score		4/9=44.4%**	2/3=66.6%***	3/8=37.5%
Below Basic score		4/9=44.4%**	0/3=0%***	4/8=50%
PSSA Writing Scores		*		
Advanced score		0/10=0%**	0/3=0%***	0/7=0%****
Proficient score		6/10=60%**	3/3=100%***	3/7=42.8%****
Basic score		3/10=30%**	0/3=0%***	3/7=42.8%****
Below Basic score		1/10=10%**	0/3=0%***	1/7=14.2%****
Adolescent mothers who received special services		5/10=50%	0/3=0%	4/8=50%
Adolescent mothers' lunch status				
Free/Reduced		6/10=60%	2/3=66.6%**	6/8=75%

*Two of the 10 girls withdrew before the grade 11 assessment. Their grade 8 scores were used instead.

**One of the 10 girls did not have PSSA Reading test scores.

***Three of the four girls pregnant in December 2008 particpated in the study.

****One of the 8 girls did not have a PSSA Writing test score.

Appendix Y

Letter to Participants during the Researcher's Hospitalization

LITERATE: A Family Literacy Program

Good morning, ladies.

I apologize for this inconvenience.

I have outlined for you below what we were scheduled to do during our next two sessions.

-Mrs. Baron

Tuesday, April 28, 2009 = Discussion Group #4

I will contact each of you by phone to discuss how things are going and to answer any questions you may have.

Tuesday, May 12, 2009 = Meeting #5

- Please read over and carry out Month 5 activities.
- Please note your progress on your Tracking Charts and note any ideas, comments, and/or questions in your journal.
- Read the following three articles from your binder and be prepared to discuss them the next time we meet (May 26):
  - Reading to an Infant
  - Quick Click: Integrating reading into Everyday Life Birth–Age 2
  - A Child Becomes a Reader: Birth through Preschool
- PLEASE bring ALL charts and journals to our next meeting, May 26, 2009.

Thank you.

New materials to be received:

- Nursery Rhyme book pack.