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# Case Studies of the Literacy Interactions of Preschool Deaf Children with their Parents in the Home

Laura West Wise

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## ACCEPTANCE

This dissertation, CASE STUDIES OF THE LITERACY INTERACTIONS OF PRESCHOOL DEAF CHILDREN WITH THEIR PARENTS IN THE HOME, by LAURA WEST WISE, was prepared under the direction of the candidate's Dissertation Advisory Committee. It is accepted by the committee members in partial fulfillment of the requirements for the degree Doctor of Philosophy in the College of Education, Georgia State University.

The Dissertation Advisory Committee and the student's Department Chair, as representatives of the faculty, certify that this dissertation has met all standards of excellence and scholarship as determined by the faculty. The Dean of the College of Education concurs.

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Laura West Wise

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## ABSTRACT

### Case Studies of the Literacy Interactions of Preschool Deaf Children with Their Parents in the Home

by  
Laura West Wise

In the field of deaf education, a long-standing and still unanswered question is why are the reading levels and academic achievement levels of deaf and hard of hearing children inferior to their hearing peers. Teachers and parents continue to look for reasons to explain the gap and strategies they can use to narrow this gap between the reading achievement of children who are deaf and children who hear. For all children, literacy learning begins at birth. During the early years, children listen to and learn from the language their parents speak to them. The children are affected by the family interactions and experiences of daily life both inside and outside the family. Examination of literacy interactions of deaf children and their parents may provide answers to help us understand the literacy achievement gap deaf children experience. For this research dissertation, my focus was on: (a) How does the communication method of the deaf child affect language learning?; (b) How can the parent-child literacy interactions of deaf children be described?, and (c) How can preschool-age deaf children's emergent literacy behaviors be described?

This naturalistic study looked at the early literacy interactions of preschool deaf children of hearing parents. From an initial group of ten families, three families from an

early intervention program were selected. The researcher identified the literacy histories of the deaf children, described the parent-child literacy interactions, and explored emergent literacy behaviors occurring in the home. Data sources included parent questionnaires, parent interviews, literacy logs, and observations of parent-child literacy interactions, including storybook reading.

Findings reveal that overall family support, the definitive personality of the parents, and the early diagnosis and amplification of the deaf child defined the difference between the deaf child that excelled as an emergent reader and those who did not. Family support assisted in making each child a successful emergent reader. Parents who made an early decision and commitment to a communication mode, whether manual or oral, allowed their child to progress in areas beyond simple vocabulary. Lastly, the early diagnosis of deafness and early amplification aided the deaf child in emergent literacy achievements.



CASE STUDIES OF THE LITERACY INTERACTIONS OF PRESCHOOL  
DEAF CHILDREN WITH THEIR PARENTS IN THE HOME

by  
Laura West Wise

A Dissertation

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Doctor of Philosophy  
in  
Language and Literacy Education  
in  
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in  
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Georgia State University

Atlanta, Georgia  
2006

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## CHAPTER 1

### INTRODUCTION TO THE STUDY

On average, a deaf student completes high school with academic and language levels at or below the 4<sup>th</sup> grade level (Hart 1978; Marschark, 1997; McAnally, Rose, & Quigley, 1999; Paul & Quigley, 1990; Yoshinaga-Itano, Sedey, Coulter & Mehl, 1998). Only approximately 3% of deaf children are able to function at a reading level equal to that of their hearing peers (McAnally, Rose, & Quigley.) A long-standing and still unanswered question is why are the reading levels and academic achievement levels of deaf and hard of hearing children inferior to their hearing peers. Teachers, parents, and researchers continue to look for reasons to explain the gap and strategies they can use to narrow this gap between the reading achievement of children who are deaf and children who hear.

From an emergent literacy perspective (Teale & Sulzby, 1986), literacy learning begins at birth. During the early years, children understand more of what they hear than they are able to speak. They listen to and learn from the language their parents speak to them. As they grow older, they are able to talk, but frequently not able to explain and describe the meanings of the words they use (Lindfors, 1987). Over time as they listen to their parents communicate in a variety of meaningful contexts, they learn that language is used for different functions. The children are affected by the family interactions and experiences of daily life both inside and outside the family (Taylor, 1981). When

children are deaf, language is not learned from listening. Language may develop at a different or slower pace, possibly explaining the reason reading levels of deaf children are lower than their peers. Further comparisons between the language and literacy experiences of deaf children and children who can hear may provide answers to help us understand this gap.

To add to our understanding of deaf children's literacy development, I designed a naturalistic study exploring the home literacy interactions between preschool deaf children and their parents. Within a constructivist framework, my rationale for observing the literacy interactions of deaf children with their parents was to see and describe the emergent literacy behaviors in the home around storybook reading and other literacy activities. These observations required mediation within the literacy interactions to attain cognitive equilibrium for understanding, as stated in Piaget's work (1973, 1977). In addition, observation of parents with their deaf child allowed me to see how literacy activities lead a child to acquiring knowledge and concepts built on the child's personal experiences. According to Vygotsky (1962, 1978), parent-child interactions guide the child into new knowledge and understanding of literacy. The child, in turn, gains new insight into his own life and understanding from the application of the knowledge learned while interacting with the parent. I was interested in seeing what types of activities in which parents engage their child in order to foster literacy learning within the child, as seen through emergent literacy research. I also wanted to observe how the interactions vary from those of parents with a hearing child with a deaf child. I looked for ways parents introduce vocabulary, explain new concepts, and support their deaf child's learning, as compared to parents of hearing children.



Vygotsky (1962, 1978) describes learning as essentially a socially mediated process. Central to his views of learning as a social process, Vygotsky defines the zone of proximal development as a point between what children can and cannot do without the support of a parent. In this zone of proximal development, first a child cannot perform even without the support of an adult. Next, the child can perform with the support of a parent. Lastly, the child is able to perform without any support from an adult. Thus, more knowledgeable persons, such as parents, are key to a child's learning. Vygotsky's zone of proximal development supports his theory that social interactions with adults affect learning. Vygotsky's theories could be described as social constructivist in their focus. This study allowed me to analyze the different literacy interactions between hearing parents and deaf children and how it affected the reading development of the child who is deaf. My research questions guiding this study are:

- 1- How does the communication method of the deaf child affect language learning?
- 2- How can the parent-child literacy interactions of deaf children be described?
- 3- How can preschool-age deaf children's emergent literacy behaviors be described?

### Rationale

In 2002, the No Child Left Behind Act was passed to ensure that every child in the United States could become a fluent reader by third grade (Morrow, 2005). To understand why some children may not reach this goal, an understanding of language and literacy is important. Between the ages of birth to two, conditions are optimal for children to develop language naturally. This time is considered to be the critical period

in which children learn language (Meece, 1997). Early research (Ruddell, 1965) argued that higher achievement in reading and writing was directly related to a child's proficiency in oral language. More current research in emergent literacy (Sulzby & Teale, 1991) suggests that children don't have to wait until they are proficient in oral language to display early literacy learning. From an emergent literacy perspective, literacy learning is an evolving process beginning at birth and continuing until conventional reading and formal school education begins. When a child is deaf, a lack of oral communication can isolate a young child from meaningful oral language interactions (Meadow-Orlans, 1990). This lack of oral communication is a significant difference between deaf children and hearing children during the years of language acquisition. Without the same language learning, achieving reading fluency by the third grade may be difficult for deaf children. In addition, research (McAnally, Rose, & Quigley, 1999; Yoshinaga-Itano, Sedey, Coulter & Mehl, 1998) shows that typically a deaf student completes high school with academic and language levels at or below the 4<sup>th</sup> grade level.

In an effort to examine further why deaf children are achieving at lower reading levels than their hearing peers, I looked at the emergent literacy development of deaf children. I sought to observe the relationships between parent-child interactions and the literacy behaviors of the deaf child. The majority of these parent-child interactions were centered on storybook reading. Because the children used differing communication methods, I also examined how these communication modes may or may not have impacted their literacy learning.

## Purpose of the Study

This study explores the early literacy interactions of deaf children whose parents have normal hearing. In order to allow the reader to better understand this study, I need to clarify my use of several terms. My definitions of *language*, *communication*, *communication mode*, and the term *literacy interactions* are particularly critical. In this study, I use the term *language* to mean a system of rules used to communicate thoughts and feelings among people. Language may be written, oral, gestures, or symbols. *Communication* is defined as an exchange of thoughts or information. Communication requires using language effectively to express the meaning of an intended thought. *Communication mode* refers to the manual or non-manual way in which a deaf child interacts with his environment for meaning. Examples of communication modes include using independent or using a combination of oral, aural, and sign systems for communication. For this investigation, *literacy interactions* are described as any contact with printed material, including reading, writing, drawing, and language exchanges. Paul (1998) describes the following as the literacy interactions deaf children should experience during their earliest years of school:

- a. a wealth of real world activities and associated language
- b. conversational interaction with many and varied interactors and for many and varied purposes – both successful and unsuccessful experiences
- c. positive encounters with reading and reading materials
- d. exposure to a variety of print formats
- e. models of literacy behavior by significant others
- f. access to books and writing utensils
- g. involvement in print literacy activities (p. 185)

Knowing that literacy learning begins when children are first born (Taylor, 1981) and are stimulated by what they are exposed to through oral language (Glazer, 1989), this

research looks at how children learn when their ability to hear oral language is absent from birth. From an emergent literacy perspective (Yaden, Rowe, & MacGillivray, 2000) children develop an understanding about language (both oral and print) through a series of interactions with print, both reading and writing. Whereas deaf children may not have exposure to oral language to assist in developing their language learning, they do have access to print. In comparison to hearing children, parental interaction with the deaf child around print may vary due to communication modes used in the home. This study looks at the various communication modes used in the home and describes the parent-child interactions around books. It also describes the importance of early parent-child interactions, no matter which communication mode is used. The comparison among the three families participating in this study shows how deaf preschoolers benefit from early communication and literacy experiences.

#### Methodological Overview

This naturalistic study examined the parent-child interactions in the home of deaf children. Data sources included parent questionnaires, parent interviews, literacy logs, and observations of parent-child literacy interactions, including storybook reading. All home visits were videotaped. I used these literacy activities as a starting place for identifying possible trends in my data.

Within a social constructivist framework, I upheld the naturalistic procedures of Lincoln and Guba (1985) and followed the case study format of Merriam (1998) to analyze the literacy interactions of preschool deaf children with their parents. I assumed the roles of observer-participant and researcher for this study (Merriam, 1998). Using multiple data sources, I provide a rich portraiture (Lawrence-Lightfoot, 1997) of each

case study family. The initial participants in this study were ten families in the metropolitan area of a large city. Each of these families consisted of a deaf child with parents of normal hearing abilities. The parents were asked to give a general history of their child's deafness, language development, parent-child mode of communication, and experiences with books. Parents were also given a structured questionnaire, inquiring about the parent-child literacy practices, the parents' view of literacy development, and descriptions of typical literacy events in the home. After the initial interview, three families were selected for this study. These families agreed to allow me to make biweekly home visits and observations in their homes around literacy interactions. Home literacy logs were used for parents to record descriptions of literacy interactions during the times I was not in the home. A final structured interview was conducted with one of the parents. Lastly, field notes, peer debriefers, and a researcher's log form the basis for additional data.

Using constant-comparative analysis (Glaser & Strauss, 1967), I generated working hypotheses. I used open-ended and inductive (Lincoln & Guba, 1985) data analysis techniques to look for emerging patterns in the data. Mnemonic codes (Miles & Huberman, 1994) were used to categorize the data around emerging themes in regard to literacy interactions.

#### Assumptions and Limitations

Assumptions and limitations are inherent within any study. For this study, I assumed that asking parents to discuss their child's etiology of deafness, choice of communication modes, experiences with literacy, and language development would begin to focus their replies towards language and literacy. I further assumed the parents

considered me a knowledgeable person in the field of deafness and literacy, whereby trusting me with their child's history and experiences. As the "expert" and researcher, I felt obligated to answer direct questions and/or assist the parents when asked to do so. In the beginning, there was some hesitation towards the video camera and me, as well as some "showing off." After the initial interview and one or two observation sessions, I believe the observations were authentic and a true representation of parent-child interactions in each home. To explore consistencies and inconsistencies in what I observed, what the interviews revealed, and what was documented in the questionnaires, I triangulated all sources of the data collection.

Although this study examines parent-child literacy interactions and notes the communication mode chosen by each family, it does not advocate any particular communication mode for deaf children or adults, nor does it attempt to determine the most effective parent-child literacy environment for deaf children. Other research, despite the contradictions, has already addressed those issues. Deaf adults were not included in the study, but an attempt to summarize their opinions and past research on deaf parents reading with deaf children were included in the review of literature.

Another limitation directly relates to the population chosen. All participants are enrolled in the Statewide Parent-Infant Outreach Organization program in the metropolitan area of the same city. All ten participants offered to me were selected by the director of the Statewide Parent-Infant Outreach Organization program, not chosen by the researcher. All of the participants were white American families. The parents had normal hearing abilities. The director of Statewide Parent-Infant Outreach Organization chose these families and gave me the contact information of each one. The families are

originally from various regions of the United States, so they do represent regional diversity within the same ethnic group.

As a teacher of deaf children and one who deals with the uphill education journey of deaf children, I have biases about the way I think deaf children should communicate and the amplification used. As part of my daily job, I teach deaf children to read. To counteract these factors, I continuously consulted two peer debriefers as I analyzed and interpreted the data, one who is familiar with emergent literacy and one who is knowledgeable with deafness.

### Significance of the Study

As a part of the deaf community, I have been privy to many conversations with deaf adults, as well as deaf educators. Despite the differences in how each group may view the education of deaf children and the communication mode that should be used, both groups maintain that deaf children must be taught to read and taught with high expectation. Through all my training and experience, I also know this to be true. I subscribe to the school of thought “if it works, do it.” As a teacher, I have never found the same way of connecting with one child that would work for every child.

Taylor (1981) stated that learning begins from birth and parents are an essential role in this learning. Children are molded by the interactions of the family. It seems that deaf parents are doing something differently when interacting with their children. The advantages deaf parents have over hearing parents in communication, academic achievement, and cognitive development are noteworthy (Zwiebel, 1987). In this study, I extended Zwiebel’s connections. I explored the benefits of early communication in

raising deaf children. I looked at how other extenuating factors affect the emergent literacy skills of deaf children. I attempt to fill a gap in the present research.

Believing that literacy begins before school age, I focused on the home interactions of preschool deaf children. Previous research indicates children who are exposed to literacy before formal schooling tend to have successful mastery of reading (Yaden, Smolkin, & Conlon, 1989). The findings from this study have the potential to enhance our understanding of the relationships between deaf children and early reading abilities. Through research like this study, educators may be better able to frame a reply to a well known problem that on average, a deaf child completes high school with academics and language levels at or below the 4<sup>th</sup> grade level (Hart 1978; Marschark, 1997; McAnally, Rose, & Quigley, 1999; Paul & Quigley, 1990; Yoshinaga-Itano, Sedey, Coulter, & Mehl, 1998).



## CHAPTER 2

### REVIEW OF RELEVANT LITERATURE

In order to examine the reading behaviors of preschool deaf children, a background of language development must first be examined. Each of the following aspects of language development and literacy learning will be further outlined in this section. First, language development, which is considered to have a critical period between birth and age 5, will be discussed. Early language development is supported by the constructivist theory of Jean Piaget and the socially mediated language theory of Lev Vygotsky. Next, because this study examined the antecedents of reading behavior, the second section will explore links connecting language and literacy development of all children. Emergent literacy is a constructivist view of children developing into mature readers through print interaction. Parent-child storybook reading experiences mediate knowledge of print as well as other critical understandings essential for successful reading development. The final section will look specifically at a deaf child's communication, parental involvement, and exposure to print and stories and will help to shed light on the historically low reading achievement levels of deaf children. Research related to deaf parents of deaf children will also be explored in this section.

#### Language Development

Outlining a year-to-year progress of early language development supports a social constructivist theory I use to support and frame his study. Using theories of both Piaget

and Vygotsky to understand early language and literacy development allows attention to be placed on the importance of the environment (Piaget 1971, 1973) and the significance of the child's interactions with others within that environment (Vygotsky 1962, 1978).

From the moment children are born, they are exposed to language. Parents and other adults speak to and around infants, saturating them with language. From this language exposure, children begin to understand and use language. Over time, they continue to explore their environment and gain knowledge. Children construct knowledge about language from their interactions with adults and the environment. Parents encourage children through repeated exposure to language. Children can then take risks and oral language develops. Oral language grows when a child's environment encourages risk taking (Glazer, 1989).

In order to learn language, children must make sense of the sounds and gestures their parents direct towards them. For infants, parents often use a child-directed speech called motherese (Snow, 1977) when they emphasize, repeat, and abbreviate language (Easterbrooks & Baker, 2002). Through ongoing verbal interactions with the parent, children begin to respond through imitation. As children begin speaking more, parents use modeling to promote good use of language. Theorist E. H. Lenneberg believed that there is a critical period in which children learn language (Meece, 1997). He stated that between the ages of birth to two, conditions are optimal for children to develop language naturally. During this critical period of birth to two, children begin babbling and then gradually start to put one and two words together. By the end of a child's third year, he is able to use about 1,000 words and can understand even more. Children are able to use many words to describe an object or idea. By age four, children are using complex

sentences, although their use of these sentences may not be grammatically correct. At the age of five or six, a child is able to use more than 3,000 words, as well as grammatically correct sentences (Glazer, 1989). During each stage of language development, the child learns vocabulary and language usage by listening to and imitating the parent. The parent models language for their child through the natural environment and different situations. Children from diverse environments attain a good command of spoken English by the time they enter kindergarten (Lindfors, 1987).

Children develop early literacy skills through oral language. Oral language plays a critical role in children learning to read. Language interactions that occur around reading and writing events allow children to learn many things about print. This is called emergent literacy. The term emergent literacy is used to define literacy learning that occurs from birth to about kindergarten and includes the reading and writing behaviors prior to mature or conventional reading and writing (Yaden, Rowe, & MacGillivray, 2000). Literacy development occurs in everyday contexts through meaningful and functional experiences. From the perspective of emergent literacy, children do not read a book or write words in conventional ways. As they play and experience everyday life, children construct their literacy knowledge. Children at every age are said to have literacy skills, but may not be as developed or conventional as a mature reader's skills would be. Through their early literacy experiences, young children learn the complexities of language without formal training (Morrow, 1997).

Research (Anbar, 2004) shows that from early experiences children who are read to frequently learn to read and write early. Reading to children also helps to enhance their understanding about books and the function of print (Morrow, 2005). From storybook

reading experiences, children learn (a) how to handle books, (b) the front-back progression of a book, (c) story structure (character, setting, plot), and story progression (beginning, middle, end), and (d) the identification of authorship. Awareness of the functions, forms, and conventions of print are also learned (Morrow, 1997). Through storybook reading, dramatic play, and verbal interactions, parents help to foster a literate rich environment for their child. Children become aware of the letters in words and sound-symbol relationships. Emergent writing skills develop as children are exposed to print and provided opportunities to write (Meece, 1997).

During their experiences as infants and toddlers, children are not passive learners. Children learn by having the opportunity to search for connections, create experiences, and develop their own meaning (Fosnot, 1996). According to Piaget, children acquire knowledge by interacting with the world and their environment.

Piaget's (1971) theory of learning focused on both the ways children construct meaning and the progressive development of that learning through a set of stages according to the type of operational thinking they used. Piaget focused on both the individual construction of meaning as well as the active role the child plays in his learning. Children are active participants in their own learning and through this activity develop an understanding about the events they experience. Hence, children do not passively incorporate an adult's reality of an event, rather they experience events through their perspective on the world- the consequence of their unique set of experiences.

Piaget described the processes associated with maintaining cognitive development. Key to his theories are assimilation and/or accommodation. Assimilation is defined as organizing information gained from an existing experience within the child's

existing schemas. In contrast, disequilibrium is when a child experiences new information through interactions with the world and his existing understandings (schemata) do not account for this new information and a state of cognitive disequilibrium occurs. Ideally, through such experiences, the child's understanding advances through a process of accommodation. Accommodation is the process by which one's schema accommodates (adjusts) to account for an altered understanding of the experience. In contrast, Piaget (1977) argues that whether a person preserves an existing structure or adjusts to make a new one, both account for new learning and function to maintain cognitive equilibrium. Similarly, children's experience assimilation and/or accommodation when experiencing new objects. As infants, children learn to gaze at and grasp new objects they encounter. From that interaction, the child's understanding of the object must either be assimilated into an existing scheme or a current understanding accommodates into a new one. As children experience new events, they incorporate these new interactions into their present understanding of their world. Each learning experience a child constructs is unique. These experiences are not always an objective reality for the child to interact with. The meaning of one's experience is different than the same experience of other children. Fosnot (1996) refers to the concept of equilibrium as a constantly changing process. The literacy interactions of children with their parents may also be seen as a constantly changing process, requiring mediation to obtain cognitive equilibrium.

For example, Sulzby (1986) discusses Piaget's theory stating that young children's concepts are their own constructions. This includes concepts children develop about reading and writing. Sulzby goes on to say that "children construct ideas about reading

and writing that are not taught to them, are not modeled for them, and are not yet conventional” (p.52). For example, a five year old child might spell *cat* – kt. Children develop much of their vocabulary through incidental learning and conversations, although not directly as members of the conversations. This supports Piaget’s theory that children manipulate their environment and from these interactions, they create their own meaning. As young children are exposed to print and manipulate it, they are emerging as readers because they are developing an understanding about print as they participate in literacy events. Although they are not actually reading the words, children turn the pages, attend to the pictures, and construct meaning like readers. Through shared readings with their parents and emergent readings of their own, children begin to develop an understanding of the process of reading before they can actually read the words (Elster, 1994).

Constructivists recognize that reading is not a simplistic learning of an alphabetic code system. Reading is a representational part of language and communication. Piaget stated that language could not occur in a separate vacuum, but instead must develop within a rich context including the setting and the relationship between the people communicating. Constructivists view reading as beginning with children’s knowledge of language and support providing children a variety of meaningful events with print. The younger the child, the more direct the experience with print should be. Over time and repeated exposure, children assimilate print messages into what they already know and have experienced (Waite-Stupiansky, 1997).

While Piaget focused the majority of his efforts on the cognitive functioning of the individual, he did not overlook the social aspect of learning. Piaget (1970) stated that “there was no longer any need to choose between the primacy of the social or that of the

intellect; the collective intellect is the social equilibrium resulting from the interplay of the operations that enter into all cooperation” (p.114). Piaget’s earlier works focused on the child’s internal representational learning, but later writings included the role of social interaction in the development of cognitive processes.

Through the addition of a social nature to learning, social constructivism emerged. As shown through the work of Lev Vygotsky, social constructivism focuses on the social nature of knowledge. These social influences include social, cultural, and political. Social constructivism formed through a change in learning to include a social and intrapsychological nature. The social aspect of learning encompasses a variety of activities, including face-to-face interactions. In the area of literacy, during these face-to-face interactions between parent and child, literacy learning occurs. The social exchanges offered by reading allow the child to expand their learning and understanding of new and different topics (Au, 1998).

The fundamental premise of Vygotsky’s theory rests on the social dimension considered within a cultural context. Vygotsky theorized that the cognitive development of children begins on a social plane and later moves to an individual level. The child internalizes the mental processes initially learned in social activities and proceeds from the social to the individual level – from interpsychological functioning to intrapsychological functioning (Garton & Pratt, 1989).

In the area of language and literacy, parents guide their children from interpsychological levels of learning to intrapsychological. When parents begin to read to their child as an infant or toddler, the child is learning language through repetition of language sounds and forms of print. As parents continue to read to their child, parents

change the intonation in their reading and questions they ask about the stories. Through these conversational exchanges, children develop language and reading skills on a social level. Over time, these socially organized experiences with stories proceed to an individual level. On this individual plane, children gradually appropriate the functions and forms of print first experience with their parents (Meece, 1997).

Lev Vygotsky focused and dedicated the core of his theory on cognitive structuring and the effect of social interactions on learning. Vygotsky included social, cultural, and historical factors in his theory of cognitive development. He explained that children learned the tools of communication and cognition through their interactions with others. For Vygotsky, cognitive construction is always socially mediated, including influences from present and past social interactions. Learning occurs in shared situations and requires language in order to be facilitated. Hence, through the talk and communication experienced by the children during an event, they come to understand other's meanings of that event. Language facilitates the shared experiences for building cognitive processes (Bodrova & Leong, 1996). In addition, literacy learning events must be authentic, not created for practice, for a child to learn the purpose and meaning of reading (Au, 1998).

Vygotsky believed that learning does not come to a child in a ready-made form. He used the term zone of proximal development to explain his views of how a child learns. Vygotsky described this zone as the gap between a child's present learning and what can be achieved with the assistance of an adult or more knowledgeable person. Vygotsky chose to focus on what the child had the potential to learn, not what had already been learned. The zone of proximal development served as a means of assessing a child's



progress towards concept formation. Thus, rather than using an individual paper/pencil test, one would consider these questions as: What can the child do without assistance? What can the child do with assistance? What is too hard for the child to do even when assistance is provided?

The zone of proximal development is a continuous process and is unique from child to child (Tudge, 1990). A child grows in knowledge as he interacts with others in the environment. The language used during social interactions is an essential tool that allows the child to further develop his understanding. A young child faced with a problem often will look to a parent to guide him to a successful solution.

Often the parent guides the child using language (Garton & Pratt, 1989). When this process occurs within literacy events, the child is introduced to reading and literacy. This includes labeling objects, describing pictures, and orienting the child to reading behaviors. As the child gets older, parents assume more that the print of a book conveys the meaning to the child. As parents engage in reading with their child, they offer the child literacy assistance. As the child makes meaning of these interactions, his awareness, understanding, and independence of literacy develop.

A second aspect of Vygotsky's theories relevant to this investigation involves his theories related to the formation of spontaneous concepts. Vygotsky proposed the spontaneous concepts learned during the younger years later form the foundation for scientific concepts taught during formal instruction. Vygotsky stated that typically the concepts learned were culturally agreed upon within a child's environment (Fosnot, 1996). In terms of literacy development, learning that occurs in the home during pre-school years becomes the foundation for formal reading instruction in school. Before

kindergarten, children are exposed to vocabulary, print conventions, and book awareness from their parents or caregivers through both incidental learning and social interactions. When the child begins school, these past exposures to reading and writing are the foundations of formal school-based literacy skills.

Similar to Piaget, Vygotsky stressed the importance of shared activities to promote learning. A shared activity may include any kind of interaction with a more, less, or equally knowledgeable participant. In addition, the language within the interaction is central to mediating this shared experience. For an activity to be shared and learning to occur, participants must communicate with each other by speaking, drawing, writing, or some other way. Through talk and communication, new information is shared and confusions can be clarified. Shared activities, therefore, force participants to elaborate and clarify their thinking and use of language (Bodrova & Leong, 1996).

#### Language and Literacy Development in the Early Years

Prior to conducting this examination of the literacy interactions of deaf children in their homes, I considered research documenting the literacy interactions of hearing children in their homes. Parents, or other adults in the home, are the first teachers of a child. The experience of a child, beginning at birth, affects his success in becoming literate. Literacy interactions within the home are a key determining factor in the success of a school literacy program. Teale and Sulzby (1989) observed that children who grow up with reading and writing in their environment will continue to exhibit literacy behaviors throughout their lives. Children's early contacts with print are considered as the beginning of a lifelong process of learning to read and write. According to Teale and

Sulzby, it is difficult to determine an exact time that literacy learning begins, but that time is well before the age of 4.

Morrow (2005) explains that babies learn language by hearing sounds, as well as learning their meanings. Infants are surrounded by the sounds within their environment of adult interactions, music, hear television, and clocks chiming. Each of these sounds heightens the baby's attention to their environment. Objects allow a baby to explore the environment from which language evolves. Babies learn that objects make sounds, have different textures, and are used for different purposes. As children ages 3 to 12 months begin to coo, laugh, and babble, parents reinforce the infant's sounds and therefore encourage language. By the end of the first year, a baby is on the verge of a language explosion. Through the second year of life, a baby will develop approximately a 150 word vocabulary and produce up to three-word sentences. Parents help children develop their language abilities through scaffolding, and modeling. By providing a language model, the child's language is expanded (Morrow, 2005).

Various aspects of a child's development contribute to success in literacy learning. A strong oral language base facilitates a child's learning to read and write. Young children actively construct their understanding of reading and writing. In addition to children experiencing language, Teale and Sulzby (1989) explain that the key role of parents is to facilitate this early literacy learning. Parents can demonstrate literacy to their child by reading storybooks, writing a shopping list, using a bus schedule, reading the newspaper, or writing a letter. Therefore, children discern the purposes of reading and writing through observing others use these processes through their daily interactions.

Likewise, Payne, Whitehurst, and Angell (1994) also showed correlations between the home environment, language skills and literacy skills in children.

Maxwell (1986) explained that parents should read to their children, tell stories, and talk about books. Purcell-Gates (1996) also demonstrated that parents should engage in specific and varying types of literacy practices. These early literacy encounters contribute to a child's emergent literacy development and lead to a child's progression to conventional reading. By parents reading to children from an early age and talking about books as they are read, children become aware of the various functions of books.

Vygotsky (1962) stated that young children make and share meaning with others by using language. Through studies in the home (Heath, 1983) and school (Purcell-Gates & Dahl, 1991), researchers have shown that literary skills, knowledge, and concepts develop in both environments. Purcell-Gates and Dahl also demonstrated that those children who entered formal schooling with knowledge of print were generally more successful in formal literacy instruction and scored higher on academic achievement tests than those with no prior print knowledge.

According to Larrick (1983), the average child has achieved 50% of their adult intelligence by the time they enter kindergarten. She refers to the first four years of life as the *peak learning years*. From the first days of life, babies distinguish one person's voice from another's. They initially respond to these voices with smiles and gestures, and later with sounds that imitate speech. Eventually, they are saying words, phrases, and sentences. As a child's understanding of oral language develops and parents begin to read to their child, an understanding of literacy, including reading and print, naturally emerges.

Storybook reading to children has a well documented impact on emergent literacy (Sulzby & Teale, 1991). The social interactions surrounding storybook reading is key in children's literacy development (Yaden, Smolkin & Conlon, 1989). Through storybook reading, children learn basic reading behaviors and knowledge about print and books and make attempts to read. These reading behaviors may include letter identification, word recognition, awareness of print, and book handling behaviors (Purcell-Gates, 1988). The predictable routines of storybooks help build the framework for independent story retellings. Shared readings between parent and child supports the child's language development, as well as rereading familiar books to increase a child's verbal interactions (Morrow, 1988).

#### Preschool Deaf Children and Their Families

Unlike hearing babies, deaf babies are not surrounded by familiar voices, sounds, speech, and language. Deaf children are surrounded by silence or by a jumble of faint and meaningless sounds, with little or no means of communicating. The deaf child is denied access to understanding oral language during their peak learning years (Larrick 1983). There may be some language input for some deaf children, but that exposure is limited. Brasel and Quigley (1975) describe this early language deprivation as the primary cause of low reading achievement in deaf children. As noted previously, the critical learning period for language development is birth to age 5 (Hart, 1978; Webster, 1986). Without the means to hear and communicate during this period, deaf children typically arrive at kindergarten with much lower functioning skills than their hearing peers. In addition, a poor oral language foundation soon leads to reading difficulties for deaf children. These reading difficulties often continue into adulthood.

The first years of a deaf child's life are different from the first years of a hearing child. Some hearing losses in children are detected early, but many are undetected for several years. At whatever age the child is diagnosed with deafness, time has passed with no auditory input. If a child had been deaf from birth and left undiagnosed until the age of three, three years of auditory input and learning would have been lost. Not until the child is diagnosed can the child be fitted for hearing aids or cochlear implants to assist in their auditory learning. For some children, hearing aids or other devices are not an option because of the severity or complexity of their hearing loss. Parents are then faced with the problem of how their child will learn. If the child will not be taught using an auditory method, then visual means or cues must be available.

### *Communication Issues*

Parents of a deaf child are not only faced with the grief of accepting that their child is handicapped (Marschark, 1997; Preston, 1994), but also with choosing a communication mode for their child. This very difficult decision can be life changing. The first part of this decision looks at whether the child will be educated using manual methods, non-manual methods, or a combination of the two. Manual methods include sign language, such as American Sign Language and Signing Exact English (Gustason, Pfetzing, & Zawolkow, 1972). Non-manual methods would include lip-reading, auditory-oral training, and speech training. The use of amplification is almost always a crucial part of non-manual methods. A combination of the two methods may include Cued Speech (Cornett, 1967) or fingerspelling.

Not only is selecting a communication method a difficult decision for parents who must accept a disability, but is also in a highly controversial arena. Which method is best

and should be used to educate deaf children is a long-debated topic. The Deaf community (capital D to identify them as a culture) supports the use of American Sign Language. This group views American Sign Language as a deaf person's natural language. American Sign Language is a language, separate from English, with its own grammatical structure, syntax, and vocabulary (Bornstein, 1990; Fauconnier & Sweetser, 1996; Paul & Quigley, 1990). It is not simply "English on the hands." In contrast, Signed Exact English is a visual representation of English through sign language. It combines signs with English word order and grammatical structure, which may or may not include conceptual accuracy. Lastly, oralists view the world as a "hearing world." In order for deaf children to succeed, they must learn to communicate in that world way using hearing and verbal methods (Ling, 1984; Morkovin, 1960). This is not easy for deaf children – to learn to listen and to speak without being able to fully hear.

Choosing a communication method is difficult for most parents of a deaf child. Parents, wanting to make educated choices, may meet other deaf children and adults who use each of these methods. Parents may see the various speech and hearing centers available in their areas. Parents may also meet with specialists to consider a cochlear implant. Making an informed decision is important, but time marches on. The deaf child continues to be denied a way to communicate. Given that the critical age for learning language is birth to age 5, as parents discuss communication modes and methods with one another and various specialists, the window of time in which a child is able to learn language is slowly closing.

Another factor related to time is the parents' exposure to a new system of communicating. Parents who chose a non-manual communication method must be taught

how best to interact and teach their child. This training may include how to adjust amplification, how to develop listening skills, and how to foster the child's speech development. Many have the mistaken notion that non-manual methods take less parent training or preparation; however, this is not so. Learning to support oral communication requires a long-term commitment. Unfortunately many parents and educators mistakenly assume that an oral approach is little more than not signing. Parents who chose a manual method of communication must find and sign up for sign language classes. Learning sign language and becoming proficient can be a long process, just as learning any other language would be. By choosing either a manual or non-manual method, a deaf child's parents will not be able to communicate fluently for a period of time. This time period varies, depending on their persistence and commitment to learning.

### *The Parent's Role*

What are parents of normally hearing children doing while parents of deaf children are choosing communication methods and learning how to communicate with their child for the first time? Ideally, parents are reading to their child daily, being good language models, and talking with the child about the experiences the child encounters daily. Larrick (1983) points out that "a child does not acquire these skills alone. He needs someone who knows the language better than he does (p.5)." What about the parents of a deaf child? They have just registered for their first sign language class. The reality is that one class is not enough. The parents will still not be proficient at sign language and ready to accept the job of language model without additional courses or education.



It has been suggested that the time that is lost in the “language window” can never be regained. Once a child has passed the age of five, language learning is more difficult and often unsuccessful. Every language experience that a deaf child is exposed to must be visible to the child. This is not the case for hearing children. Hearing children are able to hear a conversation between their parents in the other room while listening to the television and coloring. Deaf children are not. They are able to learn from conversations with peers, parents, the television, songs they learn in pre-school, or side conversations. Deaf children are not. A deaf child must choose one of these activities in which to participate. Incidental language listening, and therefore learning, is not an option. One may argue that a deaf child exposed to a communication system from birth still does not have experiences equal to a hearing child, due to the multi-modal way normal children learn and are exposed to language.

The federal and state governments have made great efforts at providing children who are handicapped, including deaf children, special programs and services focused on children under the age 5. PL 90-538, the Handicapped Children’s Early Education Assistance Act was passed in 1968. This law provided funding for programs to educate disabled infants, toddlers, and their parents. PL 98-199, the Education for All Handicapped Act Amendment was passed in 1983. This act provided states with small grants for planning, developing, and implementing early intervention services for children ages birth to 5. In 1986, PL 99-457, the Education for All Handicapped Act Amendment extended state incentives for programs with children to age 6. States may choose the early intervention program they implement.

The Language First model is an early intervention model and is used with the Statewide Parent-Infant Outreach Organization. The Language First model was developed to focus on the early identification of deaf children and provide a family-focused, home-based program. Services are delivered 2-4 times per month by a trained parent advisor. During the sessions, the needs of each family are addressed as related to the unique needs of the deaf child. The Language First home sessions inform parents of the various communication and language methods for deaf children, types of amplification, modifications to normal activities to make sure the deaf child is included, etc. In addition, the parent advisor may choose to demonstrate how to read to a deaf child, through manual or non-manual means.

#### *Early Exposure to Reading*

Just as with hearing children, early exposure to reading and language is important for deaf children. Are deaf children's and hearing children's experiences with reading different? According to Paul (1998), the answer is both yes and no. Due to the different languages (sign language and English) used during reading, the same experiences of a deaf child are clearly different. At the same time, evidence indicates that some deaf children are able to understand the structures of printed English in books. Despite their profound loss the resulting phonological disability that deaf children have, some deaf children are able to draw phonological information from the printed word. On the other hand, Paul and Quigley (1994) reported that some proponents argue that reading and writing are unrealistic goals for deaf children. In this point of view, reading is seen as so qualitatively different for deaf children that it may be unreasonable to teach deaf children to read.

From a cognitive information-processing perspective, Hanson (1989) explains that reading is not different. He argues that the literacy development of deaf students may be qualitatively similar to hearing students, but is also delayed. This quantitative delay is so great that it affects the deaf child's access to the school curriculum and therefore all educational achievement. This delay is the reason deaf children are delayed in reading achievement, as compared to their hearing peers.

Rottenberg and Searfoss (1992) examined the emergent literacy behaviors of deaf children in a preschool setting. Their research suggested that the deaf children participated and understood about print and its function, similar to hearing children. Later, Williams (1994) found similar results through observation in both children's homes and their preschool setting. She indicated that the deaf children in her study demonstrated comparable emergent literacy knowledge and understanding. Williams stated her results were similar to the behaviors of hearing children in previous literature on emergent literacy.

Marvin (1994) reported that parents of disabled children, including children who are hearing impaired, had extremely low expectations for their child's literacy development. These parents of disabled children placed literacy as their lowest priority and provided fewer types of early literacy experiences for their children at home than did parents without disabled children. A positive correlation was noted between parental attitudes and the children's acquisition of reading skills. Marvin found that the disabled preschoolers, when compared to nondisabled children, had a significantly less supportive and stimulating literacy environment. These disabled students were reported to have a higher occurrence of speech and language impairments. Due to their speech impairment,

they may not communicate answers to adults' questions or dialogue. Adults therefore may expect less from the student and interact less with the disabled child during a reading activity. Marvin also states that past research has shown that one-sided interactions are common with impaired children.

### *Storybook Reading with Deaf Children*

Parents who read to their deaf children on an almost daily basis foster considerable emergent literacy knowledge and understanding. This literacy behavior is similar compared to the behaviors of hearing children in the research literature (Williams, 2004). Through shared reading, deaf children are able to learn print concepts, such as page turning, book orientation, and directionality. Children are also exposed to story characters, story plots, and narration of books. Maxwell (1984) suggested through his research that the process deaf children experience with books was similar to that of hearing children matching speech to orthography. Deaf children instead match sign to print or sign to illustrations. Maxwell also concluded that sign was important to deaf children learning to read, as it provided them a bridge between picture cues and orthography. Deaf children reflect similar developmental sequence to hearing children in emergent literacy behaviors. Both hearing and deaf children benefit from repeated and interactive storybook readings (Snow & Ninio, 1986).

Gillespie and Twardosz (1997) studied the effects of storybook reading using reading re-enactments. Their research indicated that the students were highly engaged during storybook readings where an interactive reading style was used. The storybook reading sessions were viewed as a success because it built self-confidence and independence in the students as they progressed as emergent readers. Williams and

McLean (1997) examined interactive storybook reading responses of preschool-age deaf children. They found that the deaf children construct meaning and understanding of stories and written language, similar to hearing children. Gioia (2001) observed preschool-age deaf children during storybook reading in their classroom. The study revealed that children begin to incorporate new or unusual vocabulary words from the daily storybook reading into their own vocabularies, similar to hearing children. Research (Williams, 2004) suggests that storybook reading supports a deaf child's development as an emergent reader, story retelling, and word recognition skills. Interactive storybook reading provides a basis for emergent and early reading development.

#### *Deaf Children who have Deaf Parents*

Zwiebel (1987) showed that many deaf children of deaf parents achieve at higher levels than deaf children of hearing parents. Deaf children of deaf parents have demonstrated these advantages in communication, academic achievement, and cognitive development. The inclusion of manual communication in the home appeared to increase the understanding of information, general knowledge, and comprehension. A deaf child's exposure and mastery of sign language, as well as their parents' mastery of sign, has repeatedly shown positive results in the future achievement of the deaf child.

Brasel and Quigley (1977) demonstrated similar research results. They studied the influence of early communication and language development. Seventy-two deaf children were divided into 4 communication categories – manual English, intensive oral, average manual, and average oral. Children in the manual English group were identified as deaf at about 6 months of age, attended school at about 4½ years old, and had deaf

parents who had a good command of manual (signed) English. Children in the intensive oral group were identified as deaf at one year and three months of age, strictly used the oral method in the home and school environment, had hearing parents who had undergone intensive oral method training, and attended school before the age of 2. Children in the average manual group were identified as deaf at 4 years of age, had deaf parents who used American Sign Language with significant deviations in the use of written Standard English, and attended school at the age of 4. Children in the average oral group were identified as deaf at the age of one year and three months, had hearing parents who did not receive formal oral method training, and attended school at about four years of age. Using the Stanford Achievement Test (SAT), the 2 manual groups achieved higher results than the 2 oral groups. The 2 groups with deaf parents also achieved higher results than the 2 groups with hearing parents. The authors concluded that manual communication did in fact provide young children with an accessible communication system in which to acquire language. Based on speech, auditory skills, and lip-reading, oral communication limited the ability of children in this study to acquire language.

Schiff-Myers (1982) further stated that the modality and communication system of the parent or caretaker will be the communication system the child first learns. For deaf children, it is important for their parents to offer manual communication to their children at an early age. For deaf parents of hearing children, it is equally important for those children to have early exposure to normal English speakers.

The answer to the age-old question of how to improve deaf children's reading level is still unclear. Different approaches, methods, and communication systems have

been proven successful for some children (Livingston, 1997). The same approaches have produced limited achievement for other deaf children. Why is there a difference? The research on deaf children of deaf parents proves to be very informative. Not all deaf children are born to deaf parents and therefore into instantly accessible language in the home. For deaf children of hearing parents, language accessibility is not always as immediate and therefore literacy learning may be delayed. One portion of the research is clear, just as it is for hearing children. All children should be exposed to language from birth.

### Summary

As stated by Yaden, Smolkin, and Conlon (1989), all children, both deaf and hearing, develop literacy skills at different levels. As children are read to, they develop unequal growth in their understanding and reading skills. This may occur for a variety of unmentioned reasons. Research continues to support that exposing a child to as many sources of reading and writing as possible before formal schooling begins can provide a firm foundation for literacy success. A foundation in literacy experiences lends children to mastery of reading.

The interaction between children and adults in the home when they share language and reading has been well researched. Marked improvements in achievement in educational settings outside the home have been shown. Therefore, children who grow-up in homes where reading occurs have an educational advantage over children who do not grow-up around reading (Marschark, 1997). Children who are exposed to reading at an early age often read before any formal instruction begins. When formal instruction

begins, these children are more likely to learn to read with ease. Learning language and how to use it are important skills for a child's future educational success.

Continued research is needed in the literacy interactions of deaf children with their parents, both hearing and deaf, in their homes. Kampfe and Turecheck (1987) found little research published on the relationship between a deaf child's reading achievement and the communication method of their hearing parents. In addition, variables such as age of the child when the parents learned to sign, level of signing skill, mother's communication mode and level, and father's communication mode and level were not considered in past studies. It is clear that early exposure to language, reading, and writing is needed for all children. For deaf children, further research is needed to better understand to early literacy interactions in the home in which they are involved. With greater understanding of the nature of these interactions, educators of deaf children will have a foundation for understanding the early literacy development of deaf children.

Williams (2004) has synthesized the available literature on deaf children's emergent literacy, but this research is limited and sparse. This study attempts to fill some areas missing from past research and consider implications for future teaching and research. In addition, this study focuses on identifying deaf children early and addressing their literacy needs at an earlier age in an effort to improve their emergent literacy skills and future independent reading abilities.



### CHAPTER 3

#### METHODOLOGY

The idea for this study came from my own experiences as a teacher of the deaf/hard-of-hearing. As early as my teacher education program, I recognized that deaf children have delays in language, especially reading. I asked supervising teachers I worked with or my professors why this delay is almost an absolute given for all deaf children. The replies varied and never satisfied my need to know. After I taught deaf children for several years, I still could not pinpoint why some deaf children caught on quicker to reading and language development while most seemed to be destined for an uphill battle. I felt that answers must lie in the preschool environment, before I even met the students. In an effort to investigate the preschool environment myself, I designed this study.

David Schleper (1997) studied the parent-child interactions around reading experiences. He noted that many deaf children lack the experience of being read to by a parent or teacher. He also reinforced that the best age to begin reading to deaf children is the day they are born. Many parents know it is important to read to their deaf child, but do not know how. Schleper suggests that deaf adults are the best teachers of storybook reading to deaf children.

Language acquisition in deaf children is usually delayed compared to hearing children. Also, the language learning occurs at a much slower rate with deaf children

(Schrimmer, 1994). This delay is part of the reason deaf children may struggle their entire education with lower reading abilities and may never exceed the 4<sup>th</sup> grade level. When hearing mothers have deaf babies and the hearing status is mismatched, the quality of the interactions is less. On the contrary, deaf mother with deaf babies and hearing mothers with hearing babies have been observed to have similar quality of interactions (Meadow-Orlans, 1990). Just as the research with hearing children shows that early and extensive exposure to books and print have a head start in learning to read (Paul, 1998), likewise deaf children can also have a head start in learning to read through similar methods (Bodner-Johnson & Sass-Lehrer, 2003). Early book sharing can facilitate this head start on literacy and prolonged periods of attention, especially when combined with storybook reading.

However, not all deaf children have deaf parents. None of the students I have taught had deaf parents. What about them? How can they have a great beginning to reading? I specifically wanted to look at how hearing parents read to their deaf children. What strategies are implemented? What languages (signed English, ASL, oral methods) are used during storybook reading? Are the children developing as emergent readers?

Naturalistic research procedures provided the most appropriate framework for answering the research questions and constructing case studies of the participant families. Using a social constructivist paradigm, I adhered to the naturalistic procedures of Lincoln and Guba (1985) and utilized a case study format of Merriam (1998) to examine the parent-child literacy interactions of deaf children. In addition, the literacy histories of the children and emergent literacy behaviors were noted.

My research questions for this study were:

- 1- How does the communication method of the deaf child affect language learning?
- 2- How can the parent-child literacy interactions of deaf children be described?
- 3- How can preschool-age deaf children's emergent literacy behaviors be described?

### Context of the Study

This study focused on the early literacy interactions of families with deaf preschool children. The families were selected from the Statewide Parent-Infant Outreach Organization. These parents came to the Statewide Parent-Infant Outreach Organization by a referral from the "Infant Disability Services" program, physicians, audiologists, family members, public health nurses, or other agency. The program is offered at no cost to the families. The parents may be from various occupations, socio-economic backgrounds, age groups, and ethnic groups. The Statewide Parent-Infant Outreach Organization program assist families in providing information and training in helping children with sensory impairments to develop their potential in the areas of sensory, language, communication, physical, intellectual, and psychosocial skills. In addition, the Statewide Parent-Infant Outreach Organization provided early identification, assessment, programming, technical assistance and support to these families of children aged birth to five who exhibit a sensory impairment. The Statewide Parent-Infant Outreach Organization provided services for these families using a home management program, the Language First Model. The Language First curriculum offered support and resources in natural environments for families with infants, toddlers, and preschoolers,

age birth to five, who are deaf and hard of hearing. Resources offered include information and activities for families on early communication, audition, hearing aids, American Sign Language (ASL) resources, aural-oral language, total communication, and psycho-emotional support. A separate home management program was provided to families with children who are visually impaired. In addition to these services offered through the Language First Model, the Statewide Parent-Infant Outreach Organization also offered a physical and occupational therapy support program statewide, as well as a cochlear implant consultant. The Statewide Parent-Infant Outreach Organization parent advisors who serve deaf and hard of hearing children came from varying backgrounds in the field of deafness, including teachers of the deaf and hard of hearing, speech/language pathologist, audiologist, and social workers. This one advisor worked with the family to provide training and assistance to the parents in the home.

#### The Researcher

In this study, I functioned as both a participant and an observer. My main role was as an observer, but I did not limit myself. Occasionally, the parents and children asked me to read with them or engage in conversations with them. I welcomed the opportunity to become more involved with the parent and child. Qualitative studies often allow the researcher to uncover an “emic” view of the participants and situation. According to Lincoln and Guba (1985), an emic perspective is one as seen from “within” the study, as a participant-observer. I felt that those opportunities to interact from an emic perspective gave me a deeper insight into the home and the communication that takes place in the home. Having been involved with the deaf community for over fifteen years, I understand how difficult it is to communicate, especially to sign a book, when

one is first learning sign language. As a teacher of deaf children, I was able to share my knowledge and experiences that could assist the parents of the deaf child. For example, I was able to answer a parent's question about hearing aid options or a specific vocabulary sign in American Sign Language. My involvement with these families assisted in building a trusting relationship.

I am aware that my own beliefs and biases may have influenced my research. I have my own opinion of how deaf children should be taught language and educated. I feel the child should be exposed to all types of communication, so as not to limit the input of language or the opportunity to learn. These types of communication include listening, lip-reading, amplification, and sign language. My priority during this research was first of observer, to gather the information and data on parent-child interactions in the home. I knew that my research could only be sound if a representative picture was observed and analyzed.

### The Participants

I called the director of the Statewide Parent-Infant Outreach Organization program to ask for her permission to use families from this program. She generously agreed and we sat down to discuss what qualification I was looking for in the participants. I was interested in families consisting of a deaf child (70 dB PTA or greater hearing loss unaided) with parents of normal hearing abilities. Communication mode – manual or non manual – was not preferred. As part of the study, I wanted to include deaf children who signed and who did not. The children ranged in age from 1½ to 4 years of age. This study began with 10 families from the Statewide Parent-Infant Outreach Organization program. I called each family over a 5-day period. During each telephone call, I

introduced myself and stated I was working on a dissertation project. I talked about myself as a teacher of the deaf in a local school system. I felt by introducing myself and giving some credibility to myself as a deaf educator, parents would be willing to consider participating in this research project.

After my introduction, I asked about their deaf child. We talked about the etiology of the child's deafness, age of diagnosis, communication system used in the home, and their parent advisor visits through the Statewide Parent-Infant Outreach Organization program. I explained that I was asking for a 12-week commitment from each family. During this telephone call, three of the families said they were not interested in participating in any type of research study.

Of the seven remaining families, I took the next 3 weeks to drive to each home. During these home visits, I conducted a taped interview with each parent. In all cases, I interviewed the mother of the deaf child. The open-ended questions (Appendix C) included a general history of their child's deafness, language development, and experience with books. For five of the interviews, the parent and I sat at the kitchen table with a tape recorder. The two other interviews were conducted on the sofas of the living room, also with a tape recorder. The taped interviews were kept and transcribed. Parental consent forms (Appendix A) were also signed by each parent.

During one of the home visits, one mother expressed hesitation about having me in her home so frequently. I explained that I had other families to choose from and asked if she would like to be eliminated from my list. She did, so the remaining six families were given structured questionnaires (Appendix D) to complete before my next home visit. A self-addressed stamp envelope was left with each questionnaire. Each mother completed

the questionnaire and mailed them back to me within the 2-week window, as I asked. I explained to each family that I would be working on the transcriptions over the next few weeks, but would telephone within the next month. The questionnaire consisted of open-ended questions. These questions inquired about the literacy practices of the parent and child, how the parent feels that children learn literacy skills, how literacy is used in their home, ways other than books to encourage literacy with their child, and ways a parent knows that their child is becoming aware of print. Distinguishing families along different continua allowed me to compare and contrast various influencing factors in the families' lives. These distinctions enabled me to examine manual versus non manual communication modes, socioeconomic status, and overall literacy environments in the home. These distinctions did, however result in some tension because families did not neatly fit into each dimension. Therefore, as I introduce each family in Chapter 4, I provided detailed explanations for why each family was described according to a particular dimension.

Over the next 4 weeks, I transcribed the taped interviews and looked over each questionnaire. Each family was categorized into 3 groups – 1) manual or non-manual communication used in the home, 2) more or less reading interaction within the home, and 3) more or less than 60 miles from my home. I wanted to ensure I had some diversity in the final families selected for the research project. I also wanted to limit the area I researched due to the time factor. Many home visits would be made after my job of teaching. I decided that I was willing to give an hour for travel to the home, two hours for the home visit, and an hour for my return trip. Therefore, any family that lived beyond this 60-mile radius from my home was excluded from the final research group.

One family met this criteria and my group was reduced to four families. Maximum variation sampling was used because the purpose of the research was “to document unique variations that have emerged in adapting to different conditions” (Lincoln & Guba, 1985, p.102).

Once I had the families grouped into communication, literacy, and distance groups, I began to look at the parent questionnaires I had received in the mail. Three colors were used to highlight the 3 areas of communication, literacy interactions, and distance.

I originally began the weekly visits with the remaining 4 families. After 2 visits, one mother informed me that she needed to withdraw from the research project for personal reasons. The research group now consisted of the final three families used for the remainder of the research.

#### Data Collection

The three families purposefully chosen represented families with different levels of reading interaction with their child. With each of these three families, I began home visits and observations.

Data sources for the home visits included: 1) weekly visits for a 12-week time period, 2) a home literacy log, 3) individual interactions with the deaf child around books, and 4) a final structured interview. During each of these home visits, the sessions between the parent and child were videotaped. During these sessions the child and parent had some form of interaction about books – read aloud, talk through, looking and talking about the pictures, etc. I observed the parent and child’s routine with books. During each visit, field notes were also recorded during these parent-child exchanges. Towards the



middle to end of my home visits, I sat down with each parent advisor. Consent forms (Appendix B) were signed. I also interviewed (Appendix E) each parent advisor using open-ended questions regarding their professional background, information on the deaf child in this research study, their reading histories, and their opinion of the Language First curriculum and the Statewide Parent-Infant Outreach Organization.

I spent a concurrent period of time with three families chosen as the key informants. I collected data for a twelve-week period, or until the data saturation point was achieved. I visited with the families weekly, for a period of at least two hours each. Some time was required at the beginning of the visit to set up the video camera and my place in the home. The main portion of the home visit was the actual observation of the parent-child interactions. I always brought a bag of books with me in case the child seemed bored or uninterested in the books in his home. The books were different each visit. I purposely brought books so that I could ensure some type of literacy interaction occurred and could be recorded. The families used my books about half of the time. The other visits, the mother would select a book from the child's books at home. The literacy interactions observed occurred while reading a storybook at least one time. I also observed other literacy interactions, such as writing and role playing. As stated previously, literacy interactions are defined as any contact with printed material, including reading, writing, drawing, and language exchanges.

Lastly, time was needed to review the literacy logs that the parents kept and time for me to talk to the parents. After videotaping for at least one hour, I would stop the video camera. The mother and I would look over the literacy log (Appendix H, I, J) from the previous 2 weeks. We talked about the who, what, when, and where that literacy

occurred in the home. All three mothers understood literacy to mean storybook reading. Two of the families also understood literacy to have a broader definition than storybook reading alone. These two mothers noted literacy experiences such as writing or scribbling on paper and playing with magnetic letters on the refrigerator. I did not explain what literacy interactions meant to each mother. Part of my research was to determine a parent's perspectives of literacy.

During the time that I was not in the home, the parents recorded literacy related experiences in the home literacy log. This included the date and length of literacy activities, the type of literacy activity, and the mode of communication used during that activity. Each time I made a home visit, I discussed the literacy log with the parents. This discussion served as a way for me to answer any questions the parents had between visits. In addition, this discussion time also allowed me the opportunity to ask the parents to explain any interactions observed and recorded on videotape from previous visits. Between visits, the data were analyzed continually through a search for patterns. The opportunity for discussion with the mothers of emerging themes and unstructured interviews allowed for member checking. The individual interactions of children with books were the bulk of the home visit. These sessions were videotaped and analyzed on an ongoing basis. I concluded the period of home visits with a final structured interview of the parents. The continued opportunity for member checking allowed me to verify emerging themes with the parents' viewpoint of individual home visits, as well as a culmination of all the visits.

### Data Management and Analysis

Following naturalistic procedures (Lincoln & Guba, 1985), I analyzed the data from the study. I began by using the constant-comparative method (Glaser & Strauss, 1967). Through this process, the data was analyzed for emerging categories. Grouping the data into categories allowed me to identify patterns that emerge. I began first with the initial interviews. Each interview was transcribed and reread. As I reread each transcript, I highlighted the child's communication mode in one color. A second color was used to highlight the sections about literacy interactions in the home. Lastly, I used [www.mapquest.com](http://www.mapquest.com) to determine the mileage from my address to each family's home.

As I collected the videotapes of the home visits, I would watch them between visits. I took this time to rewind, pause, and use slow motion to see exactly what interactions were occurring in the home. I transcribed the videotapes, noting only any auditory sound. As I watched the videotapes repeatedly, I would make notes on the auditory transcripts of visual occurrences. I used my researcher's log to make notes on each home visit. The researcher's log is where I would jot down emerging themes and ideas. I recorded questions I asked myself. I used the log as a way to remember what I was thinking immediately after each home visit and again what I was thinking as I watched each videotape. This is where the themes of my results emerged. I did keep some fieldnotes during the actual home visits, but found it difficult to juggle both the videocamera and a notebook. I found it more productive to sit down the same or next day to make my comments in the researcher's log. The notetaking of my fieldnotes was sporadic and sparse.

Combined with the researcher's log, I consulted with two peer debriefers. The literacy debriefer has degrees in elementary education, reading instruction, and is also certified in Reading Recovery. The deaf debriefer has degrees in sign language interpreting and special education for children with intellectual disabilities. I consulted with each peer debriefer at least once a week. The literacy debriefer and I met almost every Saturday morning. I would show her my fieldnotes and researcher's log. I did not show her the actual videotapes due to her inexperience with manual communication and inability to listen for the uniqueness of deaf speech. While looking at the researcher's log and field notes, I would use a different color pen to make notes or comments as I talked with her. She would assist me in confirming or disconfirming my emerging themes and initial findings. The deaf debriefer and I met after work every Wednesday afternoon. I would share with her my fieldnotes, researcher's log, and the videotapes. She would assist me in adding the visual comments to the auditory transcriptions. Any comments written on the fieldnotes, log, or transcript were written in a third color of ink. The deaf debriefer was important in discussing my ideas for emerging themes and initial findings.

The emerging themes were numerous at first. I cut post-its into thin strips. I then color-coded each initial emerging theme. On the sides of the papers, I placed the colored post-its strips. For the first 4 visits, I just reviewed the data I had collected and flagged it with post-its. I found myself placing two different colored post-its on some items. To limit my frustration, I agreed with myself to wait for 2 months to see what started to emerge itself from the data. At the end of that time period, I tallied each colored post-it for each child. I did this for the interviews, questionnaires, transcripts, and log. At that point, I had twelve emerging themes. I continued to code with the twelve different colors

as I continued to collect data after the fourth visit. After the eight home visits, I limited my themes to most popular eight. These are the themes I used throughout the remainder of the home visits. Not until the end of the data collection did I start combining and merging themes. In the end, I narrowed the emerging themes to three large categories.

The emerging categories and patterns were demonstrated through triangulation across different data sources, member checking, and peer debriefing. The categories I developed related to similar results from past research (Paul, 1998), as well as a new perspective into the field of literacy and deaf education. The identification of initial themes provided a framework for additional data collection.

At the conclusion of the twelve home visits, I conducted a final structured interview (Appendix G) with each family. This gave me an opportunity to show the parents my emerging themes and get their input. All three parents were very receptive and agreeable to the eight themes I presented. This interview also allowed me to get the parents' input into determining the final three themes.

As part of the literature review, I further outlined literacy research of deaf children of deaf parents. After observing the literacy interactions in the homes of deaf children with hearing parents, I compared and contrasted my research findings with the literature on deaf parents.

### Establishing Rigor

To establish rigor, I used credibility, transferability, dependability, and confirmability measures as outlined by Lincoln and Guba (1985).

### *Credibility*

In order to establish credibility for this study, I used prolonged engagement, persistent observation, triangulation, member checking, and peer debriefing.

Prolonged engagement was established over a 12-week period of time, as I observed and videotaped these families in their homes during literacy interactions. In addition, the parents kept a home literacy log. In this log, literacy interactions that took place in my absence were recorded. I feel that this time was sufficient in becoming an accepted person in their homes and in gathering a true picture on the families' approach to literacy.

Similar to prolonged engagement, persistent observations of these families also allowed me to identify various characteristics of the families' literacy interactions that appeared most relevant to my study. The identification of initial characteristics provided the opportunity for framing subsequent rounds of data collection. In addition, persistent observation provided a deeper understanding of the families I studied over the established time period.

Credibility was also fulfilled through triangulation of different sources. I was able to verify the parents' responses to the questionnaires and interview questions with the information I observed and obtained from the literacy logs. The information I obtained myself from the interviews and observations was used to crosscheck the information from the parents in the logs and questionnaires. Discussion of the literacy logs and unstructured interviews allowed for member checking with the parents.

I consulted with two peer debriefers during my study. One peer debriefer has expertise in the field of literacy, and the other in the field of deafness. The literacy

consultant also assisted me in the analysis of qualitative methods. Both debriefers discussed areas of my study that needed further explanation and lacked credibility. The debriefing meeting also allowed me a time to confirm/disconfirm translations of the data with a knowledgeable peer.

### *Transferability*

Transferability refers to the ability of a researcher to make others interested in transferring the conclusions from her study to other contexts. This was accomplished through thick description in stating the broadest range of information for transferability to occur. In this study, thick description was used to provide a detailed description of the literacy interactions that occur in each home and the specific types of literacy interactions each family uses.

### *Dependability*

I achieved dependability in my study by exploring both the findings and the process of data collection. I demonstrated that the collection and analysis of data in this study were carried out in a dependable way. Maintaining a consistent schedule was important. A consistent schedule was maintained through triangulation across different data sources and across data collected over time, as well as by prolonged engagement and persistent observation. In addition, dependability was achieved through my fieldnote journal, which allowed me to determine all the factors of the home that may influence the literacy interactions with the child. Lastly, my researcher's log served as a reflexive journal, where reflections were made about the home visit, the categories I saw developing within the data, my personal thoughts as a deaf educator and, growing speculation about the findings of the study.

*Confirmability*

I exhibited the confirmability of this study by providing examples of the data and findings to support my conclusions. This was achieved through maintaining an audit trail, including the raw data, triangulation of the data, fieldnotes, and journals.

Confirmability allowed me to confirm/disconfirm my findings through the data collection and analysis, as well as make implications for the field of literacy and deaf education.



## CHAPTER 4

### FINDINGS

This chapter creates portraits of the three families chosen as key informants. In the sections that follow, I discuss how each family was chosen. Written snapshots of the child's deafness, parents' choices for communication, child's literacy histories, parent-child literacy interactions, and involvement and influence of the Parent-Infant Advisor detail each portrait. Within the portraits, answers to the three research questions emerge.

- 1- How does the communication method of the deaf child affect language learning?
- 2- How can the parent-child literacy interactions of deaf children be described?
- 3- How can preschool-age deaf children's emergent literacy behaviors be described?

#### Amy Barnes's Portrait

##### *The Barnes Family*

The Barnes family consists of a mother, father, a son age-5, and a deaf daughter, Amy. They live in a suburban community, within walking distance to the shopping/restaurant hub of their city. Their house is a mobile home, situated in a subdivision of only mobile homes. There are children playing outside at over half of the homes when I come to visit the family each time. Most yards have bikes and toys scattered in the yards and usually just one car in the driveway. Likewise, the Barnes

children have plastic riding toys and a covered sandbox in their side yard. There is an older model van in the driveway, but it does not run. A co-worker picks Mr. Barnes up for work each morning.

Inside their home, it is sparsely decorated. The home is well cleaned and always tidy. When I arrived each time, the older son was usually watching Nickelodeon on TV or playing outside on his bike. Amy was usually sitting beside her brother (but not watching the TV) or playing dress-up in her room. When my observation time began, the son either played outside or went to continue watching TV in the parent's bedroom. The observations were videotaped in the living room, either sitting on the sofa or in the floor. The observation time usually occurred after 3:30 on a weekday afternoon and lasted for approximately 120 minutes.

*Amy Barnes*

The deaf daughter, Amy, was age 2-years 11-months when data collection began. Amy became deaf from bacterial meningitis at the age of 11 months. She was hospitalized for 7 days and required 6 more days at home to recover. As part of the follow-up after the meningitis, Amy's pediatrician sent her for a routine hearing test. After Amy failed the hearing screening, she was sent for an ABR at the local children's hospital. She was diagnosed as deaf at the age 13-months. Her loss is described as profound in both ears. She has a PTA of 110 dB (profound unaided loss). At 2-years 2-months, she was fitted with bilateral behind-the-ear hearing aids and also uses "huggies" plastic tubing to keep them in place. Her auditory gain from these hearing aids appears to be small, if any at all. Before Amy had meningitis, her parents describe her as a normal child, meeting typical timelines for sitting up, crawling, saying mama, etc. When asked

about Amy possibly getting a cochlear implant, Mrs. Barnes said “my husband has heard negative things about it. I kind of want it if it’s going to help....But, she’s already got what hearing she’s got- none (AB-parent p.1).” In addition, Amy wears glasses. Infant Disability Services referred Amy to the Statewide Parent-Infant Outreach Organization program at the age of 1-year 5-months. Amy’s parent advisor works with her every 1-2 weeks with auditory training, building communication, and as a resource about deafness for the parent.

The father’s job does not offer health insurance. The children have health insurance through StateCare, a state sponsored health care insurance for uninsured children. Through StateCare, Amy sees an otolaryngologist and audiologist regularly. She had PE tubes implanted at the age of 2-years 2-months and was fitted with hearing aids for the first time the following month. Amy received eyeglasses through StateCare assistance at the age of 2-years 9-months.

Weekdays, Amy stays at home with her mother and brother. She has not attended any type of pre-school programs. She has limited interactions with other children in the neighborhood. She attends church programs approximately 6 hours per week (3 hours on Sunday and 3 hours on Wednesday) and does interact with children her own age. Mrs. Barnes stated that Amy can be “bad during Sunday School sometimes. They have to come get me when she won’t sit still or listen to her teacher (AB-parent p.3).” Amy does not have a sign language interpreter or teacher who knows sign language at church. Amy is expected to sit and try to participate like the other hearing children.

*Mark and Mary Barnes*

Mrs. Barnes is 21-years-old. She completed high school through the 11<sup>th</sup> grade. She is presently a stay-at-home mother. She takes the children to church almost every Wednesday and Sunday. She depends on her church family to assist in providing transportation at times, hand-me-down clothes, and financial assistance. The father is 23-years-old. He is employed as a plumber's apprentice. He works week-to-week for an hourly wage. The father does not attend any church functions with the rest of the family. The son is 5-years-old, has normal hearing, and will begin kindergarten in 2 months.

During the interview with the mother, the mother revealed that she and her husband were not strong students. Both dropped-out of high school in the 11<sup>th</sup> grade. She describes herself as the reader in the family. She takes care of all the doctor's visits and Infant Disability Services appointments, completing the various paperwork for both. She likes to read for pleasure, mostly magazines such as *People* and *Family Circle*. She could not remember the title of the last book she read. Even as a child, Mrs. Barnes liked "to look more at the pictures than read (AB-parent p.7)." In addition, she could not recall the last book, magazine, etc. her husband had read. When Mrs. Barnes does read, she reads alone in her bedroom. Her children do not see her read. Since having Amy, she "does not have time to do things like reading (AB-parent p.7)."

When asked about her literacy experiences as a child, Mrs. Barnes could not remember her parents reading to her or having books accessible in the home. She remembers her teachers reading to her in earlier school grades. During later grades, she recalls her teachers encouraging her to read and borrow books from the library, but she

just “did enough to get by (AB-parent p.4)” for the class. Now with the children, Mrs. Barnes does not go to the public library.

*Parent-Infant Advisor*

Amy’s Statewide Parent-Infant Outreach Organization parent advisor is Janice. Janice is a very knowledgeable person in the field of deafness. She has worked with deaf people for over 20 years and includes deaf people in her personal life on a daily basis. She is a fluent and native-like signer. During an interview with Janice, Janice explained that she has worked with Amy’s family for approximately 13 months. Their initial home visits/lesson focused on Amy being fitted with appropriate hearing aids and how to keep the hearing aids on Amy’s ears. Over time, Amy gradually built up a tolerance or acceptance for her hearing aids. Amy is presently wearing her hearing aids 6-8 hours daily. Janice also mentioned that she is unclear how much benefit Amy receives from the hearing aids. During interactions with and without the hearing aids, Janice sees almost identical responses and behaviors from Amy. Janice estimates Amy’s expressive sign language vocabulary to be 20 words, similar to Mrs. Barnes’s estimation. Janice does not feel Amy has any understandable verbal words.

Amy’s forceful behaviors of hitting and throwing are a concern to Janice. Janice sees these episodes as evidence of frustrating in communicating. During each of Janice’s visits, Janice signs and speaks at the same time to everyone, both Amy and her family. During each visit, Janice notices Mrs. Barnes very rarely signs to anyone, including Amy. Janice estimates that she reminds Mrs. Barnes to sign four times per visit. Janice described Mrs. Barnes during an interview as one who is “not committed to devoting the time to fully learning sign language (AB-advisor p.4).” Janice will ask Mrs. Barnes

periodically if she still chooses Total Communication as the communication mode for Amy. Mrs. Barnes had maintained the choice for Total Communication, including both verbal and signed communication.

Janice describes Amy's language development as at least one year delayed. "She has the potential to learn a lot of language and picks up immediately on your expression even before she picks up on the sign....Like most children she can comprehend more than she can express (AB-advisor p.2)." Amy does not appear to have any cognitive problems and is quick to learn new signs Janice shows her. One problem with Amy building her sign language vocabulary at a faster pace is the family's lack of consistent reinforcement.

During Janice's visits, she has helped the family with choosing a communication mode, getting amplification, and arranged bi-weekly speech therapy sessions. During the home visits, she uses naturally occurring events to guide the introduction of vocabulary. For example, one home visit Amy was interested in Janice's car keys. Janice showed Amy what each key was used for through gestures and signs, then reinforced with gestures again. Janice describes Amy as "starved for interactions like this. She drinks in every movement I make (AB-advisor p.5)."

#### *Amy's Language and Literacy Interactions and Development*

The following section includes information on Amy's language and communication choices. For Amy, the family chose a manual approach to communication. Amy's history and experience as a reader is also described, including a snapshot description of a storybook reading experience captured during this research.

*Language and Communication Choices*

During the first home visit and data collection, an interview was conducted. The family, although it would appear as primarily the mother's choice, has chosen Total Communication for Amy. It is their wish for Amy to grow-up using sign language, hearing aids, her voice, and speech reading abilities. The father and mother enrolled in a sign language class offered at the state deaf school for parents with deaf children. The father attended only the first class. The mother attended all classes in the course. She obtained 3 sign language dictionaries during that 3-month class. She states that she refers to the dictionaries often when signing with Amy. Most of Mr. Barnes's interactions with Amy consist of nonverbal activities, such as chasing or tickling her. He gets frustrated with Amy quickly when she signs to him. Since he has a limited understanding of what Amy is saying, he will frequently leave the room since he can't communicate. Mrs. Barnes says Amy "cries and throws whatever is in her hand (AB-parent p.5)" when her daddy can't communicate with her. Mr. Barnes does not show an interest in learning to sign. When questioned by his wife, he tells her "you stay home with her so you sign to her. I have to worry about my work (AB-parent p.5)."

Amy is very physical when she communicates. She uses forceful motions while forming each sign and often touches the person she is communicating with to get her point across. These touches may consist of taps on the shoulder, slaps on the leg, or a closed-fist hit. Her expressive sign language and verbal vocabulary are very limited. In frustration, Amy frequently takes a person by the hand and leads them to get what she wants. When not understood, Amy will hit people/objects or throw objects in exasperation. These fits of frustration occur approximately twice daily. For example, I

observed Amy wanting the same juice box her brother was drinking during one of my sessions. Mrs. Barnes had not seen her son get the juice box. Instead of signing “drink” to her mother, Amy kept pointing to the closed bedroom door and hitting the table. Mrs. Barnes ignored initial anger and soon after signed “no” to Amy. Amy continued hitting the table, kicking, and crying. Mrs. Barnes finally stood up to go look for things in the direction Amy was pointing. After opening the bedroom door, she saw her son drinking a juice box. Amy was given a juice box and the “fit” was over.

Mrs. Barnes estimates Amy’s expressive sign vocabulary at 20 words. Amy’s mother feels that Amy can approximate three words verbally. During home visits and data collection, none of Amy’s vocalizations were understandable. Whereas the family has chosen Total Communication for Amy’s language, it seems early to know how effective it is. Amy’s high level of frustration with making herself understood makes any type of communication difficult. Amy does not seem to have much auditory gain from her hearing aids. Her only link to communication is through sign language. Efforts with sign language are often secondary. Talking and pointing to Amy seems to be the family’s primary mode of communication within the home.

#### *Amy’s Literacy History*

The mother reads to both children before bed about 3-4 days a week. Small storybooks are read, with less than 10 pages each. When she reads, she does not sign while she reads. Mrs. Barnes holds both children in her lap and reads aloud. Mark, the son, frequently attends to the stories and sits still as his mother reads. Amy, on the other hand, squirms during the entire story and often hits the book in a forceful manner. Sessions each last for approximately three minutes. Amy and her brother have a library



of about 30 storybooks. These are the books that are read to the children. They have never been to the public library to borrow books. When asked if the children have a favorite storybook, Mrs. Barnes stated that neither child has a favorite book. Amy never requests that her mother read to her, not only at night or anytime of the day.

While Mrs. Barnes reads to Amy, Amy does not ask questions while they read or making any inquisitive gestures. She “watches me talk and turn the page (AB-parent p.6).” During the day, Amy will very rarely pick up books during play. When she does, Mrs. Barnes says Amy walks or marches around the house and speaks “gibberish to me or her brother (AB-parent p.5).” She will also pick up books as toys and bang them on things throughout the house, without opening the book. She has chewed on books in the past, but this behavior is declining.

Mrs. Barnes states that her purpose in reading to Amy is for her to “be still and use her eyes to read (AB-parent p.8).” When asked how she thinks Amy will learn how to read, she has “no clue (AB-parent p.7).” Mrs. Barnes knows that a deaf child will require a different approach to reading than the approach used with her older child. At the present time, decisions about school programs and looking to future education choices have not been made. During the last minutes of the initial parent interview, Mrs. Barnes broke down in tears. Thinking of the future and Amy’s uphill struggles as a learner was too much for her to consider. When asked to elaborate about her tears, Mrs. Barnes just wants Amy to “start soon looking at a book. I just want her to look at one without throwing a fit and it hasn’t happened yet (AB-parent p.8).”

*Amy's storybook reading experience.* This section will provide an in-depth picture of how Amy and her mother interact with books and the development of emergent literacy behaviors. This specific snapshot was chosen because it best represents an average videotaped session during this research project. Following this snapshot, I will provide a reflection which details my observations and interpretations of this interactions.

*A storybook snapshot.*

The family home is quiet today. It is raining outside and the children are inside when this session begins. They are watching "Blues Clues" and are mesmerized by the actions on the TV. Mark and Amy sit on the floor of the living room with their backs to the sofa. Each has an emptied juicebox beside them.

As I enter and begin setting up the video camera, Amy stands up and begins to walk through the living room, kitchen, and back to the living room. She comes to see what is in my bag. She does not ask or peek into the bag. She snatches it from the floor and walks out of my reach. She finds a wooden 5-piece puzzle of farm animals. She sets the board of the puzzle on the living room floor and begins to pull the individual puzzle pieces out of the bag. She maintains consistent eye contact with me, glancing from puzzle to me repeatedly. She seems to know that she did not ask permission before taking this puzzle and has positioned herself out of my immediate reach.

Mrs. Barnes asks Mark to go to her bedroom to continue watching "Blues Clues" and he complies with no resistance or verbalizations. He picks up both

juiceboxes, throws them away, walks to his parent's bedroom, and closes the door behind him.

I get the books from my bag and move to the sofa area. The books I have brought today are 5 Wright Group books titled *White Rabbit's Color Book*, *Baby Gets Dressed*, *A Party for Bear*, *Fun With Friends*, and *For Breakfast*. I have also brought *The Very Hungry Caterpillar*. Mrs. Barnes walks over to Amy and collects the puzzle and its pieces. She walks away and comes to join at the sofa area. Amy does not like this. She starts to throw a "fit." She is sitting in the floor where she sat with the puzzle. Now she is kicking her feet on the carpet and strongly and repeatedly shaking her head no. I gesture for her to come join her mother and me sitting on the sofa. She continues kicking and strongly nodding her head no. Mrs. Barnes stands up and picks Amy up to bring her to the sofa area. Amy begins to cry while shaking her head, "no." I offer her 2 books – *A Party for Bear* and *The Very Hungry Caterpillar*. She takes the books and goes back to sit on the floor where the puzzle once was. Mrs. Barnes and I begin talking about the literacy log and pretend to ignore Amy.

After 6 minutes of talking about the literacy logs and discussing Amy's behavior, Mrs. Barnes takes the other 4 books and joins Amy on the floor. I move to adjust the camera. At this point Amy is not kicking, crying, or gesturing no. She is turning the pages of the book and staring at some pages for longer times than others. She does not resist when her mother sits down beside her.

During my discussion with Mrs. Barnes, she states that Amy's behavior is typical. She estimated that Amy would settle down quickly and Amy did.

Mrs. Barnes picks up *A Party for Bear* and turns it to the cover. She verbally reads the cover and waits for Amy to look up at her. She reads the title again and turns the page. She turns past the title page without reading it and begins reading at the first page. Mrs. Barnes reads each page in a slow and steady way. On the third page of the story, she signed the word “bear” on that page. Amy copied her and also signed “bear”. Mrs. Barnes continued reading verbally in the same way and signed “bear” again on the last page. Amy took the book from Mrs. Barnes and turned back 3 pages in the book. Beginning on that page, Amy would visually scan the page for the bear and sign “bear” to herself once she located it. She did not look up at her mother or me. Then she turn to the next page, again looking for the bear, signing “bear”, and turning the page. She repeated this until the last page. She immediately stood up and found my bag. She placed the book in my bag and rejoined her mother sitting on the floor.

Amy examines the books and selects *White Rabbit’s Color Book*. She hands it to her mother. Mrs. Barnes verbally reads the title of the book and promptly turns the page. She turns past the title page and begins reading the story pages. She succinctly reads through all the pages of the book without signing any words. Amy looks at her mother and another “fit” begins. She is clearly not happy with how she read the book and demonstrates her feelings. Amy’s face tightens forward, her brow furrows, and her lips tighten. Her left foot emphatically stamps the floor. Mrs. Barnes appears to understand the reason for Amy’s “fit” and turns the book back to the cover. Mrs. Barnes begins to verbally

reread the title. Her efforts are too late. Amy is standing and walking away from her mother.

Amy walks to her parent's bedroom and opens to the door. She joins her brother on the bed, watching "Dora" on TV. Mrs. Barnes walks into the bedroom and motions for Amy to come out. When Amy does not move, her mother walks to the bed and picks her up. Amy kicks repeatedly and loudly "gibbers" at her mother. Her speech is totally unintelligible, but her intent is clear. Mrs. Barnes looks at me and says, "I don't think Amy wants to read anymore today." I agree and we go back to sit together on the sofas.

As we sit, Mrs. Barnes never asks me why I think the reading session went sour or asks for suggestions for improvement. I offer no feedback since this is only the third week of my research with this family, and I do not want to influence the reading observations I will make in future weeks. Mrs. Barnes and I talk about Amy's recent trip to the doctor and possibility of Amy having her tonsils out in the near future.

*Reflections on Amy's storybook reading snapshot.* This observation started in an awkward manner. Amy was not allowed to continue to watch TV, and she knew her brother was. This set the tone for the session. Amy's tone was evident when she snatched my bag and walked away with it. Amy was allowed to exhibit such controlling behaviors without correction. This behavior struggle continued as the puzzle was taken away from her and her "fit" began. Mentally, I knew this observation session would be a difficult one.

Once the actual book reading began and Amy had settled down a little, Mrs. Barnes kept Amy's frustration level high. If the family has chosen Total Communication, Mrs. Barnes should have been signing as she read. As she read on this day, the storybook reading was not accessible to Amy. Amy's actions at the end of the story book reading demonstrated Amy's desire for manual communication. Amy signing "bear" on the last several pages was evidence of her limited abilities to discuss books with her mother. Her actions were also evidence that she wanted to participate in a back-and-forth exchange about this book but could not. The storybook reading of *A Party for Bear* was basically two one-sided conversations. Mrs. Barnes had one conversation with herself by verbally reading to Amy, but Amy was not able to benefit from her oral reading. Amy had a separate conversation with herself by rereading the last few pages and signing "bear" to herself.

#### *Summary of Parent-Child Literacy Interactions*

During my sessions with the Barnes family, I always brought a bag of books and preschool toys. Their home had limited toys and books. As illustrated in the snapshot, Amy always looked forward to seeing what was in my bag. As I set-up the video camera each session, I typically gave Amy one preschool toy, such as a puzzle or magnetic alphabet board, to play with. Mrs. Barnes and Amy frequently sat in the floor and looked at the books in my bag together. Excitement often filled Amy's face as the books were revealed.

As shown in the snapshot and in the data for other storybook reading sessions, Mrs. Barnes never signed and voiced as she read through an entire storybook. A percentage was calculated of words signed per book. These percentages varied from 3%-

10%. This information is consistent with the parent advisor's reports. In addition, Amy's attention was seldom devoted to storybook reading. She liked to turn the pages before her mother had finished reading a page, take the book from her mother's hands, and walk around the house holding the book. Throughout this research, Amy sat through an entire book reading 7% on the times observed.

During discussions about the literacy logs (Appendix H) after the parent-child reading videotape sessions, Mrs. Barnes revealed that Amy's behaviors during the videotaped sessions were similar everyday occurrences with storybooks. The literacy logs showed that Amy and her mother read storybooks an average of 5 times a week during this research. Amy sat still through a complete book reading 3% of the time. This is similar to the 7% of the videotaped sessions.

Books listed in the literacy log included repeated readings at least once per week. Repeated readings did not show an increase in Amy's attention to the book or ability to sit through the entire reading.

#### *Reflections on Emergent Literacy Behaviors*

Guided by the caseworkers at Infant Disability Services and Janice from Statewide Parent-Infant Outreach Organization, the Barnes family displayed a behavior of trust and fate. Amy's current involvement in amplification and Statewide Parent-Infant Outreach Organization training appears almost as an accident. Mrs. Barnes has a trusting personality that "everything will work out for the best (AB-parent p.9)."

As young parents, the Barnes were not sure how their world would change with when their daughter was diagnosed deaf. Their older son's childhood had been uneventful and did not have many difficult times. With Amy's deafness, they mostly

“listened to the doctors and those people (AB- parent p.9)”. Mr. and Mrs. Barnes waited approximately 10 months before they first saw the audiologist. This was valuable time during the critical period of language learning. According to Meece (1997), conditions are optimal for children to develop language naturally between the age of birth and two. Amy’s current verbal vocabulary of little to no intelligible speech may be limited due to lack of auditory stimulation during this critical period.

An examination of Amy’s emergent literacy behaviors reveals that she is struggling as a young reader. Factors limiting her development are her parent’s lack of interest in personal reading for pleasure, Amy’s inattentiveness during storybook reading, lack of understandable communication while reading the storybooks, and lack of resources. Because Mr. and Mrs. Barnes are not readers, their children are less likely to grow up as readers. When asked about their older son, Mrs. Barnes stated that “he never thought of books like he thinks of his toys. [Books] just aren’t his favorite (AB- final p.3).” As demonstrated from the research, Amy does not attend to storybook readings. She is a very active child and does not enjoy sitting still for stories. This may or may not be related to her mother not signing to her on a consistent basis. It is hard to know if Amy is not sitting still due to lack of interest or lack of accessibility to the language of the stories. My presumption is that both are a factor, but the lack of sign language is a bigger factor. The literacy log (Appendix H) reveals that Mrs. Barnes does read to Amy, but Amy’s lack of attention is evident during each reading session. Lastly, Amy is at a disadvantage due to lack of resources. In today’s time of variety and abundance with cable TV channels, DVDs, and toys, books are most likely a low priority with Amy. The family has few books in their personal library and rarely make trip to the public library.



In addition, the books in the family library are all books with lots of text. Amy may respond more and attend more to books with more pictures, less text, and a wider and changing variety.

Janice, the parent advisor, appears to be the link to education and communication that the Barnes family needs. She knows the field of deafness very well. She has a trusting relationship with Mrs. Barnes. She has the ability to influence the Barnes family to learn more sign language and ways to communicate with Amy. In addition, she is extremely dedicated to her job and spends more time than required with the Barnes family. “[Her] goal is to get this family on the right track with hearing aids, sign language, and preschool. Amy can not go without any of these (AB- advisor p.5).”

#### Matthew Pruitt’s Portraiture

##### *The Pruitt Family*

The Pruitt family consists of a mother, father, a daughter age-6, and a deaf son, Matthew. They live in a suburban community. Their house is 2-story brick home, situated in a swim/tennis subdivision. There are few children playing outside when I come to visit the family each time. I saw more adults outside than children. The adults were doing yard work, loading/unloading their car, or walking/jogging on the street. The Pruitt children are always inside when I arrive. When I ring the doorbell, Mrs. Pruitt typically comes from the kitchen area of the house. The children are usually upstairs playing. Twice, they were in the backyard playing on the swing set when I arrived.

Inside their home, it is richly decorated. The home is well cleaned and always tidy. When I arrived each time, the daughter is asked to go upstairs and play during our sessions. She complies and is quiet throughout all of my visits. Twice, she was at her

grandmother's home during my scheduled time. The older daughter recently finished the first grade. During my visits, Mr. Pruitt is always at work. The observations were videotaped in the living room, sitting on the sofa or in the floor. The observation time usually occurred at approximately 9:30 on a weekday morning during the summer months. Each session lasted for approximately 120 minutes.

*Matthew Pruitt*

The deaf son, Matthew, was age 2-years 1-month when data collection began. Matthew was born deaf. His parents requested newborn hearing tests due to a family history of deafness. Mr. Pruitt has 2 first-cousins that are genetically deaf. Matthew's loss is 105 dB PTA (profound unaided loss). His parents began exploring cochlear implant surgery when Matthew was 3-months-old. Matthew wore bilateral behind-the-ears hearing aids for 6 months (from the ages of 4-10 months) with no measurable amplification benefit. After interviewing surgeons and doing further research, Matthew received a cochlear implant at 12 months. At 13-months, the cochlear implant was mapped and turned on. With his cochlear implant, Matthew has excellent auditory gain. Auditory-Verbal training also began at age 13-months. Before the cochlear implant, Matthew made no intelligible verbalizations. Before the cochlear implant surgery, Matthew's parents describe him as a normal child, meeting typical timelines for sitting up, crawling, etc. When asked about their choice to pursue a cochlear implant for Matthew, Mrs. Pruitt stated that "being part of the hearing world was the only option for Matthew. We are hearing and that's what we wanted for Matthew. Sign language was never an option for us (MP-parent p.2)." Infant Disability Services referred Matthew to the Statewide Parent-Infant Outreach Organization program at the age of 10 months.

A cochlear implant is a small electronic device that can help to provide a sense of sound to a person who is profoundly deaf. The implant is surgically placed under the skin behind the ear. An implant does not restore or create normal hearing. Instead, under the appropriate conditions, it can give a deaf person a useful auditory understanding of the environment and help him to understand speech. A cochlear implant is very different from a hearing aid. Hearing aids amplify sound. Cochlear implants compensate for damaged or non-working parts of the inner ear. Hearing through an implant may sound different from normal hearing, but it allows many people to communicate fully with oral communication. Cochlear implants are expensive, but mostly covered by health insurance and/or Medicaid.

Auditory-Verbal training is a systematic approach to developing a deaf child's listening skills through amplification. This approach is based on a well-developed and strict set of guiding principles that enables all children, including profoundly deaf, to hear. The deaf children are taught to use their amplification, usually a cochlear implant, to listen and speak. The Auditory-Verbal approach requires a full, long-term commitment from both the deaf child and his parent. The child attends weekly therapy sessions, frequent hearing tests to maximize and check the amplification's functioning, and home activities to reinforce skills taught during therapy. The ultimate goal is for all deaf children to grow up and become independent in the "hearing world."

Matthew attended Auditory-Verbal classes once a week from the age of 13-months to 24-months. Matthew was recently released from therapy at the Auditory-Verbal center due to his excellent progress and mastery of his auditory goals. Matthew continues to receive services through Statewide Parent-Infant Outreach Organization. His

parent advisor comes once a week to work on auditory training and preschool academic skills. Matthew's mother is always present when the parent advisor comes, and Mr. Pruitt also participates approximately 75% of the visits. The visits always occur in the evenings.

Weekdays, Matthew stays home with his mother. In addition to Auditory-Verbal training, Matthew attends a half-day Moms-Morning-Out program twice a week.

Matthew also has contact with other children at the daycare located within the exercise gym Mrs. Pruitt attends. Matthew attends this daycare 3 days a week for 2 hours each day. Mrs. Pruitt describes Matthew as very interactive with his peers at all these programs. Matthew mediates his communication needs completely independently.

“Matthew is treated just like every other child there, not as a deaf child (MP-parent p.2).”

#### *Jason and Beth Pruitt*

Mrs. Pruitt is 31-years-old. She completed high school and has a Bachelor's degree in history. She and her husband met at college. He has a Bachelor's degree in accounting and a Master's degree in finance. Mrs. Pruitt worked initially after graduating from college. She worked for 3 years for a non-profit agency and assisted in fund-raising. After their daughter was born, she became a stay-at-home mother. Mr. Pruitt, age-33, works for a small CPA firm as an accountant. He typically works 9 hours per day and usually 6 hours on the weekends. The family lives in an upper-middle class section of the city. They participate in neighborhood get-togethers and family events almost weekly. The paternal grandparents live 3 hours north of the Pruitts. They come and visit once a month. The maternal grandparents live close and visit 1-2 times per week.

Mrs. Pruitt describes herself as an avid reader. She reads women's magazines and fictional novels, such as ones by John Grisham and James Pruitt frequently. She also does a lot of reading on the Internet, researching topics she is interested in such as cochlear implants, summer camp programs, and educational topics for the children. She takes the children to either the bookstore or the library at least once weekly. Mr. Pruitt can also be described as an avid reader. He subscribes to a few money magazines that he reads cover-to-cover each month. He also enjoys reading books by Stephen King and other suspense books.

In the children's rooms, they each have a book shelf. The books are neatly arranged and on a level the children can readily reach. Mrs. Pruitt says that she reads to the children daily. Reading times may be morning, afternoon, or evening. Sessions usually last about 15 minutes. Mr. Pruitt, grandparents, daycare teachers, and Matthew's parent-advisor also read frequently to the children. The books are mostly child selected. Mr. and Mrs. Pruitt both read in the presence of the children.

#### *Parent-Infant Advisor*

Matthew's Statewide Parent-Infant Outreach Organization parent advisor is Tracey. Tracey is a teacher of deaf children in the local school system. She has a Master's degree from Gallaudet University in deaf education. She considers working with very young deaf children her passion. She has worked with Statewide Parent-Infant Outreach Organization for 8 years. Tracey's background with deaf children is mostly from the oral and auditory aspect. She does know some sign language, but has "not used in so long that [she's] forgotten most of it (MP-advisor p.1)." Tracey presently teaches in a mainstream classroom of oral deaf children ages 4-6. She works as a Parent –advisor in

the evenings or on the weekends. Although Tracey has a strong oral background and Mr. and Mrs. Pruitt chose an oral approach, Tracey did not influence their communication choice. Mrs. Pruitt is a well researched, pro-active parent. She knew before enrolling Matthew in the Statewide Parent-Infant Outreach Organization program that she wanted Matthew to grow up oral.

During an interview with Tracey, she explained that she has worked with Matthew's family for a little more than one year. Their initial home visits/lesson focused on Matthew being fitted with hearing aids and later the scheduling of the cochlear implant surgery. Tracey helped reinforce activities Matthew learned at the Auditory-Verbal center and worked on listening activities for the first 6 months after the surgery. Matthew excelled so quickly, and now Tracey works on "normal cognitive activities for 2-year-olds (AB-advisor p.2)." Matthew is able to use a noun and verb together consistently. Tracey is now introducing descriptors, such as wet/dry, big/little, and colors. Matthew seems to be grasping this concept quickly. Tracey is in close contact with Matthew's audiologist and speech therapist at the Auditory-Verbal center. They work together and are "on the same wave length (AB-advisor p.3)" in what skills Matthew is working on. For now, Matthew's language development is "remarkable and... right on target with regular kids (AB-advisor p.2)."

When asked to comment on Mrs. Pruitt's interactions with Matthew, Tracey had nothing but positive comments. Tracey could not offer any suggestions for improvement of parent-child interactions. Tracey stated that Mrs. Pruitt completely committed to doing whatever is necessary to make Matthew successful. She has always witnessed full cooperation and commitment from the Pruitt family.

### *Matthew's Language and Literacy Interactions and Development*

The following section includes information on Matthew's language and communication choices. For Matthew, the family chose a strictly non-manual approach to communication. Matthew's history and experience as a reader is also described, including a snapshot description of a storybook reading experience captured during this research.

#### *Language and Communication Choices*

The language choice in the Pruitt home is clear. An auditory approach was the only option ever considered for Matthew. The Pruitts made early choices for Matthew and have no regrets. They knew a cochlear implant was what they wanted, they did the research, and committed to the auditory therapy afterwards. Both parents show interest and involvement in Matthew's auditory development. The family has embraced the Auditory-Verbal approach and feels this was the best decision for Matthew.

Since receiving his cochlear implant, Matthew will not go without it. The external portion of the implant is known as "his ear" to the Pruitt family. Matthew puts "his ear" on as soon as he wakes up. He takes it off for baths, but then puts it back on to do things before bed. During nap time, Matthew sleeps with "his ear" on, but takes it off to sleep at night. When the implant has broken before due to a loose cord, Matthew cried until his mother took him to the audiologist to get the cochlear implant repaired.

With the cochlear implant, Matthew is a typical child. He could easily be overlooked as being a child with normal hearing, not profoundly deaf. He has excellent gain from the cochlear implant. During one of my observations in the home, he heard an airplane fly over the house. He looked at me and said, "I hear an airplane up high (MP-

video p.4).” Matthew’s expressive and receptive vocabulary is comparable to a hearing child his age. His listening abilities, speaking abilities, and overall understanding may be slightly delayed since Matthew was without hearing for the first year of life, but the intense therapies he participates in have helped to close any language gap Matthew may have.

#### *Matthew’s Literacy History*

Mrs. Pruitt reads to Matthew during various times of the day, not only at bedtime. Matthew has favorite books. Books about Curious George, books by Mercer Mayer, and books about opposites are his current favorites. Matthew requests these books to be reread to him 5-7 times per week. During one session, Matthew has been known to request and have a book reread to him three times. At times, Matthew even tries to read the books independently, making up the story as he turns the pages. While reading other books, Matthew will often ask his mother about specific pictures in the book, characters in the story, and point out letters he recognizes on the pages. Matthew will sometimes ask the same question throughout the book. Mrs. Pruitt frequently uses her finger to follow the words as she reads to Matthew. When Matthew is away from his home, he will frequently make comments about things in the environment similar to something he has read in a book.

In daily conversations and play, Mrs. Pruitt has heard Matthew use language that comes from books. During playtime, Matthew will sometimes draw airplanes and trains that he saw in books. Mrs. Pruitt stated that storybook reading help to entertain Matthew. It also helps him “learn about things we may not experience in our day-to-day (MP-parent



p.5)” lives. Storybook reading also helps to reinforce experiences that Matthew does experience.

While Mrs. Pruitt reads to Matthew, Matthew sits side-by-side with her. Since Matthew’s cochlear implant is on his left side, his mother always sits on his left side. When Matthew was younger, he sat in his parent’s lap while they read to him. Now, he wants to help turn the pages and point out things on the pages so he sits beside the reader. When asked what differences Mrs. Pruitt sees in how her children will be educated and learn to read independently, she says “there is no difference (MP-parent p.6).”

*Matthew’s storybook reading experience.* This section provided an in-depth picture of how Matthew and his mother interact with books and the development of emergent literacy behaviors. This specific snapshot was chosen because it best represents an average videotaped session during this research project. Following the snapshot, I will interpret the literacy interactions portrayed.

*A storybook snapshot.*

The family home is still, as is usual when I arrived. Today, the older daughter is not home. She is playing up the street at a friend’s house. Matthew is in the backyard, playing in the grass and sandbox with his toy trucks. Mrs. Pruitt has paperwork laid out on the kitchen table. She told me she had been making calls to other parents in the Moms-Morning-Out group for an upcoming event.

Mrs. Pruitt goes outside to get Matthew and escorts him into the house. I begin setting up the video camera in the living room. I notice that Matthew and Mrs. Pruitt have already selected the books we will be reading for today’s

session. They are stacked neatly on the end table next to the sofa. I take a quick peep at the titles and leave them untouched. The books are *Goodnight Moon*, *One Fish Two Fish Red Fish Blue Fish*, *Five Little Monkeys Jumping on the Bed*, *Corduroy*, and *Chicka Chicka Boom Boom*. As Matthew enters the house, he asks his mother for a glass of water. They go to the kitchen and stand there for just a minute. Matthew drinks a few sips and comes into the living room area. His mother, standing in the kitchen, tells Matthew, in the living room, to have a seat on the sofa. Matthew sits down and waits. Mrs. Pruitt is just a few steps away from joining Matthew.

Matthew picks up *Five Little Monkeys Jumping on the Bed* first and hand it to his mother. "I want this book first," he says with excitement in his eyes. His facial expressions tell me that he has read this book before and enjoys it. Mrs. Pruitt begins to read. She reads the cover, including the author and illustrator. She reads the title page, reading only the title. As she begins to read the story, she has a rhythm to her voice. Matthew has picked up on the rhythm and is slightly nodding his head to the rhythm of his mother's voice. As Mrs. Pruitt continues to read, Matthew's eyes begin to dance more. By the end of the book, Matthew is bouncing from a sitting position to the rhythm of his mother's voice. We all laugh when the book is complete.

Mrs. Pruitt selects the next book. She picks up *Corduroy* and pauses. Matthew looks at the book cover with his mother. She asks, "What do you think we will see in this book?" Matthew answers, "Maybe a bear in green pants." I can tell that Matthew has either never read this book or read it infrequently due

to his lack of confidence in his response. Mrs. Pruitt begins to read. She reads the title, author, and illustrator on the book cover. She reads the title and author on the title page. She pauses at the title page and tells Matthew that the bear's name is Corduroy. She turns the page and begins reading the story. At the bottom of each right-hand page, Mrs. Pruitt pauses with a comprehension type question or a comment. Matthew maintains his attention throughout the book. He replies orally to his mother's questions and comments appropriately. After reading the last page, Mrs. Pruitt asks, "What do you think of your new book?" Matthew replies, "I lost a button on my jacket." Mrs. Pruitt smiles and says, "I know and mommy needs to fix that, doesn't she?" Matthew nods.

Matthew picks *One Fish Two Fish Red Fish Blue Fish* next. Again, I can tell this book is a favorite of Matthew's by looking at his eyes dance towards the book. Mrs. Pruitt holds the book and looks at the cover. She says, "Matthew do you know the name of this book?" He yells back, "One Two Fish Red Blue Fish!" His mother says, "That's right. *One Fish Two Fish Red Fish Blue Fish*" while pointing to each word as she said it. Mrs. Pruitt skips the title page and begins reading. She reads at a quicker pace than the first book. Matthew just smiles. At the bottom of the fourth page, Matthew says, "That's the red fish and that's the blue fish." "You got it," his mother answers back. She continues reading until the last page. Then she pauses and says, "How many fish were there again?" Matthew yells, "One Two Fish Red Blue Fish!" His mother just smiles.

As Mrs. Pruitt goes to select the fourth book, the telephone rings. She

stands to answer it. It is her daughter asking if she can come home for lunch.

We pause the storybook reading for today's session.

*Reflections on Matthew's storybook reading snapshot.* Matthew loves to read and it shows. It is clear through his facial expressions and loud voice that he had read some of his books time and time again. He understood the rhythm of speech and language of stories. His head nodding and body bouncing made it clear that he knew the pattern and enjoyed it. Matthew came easily to the living room when it was time for storybook reading. This was something that he enjoyed and liked to participate in. Matthew showed he was a beginning reader and loved it.

*Summary of Parent-Child Literacy Interactions*

During my sessions with the Pruitt family, I always brought a bag of books with me. We used the books approximately 50% of the sessions. Often, as shown in the snapshot, Matthew had books out in the living room that we used during the sessions. Matthew would continue playing in his room or outside while I set-up the video camera each session. When everything was in place, Mrs. Pruitt would call Matthew into the living room and the sessions would begin. Mrs. Pruitt and Matthew frequently sat on the sofas as they read. Matthew selected the book 83% of the time during my observations. Matthew helped his mother turn the pages of the book 73% of the time.

During the storybook reading as shown in the snapshot, Matthew was mostly very attentive. He sat throughout the entire reading 91% of the time. The other times, Matthew stood next to his mother, walked back-and-forth in the immediate area of his

mother, or ran back-and-forth to the kitchen and ignored the story. When off-task, Mrs. Pruitt would call Matthew back to sit by her and their reading would continue.

During discussions about the literacy logs (Appendix I) after the parent-child reading videotape sessions, Mrs. Pruitt revealed that Matthew's behaviors during the videotaped sessions were similar everyday occurrences with storybooks. The literacy logs showed that Matthew and his mother read storybooks an average of 23 times a week during this research. Repeated reading of books occurred an average of 4 times per week. The literacy log also showed that Matthew went to the library 1.7 times per week during the research period and the bookstore 0.8 times per week.

#### *Reflections on Emergent Literacy Behaviors*

Matthew Pruitt is a success story through the efforts of his parents. The Pruitt family is educated, proactive, and follows through on their plan. Before Matthew was born, Mr. and Mrs. Pruitt knew they wanted Matthew's hearing checked in the hospital, due to a family history of deafness. This proactive measure meant that Matthew was identified at the earliest possible moment and steps towards amplification were taken. Matthew was born just before newborn hearing screenings became standard procedure in hospitals. The Pruitts made an early decision to get a cochlear implant for Matthew, therefore he received his implant at the earliest possible time of twelve months. They were dedicated to attending and implementing Auditory Verbal methods. Due to their efforts, Matthew is a well-adjusted child.

Matthew's emergent literacy skills are excellent. His parents are readers, involved, and committed. Observing his parents read, Matthew is instilling an importance of reading. Matthew is encouraged to read everyday by his parents. Mr. and

Mrs. Pruitt are involved in Matthew's life. They take time to read with him everyday. They take him to the public library or bookstore on a regular basis. They surround Matthew with books and encourage him to explore them. Mrs. Paterson recalls and extends events in books with Matthew at various times. Matthew understands the connections of books, even when he is away from the actual books. Mr. and Mrs. Pruitt are extremely committed. They knew from the start that they wanted Matthew to grow-up to fully function in the hearing world. They devote time with Matthew to attend Auditory-Verbal therapy, audiological appointments, have Matthew enrolled in a preschool class, and give valuable time with Matthew one-on-one each day. Their efforts are clear. Matthew is thriving and making excellent progress as an emergent reader.

#### Aaron Daniels's Portraiture

##### *The Daniels Family*

The Daniels family consists of a mother, father, an older son age four, and a deaf son, Aaron. They live in an urban community, within walking distance to the shopping/restaurant hub of their city. Their house is in an older section of downtown that has recently been revived with younger families. After buying their home, they devoted 4 months to renovations and upgrades, just as most all of their neighbors have done. On their street, about half of the homes have families with children. The other half are single persons or married couples with no children. Cars are parked on the street, as well as in the driveways of each home. There are no children playing when I come to visit each time. Most yards are well kept and have no toys or children's equipment in the yard.

Inside their home, it is decorated plainly, but in a modern fashion. The home is overall clean, but cluttered. When I arrive each visit, the younger son is usually one or two steps away from the mother. He is not doing anything in particular, just staying very close to mom. The older son is either playing in his room or watching cartoons in his room. When my observations begin, the deaf son is very reluctant to show his face. We always sit in the living room, on the sofas. My visits occurred during the summer months at about 2:00 in the afternoon. I stayed for approximately 2 hours each visit.

*Aaron Daniels*

The deaf son, Aaron, was age 24-months when data collection began. Aaron was diagnosed as deaf through the early intervention screening performed at the hospital. The screening was performed as part of the routine procedures for newborns at the hospital. It was not requested by the parents. At the age of 2-months, follow-up testing was performed at the local children's hospital. Those tested confirmed an 80 dB PTA loss in the left ear and a 70 dB PTA hearing loss in the right ear (overall severe-profound unaided loss). Through the otolaryngologist, they have performed tests to determine the cause of Aaron's deafness. To date, no cause has been determined. Aaron was fitted with bilateral behind-the-ear hearing aids at the age of 16-months. At 19-months, it was determined that Aaron had no measurable gain from the hearing aid in the left ear. Presently, Aaron only wears a hearing aid in the right ear. Aaron does not wear his hearing aid consistently. It appears that Aaron does have usable gain from the right hearing aid, possibly up to a moderate range of hearing ability. When I arrived for my observations, 30% of the times the hearing aid had to be located before his mother placed it in his ear. When questioned, Mrs. Daniels stated that she "tries to remember but

sometimes just forgets (AD-parent p.2).” In addition, his mother states that Aaron does not like to wear his hearing aids. “He takes them off all the time and throws them. He makes a game of it (AD-parent p.2).”

Aaron’s parents describe him as a normal child, meeting typical timelines for sitting up, crawling, etc. They state his verbalizations are a little delayed. When asked to compare her two sons’ language development, Mrs. Daniels stated that her older son spoke early and used more “complex syllable words, like helicopter (AD-parent p.2).” Up until 21-months-old, Aaron did not babble. He is beginning to babble more in the last two months and trying to say words in isolation. In weekly speech therapy, Aaron is working on making animal sounds. “His speech is very limited (AD-parent p.3).” Presently, he is attempting to verbalize about 12 different words, in addition to 5 animal sounds.

At 13-months of age, Aaron was referred from Infant Disability Services to the Statewide Parent-Infant Outreach Organization program. Aaron’s parent advisor works with him every 1-2 weeks with auditory training, building communication, and learning sign language. Weekdays, Aaron stays at home with his mother and brother. He does not attend any type of pre-school programs. He has no interactions with other children in the neighborhood. Mrs. Daniels takes the boys to the local park about twice a week. She tries to encourage Aaron to speak to the other children on the playground, but he does not. Her older son has friends that come over and play at the house about twice a week. Aaron does not participate in this playtime. Aaron is very attached to his mother and enjoys staying close to her.



*Seth and Margaret Daniels*

Mrs. Daniels is 29-years-old. She earned a Bachelor's degree in biology. She has never worked outside the home. Mr. Daniels is 30-years-old. He earned a Bachelor's degree in business administration. He is a pharmaceutical salesman. He works a typical 40 hour week. The older son, age four, attends a daycare preschool class four hours each day. He will begin kindergarten in the fall. Aaron stays at home with mom all day.

Both parents consider themselves to be average readers and of average intelligence. Mrs. Daniels says that she reads very little. When she does find time to read, she enjoys reading how-to magazines. Mr. Daniels does not read much for pleasure. When he does read at home, it is work materials he brought home. He reads the newspaper about four days a week. Mrs. Daniels could not recall the last book or magazine her husband had read. The children do see their father read work-related materials from time to time.

When asked to describe her reading history as a child, Mrs. Daniels stated that she did not read in middle school or high school for pleasure. During her college years, Mrs. Daniels began reading for pleasure. Some of her college friends got her interested in a romance book series of books. She read several of these books over her college years. Since being married and a mother, she does not have an interest in reading for pleasure. "I wish I could find a type of book I could get interested in. But with the boys, I just can not see myself finding time to read (AD-parent p.7)." Mrs. Daniels considers literacy to be important and reads to the boys every night before bed. She and the boys also make a trip to the library about twice a month.

*Parent-Infant Advisor*

Aaron's Statewide Parent-Infant Outreach Organization parent advisor is Connie. Connie is a deaf educator for a local school system. She is an itinerate teacher with five schools on her caseload, teaching pre-school children through high school children each day. Connie's mother is a speech therapist and her father is hearing impaired. He wears bilateral behind-the-ear hearing aids for a moderate-to-severe hearing loss. He does not fully rely on sign language for communication, but has learned some signs over the years. She says she "was destined to become a teacher of the deaf (AD-advisor p.1)." She learned sign language while in college. She describes herself as having average sign language abilities. Part of her student teaching experience was with a Cued Speech classroom of children with mostly cochlear implants. She took a Cued Speech class on her own time to prepare for this student teaching assignment. She has also attended two lengthy seminars on Auditory-Verbal therapy. She applauds her college teacher education program for allowing her "to choose the path she wanted to follow (AD-advisor p.1)." Connie feels her diverse training allows her to have a more open mind and flexibility when working with Statewide Parent-Infant Outreach Organization families. When pressed for an answer, she admitted that her bias is toward Total Communication.

During an interview with Connie, she explained that she has worked with Aaron's family for approximately eight months. Their initial home visits/lesson focused on Aaron being fitted with appropriate hearing aids and follow-up from the speech therapy sessions. Mrs. Daniels was slow to accept Aaron's deafness and the extra services that her life had to embrace. "I think some of her hold ups were from [Mr. Daniels]. He was in denial for a long time. I still think he is in denial a little now (AD-

advisor p.4).” Connie describes Mrs. Daniels’s adjustment to Aaron’s hearing aids as slow. It took time for her to realize the importance of them and built up Aaron’s time wearing his amplification. Aaron is presently wearing his hearing aids 4-6 hours daily, but inconsistently. Connie explains that when Aaron wears his amplification, he get good benefit from it. She estimates Aaron’s expressive sign language vocabulary to be 15 words, and 5 understandable verbal words.

During each of Connie’s visits, Connie signs and speaks at the same time to everyone, both Aaron and her family. During each visit, Mrs. Daniels almost never signs anything. Connie described Mrs. Daniels during an interview as one who is “wishy-washy in what she wants. She has so many people telling her what to do, that she can not listen to her inner voice and decide for herself (AD-advisor p.3).” Connie will ask Mrs. Daniels periodically if she still chooses Total Communication as the communication mode for Aaron. Mrs. Daniels never gives a confident yes, but seems to want to incorporate speaking, listening and sign language as Aaron’s form of communication.

Connie describes Aaron’s language development as a few months delayed. “He is such a shy little boy. It is hard to tell what he knows and is not saying and what he just doesn’t know (AD-advisor p.2).” Aaron is very alert and picks up on everything going on in his environment. Aaron does not appear to have any cognitive problems and is quick to embrace new signs or skills Connie shows him. The family’s lack of consistent reinforcement of sign language is “hindering Aaron progress... [Connie] thinks Aaron could be a lot further along than where he is now with more practice and effort from his parents (AD-advisor p.6).”

*Aaron's Language and Literacy Interactions and Development*

The following section includes information on Aaron's language and communication choices. For Aaron, the family chose a manual approach to communication, combined with amplification. Aaron's history and experience as a reader is also described, including a snapshot description of a storybook reading experience captured during this research.

*Language and Communication Choices*

Choosing a communication method has been a hard decision for the Daniels family. It seems they have been given advice regarding Aaron's communication from so many people, they have had a hard time choosing just one method. The audiologist tells them to go to the Auditory-Verbal Center and work on listening skills. The speech therapist tells them to increase their time coming to speech therapy and to mold Aaron into a verbal person. A close friend of theirs is a teacher of deaf children and tells them that learning sign language will reduce their frustrations with Aaron while he is young. "The problem is that we forget what we should or should not say in the different situations we are in (AD-parent p.4)." While at the speech therapist, if Mrs. Daniels mentions something about signing at home, the speech therapist will "get onto me and tell me everything she already said – almost like a sermon (AD-parent p.6)." This seems to be the case at the audiologist as well.

When I asked Mrs. Daniels during the initial interview what communication method they had chosen for Aaron, she said Total Communication. Mrs. Daniels stated she feels the importance of "everything everyone is telling me. I want Aaron to listen. I want Aaron to speak. I want Aaron to sign (AD-parent p.12)." When her deaf educator

friend first started coming over to the house and teaching her some signs, Mrs. Daniels saw an immediate way to incorporate them in Aaron's life. This friend began coming over about once a week for about two months. Each time, Mrs. Daniels would pick up four or five new signs. Aaron was about 11-months-old at the time. When Aaron was about 14-months-old, Mrs. Daniels took a sign language class at the state school for deaf. The class time was inconvenient for her family schedule, so she only went to about three classes. Presently, she is not learning new signs, but trying to incorporate the approximate 30 signs she knows into Aaron's communication.

When asked about Mr. Daniels's involvement in communicating with Aaron, Mrs. Daniels stated that "he is interested. He sees signs are helpful, but he is not learning very many. My other son is actually learning more signs than my husband (AD-parent p.4)." Mr. Daniels has had a more difficult time adjusting to many aspects of Aaron's deafness. Initially, he was in denial when told of the deafness. Later, it took Mrs. Daniels "a long time to convince him that [Aaron] really had to keep his hearing aids on all the time (AD-parent p.4)." The decision to learn sign language is primarily Mrs. Daniels's, although she says her husband supports "whatever the decision is (AD-parent p.4)." Mr. Daniels does enjoy playing with Aaron, but in a more nonverbal way. He pushes him in the stroller at the park, throws or rolls the ball in the yard, and watches TV with Aaron.

Aaron is a quiet child. He does not frequently initiate conversation or interactions with others. In my observation times, Aaron only signed or attempted to verbalize single words. He stays close to his mother. Mrs. Daniels often speaks for Aaron. Several times I attempted to sit down with Aaron and ask him about a toy in the living room when I arrived, Mrs. Daniels would always speak up and answer for Aaron. When I would ask a

second, follow-up question to Aaron about another toy, Mrs. Daniels would again answer for Aaron. Aaron appears to have normal cognitive functioning, but is reluctant in expressive communication.

*Aaron's Literacy History*

The mother reads to both children before bed each night. The storybooks are selected by the older son or Mrs. Daniels from a bookshelf in the children's room. When she reads, she does not sign while she reads. Mrs. Daniels holds both children in her lap and reads aloud. The older son frequently turns the pages and engages conversation with his mother regarding occurrences in the book. Aaron sits quietly and watches the book, his mother, and brother the entire time. Often, Aaron will fall asleep before Mrs. Daniels finishes reading with her older son. Sessions each last for approximately 20 minutes. Aaron and his brother have a library of about 60 storybooks. About once a month, 1-2 new books are purchased. Mrs. Daniels takes the boys to the public library about twice a month. When asked if the children have a favorite storybook, Mrs. Daniels was quick to reply with the older son's favorite. When questioned further about Aaron's favorite, she said she was unsure.

When leaving to go ride in the car, Mrs. Daniels frequently brings books along for Aaron. Aaron's behaviors with books vary as he rides in the car. Some days, he will look at the front cover for an extended period of time on each book. Other times, he holds the book upside down and turns every page. Other days, he babbles while looking at just one open page. Aaron also chooses to look at books while at home. "Sometimes [Aaron] is missing and I go to look for him. He will be standing at in front of the

bookshelf in the boys' room. He will be looking at the books lined up on the shelves, but not touching them (AD-parent p.7).”

When asked how Mrs. Daniels thinks Aaron will learn how to read, she “pictures language coming in slower and maybe [Aaron] will not learn to read until he is in 2<sup>nd</sup> or 3<sup>rd</sup> grade (AD-parent p.10).” She also knows that it will require a lot of extra work for Aaron to learn to read. At the present time, decisions about school programs and looking to future education choices have not been made. Mrs. Daniels has done no research about programs in her area. She would like to put Aaron in the same school as his older brother, but is not sure “Aaron will know enough by then (AD-parent p.11).”

*Aaron's storybook reading experience.* This section provided an in-depth picture of how Aaron and his mother interact with books and the development of emergent literacy behaviors. This specific snapshot was chosen because it best represents an average videotaped session during this research project. My reflections interpreting this observation follow this snapshot.

*A storybook snapshot.*

The Daniels home is motionless from the outside, as is their entire street. When I knock on the door, Mrs. Daniels greets me. The two boys are back in their bedroom playing in a dome tent. They are pretend camping and cutting wood for their campfire. Mrs. Daniels tells the older son to go get his workbook and get started with his homework. It is a preschool book with activities such as tracing the dotted lines, tracing letters and numbers, and coloring. Mrs. Daniels walks over to Aaron and takes him by the hand and leads him to the living room.

I am in the living room getting the camera set up. I have a Thomas the Tank engine toy out on the sofa and offer it to Aaron when he enters the room. I sign to him “you want train?” and he smiles back and nods yes. Aaron sits on the sofa and begins to look at Thomas and explore the different features on the plastic toy. I sit beside him and sign “four wheels black, you see?” He smiles and nods. I then sign, “[point] has two eyes same-as you.” Aaron signs back, “two eyes” and smiles.

His mother enters the living room after a 2-3 minute stop in the kitchen before joining us. She returns with Aaron’s hearing aid and inserts it into his ear. She then sits on the sofa next to Aaron and reaches for the *Thomas the Tank Engine* book. I have brought five books with me today - *Brown Bear, Brown Bear, The Very Hungry Caterpillar, Thomas the Tank Engine, The Mitten, Pat the Bunny*, but Mrs. Daniels selects the *Thomas the Tank Engine* because Aaron is already holding that toy. She shows Aaron the book and says, “Look at that train. It is the same as the train you are holding.” Aaron just continues to look down at the plastic toy train. Mrs. Daniels reads the title of the book and turns the page. She skips over the title page and begins to read on the first page of the story. She read in a slow and deliberate manner, asking after every 3-4 sentences, “Aaron, do you see that?” Aaron never looks at his mother. He continues to look between the book and the toy. By the end of the book, Aaron has never made eye contact with his mother. When she finishes reading the book and closes the cover, she claps and says “yea.” Aaron puts down the toy train and claps too. Aaron has made no verbalizations throughout this book.



Mrs. Daniels easily takes the train and book and hand them back to me. I place them on the floor next to where I am sitting. She reaches for the next book, *Brown Bear, Brown Bear*. She begins by reading the title and point out “Wow, look at that brown bear Aaron.” Aaron looks between his mother and the book. Mrs. Daniels bypasses the title page and begins reading the story. Throughout the storybook reading, Aaron continues looking from his mother to the book, but mostly looking at the book. Mrs. Daniels will pause at the last phrase on each page as if waiting for Aaron to say “what he sees” as the book asks. Aaron makes no verbalizations throughout the entire book. When the book reading is complete, the clapping and slight cheers appear again.

Mrs. Daniels reaches for *The Mitten* next. I step to my bag and pull out a mitten and hand it to Aaron. I sign to him, “You want mitten? Same-as book.” He smiles and points to the mitten on the book cover. Mrs. Daniels copies my sign for mitten. It is clear to me that she did not know this sign previously. She orally reads the title of the book. She sets down the book and signs “mitten” to Aaron. Aaron signs back to his mother an approximation of the sign “mitten.” Mrs. Daniels opens the book, skips the title page and begins orally reading the story. As she read, Mrs. Daniels signed the word “mitten” to Aaron 6 times throughout the story. Each time she signed to him, Aaron would repeat his mother’s sign and smile. At the end of the book, Mrs. Daniels again claps and Aaron joins her.

The storybook reading of *The Very Hungry Caterpillar* and *Pat the Bunny* were uneventful. The storybook reading was similar to *Thomas the Tank*

*Engine.* All reading was oral and no signs were attempted by Aaron or his mother. The only comments made during the reading were “do you see that?” Aaron never replied to his mother’s questions. The questions appeared to be rhetorical anyway. Throughout the readings, Aaron would look between his mother and the book, but primarily at the book. At the end of each book, Mrs. Daniels would clap and then Aaron would join her.

*Reflections on Aaron’s storybook reading.* Mrs. Daniels’s parent-child interactions during this session were somewhat heartbreaking to me. I could feel and see the desire for language in Aaron. The way he smiled and imitated the signs I introduced to him were evidence of his need. Mrs. Daniels has also agreed to learning the signs, but appeared to either not know how to ask for assistance or be hesitant to learn more signs.

During the actual storybook reading, Aaron was very interested in the books, looking more at the books than his mother. I was not sure how much connection he had between what his mother was saying and what he was actually seeing on the pages. Nevertheless, he did enjoy looking at the illustrations as his mother turns the pages. The communication involved in the reading of books was almost completely missing. This time spent reading stories between Aaron and his mother appeared to be more quiet time together, than developing skills as an emergent reader. Aaron’s lack of verbalizations made it difficult to know how much he was or was not connecting. My assumption was that he was not connecting much in terms of literacy and learning book behaviors. My view was that Aaron loved his mother and enjoyed the special *time* he spends with her, not so much the learning and language that is surrounding him.

*Summary of Parent-Child Literacy Interactions*

During my sessions with the Daniels family, I always brought a bag of books and a toy that went along with at least one of the books I brought. When I first arrived each visit, I would try to engage Aaron in a conversation about what he was doing or playing with. As illustrated in the snapshot, he seldom replied to me directly or his mother interrupted and answered for him. As I set-up the video camera each session, I would give Aaron the storybook related toy to begin playing with. Mrs. Daniels and Aaron always sat on the sofa during my videotaped observations. Each visit, Mrs. Daniels would begin by reading the book I brought that matched with the toy Aaron was holding. As shown in the snapshot and other storybook reading sessions, Aaron's face would fill with excitement as he realized that the toy was also in the book.

Mrs. Daniels never signed and voiced as she read through an entire storybook. A percentage was calculated of words signed per book. These percentages varied from 0%-3%. This information is consistent with Mrs. Daniels's description of daily communication used in the home. Aaron always gave his full attention to the book or his mother's face as Mrs. Daniels read. Aaron was never given the opportunity to turn the pages. While reading the storybook with matching toy, Mrs. Daniels would pause on a page 4% of the time to move the toy around on the actual page of the book. After reading the storybook with matching toy, Mrs. Daniels would select a book from the children's bookshelf or from my bag. Aaron continued to pay attention while a total of four books were read each session. Mrs. Daniels paused to ask Aaron typical comprehension questions 5-9% of the time. These questions usually asked, "what do you think will happen next (AD-video p.14)?"

During discussions about the literacy logs (Appendix J) after the parent-child reading videotape sessions, Mrs. Daniels reported that she read approximately 4-6 books to the boys each night. Books listed in the literacy log included repeated readings at least once per week. Repeated readings were typically the books identified as the older brother's favorite books.

### *Reflections on Emergent Literacy Behaviors*

Aaron's situation has positive and negative aspects. On the up side, Aaron has usable hearing when aided. He shows signs of wanting to speak and attempting some words. Aaron is a bright child. He enjoys looking at books for long periods of times. He picks up on new concepts quickly when shown. On the other hand, Aaron is hindered by his lack of overall communication in the home. Aaron appears stuck between the oral approach and the manual approach. He could be successful with either one. Due to his parents' denial and lack of consistency, Aaron is progressing at a rate slower than would be expected.

Aaron's emergent literacy behaviors are average. He enjoys looking at books, turning their pages, and is very attentive. He has an adequate supply of books at his disposal. He chooses looking at books during playtime. He babbles while he looks at the books and turns the pages. His mother reads to him each night before bedtime. For Aaron's emergent behaviors to improve, communication is needed. Aaron should be encouraged to respond to comprehension questions. Sign language should be used to ensure his understanding of the books. Amplification should be worn consistently and Aaron taught how to maximize what he is hearing.

## CHAPTER 5

### CROSS CASE ANALYSIS

In Chapter four, I created portraits of the three participants. Although the studies represent independent research cases, there are commonalities among the families with preschool age deaf children. For Chapter five, I extend my analysis by making connections between the case studies. Using my three research questions as guidelines, I examined the literacy experiences of each family. I first analyzed the overall family support of each family, including the parent advisor and extended family. Next, I compared and contrasted the definitive personalities of the parents. This encompasses communication choices, early education opportunities, and daily literacy habits. Lastly, I examined the similarities and differences in the age of diagnosis and age of amplification.

#### Communication Methods and the Language Learning of These Deaf Children

During this research, the families chosen varied along several continuums. Amy and Matthew were both profoundly deaf and received no noted benefit from traditional behind-the-ear amplification. Although their hearing losses are similar, the communication modes chosen by their parents are opposite. Amy continued to wear behind-the-ear binaural hearing aids, but appeared to have no response. Her parents had chosen a Total Communication philosophy of communication, incorporating hearing, speaking, and sign language. In contrast, Matthew's family had chosen a strictly auditory approach to communication. Matthew was fitted with a cochlear implant at the earliest

time and has consistently participated in auditory training. The third family in the study, Aaron, received some gain from his hearing aids. His family had also chosen a Total Communication philosophy.

Whereas all three families have children with unaided hearing losses of PTA 70dB or greater, the children functioned in three different ways. Both Aaron and Amy's parents had chosen a Total Communication philosophy, yet were not totally committed to it. Both families were not fully enforcing any of the individual aspects of Total Communication – speaking, listening, or signing. This research showed that Amy's mother used sign language 3-10 % of the time while reading. Aaron's mother signed during a storybook reading 0-3% of the videotaped sessions. According to both parent advisors, these percentages were approximations of each parent's overall signed communication to their child. In regards to amplification, both Aaron and Amy were not wearing their amplification all day, every day. Amy was wearing her hearing aids 6-8 hours daily and Aaron was wearing his hearing aid approximately 3-4 hours daily. Both children received their aids after some delay. Aaron was fitted for amplification 14 months after his diagnosis. Amy was fitted 13 months after her diagnosis. Aaron's hearing aids benefited him greater than Amy's hearing aids did, but Aaron wore his hearing aids inconsistently. These delays are significant when the language window is a critical time for learning language that can never be recovered.

In addition to delays in committing to sign language and early amplification, both children were not encouraged to be verbal. Amy frequently was very physical when communicating. She pointed, gestured, threw, and hit to get her point across. Typical language exchanges, whether manual or verbal, were not present. Amy seemed to have

invented some of her own language to convey her point to others. She communicated in a manual way, but it was not traditional sign language. Many of her attempts at communication appeared full of frustration that she knew what she wanted to say, but could not accurately convey it to others. Amy was observed to make no understandable verbal approximations. She had a sign language vocabulary of 20 signs.

Aaron was also experiencing frustrations with communication. Aaron was not only hindered by his mother's lack of commitment to Total Communication, but also by his mother's unwillingness for Aaron to speak for himself. On several occasions I gave Aaron the opportunity to speak to me, but he did not primarily due to his mother answering for him. Aaron was not having true interactions with his mother since his mother does the majority or all of the communicating. It is unclear whether Aaron was a reluctant speaker because his mother was enabling him to not speak, he was shy, or he lacked the communication skills to respond. Aaron had a vocabulary of only 15 signed words and 5 verbal words.

Matthew's parents were quick to decide and commit to an Auditory-Verbal approach for their son. Due to their family history of deafness, they were psychologically prepared and ready to be proactive. They enforced the principles behind an auditory approach with their full effort. They provided Matthew with the earliest opportunity to become auditory. They provided and participated in the stringent therapy and time-consuming training needed to succeed at an auditory approach. They did not discourage him at any point in this long journey. Matthew was a success story with language learning because of these factors. Matthew had a verbal vocabulary comparable to that of hearing children his age. No delay was observed.

### Parent-Child Literacy Interactions of These Deaf Children

Each of the families chosen for this research consisted of a stay-at-home mother and an older sibling ages 4-6. The deaf children at the time of this study varied in ages from 24-months to 2-years 11-months. Each child was referred to the Statewide Parent-Infant Outreach Organization program through Infant Disability Services. The ages of referral to Statewide Parent-Infant Outreach Organization varied from 10-months to 1-year 5-months. The time each child had been assigned to a Statewide Parent-Infant Outreach Organization Parent Advisor ranged from 11 months to 18 months. The families in this study appeared to be comparable in these areas.

Noted differences between each family included parents' education level, family income level, and adult reading participation. Amy's parents were considered low in all three of these areas. The family had a low income level, both parents were high-school dropouts, and the parents rarely read for pleasure. Aaron's family was considered to have an average to above-average income level and both his parents are college educated. Mr. and Mrs. Daniels did read the newspaper or magazines on occasions, but never a book in the presence of their children. Matthew's family was considered to an upper-middle class family, both parents were college educated, and both parents read for pleasure. When considering contributing factors to the success of a child's literacy, Matthew's family appeared to have a better advantage. Income and education level are important factors, but a love for reading may be vital.

According to the data, all three of the deaf children were read to before bed. Amy was read to before bed 3-4 times a week for approximately three minutes. Aaron was read to before bed nightly for 20 minutes. Matthew was read to before bed and at other



times during the day for approximately 15 minutes each time. Each parent did attempt storybook readings on a regular basis. The three children do differ in other ways. Both Amy and Aaron did not select the books during parent storybook reading. Matthew did. Both Amy and Aaron did not have a favorite storybook. Matthew did. Amy had never been to the public library. Aaron visited the library about twice a month. Matthew visited the library more than once a week. Lastly, Amy's and Aaron's parental expectations for how their children will learn to read were low. Amy's mother had no expectations or goal for her daughter's independence as a reader. Aaron's mother had lesser expectations, feeling that he will have a 2-3 year delay when learning to read independently. Matthew's mother expected no difference in how Matthew will learn to read in school. Her expectations were that Matthew will be the same as hearing children.

Through scaffolding, Matthew's mother was able to present the storybook reading with meaning. Matthew was able to draw meaning, understanding, and connections as his mother and other adults read to him. When Amy and Aaron's mother read to them, reading was not meaning making. Reading was not communication. Reading was not language. Reading was a social time with either positive or negative interactions between a mother and her child. When reading is not meaning making, it is not developing literacy skills towards independent reading and understanding.

Similar to the work of Heath (1983), the parents in this study talk to their children and teach them to communicate differently. Amy's mother could be compared to the people of Trackton in Heath's book *Ways with Words*. In this book, reading is not modeled for children from Trackton. The only books available to them are school books or borrowed books. The people of Trackton are also noted to talk more to their children.

As Heath noted, more talk does not correlate to academic success and learning. With Amy, Mrs. Barnes displays a commitment to reading to Amy; however, more reading does not correlate to language and literacy learning. Aaron Daniels and his family are most similar to the Roadville people in Heath's book. Mrs. Daniels does expose Aaron to the library and read to him on a regular basis. Aaron has respect for books, but does not fully understand the purpose and gain benefit from them. Matthew Pruitt is similar to Heath's Townspeople family. Like the Townspeople, the Pruitt family has taught Matthew respect for books, but also an understanding of the language and communication within books. Matthew is not left to see the relationships between books and his environment on his own. His parents and other adults scaffold conversations around book experiences, including comprehension questions during the actual storybook reading. As Heath noted in her book and I observed in this study, it is the *kind* of talk and literacy interactions, not the *quantity* that notes the differences between these families. In this study, all families showed evidence of reading, but Matthew showed evidence of appropriate scaffolding, working within his zone of proximal development, and true language and literacy learning.

#### Preschool-age Deaf Children's Emergent Literacy Behaviors

During this research study, the three deaf children varied as emergent readers. Emergent literacy includes the reading behaviors prior to mature and conventional reading (Yaden, Rowe, & MacGillivray, 2000). The emergent literacy behaviors were observed through the research, but also reported through parent interview.

Amy had the most immature literacy behaviors of the three deaf children in this study. She has difficulty sitting still through a book reading, frequently squirming and

hitting the book as her mother tries to read to her. On a day-to-day basis, Amy did not request that books be read to her. When Mrs. Barnes did read to Amy, Amy watched as her mother turned the pages. Mrs. Barnes stated that she never asks comprehension questions to Amy or her brother as she reads. She just wanted the children to sit still as she reads. Mrs. Barnes is not aware that Amy is not connecting to the print as she reads to her. Mrs. Barnes also does not scaffold her interactions with Amy within her learning zone. While reading to her children, Mrs. Barnes's questions and behaviors may be appropriate for her son, but not for Amy. Amy is not developing a language or communication from these storybook experiences. Mrs. Barnes lacks an understanding of how language and literacy develop naturally with deaf children. At other times during the day, Mrs. Barnes had observed Amy picking up books and attempting to read them. Amy babbled unintelligible words as she walked through the house. Amy had also been observed to bang the books on the furniture as she walked through the house. During the videotaped observations, Amy was seen to turn the pages on a few occasions as her mother read. She also tried to take the book away from her mother. Her attention span was limited and she sat still through the storybook reading only 7% of the videotaped readings.

Matthew had the most mature literacy behaviors compared to the other two deaf children in this study. Not only did Matthew's parents read to him on a regular basis, his grandparents, daycare teachers, and Parent Advisor also read to him. Matthew frequently requested specific books during story time. He also requested rereadings of the same book during a single session. Mrs. Pruitt had observed Matthew picking up books and attempting to read them to an imaginary audience. As he turned the pages, he made up a

story similar to the actual story printed on the pages. Away from books, Matthew frequently made connections between information learned from books and the environment he is in. Mrs. Pruitt reported that she will often use her finger to follow the words as she reads to Matthew. This assisted Matthew in learning the correlations between print and the oral language. Mrs. Pruitt also questioned Matthew about story events as they read, checking for comprehension. Mrs. Pruitt provided Matthew with appropriate scaffolding while reading. As she read, Matthew is able to develop a communication competency. Matthew sat still and attended to storybooks readings 91% of the time. He also helped his mother select the book 83% of the time and turned the pages of the book 73% of the time.

Aaron was also emerging in his literacy skills. He enjoyed looking at books in a variety of ways. He sat quietly and watched the book as his mother read to him each night. He looked at books during car trips. His behaviors in the car varied from staring at the cover, holding the book up-side-down as he flipped the pages, or babbling an imaginary story while looking at just one page. Aaron also liked to look at the children's book shelf and stared at the books provided in home. Mrs. Daniels reported that Aaron always gave his full attention to either the book or his mother as she read to him. During the videotaped observations, Mrs. Daniels was observed to never allow Aaron to turn the pages as she read. She asked Aaron comprehension questions 5-9% of the time during storybook readings. Her scaffolding for Aaron during storybook readings was too high, similar to Amy's mother. Mrs. Daniels made a commitment to read to Aaron, but does not realize that she is reading outside of his learning ability. As his mother read, Aaron

was not able to develop communication or language skills since the storybook reading occurred at too high of a comprehension level.

Socialization also plays a role in how children learn. Each deaf child had an older sibling that could be viewed as a playmate and peer. Aaron did not participate in any daycare or other programs outside his home. Amy attended church on a regular basis, but did not seem to benefit from the peer interactions. Because Amy was primarily dependant on sign language for communication and there was no sign language interpreter or church members who knew sign language, there was no accessibility to peer interactions and play while at church. Matthew attended a peer playgroup on a daily basis. During this time, he was able to access language and communication from others. He was learning to mediate his wants and needs, as well as the meaning of language.

A number of factors may contribute to why Matthew was excelling as an emergent reader. He was given repeated opportunities to interact with books and about books. He had several adults in his life that provide examples of reading to him. Matthew understood the function of books as demonstrated by him approximating a retelling of the book as he turned the pages. He understood that the print follows the pictures, but it also follows a sequence and pattern. Matthew also had a command of language and its use in society. As his parents read to him, they scaffolded their conversations around books and book talk at Matthew's learning level. In turn, Matthew was not frustrated by books. He was able to systematically develop a language and communication competency from storybook reading.

## Summary

In examining the three participant and their portraits as a whole, a more detailed picture reveals itself in the success and struggles of an emergent reader. Overall family support through extended family and parent advisors has assisted in making each child the emergent reader they were at the end of this study. In Matthew's case, family support allowed him to see reading as an activity that all people enjoy. His parents made themselves known and were seen as readers to Matthew. This may have led to Matthew internalizing that reading is important. The commitment shown by Matthew's parents in their early decision and commitment to a communication mode also allowed Matthew to progress in areas beyond simple vocabulary. Amy and Aaron both have vocabularies notably less than that of their hearing peers. This difference could be explained by Amy's and Aaron's parents not quickly or fully committing to a communication system. In addition, these parents were inconsistent in their use of the communication system they did choose. As a result, their reading of stories resulted in little communication with their children. Rather, the children were typically passive observers, instead of interactive participants. Both Amy's and Aaron's parents did not understand the need for communication and language to develop as they read. Through a lack of age and ability appropriate scaffolding as they read to their children, Amy and Aaron are not developing the communication abilities and basic language require for literacy understanding and enjoyment. In contrast, the early diagnosis of deafness and early amplification aided Matthew in his emergent literacy success. He learned that language has a place in his life and how to access this language. In the subsequent chapter, I will further explore these

three themes of overall family support, definitive personality, and early identification and amplification, as well as offer implications for future research.

## CHAPTER 6

### DISCUSSION AND CONCLUSIONS

As both a deaf educator and product of the college education I received, I have believed that Total Communication is the best choice for all profoundly deaf children. My opinion had changed somewhat in recent years with the introduction and improvement of the cochlear implant. I have witnessed my own students speak clearer and hear more with their cochlear implants. I still do not believe that cochlear implants are for every profoundly deaf child. Through this research and experience in my own classroom, I have come to believe that a Total Communication philosophy could be reconsidered as the primary choice of communication for most profoundly deaf children.

When I began this study, my beliefs about Total Communication or Simultaneous-Communication (signing and speaking at the same time, incorporating auditory, oral, and manual communication together) shadowed a bias on what conclusions I thought I might reveal in this study. I thought my biggest challenge during this study would be to accurately portray each family without letting my opinions and support for Total Communication be seen. I was wrong. I still feel strongly that Total Communication is a worthy communication philosophy for profoundly deaf children – when given the commitment and effort it demands. Because Total Communication is a *philosophy* that can use multiple codes and multiple languages (including fingerspelling,



writing, and speech) to impart knowledge, Amy and Aaron's parents would have best described their *language* choice as a signed system, such as American Sign Language (ASL). Although this naturalistic study could not have led to generalizations, the findings in this study did lead me to consider the complexities faced when hearing parents choose Total Communication, or a manual communication system, for their deaf child. Amy and Aaron's parents were neither using a consistent visual or spoken input code nor presenting an accurate model of either language (English or ASL). Their inconsistent use of a language may be the reason for Amy and Aaron's struggle with language, communication, and ultimately literacy skills. The Total Communication philosophy requires extensive commitment and ongoing effort from parents for the philosophy to be successful and this study indicates some parents may choose such an approach but fail to implement the practices associated with Total Communication successfully. This study was not designed to test whether Total Communication was successful. In this study, the parents who gave full commitment and effort found a successful method for their child. This does not mean the other communication methods, approaches, or philosophies failed.

As shown in previous studies (Zwiebel 1987, Brasel & Quigley 1977, Schiff-Myers 1982,) deaf children of deaf parents achieve at higher communication, cognitive, and academic levels than deaf children of hearing parents. One of the primary reasons for the success of deaf parents with deaf children is their immediate ability to offer manual communication to their children from birth. The parents have a proficient, often superior, command of manual communication. In the present study, data were not available to determine the effectiveness of a manual philosophy such as Total Communication when

hearing parents had a proficiency in using the signs, vocabulary, and grammar. Both Amy and Aaron's parents did not become proficient with sign language and therefore their ability to teach their children to communicate was severely limited.

In the beginning as I began to think about all the aspects of emergent literacy and parent involvement included in this study, questions began rolling around in my thoughts. What types of activities do parents engage their child with in order to foster literacy learning within the child? Does the Language First curriculum and parent advisor help to foster literacy in the home? What role do parents play in children manipulating their environment to make their own experiences? Do parents introduce vocabulary, explain new concepts, and support their deaf child's learning similar to parents of hearing children? Does the communication mode of the child play a pivotal role? I started with the research on hearing children and emergent literacy, as well as research on how deaf children learn to read. The research prompted me to develop the three research questions for the study. I thought I knew the answers to many of these questions before the study began, but some answers did not develop as I expected. In this chapter, I reiterate the findings of the study, discuss the conclusions I have come to, and offer implications for further research studies.

The findings presented in this study are isolated to the three families I studied and my role as the researcher. However, because of their variation in socioeconomic level, variation in communication choices, similarity in degree of deafness, and similarity in ages, there are other families with similar literacy experiences. This study contributes a perspective into deaf children's homes and how each child comes to understand and grow in their literacy interactions. Through the examination of parent interviews, parent

advisor interviews, and videotaped literacy interactions, a developed picture emerges in how parents foster literacy skills in their children. It is important to note that although this study was reduced from ten families to three families, all the children had similar degrees of deafness and similar ages, as well as variation in their socioeconomic levels and communication choices.

### The Parents

All of the parents in this study were facing the decisions of how to raise a deaf child for the first time. Each of the parents also had a hearing child first, then the deaf child as their second child. All families had just the two children. Some noted variations in the parents included socioeconomic status and parent's education level; however, I feel the greatest variation in the parents was their personalities. Amy's and Aaron's parents seemed complacent and willing to accept what information was given to them. They acted on referrals from doctors. They moved from doctor to audiologist with a referral. They moved from audiologist to Infant Disability Services with a referral. They moved from Infant Disability Services to the Statewide Parent-Infant Outreach Organization with a referral. Their path was laid out for them by professionals and those are the only efforts the parents exerted. Since these families had no prior knowledge of deafness, communication choices, amplification, etc., they trusted the expertise of the professionals around them. Amy and Aaron come from families with different socioeconomic levels and parent education levels, yet both seem to have similar experiences in this study. Aaron's socioeconomic level and parent education level compare closely to Matthew's, but the end results were different. Matthew's parents were both active and proactive. They knew before Matthew was born that they wanted his hearing tested due to a family

history of deafness. After learning that Matthew was deaf, they sought out the information and services. This prior knowledge of deafness and the many implications for amplification and communication assisted the Pruitt family in getting a head start on the choices they made. They read and researched to make themselves educated and informed. They made the efforts need to provide amplification as early as possible for Matthew. They made the commitment to attend Auditory-Verbal therapy and speech therapy as soon as Matthew's cochlear implant was turned on. They stayed dedicated to their son's progress. The Pruitts understood that learning begins at birth (Lindfors, 1987), and did not want to waste any of the critical period when children learn language (Meece, 1997).

The active and proactive stance that Matthew's parents adopted was not necessarily based on their socioeconomic level. Making telephone calls to get the information needed for your child is not limited to those families in a higher income status. Being diligent and dedicated takes a commitment, not money. All three mothers in this study were stay-at-home mothers. All would have equal access to the telephone and the amount of time to make the requests for information. All three families would also have had equal time to spend working on skills shown to them by the parent advisor. Amy's family is considered a lower socioeconomic level and parent's education level than Matthew's or Aaron's family. It may be that Amy's parents were influenced by the fact that they may not have had the funds or education background to fully pursue the services and information that Matthew's and Aaron's parents could.

Still, I feel the difference in the three families narrows down to definitive personalities. Aaron's and Amy's parents seemed to be content and comfortable with

their children's lives. They were clear in the communication choices they chose for their child, but lacked the clear commitment in pursuing it. For both manual and non-manual communication choices, effort and commitment is required from the child and especially the parents. The less proactive personalities of Amy's and Aaron's parents hindered their children from progressing with language and communication, and therefore literacy skills. The definitive personality of Matthew's parents allowed Matthew to progress with his language, communication, and literacy skills.

Amy and Aaron's parents also lacked the knowledge and ability to adjust their communication during storybook reading. All three families showed a commitment to reading to their children. Amy and Aaron's parents lacked the knowledge of *how* to read to their child. They lacked the ability to scaffold the communication, in order to develop the communication for literacy learning experiences. Matthew's parents somehow knew how to appropriately scaffold for Matthew and for language development to occur. None of the three families were directly taught how to scaffold while reading to their children. The Pruitts just had an innate awareness and knowledge of this skill. Consistent with Vygotsky's (1962, 1978) theories, they were able to scaffold Matthew's language experiences within his zone of proximal development. During book reading Matthew was constructing meaning because his parents were providing support matched to his needs. In contrast, Amy and Aaron's parents were presenting language and communication beyond the scope of what their children could understand at the time. Their support targeted development which may have been within their children's potential at a point in the future, but the types of questions and the reading that the parents provided did not match their children's level of functioning. Because the parents'

scaffolding was not within their children's zone of proximal development, Amy and Aaron could not learn and absorb the language presented to them, even with the support of a parent.

David Schleper (1997) offered 15 principles of how to read to deaf children. Many of these principles are specific to children who use manual communication. When comparing these principles to Amy and Aaron's reading experiences, one can see why they struggled in their literacy and communication progress. For example, both Mrs. Daniels and Mrs. Barnes did not translate the stories using American Sign Language or any manual communication system. Most importantly, these mothers did not read to their children with the full expectation of their child becoming literate. As noted from their parent interviews, both Mrs. Barnes and Mrs. Daniels stated some delay in their child's future reading success. Contrarily, Mrs. Pruitt stated none.

#### Overall Family Support

Each of the three families was assigned to a parent advisor for a period of time 11-18 months. I think it is fair to assume that each parent advisor has similar background and knowledge base to share with each family. All three parent advisors were knowledgeable and educated in the areas of deafness, including amplification, communication, and education. I feel that all three families were equally represented by their Statewide Parent-Infant Outreach Organization parent advisor in this study.

Immediate and extended family support in this study differed. Only Matthew had the support and active involvement of his father and grandparents. According to Taylor (1981), children are affected by the family interactions and experiences of daily life both inside and outside their immediate family. Both Amy's and Aaron's fathers played a

backseat role in parenting and as a role model for literacy. Matthew's parents also had the family support from his moms-morning-out class and the playgroup at the gym. Matthew was treated as an equal in all these environments, as well as thrived in these environments. The Pruitts used adult-child interactions, not limiting Matthew to only parent-child interactions, to guide Matthew into new knowledge and understanding of literacy (Vygotsky 1962, 1978). Amy and her family did attend church services regularly. Unlike Matthew, Amy was not treated as an equal in this setting. She had no access to communication and did not show social or language progress as a result of attending church services. As Meadow-Orlans (1990) pointed out, a lack of communication can isolate a young child from meaningful language interactions. Aaron's family had no outside family support. These differences in immediate and family support show that a mother can not do it all. The outside support of a parent advisor, the father, family members, and adults in a community environment all lead to the overall progress and success of a child.

#### Early Identification and Amplification

In most medical instances, early identification is the key to future success. Deafness is no different. The sooner a child can be diagnosed as deaf, the sooner steps can be identified towards a successful future. A successful future could include manual or non-manual communication. The important idea is that a plan is establish and followed. As with Matthew, he was identified at birth and a decision was made almost immediately regarding his amplification and communication. With Amy and Aaron, their identification was delayed when compared to Matthew's. Amy should have an advantage over Matthew and Aaron since she had hearing abilities and the beginning stages of

language development before her meningitis. In comparison with the three children, Amy appears to function with the most difficulties with hearing, understanding, and overall communication. Amy and Aaron both had delays in their deafness diagnosis, but also delays in amplification. These delays are compounded by wearing the amplification inconsistently. Matthew shows progress and success because he was diagnosed early, amplified early, wears amplification early, and participates in therapies to continue this progress. Larrick (1983) points out that a child does not acquire language skills alone. They need a language model that knows the language better than the child. Amy and Aaron's delays in amplification are compounded with their parents' minimal proficiency in manual communication. The limited communication they experienced with their parents did not resemble the child-directed speech called motherese (Snow, 1977) that hearing children typically experience. These children needed parental interactions in which parents use Total Communication philosophies to emphasize, repeat, and abbreviate language (Easterbrooks & Baker, 2002). These repeated exposures and interactions might have enabled Amy and Aaron to respond through imitation. However, the parents would also have needed to increase their ability to sign beyond a limited vocabulary if they were to effectively model good use of language for their children.

#### Implications for the Statewide Parent-Infant Outreach Organization program

The Statewide Parent-Infant Outreach Organization program has a large responsibility to the deaf children and their parents. Parents are guided through the stages of acceptance of their child's diagnosis, taught about the various options in communication, option in amplification, and activities for family interactions with the deaf child. This is a large undertaking for any agency.



An area of need for the Statewide Parent-Infant Outreach Organization is in their home activities or sessions planned between the parent advisors, parent, and child. There is a gap in the area of educational training. With Amy and Aaron, their parents were not taught how to interact with their deaf child around literacy activities and other educational opportunities. Matthew's parents were also not taught how to interact with literacy activities, but took the initiative to learn on their own time. A component should be added to the home management plans to include educational training and activities between the parent and child. Principles of emergent literacy could be introduced and demonstrated. Anbar's (2004) showed that children who are read to frequently learn to read and write early. In the three cases presented in the present study, all three children were to, but not frequently or with appropriate access to the language being read. Piaget (1971) pointed out that children construct meaning through an active role in learning. When the parent-child interactions are primarily one-sided as with Amy and Aaron, the child is not involved in making meaning during the literacy event.

As Zwiebel (1987) and Schleper (1997) noted, deaf parents of deaf children have demonstrated advantages in communication and cognitive development. Through his work with parent-child interactions around reading experiences, Schleper noted that many deaf children lack the experience of being read to by a parent or teacher. Many parents know it is important to read to their deaf child, but do not know how. The Shared Reading Project at the Laurent Clerc National Deaf Education Center of Gallaudet University could be an invaluable resource to demonstrating literacy skills in daily practice.

The role of parent advisor with the Statewide Parent-Infant Outreach Organization seems to be standardized so that all families receive the same unbiased information. I recommend a more flexible approach, in an effort to meet the families where their needs are. For example, unbiased information should be initially presented to all families so that *they* may decide which communication and language model is best for their child. After the communication method is selected, a parent advisor that specializes in that method should be paired with the family. This would allow the parent advisor to cater to the family. In addition, a center-based program may also benefit the families. This program would be a place where families could come and learn in a naturalistic environment, focusing on the principles of the communication method they chose.

In addition, professional development should be provided to parent advisors in how to effectively teach these literacy and education skills. Materials for the parent advisor to bring on each visit should be provided. A checkout system should be available to parents with limited financial or transportation means. Parents must both know what to do and also have the necessary materials to carry through with the plan. Grants could be written to provide these materials for both parent advisors and parent checkout.

#### Suggestions for Further Research

This study offers insight into understanding how parents communicate and interact with their deaf child around literacy activities. Although this study does provide some answers as to what factors make for a successful combination for an emergent reader, it also raised questions that need further probing in the future. I recommend that future research into this topic extend across more families, more families in each communication method, and families with varied etiologies of deafness. If more families

could be identified, specific subgroups could be examined. For example, a non-manual group of deaf children with cochlear implants could be research for differences among their socioeconomic status and age of diagnosis and amplification. If subgroups could be analyzed, they could be compared and contrasted for their overall emergent literacy tendencies and behaviors.

### Concluding Comments

This experience of conducting this study remains with me. As a new group of students enter my classroom each school year, I find myself looking at them differently. I wonder about their prior experiences – etiology, amplification, communication, literacy. I wonder if and how much their parents read to them. I am challenged by these questions. Just as the differences between Matthew, Amy, and Aaron did not take long to emerge, the literacy behaviors of the students I teach also emerge quickly. Emergent literacy behavior and experiences in children can not be instilled into a child overnight. It is clear which families have taken the time and effort to make their child an emergent reader. It is clear which families have been quick, decisive, and committed to a communication mode for their child. Examining the literacy experiences of Amy, Matthew, and Aaron compelled me to reflect on my role as their teacher. I am now committed to making every effort for my students to growing as readers and surpassing the statistic of 4<sup>th</sup> grade reading abilities for deaf children (Hart, 1978; Marschark, 1997; McAnally, Rose, & Quigley, 1999; Paul & Quigley, 1990; Yoshinaga-Itano, Sedey, Coulter, & Mehl, 1998).

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## APPENDIXES

## Appendix A

## Literacy Interactions of Preschool Deaf Children with their Parent in the Home

## Consent Form

I have been asked to participate in a study of literacy interactions with my child and me in our home. If I choose to participate, I will be interviewed and asked to complete a questionnaire about the literacy activities my child and I are involved in. My child and I will also participate in interviews with the researcher. I understand that the researcher will be observing and videotaping the literacy interactions between my child and me in our home. The length of the study is anticipated to be 6 months, including home visits by the researcher approximately 10 times.

I understand I will be asked questions about my child, his/her deafness, his/her life, and our literacy interactions together. I understand that the researcher will also interview the Statewide Parent-Infant Outreach Organization parent advisor about her observations of literacy interaction between my child and me. I understand that the researcher may share her conclusions with me, if I choose. This study may also lead to a better understanding of the literacy interactions of deaf children and the benefit of home and parent involvement.

No risks are foreseen.

The findings will be analyzed and reported in written form, and my participants will not be identified. Information I provide will be kept confidential to the extent allowed by law and not reported to others outside the research project in a way that personally identifies me.

I may ask questions about this project of the researcher, Laura Wise, or her advisor, Dr. Joyce Many. The State University Research Office can provide me with general information about the rights of human subjects in research.

I have read and understand the above, and I agree to participate in this study. I also grant permission for my child to participate in this study.

---

 Parent Printed Name

---

 Parent Signature

---

 Date

---

 Child Printed Name

## Appendix B

## Literacy Interactions of Preschool Deaf Children with their Parent in the Home

## Consent Form

I have been asked to participate in a study of literacy interactions with the deaf child I work with through the Statewide Parent-Infant Outreach Organization early intervention program. If I choose to participate, I will be interviewed about the literacy activities the child is involved in and my observations of the other interactions I have observed between parent and the child. I understand that the researcher has obtained prior permission from the parents of the child I work with, as well as Statewide Parent-Infant Outreach Organization. I understand that the researcher will be audio taping the interview.

I understand I will be asked questions about the child, his/her deafness, his/her life, and the literacy interactions between parent and child. I understand that the researcher may share her conclusions with me, if I choose. This study may also lead to a better understanding of the literacy interactions of deaf children and the benefit of home and parent involvement.

No risks are foreseen.

The findings will be analyzed and reported in written form, and my participants will not be identified. Information I provide will be kept confidential to the extent allowed by law and not reported to others outside the research project in a way that personally identifies me.

I may ask questions about this project of the researcher, Laura Wise, or her advisor, Dr. Joyce Many. The State University Research Office can provide me with general information about the rights of human subjects in research.

I have read and understand the above, and I agree to participate in this study.

\_\_\_\_\_  
Parent Advisor Printed Name

\_\_\_\_\_  
Parent Advisor Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Child Printed Name

## Appendix C

Initial Parent Interview Questions

Child: \_\_\_\_\_ Date: \_\_\_\_\_

- 1 – Describe your child. Age, dB loss, etiology, language development, cognitive functioning, communication mode
- 2 – What is your child's approximate vocabulary – signed or spoken? # of words
- 3 – What influenced your decision to sign/not sign? Do you and your spouse feel the same way?
- 4 – How was your child referred to Statewide Parent-Infant Outreach Organization?
- 5 – How would you describe yourself and your spouse. Income, education, participation, communication mode
- 6 – What type of activities does the Statewide Parent-Infant Outreach Organization parent advisor work on with you?
- 7 – Describe the interactions you have with your child. With mom? With dad? Literacy or any other interactions.
- 8 – Describe the ways books are used in your home. Valued? On shelves? Together activity? Individual activity?
- 9 – How do you read to your child – face to face or in the parents lap?
- 10 – How does your child interact with books? What did you observe – biting on book, looking at pictures, book upside down, ...
- 11 – Does your child have a favorite book? What have you observed to know that is his/her favorite book?

12 – Have you been offered any training or assistance in coaching on reading or writing (any literacy activity) with your child? Explain.

13 – How will your child view a video camera in your home? Will your child change when the video camera is presented into the home?

14 – Did you, the parent, read as a child? What ages?

15 – Do you read for pleasure now? Does your child see you reading alone?

16 – What are your opinions on how deaf children learn to read? At what age? In what manner?

17 – Do you think the Statewide Parent-Infant Outreach Organization program and Language First curriculum does an adequate job of introducing literacy activities to parents and children? Explain.

Appendix D  
Parent Questionnaire

1. Does anyone read to your child now? YES/NO
  - a. Who? Mother/Father/Sibling/Other \_\_\_\_\_
  - b. How often? Approximate times per week \_\_\_\_\_
  - c. At what time? Morning/Afternoon/Evening \_\_\_\_\_
  - d. How long do the sessions last? Time in minutes \_\_\_\_\_
  - e. Who selects the book(s)? Parent/Child \_\_\_\_\_
  
2. Where does your child get his/her books? School library/Public library/Home
  - a. How many books does the child have at home? Approximate number \_\_\_\_\_
  - b. How often are books checked out from the library? Times per month \_\_\_\_\_
  - c. Who selects the books to be checked out? Parent/Child \_\_\_\_\_
  - d. Does the child have any favorite books? YES/NO \_\_\_\_\_
  
3. Does your child have a library card? YES/NO
  - a. Titles of a few favorites books: \_\_\_\_\_
  - b. How often does he/she request them to be read? Times per week \_\_\_\_\_
  - c. Does your child try to read them him/herself? YES/NO \_\_\_\_\_
  - d. Has your child ever indicated why the book is liked so well? YES/NO \_\_\_\_\_  
Reason: \_\_\_\_\_
  
4. Does your child ever ask questions while your reading to him/her? YES/NO
  - a. About what kinds of things does he/she ask? Pictures in books/Characters in books/Names of letters/Sounds of letters/Written form of words/Meanings of words/Content of stories/.  
Other \_\_\_\_\_
  - b. Will he/she ever ask the same question over and over again? YES/NO \_\_\_\_\_
  - c. Does the same question ever occur in the same place in a book? YES/NO \_\_\_\_\_
  - d. Do you ever ask your child to just sit still and listen to the story?  
Never/Sometimes/Often \_\_\_\_\_
  - e. Does he/she request books to be reread during the same session? YES/NO \_\_\_\_\_
  - f. How many times have you reread one book in one session? Approx. times  
\_\_\_\_\_
  
5. Does your child ask questions about books at other times when you are not reading to him/her? YES/NO
  - a. When? \_\_\_\_\_
  - b. How often? Frequently/Sometimes/Seldom \_\_\_\_\_
  - c. Do you try and answer as many as you can? YES/NO \_\_\_\_\_
  - d. Does being able to communicate ever get in the way? YES/NO \_\_\_\_\_
  
6. Does your child every copy/trace titles of books or attempt to draw a picture related to stories that have \_\_\_\_\_

been read? YES/NO

- a. Aspects of books that are traced/copied \_\_\_\_\_
- b. Kinds of pictures drawn \_\_\_\_\_

7. Have you every heard your child use words that you feel come from the books that you have read? YES/NO
8. Have your ever heard your child use language in play that sounds like it comes from a book? YES/NO
9. When your are reading to your child, do you feel like she/he knows you are saying the written words? YES/NO
  - a. Do you ever make up parts of the story as you are reading such as imaginary dialogue between the characters? YES/NO
  - b. Do you think that your child knows it is made up? YES/NO
10. What form of communication do you use when you read to your child?  
Voice only / Sign only / Voice with Sign
  - a. If you sign, do you sign word for word (SEE), ASL, or just the basics of what is happening in the book?
  - b. What parts of reading to your child do you feel the most comfortable with? \_\_\_\_\_
  - c. What parts of reading to your child do you feel the least comfortable with? \_\_\_\_\_
11. What do you feel that story reading does most for your child? \_\_\_\_\_



## Appendix E

Statewide Parent-Infant Outreach Organization Parent Advisor Interview Questions

PA: \_\_\_\_\_ Date: \_\_\_\_\_ Child: \_\_\_\_\_

1 - What is your background in deaf early intervention? What made you interested in becoming a Statewide Parent-Infant Outreach Organization parent advisor? (teachers of the deaf and hard of hearing, speech/language pathologist, audiologist, and social workers)

2 – Describe the child you work with. Age, dB loss, etiology, language development, cognitive functioning, communication mode

3 – How was the child referred to Statewide Parent-Infant Outreach Organization?

4 – Describe the child’s parents/family. Income, education, participation, communication mode

5 – What type of activities do you work with the family on?

6 – Describe the interactions you have observed between the parent and the child. With mom? With dad? Literacy or any other interactions.

7 – Describe the ways books are used in the child’s home. Valued? On shelves? Together activity? Individual activity?

8 – How does the parent read to the child – face to face or in the parents lap?

9 – Have you ever seen the child interact with book? What did you observe – biting on book, looking at pictures, book upside down, ...

10 – Do you think literacy is valued overall in the child’s home?

11 – Do you know if the child has a favorite book?

12 – Have you offered any training or assistance in coaching the parent on reading or writing (any literacy activity) with the child? Explain.

13 – Can you offer me any advice in working with this family? Are they responsible? Will they follow through with appointments, etc.? How will they view a video camera in their home? Will the child change when the video camera is presented into the home?

14 – Did you, the parent advisor, read as a child? What ages?

15 – Do you read for pleasure now?

16 – What are your opinions on how deaf children learn to read? At what age? In what manner?

17 – Do you think the Statewide Parent-Infant Outreach Organization program and Language First curriculum does an adequate job of introducing literacy activities to parents and children? Explain.

## Appendix F

## Findings Chart

	Communication Mode	Child's Age	Amplification	Hearing Loss	Family Income	Parents' Education	Parents' Interest in Reading	Frequency Read to the Child	Parent Advisor
Barnes	Total Communication	2-11	2 BTE	Profound	Low	Both 11 <sup>th</sup> Grade	Low	Low	Great
Pruitt	Auditory Verbal	2-9	CI	Profound	Upper Middle	Both 4 year college	High	High	Great
Daniels	Total Communication/Oral	2-1	1 BTE	Severe-Profound	Mid-Upper Middle	Both 4 year college	High	High	Average

## Appendix G

Final Parent Interview Questions

Child: \_\_\_\_\_ Date: \_\_\_\_\_

1 – Describe your child’s growth as a reader over the past 10 weeks.

2 – Do you think your child’s vocabulary has grown? By approximately # of words?

Spoken or signed?

3 – If you could change any aspect of the activities the Statewide Parent-Infant Outreach

Organization parent advisor works on with you, what would you change or add?

4 – Do you think you do an adequate job as a language model for your child?

5 – Have you grown in your parent-child interactions during this research time? How?

## Appendix H

## Literacy Log for Amy Barnes

A= read to child alone (one-on-one with parent)

S= read to child with sibling (2 children with 1 parent)

M= mother read

F= father read

Date	Book Title	Mother or Father As the Reader	Read to child alone or with sibling	Attention span in minutes
2/5	<i>Hop on Pop</i>	M	S	1
2/7	<i>The Crazy Quilt</i>	M	S	2
	<i>Is Your Mama a Llama?</i>	M	S	2
2/9	<i>Hop on Pop</i>	M	S	3
	<i>The Elves and the Shoemaker</i>	M	S	0
2/11	<i>Why Can't I Fly?</i>	M	S	3
	<i>Hop on Pop</i>	M	S	4
2/12	<i>The Crazy Quilt</i>	M	S	5
2/16	<i>The Very Bust Spider</i>	M	S	1
	<i>T-Rex is Missing!</i>	M	S	3
	<i>Valentine Mice!</i>	M	S	3
2/18	<i>The Ugly Duckling</i>	M	S	3
2/19	<i>Shapes at Home</i>	M	S	4
	<i>Rick is Sick</i>	M	S	2
2/22	<i>The Ugly Duckling</i>	M	S	3
	<i>Shapes at Home</i>	M	S	1
	<i>Hop on Pop</i>	M	S	4
2/25	<i>The Crazy Quilt</i>	M	S	0
	<i>Is Your Mama a Llama?</i>	M	S	0
2/28	<i>Hop on Pop</i>	M	S	0
	<i>The Elves and the Shoemaker</i>	M	S	5
	<i>Why Can't I Fly?</i>	M	S	2
3/1	<i>Hop on Pop</i>	M	S	1
	<i>The Crazy Quilt</i>	M	S	3
3/3	<i>The Very Bust Spider</i>	M	S	4
	<i>T-Rex is Missing!</i>	M	S	2
3/5	<i>Valentine Mice!</i>	M	S	3
	<i>The Three Goats</i>	M	S	2
3/8	<i>My Pigs</i>	M	S	1
3/12	<i>The Ugly Duckling</i>	M	S	3

	<i>Shapes at Home</i>	M	S	2
3/15	<i>I Went Walking</i>	M	S	1
	<i>Hop on Pop</i>	M	S	0
	<i>The Crazy Quilt</i>	M	S	1
3/19	<i>Is Your Mama a Llama?</i>	M	S	3
3/22	<i>Hop on Pop</i>	M	S	2
	<i>The Elves and the Shoemaker</i>	M	S	4
3/25	<i>Why Can't I Fly?</i>	M	S	1
	<i>Hop on Pop</i>	M	S	2
3/27	<i>The Crazy Quilt</i>	M	S	5
3/29	<i>The Very Bust Spider</i>	M	S	3
	<i>T-Rex is Missing!</i>	M	S	0
3/31	<i>Valentine Mice!</i>	M	S	1
	<i>The Ugly Duckling</i>	M	S	2
4/1	<i>The Three Goats</i>	M	S	0
	<i>Rick is Sick</i>	M	S	3
4/5	<i>I Went Walking</i>	M	S	1
	<i>Shapes at Home</i>	M	S	2
	<i>I Lost My Tooth</i>	M	S	1
4/6	<i>My Pigs</i>	M	S	3
4/7	<i>The Three Goats</i>	M	S	5
	<i>I Went Walking</i>	M	S	1
4/10	<i>Hop on Pop</i>	M	S	0
	<i>The Crazy Quilt</i>	M	S	0
	<i>Is Your Mama a Llama?</i>	M	S	0
4/12	<i>Hop on Pop</i>	M	S	2
	<i>The Elves and the Shoemaker</i>	M	S	3
4/13	<i>Why Can't I Fly?</i>	M	S	1
4/17	<i>Hop on Pop</i>	M	S	4
	<i>The Crazy Quilt</i>	M	S	2
	<i>The Very Bust Spider</i>	M	S	3
4/19	<i>T-Rex is Missing!</i>	M	S	1
	<i>Valentine Mice!</i>	M	S	2
4/22	<i>Shapes at Home</i>	M	S	3
	<i>I Lost My Tooth</i>	M	S	0
4/25	<i>I Lost My Tooth</i>	M	S	1
	<i>Hop on Pop</i>	M	S	0
4/29	<i>The Elves and the Shoemaker</i>	M	S	2
	<i>Why Can't I Fly?</i>	M	S	3
4/30	<i>Hop on Pop</i>	M	S	1
	<i>The Crazy Quilt</i>	M	S	2
	<i>I Went Walking</i>	M	S	1

## Appendix I

## Literacy Log for Matthew Pruitt

A= read to child alone (one-on-one with parent)

S= read to child with sibling (2 children with 1 parent)

M= mother read

F= father read

Date	Book Title	Mother or Father As the Reader	Read to child alone or with sibling	Attention span in minutes
6/10	<i>Lets' Go To The Beach</i>	M	S	12
	<i>Pigs on the Farm</i>	M	S	15
	<i>Fish Faces</i>	M	S	23
6/11	<i>Surprise Puppy</i>	F	A	25
	<i>From Egg to Chicken</i>	F	A	14
	<i>Cars</i>	F	A	16
6/12	<i>Fire Trucks</i>	M	S	14
	<i>My Five Senses</i>	M	S	12
6/13	<i>Whose Baby?</i>	M	S	13
	<i>Whose Footprint?</i>	M	S	16
6/14	<i>My Cat</i>	M	S	14
	<i>Horses on the Farm</i>	M	S	12
	<i>Duckling Days</i>	M	S	11
	<i>What is a Bird</i>	M	S	10
6/15	<i>Dinosaurs</i>	F	S	11
	<i>So Can I</i>	F	S	16
	<i>Dump Truck</i>	F	S	14
6/17	<i>Shoo, Crow! Shoo!</i>	M	S	12
	<i>Purple is Best</i>	M	S	13
6/18	<i>Biscuit Wants To Play</i>	M	S	16
	<i>Clown Around</i>	M	S	14
	<i>It's Too Windy</i>	M	S	12
6/19	<i>Mouse In Love</i>	M	S	25
	<i>Cleo The Cat</i>	M	S	14
	<i>Big Egg</i>	M	S	16
6/20	<i>My Cat</i>	F	S	14
	<i>Lots of Balloons</i>	F	S	12
6/21	<i>Tiny Goes To The Library</i>	M	A	13
	<i>Turtle &amp; Snake Go Camping</i>	M	A	16
	<i>Wake Up Big Barn</i>	M	A	11

	<i>Play Day</i>	M	A	16
6/23	<i>Cooking Tools</i>	M	S	14
	<i>Bikes</i>	M	S	12
6/24	<i>A Baby Monkey Grows</i>	F	S	13
	<i>The Elephant</i>	F	S	16
	<i>Deer At The Brook</i>	F	S	13
6/25	<i>Red Kangaroo</i>	M	S	16
	<i>A Penguin Chick Grows</i>	M	S	14
6/26	<i>Paws And Claws</i>	M	S	12
	<i>All About Sound</i>	M	S	25
	<i>My First Real Mother Goose Bedtime Story</i>	M	S	14
6/27	<i>Sam Goes Trucking</i>	M	S	16
	<i>Madeline Says Merci</i>	M	S	14
	<i>Noah's Ark</i>	M	S	12
6/29	<i>Little Red Riding Hood</i>	M	S	13
	<i>The Tapping Tale</i>	M	S	16
6/30	<i>I See, You Saw</i>	F	S	11
	<i>William's Turn</i>	F	S	16
7/1	<i>Some Things Change</i>	M	S	14
	<i>Don't Let The Pigeon Drive The Bus</i>	M	S	15
7/2	<i>Daniel's Duck</i>	M	S	23
	<i>Summer Wheels</i>	M	S	25
	<i>The Mother's Day Mice</i>	M	S	14
	<i>Moonstick</i>	M	S	16
7/3	<i>The Baby</i>	M	S	14
	<i>The Little House</i>	M	S	12
	<i>The Accident</i>	M	S	16
7/4	<i>Big Old Bones</i>	M	S	14
	<i>The Great Kapok Tree</i>	M	S	12
	<i>Trucks</i>	M	S	13
7/5	<i>Click, Clack, Moo</i>	M	S	16
	<i>Sail Away Home</i>	M	S	11
7/7	<i>Sleepy Bear</i>	M	S	16
	<i>Cookie &amp; Crutches</i>	M	S	11
	<i>The Itch Book</i>	M	S	16
7/8	<i>Petunia, I Love You</i>	M	A	14
	<i>Night Noises</i>	M	A	15
7/9	<i>A Bag Full Of Pups</i>	F	S	14
	<i>The Monster And The Tailor</i>	F	S	12
7/10	<i>Rotten Ralph</i>	M	S	13
	<i>Shoes From Grandpa</i>	M	S	12
7/11	<i>Norman The Doorman</i>	M	S	14
	<i>My Dad Works On A Farm</i>	M	S	16



	<i>My Cat</i>	M	S	14
	<i>My Car</i>	M	S	12
7/12	<i>Ii</i>	M	S	13
	<i>The Little Runaway</i>	M	S	16
	<i>The Magic Nutcracker</i>	M	S	14
7/13	<i>And I Mean It, Stanley</i>	M	S	12
	<i>The B. Bears Ride The Thunderbolt</i>	M	S	11
	<i>Wash Day</i>	M	S	10
	<i>Young Amy</i>	M	S	11
7/14	<i>What Is It?</i>	F	S	16
	<i>Splat!</i>	F	S	14
	<i>Tasting Things</i>	M	S	12
7/15	<i>Tanks</i>	M	A	13
	<i>Thanksgiving Is Here!</i>	M	A	16
7/16	<i>Watch Me Plant a Gardern</i>	M	S	14
	<i>We Need Auto Mechanics</i>	M	S	16
	<i>Later, Rover</i>	M	S	14
7/17	<i>The Baby Bunny</i>	M	S	12
	<i>Cats!</i>	M	S	13
7/18	<i>The Ear Book</i>	M	S	16
	<i>Family Pets</i>	M	S	14
	<i>Young Amy</i>	M	S	12
7/19	<i>Young Billy</i>	M	S	11
	<i>Tiger Trail</i>			
	<i>The Stray Dog</i>	M	S	10
	<i>Square Dancing</i>	M	S	11
7/20	<i>Stars</i>	M	S	16
	<i>Way to Go!</i>	M	S	14
	<i>The Water Hole</i>	M	S	12
7/21	<i>It's Circus Time, Dear Dragon</i>	M	S	13
	<i>The Little Cookie</i>	M	S	16
	<i>Mouse In Love</i>	M	S	14
7/22	<i>Little Puff</i>	M	S	12
	<i>The Little Runaway</i>	M	S	14
	<i>Miss Mouse's Day</i>	M	S	16
7/23	<i>My Camp-out</i>	M	S	14
	<i>Let's Have A Play</i>	M	S	12
	<i>Let's Play Rough</i>	M	S	13
7/24	<i>Brothers</i>	F	S	16
	<i>The Birthday Car</i>	F	S	14
7/25	<i>Biscuit and the Baby</i>	M	S	12
	<i>Fair Is Fun</i>	M	S	11
7/26	<i>Don't Cut My Hair</i>	M	S	10
	<i>Big Egg</i>	M	S	11

7/27	<i>Young Roy</i>	M	A	16
	<i>Wash Day</i>	M	A	14
7/28	<i>Subway Rides</i>	M	S	12
	<i>Thanksgiving Is Here!</i>	M	S	13
7/29	<i>The Magic Beans</i>	M	S	16
	<i>Loose Tooth</i>	M	S	14
7/30	<i>Mine's The Best</i>	M	S	12
	<i>City Fun</i>	M	S	25
	<i>Circus Fun</i>	M	S	14
8/1	<i>Biscuit Wants To Play</i>	M	S	16
	<i>The Cat Who Barked</i>	M	S	14
	<i>Catch Me, Catch Me!</i>	M	S	14
8/2	<i>Big Brown Bear</i>	M	S	16
	<i>Big Pig, Little Pig</i>	M	S	14
8/3	<i>The Yellow Boat</i>	F	S	12
	<i>Young White Thunder</i>	F	S	13
8/4	<i>We Are All Different</i>	M	S	16
	<i>Who Goes To School?</i>	M	S	14
8/5	<i>Ten Little Fish</i>	M	S	12
	<i>Ten Red Apples</i>	M	S	11
	<i>That Cat!</i>	M	S	10
8/6	<i>The Three Little Pigs</i>	M	S	11
	<i>Let's Go On A Picnic</i>	M	S	16
	<i>Monster Math Picnic</i>	M	S	14
8/7	<i>Let's Get Ready For Halloween</i>	M	S	12
	<i>I'm a Caterpillar</i>	M	S	13
	<i>My Best Friend</i>	M	S	16
	<i>Biscuit Finds a Friend</i>	M	S	14
8/9	<i>Biscuit Goes to School</i>	F	A	12
	<i>Biscuit's Big Friend</i>	F	A	25
8/10	<i>Cowboy Up!</i>	M	S	14
	<i>Wet and Dry</i>	M	S	16
	<i>Do All Ducks Quack?</i>	M	S	14
	<i>When Tiny Was Tiny</i>	M	S	12
8/11	<i>Young Dike</i>	F	S	13
	<i>Young Redi</i>	F	S	14
8/12	<i>Young Chrissy</i>	F	S	12
	<i>The Giving Tree</i>	F	S	19

## Appendix J

## Literacy Log for Aaron Daniels

A= read to child alone (one-on-one with parent)

S= read to child with sibling (2 children with 1 parent)

M= mother read

F= father read

Date	Book Title	Mother or Father As the Reader	Read to child alone or with sibling	Attention span in minutes
6/1	<i>Fathers</i>	M	S	9
	<i>Time for Bed?</i>	M	S	8
6/2	<i>Sea Horses</i>	M	S	10
	<i>Ten Little Fish</i>	M	S	11
6/4	<i>The Cat in the Hat</i>	M	S	12
	<i>Firehouse Sal</i>	M	S	9
6/5	<i>Space Guys</i>	M	S	8
	<i>Sea Horses</i>	M	S	12
6/6	<i>The Three Bears</i>	M	S	8
	<i>Sheep in a Jeep</i>	M	S	9
6/8	<i>Tree Frogs</i>	M	S	10
	<i>Sheep in a Jeep</i>	M	S	9
6/9	<i>The Foot Book</i>	M	S	8
	<i>Addie Meets Max</i>	M	S	10
6/10	<i>The Good Bad Day</i>	M	S	13
6/11	<i>Nana's Hog</i>	M	S	15
	<i>Shoes, Shoes, Shoes</i>	M	S	9
6/12	<i>Great Day for up!</i>	M	S	8
	<i>The Turnip</i>	M	S	10
6/13	<i>Someone Says</i>	M	S	9
	<i>D.W. All Wet</i>	M	S	10
6/16	<i>Let Me Help</i>	M	S	11
	<i>I am Lost!</i>	M	S	9
6/19	<i>Shoe Town</i>	M	S	16
	<i>Tap Dancing</i>	M	S	11
6/20	<i>The Trip</i>	M	S	9
	<i>Bookstore Cat</i>	/M	S	9
6/21	<i>Why the Frog Has Big Eyes</i>	M	S	8
	<i>I Like Messes!</i>	M	S	12
6/22	<i>Just Camping Out</i>	M	S	8

	<i>Was That Fun?</i>	M	S	10
6/25	<i>Across the Stream</i>	M	S	11
	<i>The Giving Tree</i>	M	S	12
6/26	<i>How Do Dinosaurs Say Good Night?</i>	M	S	9
	<i>Doll Party</i>	M	S	8
6/27	<i>D.W. Flips</i>	M	S	12
	<i>Harry Goes to Day Camp</i>	M	S	8
6/28	<i>Across the Stream</i>	M	S	9
	<i>Train Rides</i>	M	S	10
7/1	<i>We Are Different</i>	M	S	9
	<i>Five Silly Fishermen</i>	M	S	8
7/2	<i>Mr. Sun and Mr. Sea</i>	M	S	10
	<i>Big Bird's Copy Cat Day</i>	M	S	13
7/3	<i>Ollie</i>	M	S	8
	<i>Biscuit</i>	M	S	10
7/5	<i>The Cow That Got Her Wish</i>	M	S	11
	<i>Train Rides</i>	M	S	12
7/6	<i>Watch Me Paint A Picture</i>	M	S	9
	<i>Hop on Pop</i>	M	S	8
7/7	<i>The Big Mile Race</i>	M	S	12
	<i>Turtle and Snake's Day at the Beach</i>	M	S	8
7/8	<i>Do Frogs Have Tails?</i>	M	S	9
	<i>Clifford Makes A Friend</i>	M	S	10
7/9	<i>Ice-Cold Birthday</i>	M	S	9
	<i>Raindrops</i>	M	S	8
7/12	<i>Duck, Duck, Goose!</i>	M	S	10
	<i>The Viper</i>	M	S	13
7/13	<i>Two Crazy Pigs</i>	M	S	15
	<i>Animals on the Plains</i>	M	S	9
7/14	<i>The Three Little Pigs</i>	M	S	8
	<i>Show and Tell</i>	M	S	10
7/15	<i>Sharks</i>	M	S	9
	<i>City Fun</i>	M	S	10
7/16	<i>The Baby Bunny</i>	M	S	11
	<i>Shadows</i>	M	S	9
7/20	<i>Hello, Two-Wheeler</i>	M	S	16
	<i>Sheep Take A Hike</i>	M	S	9
7/21	<i>My Grandfather Works in a Bakery</i>	M	S	9
	<i>Shrinking Mouse</i>	M	S	5
7/22	<i>Sheep in A Jeep</i>	M	S	12
	<i>And I Mean It</i>	M	S	14
7/23	<i>Sleepy Dog</i>	M	S	9
	<i>The Baby Bunny</i>	M	S	4

