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Infant literacy

Tera Weber
University of Northern Iowa

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Abstract

The purpose of this project is to share the importance of reading to infants with their caregivers and teachers. This project will highlight what the research says regarding reading, what the infants gain from reading, and ideas on how to incorporate reading into group settings with infants through a professional development project. Participants in this professional development opportunity will be able to see recorded examples of teachers reading to infants, infants interacting with text, and materials that teachers may take back to their classrooms.

Infant Literacy

A Graduate Project

Submitted to the

Division of Early Childhood Education

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By

Tera Weber

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ABSTRACT

The purpose of this project is to share the importance of reading to infants with their caregivers and teachers. This project will highlight what the research says regarding reading, what the infants gain from reading, and ideas on how to incorporate reading into group settings with infants through a professional development project. Participants in this professional development opportunity will be able to see recorded examples of teachers reading to infants, infants interacting with text, and materials that teachers may take back to their classrooms.

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Chapter I

Introduction

Description of Topic

The ability to read, write, and communicate has always been a very important tool for children to have as they enter their elementary school years. Early literacy skills have a clear and consistently strong relationship with later conventional literacy skills, such as decoding, oral reading, fluency, school comprehension, writing, and spelling (National Institute for Literacy, 2009). The early years before elementary school are a time of great learning for young children. These are the years when children learn to interact with print and experience the excitement of being read to. There has been a virtual explosion in the publication of books for very young children. Nevertheless, whether children benefit from this vast array of books depends upon the adults in their lives: why, how, and what caregivers read to young children matters enormously in the role books will play in enriching children's lives and later school achievement (Nueman & Wright, 2007). Shared book reading is the single most important activity for helping children become literate. Studies suggest that book reading stimulates vocabulary development, knowledge about the world, and children's motivation and interest in becoming literate (Bus, vanIjzendoorn, & Pelligrini, 1995). The United Nations Educational, Scientific, and Cultural Organization (UNESCO) defines literacy as "the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts" (UNESCO, 2004).

Conventional reading and writing skills that are developed in the years from birth to age five have a clear and consistently strong relationship with later literacy skills

(National Institute for Literacy, 2009). These important skills for developing literacy have in the past been taught by the parents of these children. These parents served as the teachers who guided and supported the necessary steps to begin this process. However, this did not occur in all families consistently. Due to the recent economic struggles many families are facing, many parents work outside of the home, leaving their child's care in the hands of child development or child-care centers. According to Belsky, Burchinal, McCartney, Vandell, Clarke-Stewart, and Owen (2007), approximately 9.8 million American children under the age of five years old were in child-care, many beginning in the first year of life. This trend moves the job of guiding and supporting the steps needed to develop literacy to the providers or teachers of these children. During the infant years (birth through 12 months of age), a number of age-appropriate skills are taught to encourage later reading. These skills include physically manipulating or handling books, looking at and recognizing books, comprehending pictures and a story, and finally interacting with books verbally.

In this paper, I will describe a project designed to support a literacy rich environment for teachers in infant classrooms. The purpose of this project is to help teachers of infants to develop curriculum and activities to enhance literacy development. Based on a review of relevant research, this project will recommend appropriate children's literature, displays to be posted, and other activities that will support these teachers of the very youngest children.

Rationale

As a mother of two, an early childhood teacher for children birth through 12 months of age, and a supervisor of a variety of future educators in a higher education

setting, I see first hand the importance that literacy and literacy enriched curriculum has on the development of young children. Two of the many questions I hear from the university students who come into my classroom to observe are “What exactly can you do with babies? How do you teach them?” I respond to that by saying that during my daily encounters with the children in my classroom, I spend the majority of my time talking to the children, describing the textures they are feeling or talking about the objects we see in the books we read, the noises we hear when we are outside on walks or in the classroom, and what the infants are making with their dot markers, crayons, or fingers when painting with pudding. Literacy also happens when we play with the musical instruments, count the number of blocks we use to build our towers, describe or name the food that is in our basket or on our plates, and sing a variety of songs to the children. This is how I help the infants develop their beginning ability to read, write, and communicate in my classroom. One of the most important activities, shared book reading helps facilitate children’s vocabulary development, phonemic awareness, print concept knowledge, and positive attitudes towards literacy (Raikes et al., 2006). Research by Zimmerman et al. (2009) suggested that adult-infant conversations are strongly associated with healthy language development.

Purpose of the Project

The purpose of this project is to assist teachers of infants in developing the tools and guidance needed to implement reading to infants in their classrooms. These early childhood teachers, who may or may not have a post-secondary degree, may not yet understand the advantages appropriate literacy activities have for infants and how easy they are to implement into their classrooms. This project will provide professional

development suitable for infant room teachers and care providers to improve the ability to integrate reading into their daily schedule.

Importance of Project

Early childhood professionals spend a lot of time learning about, looking for, and understanding the integrated ways in which children's cognition develops and their emerging literacy flourishes (Zeece, 2008). This project will help teachers enhance their classrooms by giving them the guidance, ideas, and tools necessary to develop a literacy rich environment.

School improvement efforts now require teachers to study, implement, and assess the outcomes of student learning outlined by local, state, and federal educational standards. However, it is also important these teachers provide meaningful and engaged learning for diverse populations. Teachers need more time to work with colleagues, to critically examine the new standards being proposed. They need opportunities to develop, master, and reflect on new approaches to working with children (Corcoran, 1995).

Communication plays a key role in the development of literacy. Being able to communicate and being understood by those around them is a powerful achievement for very young children (Parlakian, 2004). Communicative pointing has been related to both expressive and receptive language development at 24 months (Desrochers et al., 1995). Additional research regarding use of American Sign Language (ASL) with infants and toddlers has been published. According to Collingwood (2009), signing with your baby is intended to help very young children to express their needs and wishes earlier than they could otherwise. Baby signing experts believe that frustration and tantrums can be

avoided by closing the gap between the desire to communicate and the ability to do so. Infants from about six months of age can begin to learn the basic signs, which cover such objects and concepts as *thirsty, milk, water, hungry, sleepy, pacifier, more, hot, cold, play, bath, and teddy bear*. Infants who learn baby sign language may also gain psychological benefits, such as improved confidence and self-esteem. Feelings of anger due to an inability to communicate may not occur as often. Having the ability to sign could be an important tool when a child is too distraught to speak clearly (Collingwood, 2009). Therefore encouraging the teachers to also use sign language will be an item that is discussed during the project.

Terminology

The review of research I found generated a large list of terms for literacy and all of its components. For this particular project, I will be using the following terms and definitions.

Creative Curriculum Gold- is an ongoing, developmental observational assessment tool for children from birth through kindergarten. It was created based upon years of feedback from thousands of educators and important new research about how children develop and learn (Creative Curriculum, 2012).

Communication-Any act by which one person gives to or receives from another person information about that person's needs, desires, perceptions, knowledge, or affective states. Communication may be intentional or unintentional, may involve conventional or unconventional signals, may take linguistic or nonlinguistic forms, and may occur through spoken or other modes (Scherba de Valenzuela, 1992).

Curriculum- “ a set of courses constituting an area of specialization” (Merriam-Webster, 2011).

Emergent Literacy-the developmental process that begins at birth whereby children acquire the foundation for reading and writing or literacy (Hatton & Sapp, 2005).

Iowa Early Learning Standards- These standards fulfill a requirement of the federal government. Standards are statements that describe expectations for learning and development. (Early Childhood Education Assessment Consortium, 2003).

Infant- a child between the ages of birth and 12 months (NAEYC, 1998).

Literacy- the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts (The United Nations Educational, Scientific, and Cultural Organization, 2009)

Research Questions

The following research questions will guide the review of research regarding literacy with infants. These questions will provide the foundation for this project.

1. What are the advantages of a literacy curriculum for infants?
2. What does appropriate literacy curriculum look like for infants?
3. What would a professional development training workshop about literacy for teachers of infants include?

Chapter II

Methodology

Procedures to Develop Project

My goal is to communicate with other infant teachers concerning their wants and needs regarding incorporating literacy into their classrooms. I have found, through communication with future teachers and others in the community a lack of understanding of the importance of reading to infants. I chose to do a day-long training through Child Care Resource and Referral (CCR&R), because their training registry allows home providers and staff of child development centers statewide to participate.

I will start by contacting CCR&R to determine if a workshop like this has been presented in the past. If it has not, CCR&R will then add it to their online training registry for providers and directors to attend. The training will be both informative and engaging with hands on activities.

The following synopsis will be provided to CCR&R to put on their training registry

The Link to Success-Literacy and Infants

Wondering what to do with your infants? Why not read a book, paint with pudding, and sing silly songs? This professional development program will help you learn the advantages of a literacy-enriched environment for infants and help you to create the ideas and materials to foster that environment.

Literature Review

Research Question 1.

Early literacy and the building process.

Accessibility is always a key factor when it comes to literacy instruction. Having materials readily available for the children is one of the best ways to encourage infants to read and experiment with books. Murphy, Hatton, and Erickson (2008) suggested a variety of books that help with literacy instruction. These include, but are not limited to storybooks, picture books, board books, alphabet books, nursery rhyme books, and factual books. The authors also recommended that these materials be accessible to the infants at school as well as at home.

Young children's development does not occur in isolation; it takes place in a rich context of direct and indirect influences. Research has linked children's developmental outcomes and the environments in which they live to support the importance of recognizing the contexts of children's experience. The ecological theory of child development advanced by Bronfenbrenner (1979) provided a conceptual basis for understanding the broad influences on children's development. Bronfenbrenner's theory claimed that children develop within a variety of social contexts and that it is important to investigate the interrelationships among the various contexts when studying children's development.

This context can be seen like a sphere that is divided into layers, according to Bronfenbrenner (1979). The center of the sphere is the children. The next portion or layer of the sphere is made up of the children around them—the ones that have direct influence. The home and family environment as well as the child's care setting and preschool environment are components that help give the children a basis for literacy development, which is the third and last layer of the sphere.

For infants and toddlers, the beginnings of literacy may not look much like reading

or writing. Instead, beginning literacy appears in activities such as pretend play, drawing, and conversations about books with their closest personal relations, their family (McLane & McNamee, 1990). During these early years, children learn to use these symbol systems in increasingly clear ways to create and communicate meaning. These symbols may include words, gestures, pictures, numbers, and objects, all wonderfully configured into a mixed medium to represent their imaginative ideas and creative thinking. Children use these early symbolic activities to build bridges to literacy (Dyson, 1988). Infants who grow up experiencing reading and writing in their everyday lives begin to understand the purposes that literacy serves.

Early literacy development does not merely happen. Rather, it is a social process that is nurtured through meaningful relationships with parents, caregivers, friends, and siblings. These caregivers play critical roles in children's motivation and knowledge about literacy by serving as models, providing necessary resources, and conveying their hopes and expectations to children. It is these interactions that shape what and how children come to see literacy in their daily lives.

Goin, Nordquist, and Twardosz (2004) stated in their study of infants and toddlers with developmental delays, "the early childhood years are critical for literacy development" (p. 87). Their purpose was to look at information regarding parents of infants and toddlers with mild developmental delays, how they viewed literacy processes occurring within their homes, and how they may be influencing their children. In this particular study the participants were selected from families in Eastern Tennessee who were affiliated with Tennessee's Early Intervention System (TEIS). TEIS is a non-profit statewide organization that assists families of young children with known disabilities and

delays from birth to age three. TEIS coordinators identified families who met specified criteria for possible participation in the study. The participants were children ages 12 to 36 months of age who had been affiliated with TEIS for six months. Thirteen parents were able to participate in the study, ten mothers and three fathers. The average age of the parents was thirty-two years. A total of 11 children, eight males and three females, were eligible for the study with the average age being two years. This group included five children with mild speech delays, two had mild speech and motor delays, one child had cataracts, and three were born prematurely and were referred by their physician to the TEIS.

Data-collection for this study was done using face-to-face communication. Each conversation was audiotaped using a hand-held tape recorder and occurred in the parents' homes. In order to ensure that the parents and not the interviewer guided the participants' answers, more general questions were asked at the beginning. Once the interviews were over, the authors learned that, to the parents the term *literacy* meant knowledge of letters and words. The data suggested that children's books were the most commonly used medium with the children, many of the participants had a computer and used *learning* programs that emphasized literacy, and finally that the children had direct access to crayons, markers, and chalk to write and draw (Goin, Nordquist, & Twardosz, 2004). Overall findings of this study suggested that the participants understood that literacy begins very early in life and opportunities that were provided by the parents are critical components of becoming literate (Goin et al., 2004). Katims and Pierce (1991) and Katims (1994) pointed out that early literacy experiences reduce and even prevent reading and writing deficits in some children with disabilities.

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Even though recommendations for facilitating early literacy have been made, little is known about the practices that professionals use to promote early emergent literacy (Dote-Kwan, Chen, & Hughes, 2001; Erickson & Hatton, 2007; Erickson, Hatton, Roy, Fox, & Renne, 2007). The purpose of a study done by Murphy, Hatton, and Erickson (2008) was to identify strategies and resources that promote early literacy for young children who have visual impairments.

An online survey was produced that contained content from several empirically based sources that included research on evidence-based practices like shared booked reading. The survey also used content from components of the emergent literacy research that was conducted by the National Early Literacy Panel and the National Reading Panel. The survey asked professionals which strategies and resources they used to promote early communication and literacy in young children with visual impairments (National Institute for Literacy, 2007).

The survey listed 29 composite questions with eight of them having an average of 19 items. The questions were designed to gather information about the characteristics, resources, services, and strategies that teachers use to promote early communication and literacy. Three doctoral-level colleagues with expertise in the field of visual impairment reviewed a draft of the survey in early literacy; then the survey was revised to incorporate their suggestions. After the final draft was created, the survey was sent out to members of the Early Intervention Listserv in January 2005. Approximately 192 of the 375 subscribers completed the majority of the items on the online survey. The data were submitted electronically, recorded in the database, and summarized to answer the research questions. Results showed 192 of the respondents were white, non-Hispanic.

Over half of the participants were certified or licensed teachers of children with visual impairments and 36 percent of them reported working with children from birth to age three. Many of them also had certification in special education, elementary education, orientation and mobility, and/or reading (Murphy, Hatton, & Erickson, 2008).

The respondents used a variety of literacy practices. Seventy percent supported the development of early literacy by facilitating early attachment and bonding. They provided their families with storybooks, picture books, board books, alphabet books, nursery rhyme books, and factual books that were in accessible media. Many of the respondents also gathered materials from a variety of resources that were created by publishers with experience in visual impairments such as Patterns Prebraille Program, Tactile Treasures, Braille Fundamentals, Touch and Tell, and The Braille Readiness Skills Grid. Many teachers also used their own teacher created materials in addition to the items listed above (Murphy et al., 2008).

Overall, the results of the survey indicated that the teachers who participated in the survey understood the importance of early literacy in young children with visual impairments and the importance of the variety of resources that were available to them. However, it was indicated that many teachers might not be using the recommended practices for some components of early literacy because they lacked access to current resources on early literacy for all children as well as the support to assist them in implementing these practices (Murphy et al., 2008).

There has been much research regarding emergent literacy intervention practices for children older than three years. Erickson, Hatton, Roy, Fox, and Renne (2007) decided to research practices at the infant and toddler level that were being used to

support children who had visual impairments and blindness. This study was conducted with two teachers in one southwestern state and one northeastern state. Each teacher chosen for this study had over fifteen year of experience providing early intervention to young children with visual impairments and blindness. Each teacher selected children with whom they worked on a weekly basis. The nature of the disabilities varied. All of the children did appear to have some useful vision. This study was done by using observations, teacher interviews, and document reviews. Face-to-face interviews were completed with the children's teachers before the observations began. The researchers also looked at the curriculum used by the teachers as well as the children's Individualized Education Plans (IEP) in order to fully understand the goals for each child. Three themes emerged around how the teachers supported emergent literacy. They were family-centered practices, language and concept development, and a focus on the senses as they related to literacy. These all provided the skills required to promote emergent literacy with the infants and toddlers (Erickson, Hatton et al., 2007).

The results of this study indicated that by using all three elements, the teachers were able to support emergent literacy. This was done by creating books with the children and their mothers and creating an environment that was ideal for exploration (Erickson, Hatton et al., 2007).

Early vocabulary growth.

Between the ages of 12 months and two years of age, children are making a dramatic transition from not talking to talking. Gershkoff-Stowe and Smith (1997) looked at twelve children who came from middle class Caucasian families in which English was the only language that was spoken. To identify naming behavior, the

researchers used the books *Brown Bear, Brown Bear* by Bill Martin (1996) and *Corduroy* by Don Freeman (2011). Parents were asked to write down any new words or phrases their child produced spontaneously throughout each day. The children's verbalizations were then coded for the number of times they produced an utterance related to the book.

Results indicated that the children did attempt to name the pictures, offering on average a minimum of ten attempts in the first session; later, towards the end of the sessions, 36 total attempts were made. There were instances when the children did name an object incorrectly, but this was found to be normal by the researchers (Gershkoff-Stowe & Smith, 1997).

Early in word learning, receptive vocabulary clearly outstrips productive vocabulary (Huttenlocher, 1974). Other evidence indicates that *fast-mapping*, or one-trial word learning emerges at the same time as the spurt in new word productions (Jones, Smith, Landau, & Gershkoff-Stowe, 1992; Mervis & Bertrand, 1993).

The subject of first language acquisition has been explored for many years, with varying outcomes. Many researchers believe that language is an instinctive response and that as long as children are exposed to speech, they will learn to talk, regardless of the quality of input they are given (Chomsky, 2000). Some researchers believe that all children go through a variety of stages of language acquisition during set periods of time in their childhood. Lock's (1996) research suggested that physical proximity and vocal interaction between mother and infant have been shown to aid in language learning, and Clark (2004) suggested that reading aloud to infants may nurture language development through an early and playful introduction to vocabulary.

Hepburn, Egan, and Flynn's (2010) research purpose was to look at the relationship between sharing storybooks with infants and their early language development. They chose two male children for this case study. Both boys were *only* children living within two parent families. The mothers read one required book per week with their children on a daily basis and recorded their responses to that book for six weeks. Along with reading of the books, the mothers were encouraged to ask questions of the children, which included pointing and using gestures. During the collection of data, the mothers recorded how many times the books were shared with their children and how many times the child read to themselves. Once all of the data was analyzed it was determined that the boys both acquired three percent more vocabulary words relating to their storybooks. The overall findings from the study showed that sharing storybooks with children played a role in their vocabulary acquisition (Hepburn et al., 2010).

Joint attention skills.

Preverbal infants demonstrate an implicit understanding of mental states by their use and understanding of communicative gestures beginning at the end of their first year of life (Kristen, Sodian, Thoermer, & Perst, 2011). Joint attention is described as the coordination of attention between themselves, others, and some external objects or events. Infants are said to engage in joint attention around the age of six to nine months. For this study, Kristen et al. (2011) looked at the fuller understanding of developmental relations between joint attention skills, intention understanding, and mental state talk. They wanted to test the developmental links that are associated with preverbal communication gestures and mental state vocabulary at the ages of seven, nine, twelve, fifteen, and eighteen months of age.

The researchers used a sample of 88 healthy, full term infants who came from the lower to upper middle class in an urban area in southern Germany. The researchers started with a warm-up activity during which the experimenter interacted with the child until it was apparent the child was comfortable with the surroundings. All of the sessions were videotaped for later analyses. The experimenter used the formal assessment instrument developed by the researchers to test the following tasks: joint attention tasks, intention-based imitation tasks, working memory skills, mental state language, and language (Kristen et al., 2011).

The researchers hypothesized that the infants' comprehension of referential intent and their demonstration of declarative gestures would predict their intention-based imitation skills. This study showed a strong link between infants' comprehension of reference, their intention-reading skill, and mental state vocabulary, which in turn produced a joint attentional frame in their object-directed interactions with adults. It is also the first study to show how the development of desire verbs develop over and above general language skills (Kristen et al., 2011)

Research Question 2

Sharing books with babies.

Hardman and Jones (1999) collaborated with the Kirklees 'Babies to Books' project to encourage parents to introduce books to their babies during their first year of life. The Literacy Development Workers contacted the families of babies born in the two targeted priority areas. The majority of the infants were seven months old and had their own books. Fifty-three percent of those children were categorized as being interested in their books and sixty-three percent would sometimes reach for their own books.

Hardman and Jones (1999) used videotaped group sessions of mother and baby for their observations. During the observations, all babies had difficulties holding and moving the pages, focusing on the images, making intentions known, and sitting. Many of the babies were shown to be sucking and touching the books in a variety of different ways; patting, stroking, scratching, pressing, and flapping at books. The babies were very interested in the books and the book-related activities like turning the pages, opening and closing the book, looking at the picture on the page, and looking at mother and her actions in relation to the book.

All of the mothers were facilitators in the book sharing. They all held the book within the reach of the baby, had it in the baby's field of focus, moved the baby's hand, pointed at the page, talked about the book, and tapped and turned the pages. All of these activities helped to engage the baby in motor skills, awareness of the baby's body, control, anticipation, meanings of images, rituals, and social behavior (Hardman & Jones, 1999).

From the final assessment, Hardman and Jones found that the babies had received more books, and there was a significant increase in the frequency of the books being read with baby. The mothers reported that their babies preferred small brightly colored books with large familiar images, textures, and noise. The mothers also commented on the calming and soothing experience their babies had with the books (Hardman & Jones, 1999).

Overall, Hardman and Jones (1999) noted the mothers' skills in scaffolding the learning context were important in terms of their ability to use and create book-sharing contexts. The data showed little evidence that the mothers were following a storyline

from beginning to end. It was also clear there was mutual enjoyment of the shared book reading. The authors were able to highlight the value of the literacy, specifically when it came to increasing the amount of book reading activities with very young babies.

Emergent literacy has been said to focus on the children's individual literacy learning trajectories and the stages the children go through as they move toward conventional literacy. Razfar and Gutierrez (2003) described early literacy as a "multidimensional and mutually engaging process between adults and children" (p. 38). Makin (2006) looked at infants eight to twelve months of age whose communication level included body language, gestures, and facial expressions. Ten mothers were chosen to participate in this study that also looked at book sharing with infants. These mothers were video taped for ten minutes, as they were engaging with their children in shared book reading. All of these mothers were participants in the early literacy prevention initiative called Support at Home for Early Language and Literacies (SHELLS), a program developed for children between birth and three years of age. The videotaping was done in a small room that was set up in a home-like environment with a sofa and several books from which to choose.

A linguist transcribed the videotapes. The visual data and the transcripts were analyzed in terms of several linguistic and paralinguistic features that were linked with provision of successful scaffolding. The researcher was looking for mothers to provide such language as *cover*, *read*, and *page*. They also wanted the parent to use labeling, and simple and complex sentences. When all sessions were concluded, the researcher determined the mothers all used the words *book* and *page*. The mothers also encouraged

the children to help turn the pages. Many of the mothers also pointed to and labeled the different items found in the pictures (Makin, 2006).

The researcher did make it a point to comment on the fact that one taped session in an unfamiliar environment cannot be said to be typical of how a shared reading session might take place. She did note, however, that babies who are frequently engaged in a wide range of reading opportunities are beginning to be part of a literacy community. Early childhood settings that include infants and toddlers can foster engagement and active participation by using frequent shared book reading (Makin, 2006).

Parent-child book reading has been identified as the most important determinant of language and emergent literacy. Indeed infants who engage in joint attention interactions with their caregivers are said to thrive in future language abilities (Karrass, VanDeventer, & Braungart-Reiker, 2003).

Karrass et al. (2003) selected 106 full term infants from a middle-sized midwestern town. They collected data at four, eight, twelve, and sixteen months of age. Mothers and infants attended four laboratory assessments that were between one and a half to two hours long. During the videotaped sessions the mother and infant did free-play, which included interacting with a variety of age-appropriate toys (soft blocks, soft Big Bird stuffed animal, a colorful shape sorter, and a plastic picture book). After the parent-infant book reading, parents completed a questionnaire that asked them to record the frequency and duration of specific activities. Results suggested that increased shared book reading between parents and their infants did increase the infant's emergent literacy.

Picture books.

The reading of books to infants and children may be a main route in becoming literate because it familiarizes them with the representational function of pictures, the written language register, and written symbols (Bus et al., 1995). Picture books are the most used type of book in the early stages of book reading. Bus et al. studied 82 mother-infant pairs. Infants from 44 to 63 weeks of age participated; all were first born. Boys and girls were equally represented in this study. The researchers videotaped all sessions of mothers and infants sharing a simple book with thematically ordered pictures. A scale was used to score the infants' motor activity and attention. Results showed that infants who were more focused on the content were more attentive and more inclined to stay on their mothers' laps. As the younger infants were observed, it was noted that they were touching, reaching, and eating the books. When they got older and had more experience, they were making sounds and looking and laughing at the pictures. Results also suggested that the more affective the relationship, the better the quality of the sharing of picture books (Bus et al., 1995). This study helped to provide evidence that reading is not a process of learning isolated skills, but it helps reinforce the view of learning to read as a fundamental social process.

Parent-child interactions.

A perspective on child development suggests that infants, toddlers, and young children learn many skills through adult-child interactions. Research by the National Institute of Child Health and Human Development (NICHD, 1999) demonstrated that supportive, warm, and engaged parent-child interactions were associated with the child's emerging competencies in social, cognitive, and linguistic domains throughout early and

middle childhood. The study also suggested that the amount of talk and the guidance style of parents were related to later language and cognitive development.

Dodici, Draper, and Peterson (2001) studied families in the Midwestern United States who had a child born between September 1995 and September 1996, were income-eligible for Early Head Start, and had enrolled in the Early Head Start National Evaluation. Participants completed child assessments and interviews when their children were 14, 24, and 36 months of age. Researchers videotaped interactions during parent-child sessions that were structured to elicit teaching, play, and frustration behaviors. During each session, the following items were scored: infant/toddler language, parent language, emotional tone, joint attention, parent guidance, and parental responsiveness. Each of the items was rated on a five-point scale. Data suggested that the relationship between parent-infant or parent-toddler interactions and the quality of those interactions were related to early literacy skills. The mother's responsiveness was shown to correlate with later language development, cognitive development, and social development.

Holland's (2007) case study looked at the read aloud opportunities that parents and caregivers provided to a six month old child from her birth until later 2007. The child was observed daily during her fifth and sixth month at home and in child-care. She was from a low-income area in Mississippi and was an only child. Her parents and grandmother had read to her daily since she was in utero. Her reading opportunities at her parochial child-care center were not as extensive as her time at home.

A common activity among many young children and their parents is shared book reading. Bus and van Ijzendoorn (1997) suggested that secure parent-child attachment relationships contribute to the quality of storybook interactions. An investigation was

designed to look at the associations of security of infant-parent attachments and later toddler parent storybook interactions.

One hundred thirty-one families were chosen for this study from prenatal classes that were conducted in a rural, mountainous area of the southeast United States. To measure attachment security, parents were asked to assess their attachment relationship by using the Ainsworth Strange Situation procedure. The Strange Situation is a series of eight episodes involving infants' interactions with a stranger and separations and reunions with the caregiver. Then based on the patterns of behaviors that the children exhibited, the researchers used three classifications to measure the level of attachment. These levels were: secure, insecure-avoidant, and insecure-resistant. It was determined that for parents who were more warm and supportive, their children were more compliant and had greater attention and enthusiasm, and a positive mood during parent storybook interactions (Frosch, Cox, & Goldman, 2001).

Read alouds.

There have been many efforts to promote reading aloud and literacy rich activities for infants. Reading aloud to infants provides positive literacy opportunities for infants that prepare them for learning to read and write (Calkins, 2000). However, some health care professionals indicated that children six months and younger are not ready to listen to stories being read aloud (Murkoff, Eisenberg, & Hathaway, 2003). Curtis and Schuler (2005) disagreed, and they stated that an infant is ready to listen to stories being read aloud by week 16. In fact, they also pinpointed that language skills are developed and sharpened through read alouds. They also suggested that a six month old is capable of

reacting to the voice intonation inflection, and the patterns of stress and intonation of the reader.

Reading with infants and young children is a powerful way to enhance early language development. Through picture book sharing with very young children, caregivers boost prereading skills, attention span, word comprehension, and pleasure with books (Newman & Roskos, 1998). When children are read to during infancy, they develop the social skills of listening and interacting with a nurturing adult.

Quality of center-based child care and language development.

There is growing evidence that suggests the quality of infant child-care is linked to cognitive and language development (Burchinal, Roberts, Riggins, Zeisel, Neebe, & Bryant, 2000). The National Institute of Child Health and Human Development (NICHD) Study of Early Child Care found that even after considering the effects of family characteristics, the quality of nonmaternal child care was a modest, but significant predictor of cognitive and language development at ages of 15, 24, and 36 months of age.

Burchinal et al. (2000) conducted a study of 89 African-American infants attending urban community-based child-care centers. Twenty of the participants were infants whom the researcher observed over a four-year time period. Measures of cognitive and language skills were selected for the methodology because they had been shown to be among the best infant predictors of preschool developmental status (DiLalla et al., 1990). To assess the language portion of the study, the authors used the Sequenced Inventory of Communication Development-Revised (SICD-R) at 12, 24, and 36 months and the Communication and Symbolic Behavior Scales-Research Edition (CSBS) (Wetherby & Prizant, 1993) at 12, 18, and 24 months. Although many of the 12 month olds could not

speak complete sentences, they could communicate through gestures, vocalizations, and by using some words. The SICD provided an overall measure of the children's receptive and expressive communication skills. The CSBS assessed the communicative, social affects, and symbolic skills of the infants. At the end of the study the authors were better able to see the connection between quality child-care centers and the benefits the centers had on infant literacy development. Results showed that quality of child-care was a modest to moderate predictor of cognitive and language development among African-American children at 12, 24, and 36 months of age (Burchinal et al., 2000).

According to Honig and Shin (2001), infants in child-care settings hear books read aloud an average of 1.5 minutes per day. In addition, their data showed that child caregivers read aloud daily in their classrooms to only one of thirteen infants who range from four to eight months. This study suggested that reading aloud is beneficial to an infant's language development and also improved the interaction with parents and caregivers. There are also special bonds that form during the interaction of a parent or caregiver and infant during read alouds.

This qualitative study (Honig & Shin, 2001) looked at the reading patterns in infant classrooms of four different nonprofit middle-class centers in an urban area. The observer recorded the reading activities of twenty-four teachers as they read to children ages four to twenty-seven months old daily for two weeks. Teachers were coded for the number of times they were seen to be using the following behaviors: reading text, labeling and describing, verbal elaborating, praise and confirming, asking who, what, where questions, yes or no questions, and controlling child attention verbally.

Results showed that the teachers only read to one of thirteen infants in the four-eight months age range. Other infants were awake and available, but teachers did not use the opportunities. It was also noted that the teachers typically read more to girls than boys. As a result of this study, the researchers called for courses designed for teachers of infants that would include development clues that help the teachers introduce book-sharing interactions with babies. The importance of having age-appropriate books in these classrooms was also discussed (Honig & Shin, 2001).

Studies have also focused on the quality of the programs, curriculum, staffing, and standards, as well as on the views of teachers, parents, and educational researchers. One particular study focused on quality. Ceglowski and Bacigalupa (2007) conducted a two-year study of the quality of child-care experience of 94 children from Minnesota families from four counties. Families of the study were considered low income and eligible for subsidized assistance or sliding fee scales for methods of payment.

Urban and rural families were included in this study. Thirteen percent of the children spoke a language other than English. Children who participated in the study came from a variety of care settings: family, friends, or neighbor; unlicensed and informal; and child-care centers. Researchers used family interviews conducted in the home language to collect data about the quality of their child's day care. Sessions were audiotaped and transcribed into English. The data suggested that many of the participants enjoyed being read to during read alouds. Parents reported that activity as a characteristic of high quality care. However, interview data also suggested that there were several shortcomings when it came to age-appropriate activities and interpersonal relationships, which affected the quality of care (Burchinal et al., 2000).

Exposure to print and progress toward independent reading.

Children in literate societies have knowledge about written language long before they read conventionally from print (Neuman, Copple, & Bredekamp, 2000). This is why it is imperative that young children be exposed to print. Studies have highlighted the importance of children's emergent storybook reading. By providing children exposure to print, such as book exploration with adults or independently, engaging in conversations, labeling the pictures on the pages of the book, and asking children to describe what is going on, teachers can facilitate early literacy development.

Book knowledge is a necessary tool children use to help guide independent reading. Book knowledge is divided into three domains: book handling knowledge, print knowledge, and interpretive knowledge. Lee (2011) looked at how to assess book knowledge. Lee observed ten toddlers four boys and six girls enrolled in a classroom in a southeastern university preschool program in the United States. The children ranged from 26-28 months of age. These children were observed two times a week during their free play for approximately five months. The observation time usually lasted an hour and the children were never forced to read the books. Each session used videotape equipment and a checklist for Lee to use as a guide. Lee coded each category when he observed the child demonstrating one of the three behaviors indicated.

Results from this study indicated children displayed consistency in the several behaviors that were tallied on the checklist. Ninety percent of the children could use the cover of the book to predict what the story was about. All of the children were also able to hold the book in the upright position and turn the pages from right to left. Also, thirty

percent of the children looked at the pictures on the left side of the page before the right page (Lee, 2011).

The researcher acknowledged that children over the age of five have been well researched. However, many researchers have found that even toddlers and infants can be assessed in terms of their book handling skills. By shedding light on what kinds of book knowledge infants and toddlers have, teachers, parents, and educators can become more aware of age-appropriate book knowledge in order to help them develop emergent reading behaviors (Lee, 2011).

Inclusive and non-inclusive environments.

There have been decades of research that have highlighted concerns regarding the quality of the environments on the development of young children. In 2007, Neuharth-Pritchett looked at 466 classrooms. The children in these classrooms ranged in age from one to 42 months. Sixty-four of these classrooms were inclusive, two contained only children with disabilities, and 400 were serving children who were developing typically. One hundred twenty-five of the children were identified with disabilities (Neuharth-Pritchett, 2007).

The data file was split into two sets in order to run an exploratory and a confirmatory factor analysis. The preliminary analysis was used to examine missing data and distributions. The confirmatory factor analysis indicated that the four factor solution best represented the data. Results suggested that inclusive classrooms were rated higher in overall quality than those classrooms that contained only typically developing children.

Research Question 3

Professional development of early literacy.

There has been a great deal of research suggesting the importance of early development and learning opportunities for “at-risk” children (Phillips & Lonigan, 2005). The limited number of observation studies conducted suggested that the language and literacy environment in family child-care homes is often lower than that seen in center-based child-care (Dowsett, Huston, Imes, & Gennetian. 2008).

Center versus home care.

Phillips and Morse (2011) studied literacy in family child-care homes that were selected to participate. Participants completed surveys regarding their home-based child-care. Many of these providers completed their own provider monitoring in lieu of state monitoring. That is, trained observers carried out regulatory assessments. Surveys were divided into two separate parts: Part A and Part B. Part B of the survey was only available to participants when Part A was returned. All of the surveys were mailed with the following components: explanatory cover letter, informed consent documents, and addressed/stamped return envelopes. A thirteen percent return rate or 188 providers completed part A and 125 providers returned Part B. All of the participants were female. The caregivers were to complete three measures: a Family Child Care Survey, Literacy and Math Materials survey, and a Caregiver Knowledge Survey. Items on the measures were borrowed from or developed to be similar to surveys used in several studies of center-based child-care providers.

Data from the returned surveys indicated that many of the family child-care providers lacked organized curriculum, but realized the importance of language and

literacy. The family child-care providers realized their role of including more of a professional and educational component to the children in their care. Improving these skills could be accomplished if family child-care providers became better aware of professional development opportunities particularly in early language, literacy, and math pedagogical knowledge and instructional strategies (Phillips & Morse, 2011).

Models of professional development.

One of the struggles many teachers have is finding professional development opportunities that are available to them, determining whether they will be able to implement what they learned in their classrooms, and how the information can be appropriately transformed into an infant environment, if the resources are not geared toward infants or early childhood. Professional development opportunities for infant teachers are limited in number and scope. According to Lonigan, Farver, Phillips, and Clancy-Menchetti (2011), there have been very few high quality studies of programs designed to promote the development of early literacy and other pre-academic skills. Lonigan et al. evaluated the literacy-focused preschool curriculum relative to the traditional versions (thematic units) of early childhood curricula with a group of 739 children who were considered to be at-risk of educational difficulties that were associated with poverty. Lonigan et al. then evaluated the benefits of two models of professional development for assisting teachers. The goals of the study were to determine if the research-based curriculum could be successfully implemented by traditional preschool teachers, if the curriculum would have meaningful impacts on the children's early literacy skills compared to outcomes of the traditional early childhood curricula, if the form of professional development provided to teachers affected their implementation of

the curriculum or the impact on children's early literacy skills, and how the use of the curriculum affected the classroom environment.

For this study, 48 preschool centers were recruited, 18 in Tallahassee, Florida, and 30 in Los Angeles, California. Many of the centers were Head Start programs with the rest being Title I school district preschools. The preschool site directors determined which classroom or classrooms participated if there were more than one four year old preschool classroom. A majority of the centers were using the High/Scope Curriculum prior to the study, but some were using the Creative Curriculum Gold (Lonigan et al., 2011).

Data and consent forms were gathered from 808 children who ranged from 36 months to 69 months at the time of the fall semester. Of those 808 children, 378 of them were boys and 361 were girls. 739 completed some parts of the post-test assessment (Lonigan et al., 2011).

Three subtests of the Stanford-Binet were administered to the children during the fall to obtain an estimate of their nonverbal cognitive ability. Then the children were assessed using the Preschool Language Scale to measure their vocabulary development, social communication, semantics, structure, and integrative thinking in receptive and expressive domains. The children also completed two measures of phonological awareness from the Preschool Comprehensive Test of Phonological and Print Processing and a Print Knowledge subtest. After all of these were completed, two observational measures were used to look at the impact of professional development conditions on classroom materials, activities, and teaching behaviors. This was done by using the Early Language and Literacy Classroom Observation Toolkit. The toolkit consisted of several

measures that assess classroom language and literacy activities as well as resources (Lonigan et al, 2011).

This was one of the first studies to evaluate the effects of different professional development models on child outcomes. The researchers concluded that academic-skills focused curriculum provided clear advantages relative to traditional early childhood curriculum for the increase of the early literacy skills of children who are at-risk of later academic difficulties (Lonigan et al., 2011).

A central purpose of professional development is to improve teachers' understanding of effective instruction in their content area (Shulman, 1986). Research has shown that teachers' knowledge about reading improves when they participate in intensive, extended programs of professional development in reading. Teachers have been found to benefit from being shown alternative and effective methods when they have been given opportunities to learn how to apply these to student learning (Garet, Cronen, Eaton, Kurki, Ludwig et al., 2008).

An alternative to the various forms of professional development is the idea of a literacy coach. A literacy coach facilitates the delivery of the professional development program, as well as providing support for the teachers. The International Reading Association defines literacy coach as a reading specialist who focuses on providing professional development for teachers by giving them the support needed to implement various instructional programs and practices (International Reading Association, 2004).

Carlisle and Berebitsky (2011) looked at the benefits for primary grade teachers of having a professional development coach. This study examined a Reading First program in Michigan with 76 first grade teachers. The teachers attended nine seminars to improve

their knowledge about reading and reading instruction. The seminars began in October and were conducted every three to four weeks.

The participating teachers completed a survey that looked at their attitudes toward professional development, communication around literacy, and principals' support for change, reflective dialogue, and teacher information. Then during each teacher's literacy instruction, the literacy coach would observe the teachers for one or more of the five components required by the Reading First legislation. Those five components included phonemic awareness, phonics, fluency, vocabulary, and comprehension (Carlisle & Berebitsky, 2011).

Overall, the data suggested benefits to having a literacy coach to support and guide teacher instruction. Teachers were better able to meet the needs of the students in their classrooms who were considered to be at risk, as well as those children who were developing on target (Carlisle & Berebitsky, 2011). These tools for professional development could be tweaked to meet the needs of teachers/directors who work with infants. Child-care administrators or peer teachers might serve as coaches for each other in infant settings. Strategies might include using observation or charts to determine the number of books that were read to the children and the emphasis of repeating certain vocabulary words such as *red*, *ball*, *dog*, or *cat*.

Keys to a beneficial professional development.

Research has suggested that teachers and practitioners are the key to high-quality early childhood programs and child outcomes (Winton & McCollum, 2008). However, having a AA degree may not be sufficient for helping children to learn and develop to

their highest potential. Ongoing professional development will help these teachers and practitioners to stay up to date on the current knowledge base that is constantly changing.

Winton and McCollum categorize professional development into two categories, *pre-service education* and *in-service education*. Pre-service education refers to those obtaining a degree or professional credit and in-service education refers to on-the-job training and support. Brownell, Ross, Colon, and McCallum (2003) identified seven features that defined effective teacher education, or pre-service programs. Those are: 1) coherent program vision, 2) conscious blending of theory, 3) disciplinary knowledge and subject-specific pedagogical knowledge and practice, 4) carefully crafted field experiences, 5) standards for ensuring quality teaching, 6) active pedagogy using modeling and reflection, and 7) focus on meeting the needs of a diverse student population and collaboration as a vehicle for building a professional community. Joyce and Showers (2002) indicated in their study that workshops alone do not translate into changes in classroom practices for in-service teachers. Workshops in conjunction with classroom coach did result in the use of new ideas by these teachers.

The impact of training and education on child-care providers has been the focus of extensive studies (Fukkink & Lont, 2007). However, there has been limited research on the needs and interests of early childhood education trainers. Early childhood education (ECE) trainers educate a diverse early childhood workforce within a wide range of settings. These individuals have varying degrees of education, training, and experience. These groups of individuals teach large populations of young children with a wide range of abilities, ethnicities, cultures, languages, and socioeconomic statuses.

Merriam (2008) argued that a greater understanding of how adults learn would help these trainers structure their educational activities to meet the needs of the learners. Training is most effective when adults are involved in the planning of the training and when the instructors apply the following concepts: new information builds on their prior knowledge and experience, participants are active and viewed as partners in the learning process, participants meet a personal need and they can integrate and apply the information to their current setting, and the trainer provides a respectful, safe, and comfortable learning environment that promotes optimum learning.

A newer trend in professional development is the idea of *instructional coaching*. This developmental approach includes using reflective practice strategies including posing open-ended questions to teachers or video taping classes. Then the coaches help the teachers to analyze their teaching and its impact on children (Skiffington, Washburn, & Elliot, 2011). The coaches meet weekly with the teachers to assist them in applying what they have learned from professional development courses, workshop series, and study groups. The coaches also help the teachers plan curriculum, and build their capacity to use child and classroom data (Skiffington et al., 2011).

In order to have a successful and meaningful professional development the participants need to feel secure, be actively involved, and be able to implement ideas in their environment. Professional development has been identified as the “*driver* to support practitioners’ implementation of evidence-based practices and to improve developmental and learning outcomes of young children” (Snyder, Hemmeter & McLaughlin, 2011, pp. 357).

These same strategies are as applicable to teachers in infant classrooms as they are for teachers of older children. The recommendations for high quality professional development reviewed here will guide the development and implementation of my project, which is described in the next chapter.

Chapter III

The Project

Describe the Project in Detail

This project will be a one-day training made available to teachers working with infants either in a child-care center or in a home-based environment. Participants for this training will register online through Child Care Resource and Referral's online training registry.

General Overview of Project.

The training will be approximately eight hours in length. The morning session will consist of lecture that will focus on the definition of literacy, research regarding literacy, and how it is incorporated into the classroom/home environment. During the lecture, videos will be used so the participants can see how the infants react to hearing books read. A slide show of infants interacting with books will also be used. The afternoon session will include examples of effective early literacy activities, as well as opportunities to make teacher-made materials the attendees can use in their own classrooms. The training session will be held at Area Education Agency 267, located in Cedar Falls, Iowa. This setting will allow access to equipment and materials to be used during the afternoon *make-and-take* session. There will be a cap of 15 participants for this training.

Attendees will receive a packet of materials upon arrival. The packet will contain background information of the presenter, information regarding literacy, and resources for them to use in the future, which include book titles and helpful websites (see Appendix). Examples of age appropriate books that are commercial products or made by

the teachers, as well as other visual literature items will be shown, such as songbooks, posters, and sign language posters.

An evaluation of the workshop, included in the attendee's packets, will be collected. This data will provide information about the effectiveness of the content and the presenter, as well as suggestions for how to improve the workshop for the future.

Agenda for the Day.

Within the morning lecture time, a variety of media will be demonstrated, with child-made examples to show possibilities. Videos of infants engaged in lessons that are rich in literacy content will be interspersed throughout the day.

The afternoon portion of the training will be an opportunity for the participants to create materials to take with them. Basic materials will be provided for them, including poster boards, construction paper, scissors, tape, glue, markers, computers, Internet, printer, binding machine, binder rings, and a laminator. At the end of the training, providers will be able to share the materials they created with the other participants in order to increase the number and variety of potential activities for the participants.

The following schedule indicates the timeline for the day:

Workshop Timeline

8:00-8:30: Breakfast and Introductions

8:30-9:15: Literacy Information-Definition

9:15-10:15: Literacy Information-Research Says

10:15-10:30: Break

10:30-12:00: Literacy Information-Incorporating into classroom/home environment

12:00-12:30: Lunch (Onsite)

12:30-1:30: Literacy Examples

1:30-1:45: Break

1:45-3:30: Create Materials

3:30-4:00: Sharing of Materials, Questions, Final Thoughts, Evaluation of Training

The schedule will be flexible, allowing for questions from participants. It is important to provide the participants the information regarding literacy by using both lecture and visual representation. This will improve the engagement of the participants.

Chapter IV.

Conclusions and Recommendations

Conclusions

The ability to read, write, and communicate has always been a very important tool for children to have as they begin their elementary school years. The research reviewed has shown features of literacy that play an important role in children's literacy development. Making sure that books and other materials are age-appropriate will not only ensure a rewarding experience, but will help children learn about the joys of reading, writing, and communicating and the knowledge from these that awaits them.

Identification and Synthesis Insights

The foundation for future education for infants in our care depends greatly on the actions of their teachers. The more interacting and hands on experience with materials we offer our infants, the more knowledge they will be able to gain. Researchers have been able to identify elements of literacy that are important for infants, ways to incorporate literacy for those children with disabilities, and what parents and teachers can do for those children who are considered to be *at risk* (Bus et al., 1997; Bus et al., 1995; Dodici & Draper, 2001; Dwyer & Neuman, 2008; Frosch et al., 2001; Holland, 2008; Honig & Shin, 2001; Makin, 2006; Neuman, 1999; Raikes et al., 2006).

Recommendations

Teachers and caregivers should provide infants with daily opportunities to explore the elements of literacy. This may occur through read alouds, independent reading, songs, sign language, or experimenting with writing materials. Many educators or providers are hesitant to give these opportunities to their infants due to the lack of

knowledge that surrounds the benefits. *Eating* and *touching* of the books are first steps in the exploration of literacy. As the infants get older, they will begin to make sounds and look and laugh at the pictures with their educators or providers. These special moments will also help the infants develop a better relationship with their caregivers.

Future Projects/Research

I think it would be interesting to follow up with the participants who attend the professional development to learn how they are using their materials, the reactions of the infants who are using them and the responses they are hearing from the infants' parents. This would also be an opportunity for the other participants to take notes on what have been the most attractive items for the infants in other centers and incorporate them into their own classrooms.

Further research regarding reading and writing with infants is needed. I found no research regarding writing and fine motor development. This may be due to a belief infants should not be given these opportunities because they are too young, or that the opportunities are not developmentally appropriate.

Educational Policies

All infants should be given the opportunity daily to experiment with books, writing, and communication. Educators are the roots to the tree of knowledge. We provide children with the basic nutrients they need to grow and survive in the world. Without a solid foundation the tree will topple and children struggle to grow and flourish in the future.

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Appendix

Handouts

About the Presenter

Tera Weber is a graduate from the University of Northern Iowa with her MAE degree in Curriculum and Instruction. She also has her BA in Early Childhood and Elementary Education. She has taught at the University of Northern Iowa Child Development Center since the fall of 2003. She is currently the teacher in the Infant Room. She has also taught the three to five year olds, toddlers, and two to three year olds.

A Few Facts About Literacy

- The years birth through age five are a critical time for children's development and learning.
- It is estimated that more than a third of all American fourth graders read so poorly that they cannot complete their schoolwork successfully.
- The National Early Literacy Panel found the following skills to be precursors to children's later growth in the ability to decode and comprehend text, write, and spell. These precursors are: becoming aware of systematic patterns of sounds in spoken language, manipulate sounds in words, recognize words and break them apart, learning the relationship between sounds and letters, and building oral language and vocabulary skills.
- Strategies to incorporate with your infants to encourage early reading skills include: talking with the infant and reading with the infant.

Resources for Teachers

- A Child Becomes a Reader-Pamphlet by the National Institute for Literacy
- Children's Books:
 - *ABC* by Cathy Heck
 - *Hugs and Kisses* by Christophe Loupe and Eve Tharlet
 - *Toes, Ears, & Nose* by Marion Dane Bauer
 - *Jungle Babies* by Charles Reasoner
 - *I Love You, Good Night* by Jon Buller
 - *The Going to Bed Book* by Sandra Boynton
 - *Little Quack Loves Colors* by Lauren Thompson
 - *Old McDonald* by Rosemary Wells
 - *What Floats* by Julie Aigner-Clark
 - *Twinkle, Twinkle, Little Star and other favorite bedtime rhymes* by Sanja Rescek