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### Hand-on Strategies to Help Assist Children in Letter Formation and Letter Recognition

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# Hand-on Strategies to Help Assist Children in Letter Formation and Letter Recognition

## Abstract

This study was performed to discover strategies that can assist children in forming letters and recognizing letters. The research question is, given that literacy is a social process that is influential to one's culture, this action research question asks what are some hands-on strategies that can assist a child in early literacy development with letter recognition and letter formation? Within this study, data was collected, parents were given questionnaires, teachers were interviewed and students were assessed. Through this data the findings were an array of hands on strategies that can be used to help children. Implications for teachers include keeping the children engaged is key when working on letter formation and letter recognition. It is important for teachers to keep this in mind to ensure the most growth from their students.

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Hand-on Strategies to Help Assist Children in Letter Formation and Letter Recognition

By

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Submitted in partial fulfillment of the requirements for the degree  
M.S. Literacy Education

Supervised by

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School of Arts and Sciences  
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August 2012

### Abstract

This study was performed to discover strategies that can assist children in forming letters and recognizing letters. The research question is, given that literacy is a social process that is influential to one's culture, this action research question asks what are some hands-on strategies that can assist a child in early literacy development with letter recognition and letter formation? Within this study, data was collected, parents were given questionnaires, teachers were interviewed and students were assessed. Through this data the findings were an array of hands on strategies that can be used to help children. Implications for teachers include keeping the children engaged is key when working on letter formation and letter recognition. It is important for teachers to keep this in mind to ensure the most growth from their students.

### **Hand-on Strategies to Help Assist Children in Letter Formation and Letter Recognition**

Literacy is the cornerstone to all academic subjects. The earlier a child is exposed to literacy the more successful a student they will become (Otto, 2008). If a child struggles with literacy it will hinder him or her in all other subject matters (Massengill & Sundberg, 2006). Parents and other caregivers can help a child by immersing them into literacy. By reading to children it will form a better relationship between the reader and the child. The child will learn that reading can be entertaining and will want to continue the process (Aram, 2006). Learning literacy at the toddler and preschool age will also help with a child's basic speech skills. Children at this age are learning how their own speech works. By exposing a toddler and preschooler to books it will help them increase their vocabulary and work with the enunciation of words, that the toddler or preschooler will hear (Anothony, Williams, McDonald, & Francis, 2007)

It is very important for young children to be exposed to many different forms of literacy. One of the first exposures to literacy learning that children will have is learning to recognize letters and form letters. Once a child can recognize and form letters it will help him or her in the process of reading and writing. One of those forms is exposure to the alphabet. If a child does not know the letters of the alphabet it will significantly hinder his or her ability to read and write. The earlier a child is taught the letters of the alphabet the stronger a reader they might be (Massengill & Sundberg, 2006). Reading and writing instruction typically starts in a child's first year in primary school, around age six. Alphabet knowledge is usually taught through formal reading and writing instruction. With changing times, children are now learning to recognize letters and write letters at the toddler and preschool age, ages two to five. Children need to have the basics of letter recognition and sounds of the letters memorized in order to allow them to be

successful readers and writers. Children learn best through many different approaches of instruction. As long as the instruction is meaningful, children will learn and succeed (Aram, 2006).

My question for my research project was what are some hands-on strategies that can assist a child in early literacy development with letter recognition and letter formation? . Through my research and a review of literature I have determined that there are numerous strategies to help children in the emergent literacy stage of development. Teachers were interviewed in my research project and they shared a variety of similar activities, the end result was that the activities used have to be intriguing to the child to fit his or her skill level and interests. It is important for teachers to make sure that the activities that they are working with have a purpose and are suitable for the group of children. With children at the emergent literacy stage of development there are strategies that will assist them in learning how to form and recognize letters.

### **Theoretical Framework**

Literacy has been defined in many different ways by many different scholars. Literacy is a broad term that encompasses many different components. To tie it into one definition is a difficult task. Literacy is a multifaceted, lifelong process that allows someone the ability to read, write, think, speak, listen and view the world socially, constructively, and critically (Gee, 1989). Literacy is a tool that can be used in all content areas. A person starts learning literacy from the day they are born. As soon as someone is born he/she start to hear and see the world. Literacy is ever changing, and each day someone reads, writes, thinks, speaks, listens, and views the world differently (Kucer, 2001). Everyday people are interacting with one another, and they are making decisions about their lives whether it is significant or not. In order to do this they must

use literacy skills. People are surrounded by literacy everywhere they go. Literacy is important to teach and expose children at a very young age. From the moment that people are born they are being exposed to literacy (Gee, 1989). One of the strongest indicators for a child to start kindergarten is to have a basis for letter formation and letter recognition. This beginning part of literacy is very important for children to learn (Massengill & Sundberg, 2006).

It is very important for there to be a strong impact of literacy on young children. The earlier a child can acquire literacy the more successful in literacy they may become. Some of the ways in which a child can be exposed to literacy is by instrumental literacy. This use of literacy involves objects that children see all the time for example, a receipt or street sign. Children who are pretending they are a waiter or waitress and scribbling on a note pad are practicing early literacy techniques. Another use of literacy is social interaction. Social interactions involves greeting cards, bumper stickers cartoons and many more. Anytime a child sees one of these they are being exposed to literacy. All of these exposures will help a child and might increase their interest in literacy. By having a child pretend to write like he/she is a waiter or waitress is the start of his/her writing skills. The children are practicing letter formation. Along with trying to read a menu if he or she is playing restaurant is fostering their reading skills and exposing them to print. Which in turn is exposing children to letter recognition. With pretend play it is helping a child be exposed to as many opportunities there are for reading and writing.

A large part of literacy is communication. Gee (1990) states that there are many different ways of speaking, in which he refers to it as discourse. Children's primary discourse is that of which they speak at home. A child's secondary discourse is that of which he or she speaks at school. Some individuals have more than two forms of discourse. The different discourse an individual has is important because: "without language, a society and its culture cannot exist"

(Otto et al., 2008 p. 3). The sociocultural theory plays a role in this topic. Sociocultural theory as explained by Vygotsky is described as learning through the social process. The theory states that a person's culture, everything that surrounds them affects the way he or she learns. A child's culture plays a role in how he or she do academically. At an early age children need to understand that there are two forms of language involved in communication, receptive language and expressive language. Receptive language is that child's comprehension of the words he or she hear and see, expressive language involves the interactions the children have socially (Otto, 2008). With a child understanding both of these forms of language, he or she can communicate efficiently to ensure success in their culture. In terms of letter formation and letter recognition sociocultural theory plays a large role. Children are exposed to letters everyday. Whether the exposure to letters come from television or the toys and games that children play with, they are always exposed to them.

In order for the child to be successful in literacy he or she needs to know the basics of his or her own language in order to succeed. In an article writing by Otto (2008), she created the interrelations between the five aspects of language knowledge (p.49). She states that there are five different aspects of language that coincide with one another. Children are developing and refining all five aspects of language. These aspects consist of, morphemic knowledge, syntactic knowledge, semantic knowledge, phonetic knowledge and pragmatic knowledge. The five aspects of language do not develop in isolation they must interact with one another. Morphemic knowledge is the knowledge of word structure, syntactic knowledge refers to meaning and comprehending. Semantic knowledge pulls from one's memory, phonetic knowledge is the sound-symbol relations, and pragmatic knowledge is the awareness of how language is to achieve communication. All five of these aspects are needed in order for someone to



communicate. Once all of these five aspects of language are refined it will help a person with his or her culture. Language helps define one's culture. People in a culture need to understand their development of knowledge to help others. In relation to the sociocultural theory there needs to be a balance with the aspects of language to allow one to be in his or her zone of proximal development. A person's zone of proximal development is where the greatest amount of learning occurs. The learning is not too easy and it is also not too hard. A person needs to be able to problem solve in order to learn. A child's zone of proximal development is different from an adult's. The stronger a child's knowledge of his or her own language development the more he/she can learn. In turn the language development will help in assisting in one's zone of proximal development which will help in his or her culture. Letter formation and letter recognition is the start to a person's knowledge of their language development. A person needs to have a strong foundation of letter formation and letter recognition to be successful in his or her own language.

In order for a child to enter kindergarten he or she must go through a screening to make sure that he or she is ready to start school. Children enter school at many different levels some children have had more exposure to literacy than others. With this exposure, cultural modeling plays a huge role in a child's knowledge as he or she enters school. The literacy he or she gains out of school and the practices that happen in school all support academic learning (Kucer 2009). When a child ties the two together there is greater growth academically with the child. The more closely practices outside of school and inside of school relate the greater growth will be shown with the child. Teachers and parents need to work together to make sure that there are similar learning events happening between home and school cultures. (Lee, 2000, 2001, 2007). Students will be able to gain more literacy skills if the ways they are learning are similar. In terms of

sociocultural theory the cultures of a child's home life and school life need to merge to have the greatest growth academically for the child. This merge of home life and school life is particularly important for children starting school. Letter formation and letter recognition need to be similarly taught to children at home and at school to allow for the child to stay in his or her own zone of proximal development.

Sociocultural Theory plays a large role in the development of one's literacy. Culture plays a large influence on what a child is exposed to, in terms of literacy. In order for a child to be in his or her zone of proximal development to ensure the greatest amount of academically growth that child needs to have assistance from his or her own culture. One of the first steps in a child learning how to read and write is learning letter formation and letter recognition. The child's culture assists in how that child learns how to read and write.

**Research Question**

Given that literacy is a social process that is influential to one's culture, this action research question asks what are some hands-on strategies that can assist a child in early literacy development with letter recognition and letter formation?

### **Literature Review**

At a very young age children are learning the early skills needed to be able to read and write. What they learn will affect them in their later years of schooling (Anthony, Williams, McDonald, & Francis 2007). Two of the first skills that children learn are letter formation and letter recognition. If children do not have a strong understanding on these two skills it will affect them greatly in their future of learning how to read and write. One of the first steps in learning letter recognition is the alphabet and gaining alphabet knowledge. One of the first steps in learning letter formation is a child learning how to write his or her own name. Alphabet books help children with letter formation and letter recognition.

Through reviewing literature there were three themes that emerged. Those three themes were the following, alphabet knowledge development in connection to early literacy skills, name writing and the affect it has on early literacy skills, and alphabet books and the affect those books have on early literacy skills.

#### **Alphabet Knowledge Development in Connection to Early Literacy Skills**

A very complex but necessary skill that children need to have is alphabet knowledge (Massengill & Sundberg, 2006). Alphabet knowledge is knowing the letters of the alphabet and being able to recognize them. Being able to recognize the letters is an important skill needed to be successful in reading and writing. Acquiring ones oral and written language system is the basis for alphabet knowledge (Turnbull, Bowles, Skibbe, Justice, & Wiggins, 2010). Phonemes and graphemes are the most basic when it comes to letter formation and sound (Turnbull et al. 2010). Phonemes are the individual sounds that letters make and graphemes are the way letters look. Children need to have a strong foundation of phonemes and graphemes in order to be successful in reading and writing (Turnbull et al. 2010). The reason is because without the

knowledge of phonemes and graphemes, learning the alphabet will be near impossible. It is important for a child to have an understanding of alphabet knowledge to further their growth of letter formations and letter recognitions.

Alphabet knowledge is very complex, but necessary for young children to know and understand (Massengill & Sundberg, 2006). The reason it is so complex is due to the fact that each letter in the alphabet makes a different sound. Also some letters look different upper case versus lower case. It is acquiring the knowledge of one's oral and written language systems (Turnbull, et al. 2010). Alphabet knowledge is a child's familiarity with the forms of letters, the corresponding names and sounds of letters, and the ways to write letters (Piasta & Wagner, 2010). Once a child masters what the letters look like the sounds are another hurdle he or she has to master to make sense of reading and writing. It takes around five years for a child to acquire alphabet knowledge. The time it takes for a child to acquire the knowledge of the alphabet is by being exposed to it at home and at school (Massengill & Sundberg, 2006). The more a child is exposed the better understanding of alphabet knowledge the child will have. Alphabet knowledge is one of the first steps in a child starting to read. A child needs to understand what letters look like, upper case letters and lower case letters. Along with this understanding of what letters look like, children need to understand that some upper case letters look differently from their lower case letters for example 'G' and 'g'. Children also need to know the many different sounds that letters can make, individually at first. Some letters can produce multiple sounds, for example the letter 'C' can sound like /s/ or /k/. If children do not have a firm grasp on alphabet knowledge it can greatly impact a child's later reading abilities. (Turnbull et al. 2010). With this knowledge educators need to ask themselves how does one best instruct a child in gaining knowledge of the alphabet. For children to fully understand the alphabet they

need to have an understanding on the phonemes and graphemes of the letters. It is very important for someone to teach a child the alphabet, but there are some complications that one might face. For a child to learn the alphabet at an early age will help that child through their years of schooling.

When it comes to learning the alphabet for young children it is more than learning the ABC song. Children need to be exposed to not only the way letters look but the way the letters sound. A phoneme is the smallest unit of sound. A phoneme is just the tip of the iceberg in relation to letter sounds. Anthony, Williams, McDonald, and Francis (2007), summarized the many processes that the brain goes through in order to understand letter sounds:

PA refers to one's ability to detect or manipulate the sounds in his or her oral language.

PA encompasses phoneme awareness, the ability to manipulate individual sounds

(phonemes) in words, and rudimentary phonological awareness skills, such as judging

whether two words rhyme. PM refers to the coding of information in a sound-based

representation system for temporary storage. PM is utilized during all cognitive tasks

that involve processing sound information. Individuals' PM capacity is often

operationalized by auditory span tasks, like digit span. RAN refers to the efficiency of

retrieving phonological codes from memory. Individual differences in efficiency of

retrieving phonologically stored information from memory are typically operationalized

by performance on rapid automatic naming tasks in which individuals verbally identify

common objects, letters or numbers as quickly as possible. (p. 114)

In the study performed by Anthony et al. (2007), they examined the validity of the phonological processing abilities in children ranging from ages three to five. They assessed children on five different areas, phonological awareness, phonological access, letter knowledge,

phonological memory, and print awareness. The results stated that the different phonological processing abilities were found to be different from the cognitive abilities that are considered general. Another finding from this study is that there showed a strong correlation between a child's phonological processing abilities and their emergent literacy skills. This finding is important because if a child pronounces something incorrectly then that alters his or her growth with the skills needed in emergent literacy.

The sounds that letters make is another complex structure that child need to learn in order to succeed in their years of schooling. Silva et al. (2010) along with Anthony et al. (2007) all state that the phonological awareness plays a crucial role in the acquisition of literacy particularly alphabet knowledge. If there is a struggle with understanding phonological awareness there will be difficulties with learning to read.

There are many letters of the alphabet that have multiple sounds. There are only eight letters in the alphabet where the sounds can be derived from (b, d, j, p, t, k, v, and z) (Massengill & Sundberg, 2006). There are some letters that have the “ee” sound as the final sound in it's name (b, e, p, d, t, c, g, v, and z). For example 'Tt', the 't' in 'the' sounds different from the 't' in 'top'. Another example is letter 'Cc', the 'c' in 'cat' sounds different from the 'c' in 'pace', which has a 's' sound. Also there are some letters that have the short /e/ sound in the beginning of letter sound (f, m, and n) (Massengill & Sundberg, 2006). All of the vowels produce different sounds, there are short vowels sounds and long vowels sounds. There are also some consonants that produce multiple sounds.

One study that helped students with the confusion of different letters making different sounds is a study performed by Massengill and Sundberg (2006). The purpose of their study was to assess children and work with them on teaching simultaneously letter sounds and formations.

They created an integrated alphabet approach and after working on the study and finding that what they created worked they started to implement the integrated alphabet approach into classrooms. The integrated alphabet approach is a set of cards. Each card has an abstract symbol that represents a letter of the alphabet. The researchers worked with students for ten twenty minute sessions. The researcher starts the session off by showing the child a card with a picture on it. For example they had the letter 'C', the picture was of a cat's mouth opened. With each letter there was a saying that went with it. The researcher will give the child a brief story pertaining to the picture, this story has alliteration related to the letter as well. The teacher will then trace the letter that is in the image (the picture will start with the same letter and the letter shown on the card). The student will then learn the phoneme for each picture, this is the second phase which is approximately ten twenty minute sessions. The third phase is considered the integration phase. Here, children will work heavily on sound-symbol correspondence. This phase is where the researcher works on the letters that have multiple sounds. The final phase is where the student will combine phonics and handwriting together. They will practice the letter sounds while they learn to write the letters.

Silva et al. (2010) performed a study on childrens' invented spelling. In comparison to Massengill and Sundberg (2006) study both state that it is important to have words that have initial syllables that match the letter name, which will allow the children to understand letters better. Both studies found it was harder for the students to learn vowels due to the numerous sounds all the vowels make. Even though the study performed by Silva et al. (2010), was in Spanish, there were similar findings to Massengill and Sundberg (2006) in relation to the difficulties that children had.

There have been many researchers that have stated that instruction to child should be



letter sound only, letter name only, or a combination of instructing letter sound and letter name. Groff, (1984) and McGuinness (2004) state that having a child learn letter name can interfere with the acquisition of letter sound. There are some curricula that will only teach children letter sounds. There has been research performed to see what is more beneficial to children, in the United States. This form of instruction might be seen as unaffected (Piasta et al. 2010). In the research performed by Massengill and Sundberg (2006) they found that children learn more effectively when they are taught letter sound and letter name together. The integrated alphabet approach uses many different senses with learning the alphabet, visual, auditory, and kinesthetic. Massengill and Sundberg (2006) state that when a person is learning something new if it is registered by different senses that it is stored in the memory better.

Piasta et al. (2010) conducted a study to see whether letter name instruction or letter sound instruction was more beneficial to children. With their study they have three small groups, one group of preschool-aged children received letter name instruction, another small group received letter sound instruction, where the third group (the control group) received both letter name and letter sound instruction. The children in the small groups were pre-assessed, they were then taught a series of mini lessons and were then post-assessed. Statistically the results showed that there were many benefits to teaching children using a combination of letter sounds and letter names instead of teaching one of those concepts in isolation. Silva et al. (2008), conducted a different study from the Piasta et al. (2010) study but both studies showed similar results. Piasta et al. (2010) conducted their research on spelling programs. They assessed the letter sound knowledge of children based on their invented spelling. Their results show that children need to be taught in the combination of letter sound and letter name. Diamond, Gerde, and Powell (2008) had similar findings as Silva et al. (2008), along with Piasta et al. (2010). All of these

studies found that children were more successful with literacy if they were taught letter sounds and letter names together. The children in all of these studies were found to be able to grasp the concepts of print better than the children that received letter sound and letter name instruction separately.

In a child's entry into kindergarten, if he or she is able to recognize a letter by name andz). Other letters look different as an upper case letter versus a lower case letter (Aa, Bb, Dd, Ee, Ff, Gg, Hh, Ii, Jj, Kk, Ll, Mm, Nn, Pp, Qq, Rr, Tt, Yy), with letters looking different it can be confusing for children when they are learning the alphabet. by sound, then it might show a large advantage in his or her later years of school. Once a child has become proficient in letter names and sounds the child can then use this knowledge to expand on their own reading and writing skills. For example it will help them with spelling, decoding, and comprehension (Molfese et al. 2010). It is important for children to be exposed to upper case and lower case letters. Some are easier for children to learn. For example some letters look the same as an upper case letter as they do as a lower case letter (Cc, Oo, Ss, Uu, Vv, Ww, Xx, Z Some research states that it is better for children to learn upper case and lower case letters in isolation where other research has found that it is better to teach children all of the letters (Massengill & Sundberg, 2006). All research has shown that it is important to teach children in such a way that it is gamelike, naturalistic, and fun (Massengill & Sundberg, 2006).

Letter sounds and letter names are some of the first early literacy skills a child learns in the steps to becoming a reader. If a child does not have a strong understanding on the look of a letter or the many different sounds that letters can make then there can be difficulties in their ability to read (Anthony, Williams, McDonald, & Francis, 2007). By children having a better understanding of literacy skills they will become better readers and writers. It is also important

when teaching children letter names and letter sounds to teach them simultaneously to ensure the best understanding and growth from younger children. Alphabet knowledge is very complex and takes many years for a child to fully understand (Massengill & Sundberg, 2006). By teaching a child in a naturalistic, fun, engaging way will ensure the greatest success for the child (Massengill & Sundberg, 2006).

### **Name Writing and the Affect it has on Early Literacy Skills**

One of the earliest and more significant accomplishment that young children experience is the process of being able to write their own name (Puranik & Lonigan, 2011). There is a sense of pride in a child when he or she is able to write his or her own name. It is important for children to have a firm grasp on alphabet knowledge in order to fully understand what writing their name means, in terms of letter formation, sound, orientation and directionality (Molfese et al. 2011). The reason for importance of having a firm grasp on alphabet knowledge in order to have a child write his or her own name is due to the knowledge of phonemes and graphemes needed. Children need to know the letters that create their name along with the sounds those letters make in order to say their name.

Children that are in preschool learn the letters of the alphabet. Children are learning how letters look and how to write them. Some of the first letters that children acquire and understand how to write are the letters that compose their name. There is a personal and a social significance in a child learning how to write their name (Puranik & Lonigan, 2011). A child's name is who they identify them-self to be. A child's name is a very important part to the child. It has been said that children learning how to write their name is the foundation needed to learn all of the other literacy skills needed to become a successful reader and writer (Puranki, Lonigan, & Suk Kim, 2011).

Puranki, Lonigan, and Suk Kim (2011) state: "Writing development is not an all-or-none phenomenon. Perhaps knowing how to write one's name signals the start of developing knowledge of the alphabetic principle." (p. 473) In Puranki, Lonigan, and Suk Kim's (2011), study they examined which emergent literacy skills contributed to the skills needed for one to write his or her own name. Children ranging in ages of four to five were given tasks to test their knowledge of print and their skills of letter-writing. After the children's parents filled out a questionnaire, the children were given several different tasks to complete. Some of the results that were found were that a child's ability to write their name is closely related to that child's print knowledge (Puranik, Lonigan, & Suk Kim, 2011). A child's ability to write his or her own name has been said to have a high correlation to print concepts as well (Puranik & Lonigan, 2011). A child's print knowledge includes knowing the difference between letters and numbers, and print and pictures. Along with understanding that there are spaces between letters and between words and that writing is arranged in a linear fashion (Puranik, Lonigan, & Suk Kim, 2011). For a child to be able to write his or her own name there is a lot that needs to happen to be able to do such a skill. The child needs to be have fine motor skills to be able to hold a writing utensil (Cabell, Justice, Zucker, McGinty, 2009). Children need to be able to recognize the letters in their name, along with knowing the way each letter sounds. The child also needs to have an idea of print concepts. There needs to be an understand that words are comprised of different letters and that the words are writing from left to right and top to bottom. In order for a child to master all of these skills needed there will be a lot of experimenting with writing (Cabell et al. 2009).

As soon as children have the fine motor skills to hold a writing implement children are experimenting with writing. The typical writing process for a child is first scribbling, then linear

scribbles, followed by separate symbols, where some are letter-like, name writing with a mixture of correctly written letters and symbols, name writing with some letters while other letters are written in reverse or they are omitted, and lastly the name written correctly (Cabell et al. 2009). Being able to produce letters is one of the most fundamental processes in written expression (Puranik, Lonigan, & Suk Kim, 2011). Children learn to write and are also capable of producing a piece of writing before they are exposed to formal instruction (Puranik & Lonigan, 2011).

In a typical preschool classroom most children are learning how to write their name. The process children go through is usually copying or tracing the different letters that comprise of their name (Molfese et al. 2011). Having children write their name can be assisted or unassisted. There are activities that help a child compose the letters of their name. After the child has learned the mechanics of the formations of the letters in their name, the arrangement of the letters, and the conceptual knowledge they should have a firm grasp on being able to write their name (Molfese et al. 2011). In the studies performed by Longcamp, Zerbato-Poudou, and Velay (2005) they found that it is important for children to be able to recognize the letters they are writing. Like the Molfese et al. (2011) study both agree that it is important the the children understand what the letters are that they are creating. If children do not know the letters that they are writing both studies have shown that it is difficult for the children to produce the letters.

Molfese et al. (2011) conducted a study on the writing skills of children preschool to kindergarten. In their study they compared letter writing scores with name writing abilities. The participants attended either a state-funded or Head-Start program. The children in the study were assessed in different writing skills. They were assessed in name writing, letter writing, non-writing, letter naming and word reading. The results of the study showed that children scored higher on the name writing portion of the assessment. The children in this study scored lower

than compared to other studies in both the name writing and letter writing. There were three major findings that were found as a result of this study. One of those findings was that the children's writing knowledge reflected a range of skills that are needed for writing one's name. Another finding was that there is a correlation between name writing components and letter writing components, for example formation of the letters, left-right orientation and vertical orientation. It is important for a parent or teacher to understand the relationship between name writing and letter writing (Molfese et al. 2011).

With the research that was performed by Molfese et al. (2011) and interesting twist to their study would be how does the affect of technology play a role in handwriting. Longcamp et al. (2005) did just that. They looked at several different studies and found that a crucial role is the visual recognition of letters. As stated above Molfese et al. (2011) found this to be true. With the studies performed by Molfese et al. (2011) along with Puranik, Lonigan, and Kim (2011) found that it is important to have children learn to write the letters of the alphabet. With the growth of technology in the field of literacy Longcamp et al. (2005) found keyboards and children typing problematic. There was little growth in learning what the children that learned letters on a computer.

There is a great sense of pride in a child when he or she is able to write his or her own name (Molfese et al. 2011). When a child learns to write his or her name it is one of the very first opportunities for a child to be able to connect what he or she have learned about oral and writing language thus far in their process of learning how to read and write. It has been said that having a child learn how to write his or her own name is the foundation to which will help build on other literacy skills (Puranik & Lonigan, 2011). Before a child can write his or her own name children first go through a phase of literacy development called pre-alphabetic or

logographic (Cabell et al 2009). With this phase children use context clues to help them remember symbols that are tied to words. For example, seeing a fish on a bag, the child will recognize that to be the Goldfish snack. Once children become familiar with the letters in their own name it will allow them the move on from the pre-alphabetic stage of literacy development and into the alphabetic stage of literacy development. When reading or being read to children will be able to pick out the letters in his or her name within the reading piece. Research performed by Puranik and Lonigan (2011) has shown that children with longer names are at more of a benefit because they are able to recognize more letters when looking at print. Children with longer names tend to be able to produce longer spellings of words as well (Puranik & Lonigan, 2011).

In a study researched by Puranik and Lonigan (2011) they studied the two different components to name writing. They looked at proficiency along with the length of one's name in relation to their emergent literacy skills. This study focused on children ranging from ages four to five. The children within this study were recruited from another study that was focusing on skills needed for emergent reading and emergent writing. These children went to different child-care centers. Some of these child-care centers were public while others were private. The children were all tested individually at the child-care centers that they attended. They were all assessed in two to three sessions. These sessions were approximately 20-40 minutes in length. Children were assessed in phonological awareness, alphabet knowledge, print concepts, name writing, letter writing, spelling and inter-rater reliability. The results of the study showed that the level of name writing proficiency was different with the children with respect to the other emergent reading and emergent writing skills that are considered critical. Another result of this study was that the length of a child's name did not determine an advantage or a disadvantage in

comparison to the child's emergent literacy skills, including alphabet knowledge and spelling skills of the children (Puranik & Lonigan, 2010).

With the previous study by Puranik and Lonigan (2012) and the study by Puranik, Lonigan and Kim (2011) showed very similar results. Both studies found that the ability of children to be able to write their name was linked to print related knowledge. This find is significant because it shows that it is important for children to work on letter formation and letter recognition simultaneously.

It has been stated that children who have higher abilities to name writing show greater achievements in emergent literacy (Puranik & Lonigan, 2010). A child's name is typically the first word a child will learn to write. With the child being able to write his or her own name will aid the child in the ability to spell. If a child is proficient in writing letters they are more likely to have the attention and cognitive resources to be able to spell other words. Having a child be proficient in writing letters will help a child in future reading and writing tasks (Puranik, Lonigan, & Suk Kim, 2011).

### **Alphabet Books and the Affect Those Books Have on Early Literacy Skills**

One way to help children with learning letter formation and letter recognition is by having them read alphabet books. An alphabet book is different from other books because usually alphabet books do not have a storyline (Evan, Saint-Aubin, & Landry, 2009). Children need to understand that many letters look differently, uppercase versus lowercase and that letters also have multiple sounds (Turnbull, Bowles, Skibbe, Justice, & Wiggins, 2010). Once children have a strong foundation of letter formations and letter recognitions this will help them in the future of reading and writing.

Reading is an activity that is very complicated and multifaceted (Horner & Memphis,



2001). For someone to be able to read his or her brain has to work through many different skills. Most of these skills are learned through formal instruction. Another way for children to learn the different skills needed to be able to read are by being exposed to stories. The interaction between someone reading to a child can be viewed as a production promoting literacy. It is seen as meaningful and motivating for children (Aram, 2006).

There are many benefits that come from a child being read to. Some of those benefits are that the books read can connect the relationship between a child's home literacy environment and a child's literacy skills. Another benefit is it helps increase a child's vocabulary and letter knowledge along with book exposure (Davidse, de Jong, Bus, Huijbregts, & Swaab, 2011). It also sparks interest within the child to continue reading and being read to. For these benefits to happen one needs to be able to teach a child about the look of print and how to read to help start children into independent reading.

When someone is reading a story to a child it is typically a listening activity. The pictures are read and at some level the text is heard (Evan et al. 2009). When children first look at a book their eyes tend to move towards the illustrations in the book (Evans et al. 2009). Hovland, Gapp, and Theis (2011), conducted a study that looked into teacher's perceptions of what characteristics of print were distinguishing. They created a questionnaire, they received writing samples and took observational notes. With their research they found many different strategies that can help a student with the concepts of print. One of the first things that a new reader must know is how one's eyes should move across the page, where one should start and what one should look for when reading. They found that when a child is of preschool-age look at the pictures in the story and not even recognize that there is print on the page (Evans et al. 2009). Davidse et al. (2011) state that children only look at the pictures instead of the words

when reading a book. They state that it is important for parents to help their children recognize that there are words on the paper. They also found that it is important for teachers to know the importance of exposing children to print throughout the entire school day. The more exposure children have the more practice they can have with the different concepts of print (Hovland et al. 2011).

Once the preschool-age children begin to become aware of print it looks like solid black lines. They then learn that print is made up of words which look like shorter sections of black lines. Once children who know an average of 20 letters or more start to realize words (Evans et al. 2009), they realize that words are composed of letters. To be able to recognize letters children start seeing the key features of letter shape, orientation, and the directionality (Bradley & Jones, 2007). The letters they tend to recognize first are typically the letters that compose their name. As their alphabet knowledge increases, children will be able to understand more about the process of reading. It is important for teachers to understand how the look of print can impact a child and their process of reading.

It is important for teachers to not only read books to their students but to also talk about the features of the book to help improve a child's concept of print. Teachers should show the children the title page and explain the author and illustrator. When reading big books the teacher can use a pointer. The pointer will show the children that reading has directionality, it occurs in a left to right top to bottom formation (Molfese et al 2011). Along with directionality teachers can briefly describe spacing, capital and lowercase letters, and how every piece of writing has a purpose. All of these will help a child with learning about print (Hovland et al. 2011).

One genre of books that is important for children to be exposed to at an early age are alphabet books. Alphabet books are essential for exposing younger children to because of the

importance of exposure to the alphabet (Bradley & Jones, 2007). Alphabet books are different from other story books. The main reason for the difference is because alphabet books do not typically follow a story line. It will usually have a letter on each page with a few words corresponding to the letter and a possible illustration. The letters are typically in alphabetic order, starting with A and ending with Z (Bradley & Jones, 2007).

Parents and teachers need to make sure that when reading alphabet books to children that the children have had some exposure to the letter names and letter sounds. If not then Evans et al. (2009) state:

Thus, when read by children themselves, for alphabet books to potentially be a useful tool for consolidating alphabetic knowledge and leading them to attend to the printed word, teachers and parents need to provide them with previous opportunities to acquire familiarity with letter forms and names. Otherwise, they are picture books that carry other benefits in this independent activity, but likely not learning to read (p. 1839).

Alphabet books are a way to expose children to the alphabet in a different way. It is also important for parents and teachers in the selection of alphabet books that they read to younger children.

In the study that was conducted by Evans et al. (2009) they tested the eye movement in kindergarteners when they were reading alphabet books. Twenty children that ranged in ages from 51 months to 71 months (five to seven years of age) participated in this study. Home Literacy Experiences Questionnaires, alphabet books and test measures were used for this study. The alphabet books had a single large uppercase letter, a word with an uppercase letter and an object that corresponded to the letter. Also there was a picture of a bear on each page. Each of the children that participated in this study were tested in session that lasted approximately one

hour. The study showed that children tend to look at the pictures first and then the words if they can identify the letter on that page. Children are more likely to look at the words quicker if they can automatically identify the word or letter (Evans et al. 2009). The parts of this study that focused on eye movement was similar to the study done by Hovland et al. (2011). Both studies showed that children were more likely to look at the pictures than the words. Another similar finding is that both studies found that if children were able to identify words, they were more likely to look at those words.

Learning letters is a difficult task for children to grasp. Parents and teachers need to help children and make it an engaging and entertaining activity for them. Children that do not have positive interactions between their parents or teachers when it comes to reading are at great risk of reading difficulties later in their schooling (Lachner et al. 2008).

When parents and teachers are selecting alphabet books to read to younger children, parents and teachers need to be advised. There are some alphabet books that are conveying the wrong message to children about the sounds that some letters may produce. Bradley and Jones (2007) state “For example, a letter, picture, and text stating 'A is for Arcade' suggests that the letter A sounds like /r/. Silent letters, as in 'K is for Knight' also may be confusing” (p. 457). Teachers and parents should be advised of this confusion of the letters and the many sounds that letters can make.

When a teacher or a parent reads a story to a child that person is typically going to ask the child questions regarding comprehension (Davidse, de Jong, Bus, Huijbregts, Swaab, 2011). Rarely does a parent or teacher ask questions to the child regarding the letters that make up the words of the story. Parents and teachers tend to ask questions about letters when reading alphabet books to children. For example, what letter is this, what sound does it make, what is

something that starts with this letter?. If a child does not know many letter names their parent did not ask them to name as many letters (Lachner et al. 2008). Parents should be challenging their children and asking questions throughout the reading. Another thing that parents might do while reading to their child an alphabet book is that they were more likely to say the name of a letter to their child to allow the child to recognize it in the words being read. By saying the name of the letter occurred more with alphabet books than storybooks.

In one study conducted by Lachner et. al (2008) they examined the references made by parents to their preschool aged children regarding letters when discussing a shared reading of an alphabet book. There were 44 participants in this study along with their caregivers. The participants were videotaped during a shared reading activity. When the researchers were evaluating the data by coded the different types of print speech that the parents used during the shared reading. Some of the examples that parents used during the shared reading were labeling, naming requests, yes or no questions, prompting, general information regarding the text. Some other examples are the child verbalizing an answer, or questioning. All of these examples seemed to be consistent with all of the participants (Lachner et. al 2008). Parents are a strong influence on their child's emergent literacy skills (Lachner et al. 2008). Davis, Evans, and Reynolds (2010) and Lechner et al. (2008) found similar language used between parent and child in their studies. The questions asked by parents to their child was similar in relation to alphabet books and storybooks.

Reading is considered to be an activity that is complicated and multifaceted (Horner & Memphis, 2001). There are a lot of different processes that the brain has to go through in order to comprehend every skill needed to be able to read and write. Some of the first steps in learning how to read and write is to first recognize the letters of the alphabet and the formations of the

letters of the alphabet. It has been stated that letter formation and letter recognition should be taught simultaneously (Massengill & Sundberg, 2006). Parents and teachers need to be aware that because a child knows how to write their own name does not mean that they understand all the concepts involving print knowledge in relation to alphabet knowledge (Molfese et al.). Alphabet books are another important aspect of learning that can be used to help children learn letter formation and letter recognition. Learning to read should be an entertaining life long process.

## **Method**

### **Context**

The place where the research was conducted was at Caterpillars Children's Center in western New York. Caterpillars Children's Center started in upstate New York in 1992 and has expanded. There are now six centers in the upstate New York area, and four in the western, New York area. Markerville, New York is a town located in Moe County just outside of the City of Rae. The total area of Markerville is 37.9 square miles. According to the 2000 census there are 34,645 people, 13,144 households, and 9,634 families that reside in the town. The racial makeup of the town is 93.48% White, 3.05% Asian, 2.11% African American, and 1.43% Hispanic. The median income for a household in town is \$63,223.

There are 13 classrooms in the Caterpillars Children's Center. At the Markerville location there are three classrooms that have children ranging from ages six weeks to 18 months. There are four classrooms that have children ranging from 18 months to 36 months. Two classrooms have children ranging from three years of age to four years of age. Three classrooms have children ranging from ages four to five. The last classroom is for the school age, age group. These children range from ages six to 12. There are 218 students enrolled currently at

Caterpillars Children's Center.

There was several students that were from different classrooms that participated in this research. One of the classrooms is a room made up of 14 children ranging in ages from 18 months to 36 months. 100% of the population of the classroom is white. Two of the other classrooms where there are students participating are made up of 19 students. 100% of those students are white as well. These students range in age from three years of age to four years of age. The other classroom is made up of 20 number of students. 18 of those students are white and 1 African American.

### **Participants**

**Students** (All student's names are pseudonyms, for their protection)

One student that participated in the research study was a girl named Mary. She is a three year old who has been with me in my classroom since she was 18 months old. Mary attends Caterpillars two times a week. She lives in Erieport, New York with her mother, father and brother who is in second grade. Her mother is from Puerto Rico and her father's grandmother is from Germany. Before Mary started in my classroom her mother watched her daily. During her time in my classroom Mary has grown. When she started she was just learning how to speak and with the time in my classroom she can now speak several sentences at a time. Her fine motor and gross motor skills have increased as well. She is able to hold a writing utensil and is able to write her own name. Mary can completely feed herself and she is able to drink out of a cup without a top on it. She started off in my classroom in diapers and is now completely potty trained. In relation to the research topic Mary can recognize a few letters of the alphabet, in random order. As stated before, she is able to write the letters of her first name and she can also spell her first name. She has a bright personality and is known and liked by many of her

classmates. Mary is shy around people she does not know. She is outgoing around people that she does know. Mary uses her imagination and she is able to create games and pretend play.

Mary's mother and father also participated in this study by filling out a questionnaire.

Another student that participated in the research study was Terry. She is a three year old who, like Mary, has been in my classroom since she was 18 months old. Terry is white, she lives with her mother and father in Markerville, New York. She attends Caterpillars four days a week. On Monday's Terry goes to her mother's parents for the day. When she first started in my classroom she had previously been in an infant classroom. Every morning the drop off was hard for her. She would cry for her mother but a stuffed rabbit she named Hop-Hop would help ease her transition. When she enters my classroom now she waves to her mother and says, "bye bye". Terry has grown in all areas of development. For some fine motor development achievements she is able to feed herself and drink out of a cup without a top. She is also able to hold a crayon and is showing signs of a novice writer. In terms of gross motor development achievement she is able to run, skip and she can stand on one foot for a short period of time. In terms of the study Terry can recognize a few letters of the alphabet, in random order. She can recognize a few of the letters in her name. At the time the study was conducted she could not write letters but she made scribbles on her paper and can articulate what she wrote. Terry has a very happy personality. She is very caring towards the other classmates in the room. She is shy until one gets to know her. Terry enjoys playing house and playing with her dolls. Terry's mother participated in this study by filling out a questionnaire.

Mack is another student that was in the research study. She is a white, four year old girl. She lives with her mother, father, and sister who is 16 months old in Point, New York. Mack is not a student in my classroom. According to her teachers she likes to be the leader of the group.



When interacting with other students she has the tendency to not share with her friends. She responds well with others as long as she gets her way. Mack has a very happy personality and is very bubbly. She has a huge imagination and she enjoys playing dress-up. Some days Mack will tell her teachers to not call her by her name but to call her Arielle. In relation to the study, Mack can recognize all upper case letters of the alphabet. She can also write her name. At the time of the study she was working on strengthening a few letters in her name. Mack's mother participated in this study by filling out a questionnaire.

### **Teachers (names are pseudonyms)**

Kaylee has worked for Caterpillars for about a year. Before she started she worked at another day care. She has her degree in elementary education from a school in Pennsylvania. When she started at Caterpillars, Kaylee was an assistant for a pre-kindergarten class. At the time of the study she was the lead teacher in one of the preschool aged rooms.

Nancy has been at Caterpillars for almost four years. All four years she has been a lead teacher in a prekindergarten classroom. Before working at Caterpillars she attended a school in Ohio for her degree in early childhood education. She just recently received her masters in literacy.

Dora has been Nancy's teacher assistant for the past three years. Previous to working at Caterpillars she attended a school in central New York. She received her degree in elementary education.

Joey has been a toddler teacher at Caterpillars for the past two years. Before working at Caterpillars she attended school in Pennsylvania for early childhood education. She has a lot of experience working with children ranging in ages of three to six.

Moe has been a prekindergarten teacher for the past year. Previous to working at

Caterpillars she taught English to children in Korea. She attended school in western New York and received her degree in elementary education.

### **Parents (names have been changed for protection)**

Four of my student's parents participated in this study by filling out a questionnaire (see appendix)

### **Researcher Stance**

My role in this research study was an active participant observer (Mills, 2011). An active participant observer is someone who observes and engages in the activities and people that are providing useful information. By being the active participant observer I was able to collect data that helped in the research of my topic. I have been teaching the toddler age group (18 months to 36 months) for two years. In 2009 I graduated from college with my bachelors in Childhood Education/Special Education, with a concentration in Family and Childhood Studies. I became a certified teacher, being able to teach grades first through six along with special education in those same grade levels. After receiving my degree I was a substitute teacher, teaching any grade from pre - kindergarten through twelfth grade. At the time of the study I was working towards my masters in literacy. After completing a few courses in my masters program I can now apply to be certified in birth through sixth grade. Upon completing my final course I will be certified as a Literacy Specialist.

### **Methods**

I collected the data over a period of three weeks. First, I give the parents of the students that were in the study a questionnaire about what type of practices they do at home to help their child with letter formation and letter recognition. Along with giving the parents the questionnaire I also interview four teachers for my study. I asked the teachers questions

regarding the topic of the study, letter formation and letter recognition.

In the first week the students, individually, sat with me and I assessed them on recognition of letters and what letters they can form. I showed the students a card with the same lower case and upper case letters. I went through all of the alphabet and recorded what letters the student was able to automatically identify. Then, I give the students a piece of paper and crayon, asking them to write letters that they knew. Then, I recorded what letters they were able to legibly write. I collected the recording sheet from the letter recognition assessment, along with the recording sheet and student produced work from the letter formation. Based on the letters that the students did not recognize automatically I worked with the students on those letters five times in a week for 15 minute sessions. I found pictures that start with that letter and have the students sort the pictures to the appropriate letter. I worked with two letters at a time. In this time I worked with the students on letter formation. I worked with students using different tactile materials to help with forming the letters that are in their name. For the students that know how to write their first name I worked with them on the letters that are in their last name. Some of the different materials I used with the students were play-dough, shaving cream and paint. At each new session we reviewed what was practiced in the previous session.

After a week of working with the students I assessed them again. I showed the students the same cards with the lower case and upper case letters on them. I recorded the students' answers. Then, I give them a piece of paper and crayon and asked them to write letters that they knew. I recorded the letters they were able to write legibly along with collect their writing sample.

### **Quality and Credibility of Research**

For this research it was very important to ensure that there was validity (Mills, 2011).

According to Mills (2011) he defines validity to be how accurately the data that was collected is being measured. To ensure qualitative research in terms of validity there are four criteria that must be met. Those criteria are credibility, transferability, dependability and confirmability (Mills, 2011). Credibility is for the researcher to take into account some of the complexities that might occur during the study. It is the ability of the researcher to be able to study these patterns that might be hard to explain (Mills, 2011). I have worked with most of these students before and I know a lot about their prior knowledge. Working with the students helped with the credibility of my study. I was able to watch these students throughout the course of the day along with the sessions that I worked with them.

Transferability is for the researcher to not develop statements that can be considered truth and generalized. It is to develop statements that are relevant to the content (Mills, 2011). My study showed transferability in that I collected detailed data. I took pictures and collected all of the students work to be able to do a comparison to see if growth was made. During each session I was able to collect data from each of the participants in relation to letter formation and letter recognition.

Dependability is how stable the data is (Mills, 2011). I worked with the students in this study on different activities related around the same topic. For letter recognition I was playing different games with the students to hold interest and to be able to compensate for the possibility of a weaker activity. I also was able to “establish an audit trail” (Mills, 2011, p. 105). I was able to discuss the data with coworkers of mine.

Confirmability is how neutral the data is (Mills, 2011). I practiced triangulation in this study. By using different methods of collecting data I was able to cross-analyze the data that I collected.

### **Informed Consent and Protection the Rights of the Participants**

Prior to me starting my research I created an informed consent form for parents to fill out. Due to the ages of the students in my study a signed parent permission form was sufficient. In the permission form it describes the purpose of the study, the procedure of the study along with the risks and the benefits to the students involved in the study. The teachers that participated in this study also signed a consent form along with the parents that are filling out the questionnaires.

### **Data Collection**

The data that was collected was quantitative along with qualitative. I triangulated my data into three different categories. The first form of data is the questionnaires given to the parents. This questionnaire was both quantitative as well as qualitative. The parents were asked several questions by writing out answers along as scale questions to determine what happens in the home in relation to letter formation and letter recognition.

Another form of data that was collected is the interviews from the teachers. This interview was qualitative research based. I asked five teachers several questions about their thoughts on teaching letter formation and letter recognition. Along with their thoughts about different activities they have used I also asked about what they would like to learn more about letter formation and letter recognition.

The third form of data that was collected was the students' work. I collected student work from each session I worked with the students. Some of the work was the recording sheets that showed what letters the students can automatically identify. Additionally, the students writing samples and pictures of the students working using different manipulatives to create letters were used. (See Appendices A, B, and C)

### **Data Analysis**

I collected three forms of data for my research. These three forms were parent questionnaires, teacher interviews and student work. I looked at all of my data that was collected a number of times. The first time I looked I familiarized myself with the data and wrote down key words to help summarize the data. The second time I coded the data looking for categories to create themes. The third time I looked through the data was to confirm my themes and to see if there was data that related to any literature, whether the data agreed or disagreed.

### **Findings and Discussion**

After an analysis of the data that was collected there are three major themes that consistently showed up throughout all of the data. These themes can also be found among the literature review. These three themes are, activities used to assist learning of letter formation and letter recognition, letter formation and letter recognition taught simultaneously versus separately, and letters that have been found to be easy and difficult to teach and learn in relation to letter formation and letter recognition. As previously stated the data that was collected for this research project were parent questionnaires, teacher interviews and student work. The parents that filled out questionnaires and provided information that was pertinent to their child. Across all of the questionnaires the parents answered the questions similarly. Similar strategies and books were mentioned. All of the teachers that were interviewed all currently work at Caterpillars Children's Center. With the interviews there were similarities in the answers to the questions that were asked. All teachers mentioned the program Handwriting Without Tears® which is the handwriting program that is used at Caterpillars. Teachers also talked about similar letters that are fairly easy and ones that are hard to teach in relation to letter formation and letter recognition. The students' work showed similarities between the amount of letters the students

knew in relation to the letters the students could write.

### **Activities Used to Assist Learning of Letter Formation and Letter Recognition**

Across all of the data there were many different tools that were mentioned that parents and teachers have used to assist children in learning letter formation and letter recognition. Most of the activities are hands-on that used many different materials. Some of the activities integrated letter formation and letter recognition together while other activities only focused on one.

One type of activity that was mentioned in the interviews and questionnaires is the use of books. Many parents made mention of different books that they read to their children. Some parents made mention of “Eric Carle, Dora the Explorer and Sesame Street® books”. (Mary, personal communication, July 3, 2012) These books are iconic and children can recognize the characters. Teachers made mention of these same books that they have read to their students. These books have iconic characters that are familiar to the children. This might show interest with the children. Books can expose children to the letters of the alphabet and allow them to gain print knowledge. Davidse, de Jong, Bus, Huijbregts, and Swabb (2010) state that there is a correlation between book exposure and a child’s vocabulary and letter knowledge.

A few parents mentioned how they use technology to help their children with letter formation and letter recognition. Some of the children use an Ipad or LeapFrog® when practicing letters. When Ally's (pseudonym) parents were asked the question- “What activities do you do at home to help your child with being able to recognize letter?” they “Our daughter is on the Ipad about 4 times per week, learning her letters.” (Ally, personal communication, July 3, 2012) They have her concentrate on a program named “Super Why” which is geared to children ages three to six. Upon further research “Super Why” is a program based off of a show on the

PBS network. There are interactive games that help children learn strategies to learn letters.

(Ally, personal communication, July 3, 2012) With this computer program and other programs they can help assist to the development of orthographic knowledge according to Davidse et al. (2010). Orthographic knowledge is how words look. These computer games will keep children actively participating as well.

Some teachers along with parents made mention of other hands-on activities that children seem to enjoy along with learn from. In the interviews when teachers were asked the question- “What methods have you found work the best in teaching children letter formation and letter recognition?” Kaylee states

Umm something we do each week is we have a letter and the kids will bring in an object from home that starts with the same letter we are studying that week. And that seems to really help them relate to the letter, they can put a word with the object. And that seems to help them better. (Kaylee, personal communication, July 5, 2012)

Making connections between letters and objects allows children to remember letters in an easier way. When asked the same question Nancy stated

We do show and tell, it's their choice but we do show and tell with the letter of the week, so if it is S they can bring in a sailboat, sea shell, or shark, to help reinforce that and they are searching around their home searching for the same letter and then we do charts and brainstorm as many words that start with the letter of the week. (Nancy & Dora, personal communication, July 3, 2012)

Allowing children to be able to find objects that relate to the letters they are studying allows reinforcement along with practice in learning letters. Parents do a similar activity with their children at home. Ally's parent states:



“We have also worked with wooden blocks, spelling out words found on TV, our T-shirts, the Heinz ketchup bottle, street signs, food products in Wegmans and Walmart, pictures and posters. Every chance we get, we have her spell things out. She thinks it's a game and she appears that she wants to learn and please her parents” in relation to the pointing of letters that surround her environment. (Ally, personal communication, July 3, 2012)

This quote means that Ally's parents are taking an active role in her development of early literacy. They are creating learning in a game like manor which allows Ally to think of learning as fun instead of a chore by using the environment around them. Massengill and Sundberg(2006) state in their article that teaching children should be fun, and gamelike (Massengill & Sundberg, 2006). Apple (1995) and Kelly (1997), found that it is important for children to be exposed to their environment. They state that it is a necessary skill to learn through hands-on experiences. It is important for parents to link a child's environment with literacy in every way possible. The following are strategies that help children with fine motor skills along with how to form letters. Teachers used play-dough as a type of tool to help children with letter formation. Kaylee states “Something that we do and I know they do it in the older rooms is with play-dough, like forming a snake and making the letters” (Kaylee, personal communication, July 5, 2012). By manipulating common classroom items, children are able to create letters. Moe a pre-kindergarten teacher states “Giving them play-dough, rice, shaving cream other ways for them to practice” (Moe, personal communication, July 6, 2012). Any items that a child can manipulate can potential be used to help with the formation of letters. Dora shared “Whatever it may be they can do with their hands on with the play-dough or they can you know sit down and do the stamp and screen boards or they can play with their friends, they can use the wooden pieces and a lot of the kids like that versus just the workbook all the

time” (Nancy & Dora, personal communication, July 3, 2012). This quote points to the idea that having hands-on activities are more engaging for children. Dora expressed in her interview that

“I think the most important thing is the variety of activities we do can help with all the different learning styles, like if they are visual learners we have activities to do that, if they are hands on we have activities for that, so it's not like okay we are going to sit down with our workbook and we are going to trace the letter R six times and then we are going to write road and like rail road or whatever” (Nancy & Dora, personal communication, July 3, 2012).

This quote means being able to work with all different learning styles will allow for the greatest growth with the students in one's classroom.

Saracho (1996) found in their research that children at the early literacy development performed better on tasks that involved play. Behaviors were better along with the knowledge they gained. Moe found this to be true she said in reference to worksheets “I feel like a lot of kids don't like doing it so I provide a variety and allow for breaks” (Moe, personal communication, July 6, 2012). After some experience with children, it is important to figure out what the children like the best to ensure the greatest growth.

As stated above there are many activities that can help children with letter formation and letter recognition. Teachers and parents provided activities that they have found successful with children. Most of those activities are hands-on and game like which the children seem to enjoy the most according to the teacher interviews and parent questionnaires.

### **Letter Formation and Letter Recognition Being Taught Simultaneously versus Separately**

The students that I worked with have all been at Caterpillars Children's Center since before they were 18 months old. The Handwriting Without Tears® program teaches children

letter formation and letter recognition simultaneously. The three children that I worked with have been working with their teachers from a range of two months to two years using the Handwriting Without Tears® program. I assessed the children I worked with by showing them flashcards of the letters of the alphabet. I would show each child a card and ask them to correctly identify the letter they saw. In Table 1 it shows the averaged percentages of the three children I worked with in relation to the letters they correctly identified and the letters they were able to correctly write. As shown the percentages between being able to identify letters and writing the letters are fairly close. The students were able to identify more letters than being able to write them. There was only a slight difference between the two percentages.

Table 1

*Averaged Assessments of Correctly Identified Letters and Correctly Written Letters  
In terms of Percentages of Individual Students*

Student	Identified Letters	Written Letters
Mack	94%	90%
Mary	85%	81%
Terry	21%	2%

Note: The students pre and post assessments were average together to get the percentages stated above.

One question that was asked to the teachers that were interviewed was the topic of whether letter formation and letter recognition should be taught simultaneously or separately. The teachers that had the same answer of it being taught simultaneously were Dora, Nancy, Joey, and Kaylee. Moe was the only teacher who felt differently she said “ Personally I think the kids should be taught the whole alphabet first and be able to recognize the letters before forming them” (Moe, personal communication, July 6, 2012). This quote means that it is important for

children to know their whole alphabet before they begin writing the letters. If they can not identify letters then how are they going to be able to write them. Massengill and Sundberg (2006), found it to be more effective to teach children letter sound and letter name together. In contrast to this statement of letter formation and letter recognition being taught together Groff (1984) and McGuinness (2004), found that teaching letter formation and recognition together can cause children confusion. Kaylee stated in her interview:

Well I think to be able to form the letter you need to be able to know what the letter is, I think we do more of recognizing the letter and having them feel comfortable with the letter and then being able to form it and work with the letter...So I think they definitely need to be able to recognize it first and then be able to form it, like I would ask a kid what letter this is and they have no clue, so how can I ask them to form it if they don't even know what it is. (Kaylee, personal communication, July 5, 2012). This quote means that children should be able to recognize a letter before they learn how to write it. Both are important to teach but learning the letter first is more important. An interesting find on this topic was presented in an article written by Piasta, Purpura, and Wagner (2010). They found that some curriculum for early childhood only teach letters by the sounds. The purpose of their study was to see what the effectiveness of combining letter sound and letter name would be in instruction. They learned that children performed better when taught letter sound and letter name together. Nancy had the same response to this question when asked about how letter formation and letter recognition should be taught. She stated "I think they should be taught together." Through experience some teachers feel it is important to teach letter formation and letter recognition together. Dora added "It's hard like what do you focus on first formation or recognition you know some of the kids can recognize a letter but they can't make their forms some kids can make

a letter A but they don't know what word goes with A, I think it has to be a hand in hand thing I think it's hard to focus on one without the other” (Nancy & Dora, personal communication, July 3, 2012). This quote points to the idea that children learn differently and that needs to be taken into account while teaching children. Letter formation and recognition should be taught together but letter recognition should be taught first. The study by Piasta, Purpura, and Wagner (2010) fits with the information given by the teachers.

From a toddler teacher's perspective Joey feels that it is important for the two to be taught together, she states:

“I think both are very important and I think they develop alongside each other so I think they should be taught together, um, that's all I've really done and it's worked so far um, especially with the younger kids like in my class right now we do, well practice tracing it after we look at it, we will learn the sound of it and at the same time we look at it then we will trace it, so it's like doing all of it, like introducing the letter, the sounds that it makes and the way it looks and how we can make it, we always start off tracing it even before we use crayons or pencils or whatever we use” (Joey, personal communication, July 9, 2012).

This quote points to the idea that children should learn the letter and know how it looks before the child will try to write it by him or herself. Piasta and Wagner (2010) found in their study that there are large advantages to children who learn letter name and letter formation simultaneously to help with their success when entering kindergarten.

In terms of the parent questionnaires, the responses seemed to be that the parents worked with their children on letter formation and letter recognition together as well. Some of the computer games that Ally and her brother play on the Ipad work with the letter formation and

recognition together. Ally's parents said “We encourage her to concentrate on 'Super Why' application, which is geared toward 3-6 year old children” (Ally, personal communication, July 3, 2012). By learning about a program before you have your children use it is important because it can help a parent understand if the computer program is appropriate.

Based on the above information one can assume that children are better off learning letter formation and letter recognition simultaneously. This is just a small sample of researchers and interviews to make this statement. A lot of research needs to be done to prove this statement to be true. As long as children are learning and enjoy learning whatever method teachers find to work should suffice.

### **Letters That Have Been Found to be Easy and Difficult to Teach and Learn in Relation to Letter Formation and Letter Recognition**

The last theme that seemed to appear across all of the data that was collected was letters that are easy and difficult to teach and learn in both letter formation and letter recognition. In reference to letter formation, in regards to the teacher interviews the teachers mentioned the terminology used in the Handwriting Without Tears® program. For example Nancy explains

We do letter of the week, and we use the Handwriting Without Tears® book, we talk about the language of the lines, we set that up first so we say big line down, little line across, big curve to bottom for the letter D, so it's big line, little line, big curve, little curve, then we do diagonal, as slides so that works really well (Nancy and Dora, personal communication, July 3, 2012).

It is important for the children to understand the terminology of learning how to write letters before they write them. Without the terminology and consistency of learning letters it may pose a challenge for children.

The children that participated in this study were shown a letter that was printed on a card. They were then asked to write the letter they were shown. In the following table it shows the students pre-assessment and post-assessment for how many letters they wrote correctly. Mack correctly wrote 23 out of 26 letters for a percentage of 88% in the pre-assessment. In the post-assessment she was able to write 24 out of 26 letters for a percentage of 92%. Mary was able to write 21 out of 26 letters correct on the pre and post assessment. Terry was not able to produce any letter in the pre-assessment but was able to produce one letter for the post-assessment. Table 2 shows the children's percentages.

Table 2

*Correctly Written Letters in terms of percentages of Individual Students*

Student	Pre-Assesment	Post-Assessment
Mack	88%	92%
Mary	81%	81%
Terry	0%	4%

Note: Students were shown the flash cards with each letter on them, lower case and upper case were on the card, students were asked to write the letter they were being shown. Mack and Mary both correctly wrote the following letters: Y, L, M, N, H, E, F, P, O, A.

Mack and Mary were able to correctly write the letters of the alphabet that had straight lines and lines with diagonals. They both were able to correctly write letter O and letter P which are seen as more challenging due to the curve in the letter. Moe states “The ones that are straight lines, vertical or horizontal like L are really simple, the diagonal ones are not that bad but any letters with curves like R or S those are really hard” (Moe, personal communication, July 6, 2012). Moe's statement holds true to how the student's in this study performed. This quote points to the idea that children should be taught vertical or horizontal lined letters first because of the ease of them. Most children can grasp these letters better than the letters with curves.

Some of the first letters children learn how to write are the letters in a child's name

(Puranik, Lonigan, & Kim 2011). Puranik, Lonigan, and Kim (2011) found that if a child is able to write letters beyond his or her own name that it will help him or her with the beginnings of orthographic knowledge.

In the following table the children that performed in the study were shown flash cards with the letters of the alphabet. They were asked to identify the letters on the cards. Mack was able to identify 24 out of 26 letters correctly during the pre-assessment. During the post assessment she was able to identify all but one letter correctly. Mary was able to identify 21 out of 26 letters correctly during the pre-assessment and 23 out of 26 during the post assessment. Terry identified five out of 26 during the pre-assessment and six out of 26 during the post assessment. The following table shows the children's results in percentages.

Table 3

*Correctly Identified Letters in terms of percentages of Individual Students*

Student	Pre-Assessment	Post-Assessment
Mack	92%	96%
Mary	81%	88%
Terry	19%	23%

Note: Student's were shown a flash card of each letter on them, lower case and upper case were on the card, students were asked what letter they were being shown. Letters that all students identified correctly: H, T, M, G, X. There were no letters that all the students were not able to identify.

During the pre and post assessments all of the children were able to recognize the first letter in their name. Puranik and Lonigan (2011) stated that children relate to their name and are able to recognize and form the letters quicker because of the personal connection the child has with his or her name. Kaylee stated in her interview "Familiar ones line A umm...the letters in their name, some kids, or letters like N that was an easy one" (Kaylee, personal communication July 5, 2012). By teaching familiar letters with familiar objects children are able to make stronger connections. She also says "The first like ABC they usually do good with those, um... but I also



think it's like what we decorate the letters with like A we use apple and how they can like A, apple, and then there's some letters that have no word clues like X and Z were awful to teach, I mean what do you decorate Z with, zebra but how do you do that" (Kaylee, personal communication, July 5, 2012). This quote points to the thought that letters with familiar objects can help children remember letters better. Moe finds that the letters her students are able to learn quickly are the letters in their name "I think recognition is different with every kid like they recognize the letters in their name first so if they have a long name they are going to recognize more letters (Moe, personal communication, July 6, 2012). Children show pride in their name and are more likely to remember the letters in their name. Therefore the longer the child's name the more letters he or she may know. Puranik and Lonigan (2012) would agree with Moe's statement. They found that children with longer names were able to recognize and write more letters than children with shorter names.

Puranik, Lonigan, and Kim (2011), found that students are able to identify the letters in their own name first. The students that I worked with were able to identify the first letter in their name along with the other letters in their name. The students were also able to form at least the first letter of their name. In the parent questionnaires one parent mentioned "we have a wooden puzzle with her name spelled out that she puts together" (Mary, personal communication, July 6, 2012). This activity is another strategy that parents have used. Another parent mentioned "Randomly ask her what letter something is when we see something and ask her what else begins with that letter" (Mack, personal interview July 5, 2012). Using the environment around you is another great tool to use. Cabell et al. (2009) states that it is important for children to have that personal connection.

It is important for children to be able to write and read the letters of the alphabet. This is

the basics of reading and writing. One can assume from the data presented above that it depends on the child and how they learn. All children are not going to learn letters the same way. It may take some longer than others. All children have a chance at being successful, it starts with the same steps of becoming a good reader and writer.

### **Implications**

After reading the literature and performing research on the topic: strategies that can assist emergent literacy learners in the areas of letter formation and letter recognition, my findings have shown some implications that myself and my colleagues can use in our classrooms. My original question was what hands-on strategies can help children with letter formation and letter recognition? This topic is prevalent in my current place of employment. At the children's center that I am employed, one part of the curriculum has teachers teaching children how to form and recognize letters. It is the teacher's job to make sure that these children are prepared for kindergarten. Molfese et al. (2010) state that a child entering kindergarten with strong letter recognition skills will have a large advantage in their later years in school.

Based on the similarities and differences with the research and the literature one might conclude that there are a variety of strategies that can be used. Several teachers that were interviewed use similar strategies of using different materials to mold and shape to help children form letters. These materials that were suggested are play-dough, pipe cleaners, popsicle sticks, and wax sticks. Other items that were suggested to use were items that had the same starting letter as the letter that is being studied, for example using beans and forming them to look like the letter 'B'. Some of the other strategies that were mentioned by teachers and parents were using marker boards, or chalkboards. Some parents even use technology when working with their children. Massengill and Sundberg (2006) feel that it is important for children to learn in a

naturalistic, fun and game like manner. Most teachers will agree with Massengill and Sundberg (2006). Dora, an assistant in a pre-kindergarten classroom made a suggestion that there should be a variety of activities for children to choose from when learning how to form letters. Most children would rather be able to use their hands than practice their writing on a worksheet. There are many different learning styles and it is important to make sure that the activities that the students will be working on fit to his or her learning style. At the age of three and four most children will enjoy the hands-on activities.

When it comes to teaching children how to recognize letters there have been many strategies that can help with assisting a child. ABC books are a tool that can be used at home and in the classroom. These books are different from a story book because of the nature of the way the book is laid out. With ABC books children see letters, words and pictures that all relate. Some parents and teachers discussed a game that they play with children using the environment that surrounds them. Parents and teachers will look at signs or posters and ask children what letters are visible to them. Other activities that parents and teachers have suggested are flashcards and using the letters in a child's name.

One of the most important ideas to take away from the strategies shared above is to find activities that the children enjoy. It is important for the children to like what they are doing, this enjoyment for the activity will keep children's interest and motivate them in further learning. Naturalistic and fun activities are important at the emergent literacy age of development.

One question that has been raised during this research project is, should letter formation and letter recognition be taught simultaneously or separately? This question was asked to the teachers that were interviewed. There was a variety of responses. Some of the literature that was reviewed for this study suggested that letter formation and letter recognition should be taught

together. Some of these researchers are Piasta, Purpura, and Wagner (2010), along with Silva et al. (2008). With the variety of responses from the teachers it would be an interesting follow up to this research project.

### **Conclusion**

The purpose of my research was to find strategies to help assist children in learning to form letters and to recognize letters. Through my research and research that others have conducted I have determined that there are many strategies to help children in this stage of development. In my own research I found that teachers that were interviewed shared a variety of similar activities, the end result was that the activities used have to be intriguing to the child to fit his or her skill level and interests. After a review of the literature similar results were found. Massengill and Sundberg (2006) stated that children should be taught in a naturalistic, game like manor. It is important for teachers to make sure that the activities that they are working with have a purpose and are suitable for the group of children.

The sociocultural theory helped guide me through this research project. The children that are ages three to six are learning how to form letters and recognize letters. Culture is a large factor in a child's development of literacy. A child's home life and school life need to merge for the child to be successful in literacy.

There are many aspects of my research project that worked and other aspects that I would have changed. I would have liked to work with more than three students. I also would have liked to study them over a year's time to see more growth than I did. I would have liked to focus more on letter formation, than both letter formation and letter recognition. Some of the limitations that I had during this project were parents sending back the questionnaires on time and it was hard to schedule time to work with the children that were not students of mine. This

problem was because of my work schedule conflicting with the parents work schedule.

A question that is left unanswered is should letter formation and letter recognition be taught simultaneously or separately? With conflicting answers from the teachers that were interviewed, it would be interesting to perform research on this to see what is most beneficial to students.

It is important for parents and teachers to keep in mind that the activities they are doing with their children are engaging and fun. Children should feel motivated to participate in activities involving letter formation and letter recognition. Parents and teachers need to remember that it should not be a chore for children, and that all children learn differently.

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**Appendix A**

## Parent Questionnaire

Please fill out and return to Kylee ASAP. Thank you!

*How often do you read to your child? (Circle one)*

Once a week

2-3 times a week

4-5 times a week

Everyday

*How often do you work with your child with letter recognition? (Circle one)*

Once a week

2-3 times a week

4-5 times a week

Everyday

*How often do you work with your child with letter formation (writing)?*

Once a week

2-3 times a week

4-5 times a week

Everyday

*Do you read any ABC books to your child? If so, what are the titles of these books?*

*What activities do you do at home to help your child with being able to recognize letters? Please be specific.*

*What activities do you do to help your child with writing? Please be specific.*

*What do you remember about how you learned how to read and write?*

### **Appendix B**

Interview questions for teachers

Before working here what has been your experience with teaching letter formation and letter recognition?

What methods do you think work the best?

What letters are easy and hard for children to form and recognize?

How do you think letter formation and letter recognition should be taught?

### **Appendix C**

Student record sheet

Name	pre	post	pre	post	pre	post
H						
E						
K						
R						
B						
T						
M						
G						
Y						
W						
A						
N						
O						
X						
J						

D						
Z						
L						
S						
U						
F						
V						
C						
P						
I						
Q						