

# Exploring Emergent Literacy Behaviors of Filipino Deaf Children

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This paper is an exploratory, descriptive study of the emergent literacy behaviors of Filipino deaf children. Available research shows that deafness has a profound effect on literacy performance. This study investigates the unique literacy behaviors of oral and signing deaf children and reports these behaviors in three categories: early reading, early writing and book orientation behaviors. Implications on literacy learning are suggested.

Frank Jennings (1965) once said, “reading begins with wonder at the world around us.” It is a wonder experienced by children, causing them to explore print-rich environments and find connections between print and language in various ways. Reading and writing are but communication practices that enable human beings to relate to reality (Bagga-Gupta, 2004). Literacy then cannot be limited to traditional views of reading and writing but as McLane and McNamee (1990) succinctly put it, literacy involves mastering a “complex set of attitudes, expectations, feelings, behaviors, and skills related to written language.” Viewing literacy as a social construct pushes us to investigate literacy in homes and schools and in various social arenas. Children begin the process of learning to read and write very early in life. As young as two years old, children are able to demonstrate signs of literacy such as being able to identify signs and labels and including writing in their play activities (Teale & Sulzby, 1989).

## EMERGENT LITERACY

Emergent literacy refers to children’s early reading and writing behaviors that mark the beginning of their development into conventional reading and writing processes. Sulzby (1991) describes this as the development from picture-governed to print-governed attempts at reading. Picture-governed attempts may range from simple labeling of story illustrations or “reading” a story without watching print. On the other hand, children who are beginning to read conventionally attend to print using their knowledge of grapheme-phoneme correspondence and comprehend the text without relying on story illustrations and memory.

Emergent literacy behaviors become evident in storytelling, free reading and free writing activities. Morrow (1990) proposes categories for coding children’s responses during storytelling; these are based on the focus of the child’s attention during storytelling — story structure, meaning, print, and illustrations.

A young child's development toward conventional writing could likewise be seen in children's written productions where their writing mirrors some understanding of grapheme-phoneme relationships. Medrano (1997) classifies children's early writing attempts into four categories: ideographic writing (using drawing to convey a message), symbolic writing (scribbling and letter strings without one to one correspondence), invented spelling (using letters to represent a syllable or word) and conventional spelling.

As a construct, emergent literacy research has been ongoing for decades. Areas of emergent literacy that have been investigated include; awareness of print, relationship of print to speech, text structure, phonological awareness, and letter reading and writing. These are known to be interrelated and develop concurrently (Gunn, Simmons, & Kemeenui 1995). The National Reading Panel (2000) reports that phonemic awareness or "the ability to focus on and manipulate phonemes in spoken words" and knowledge of the alphabet are two best predictors of how well children will learn to read during the first two years in school. The predictive properties of emergent literacy behaviors justify the existence of this particular field of research. The need to investigate emergent literacy among deaf children is even more compelling.

Hearing loss does not stop deaf children from experiencing the same wonder at the world and at the printed word. Studies document young deaf children's experimentation with reading and writing (Maxwell, 1984, Ruiz, 1995; Ewoldt & Saulier, 1995; Ewoldt, 1985; Bustos, 1999; Dario, 2001). As a research field, emergent literacy of young deaf children has also gained acceptance (Williams, 2004). Ongoing studies at Gallaudet University under the Signs of Literacy Project (n.d.) continue to investigate the literacy development of deaf children in a bilingual context.

Deaf children are more likely to experience serious language deprivation, not only due to hearing loss but also because of the lack of language models to emulate. As a consequence, deaf literacy development is often delayed and

continues to emerge even after preschool and through the early grades (Maxwell, 1986). Unlike research on hearing children, investigations of deaf children's literacy continue through the elementary grades.

Research has consistently reported the low reading achievement of deaf persons (Allen, 1986 in Paul & Quigley, 1994; Holt, 1993). Balarbar (2001) reports difficulties of Filipino deaf students in expressing themselves in writing and Gabor (2005) further explains that Filipino deaf students perceive writing as "challenging" and "tedious." This situation has led many researchers to prescribe remedies to solve the problem of low literacy levels of the deaf. Any attempts to prescribe solutions demand descriptive knowledge of the deaf population. Prescriptions on what is to be taught and how it should be taught should be anchored on the knowledge of strengths, weaknesses, needs and learning preferences of the deaf population. Investigations need to be wide-ranged to include not only school age children, but also very young ones who are just beginning to make sense of print.

This paper is a contribution to the small but growing collection of Filipino Deaf research for the development of appropriate literacy programs for young deaf children. It examines emergent literacy, mainly early writing behavior or the children's early attempts at writing; book orientation or book handling behaviors; and early reading behavior or the deaf children's early attempts to make sense of print, and their implications on special education.

## **Methodology**

*Design.* The study used moderate participant observation as the main data collection technique. Purposive sampling was used to select two groups of deaf children: the first sample was from an oral school while the second sample was from a school that used manual communication.

*Participants.* The first group of children from the oral communication school was composed of five girls and three boys, while the second group of children from the manual communication school was composed of six boys and three girls. Of the

17 children in the study, only one was reported to have moderate hearing impairment. The rest had severe to profound hearing losses. The average group age for the first group of children was four years 11 months, while for the second group, the average age was six years two months. All children were prelingually deaf or have acquired the hearing loss before the age of two, prior to the development of speech and language. Their parents had normal hearing abilities thus; the modes of communication at home were mainly speech and gestures, with some sign language for parents of children who went to the manual communication school. Both groups of children were enrolled in the first formal preschool level of their respective schools. Their previous school experience was of an informal nature akin to tutorial sessions.

The first group of children was observed for 18 sessions while the second group was observed for 15 sessions. While it recognized that the home environment plays a major role in the emergence of literacy, this study did not trace its influence on the behaviors demonstrated by the children. Likewise, the study did not compare the effectiveness of educational programs where the participants were enrolled.

## DATA COLLECTION TOOLS

*Reading and Writing Center.* A reading and writing center was set up in both schools. Different books and writing materials were made available for children's use during their free time.

*Video-recorder.* All sessions with the children were videotaped. The researcher was able to "paralyze in time" the behaviors exhibited by the children.

*Stimulus Lessons.* Stimulus lessons were designed to maximize the children's exposure to and experiences with print to draw out possible literacy behaviors. Among these activities were free reading, free writing, and story telling. Individual activities included naming the letters of the alphabet, identifying environmental print, retelling of stories, and identifying one's name and

classmates' names. Majority of the stimulus lessons used in the study were patterned after Pado (1990).

*Anecdotal records.* These were brief notes on the highlights of each day, focusing on the context of the videos taken.

*Basic Information Sheet, Parent's Questionnaire, Student Records.* These were used to get basic information about the children such as mode of communication at home, previous school experience, exposure to print and television, cause of hearing impairment, and other information.

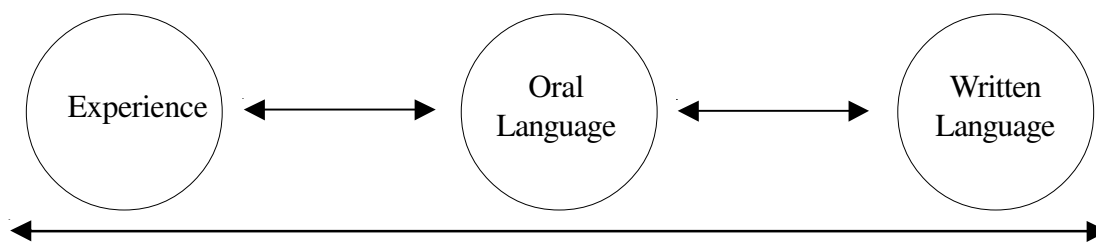
## Data Collection Procedure

Young deaf children's literacy behaviors were observed in three contexts: during Free Reading and Writing time at the Reading and Writing Center; during Group Storytelling time; and during Individual Stimulus Lessons. The researcher conducted group storytelling and individual stimulus lessons. In these three instances, the children's behaviors were recorded on video and in anecdotal records. The video-recorded behaviors were viewed and dictated to a machine; the audio recording was later transcribed.

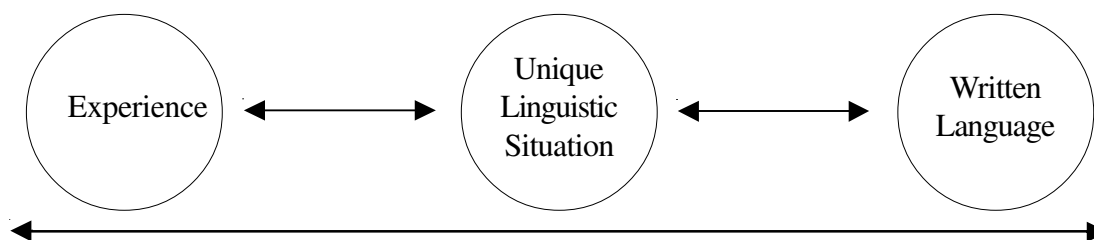
## DATA ANALYSIS

Behaviors were derived from the videotapes, the children's written output, and the anecdotal records. The frequency of behavior occurrence was likewise tallied. For the children's retelling of familiar stories, two Deaf teachers were involved in evaluating the level of the children's performance. The deaf children's emergent literacy behaviors were categorized and presented using Pado's (1990) categories of literacy behavior of preschool age Filipino children; Sulzby's (1991) categories of storybook reading; Morrow's (1990) categories of coding children's responses in interactive story reading; and Medrano's (1997) categories of early writing attempts.

The final list of emergent literacy behaviors was presented to a pool of experts: five Deaf



**Figure 1. The Three Circles of the Literacy Process for Spoken Language Users (Hermosa, 1996:25)**



**Figure 2. The literacy process of Filipino deaf children based on research findings**

teachers, five Hearing teachers of the Deaf, and a reading specialist. Due to limitations of communication, member checks or verification of the patterns of literacy behavior with the young research participants was almost impossible. To replace member checks, the researcher presented the results to Deaf adults who can identify and provide further clarification of the strategies used by deaf children. These series of consultations were done to monitor the researcher's subjectivity. Lastly, the data gathered from the videos, the children's written output, the questionnaire and anecdotal records were compared and analyzed for consistency.

## **Results**

It has been said that literacy development for hearing children is dependent on the development of oral language. Teale (2003) points out that long-term literacy learning and achievement hinge on language. This relationship is illustrated in Figure 1.

This is problematic for young deaf children who have little access to the oral - aural communication

channel. For the children involved in this study, none of them responded through the oral-aural channel, hence, oral language cannot be considered as the middle circle for these children. Neither can sign language be considered the middle circle because the modes of communication in the children's homes were mainly speech, gestures and some sign language. The children's families were bilingual, using both Filipino and English when communicating with the children. Gestures and home signs were also used but these were highly idiosyncratic. Home signs varied per family. Gestures and home signs do not comprise a language. Language is shared by members of a community and its arbitrariness is determined by that community and not by individuals. Hence, the literacy process of the young Filipino deaf children involved in this study is unique and is represented in Figure 2.

The unique linguistic situation of young deaf children has affected their literacy behaviors. The following tables summarize the early literacy behaviors observed in the 17 four to six - year old deaf participants.

**Table 1.**  
**Book orientation behaviors of Filipino deaf children**

<b>Book Orientation</b>	<b>Specific Behaviors</b>
<b>Behavior Categories</b>	
Reaction to Books	Got books without prompting and browsed Did not get books
Book Choices	Chose books with bright and/or attractive covers Preferred books with Disney characters
Manner of Choosing the Book	Chose books that produced sound Chose books carefully Chose books automatically
Book Handling Behaviors	Held the book correctly Opened the book correctly and flipped pages sequentially Looked at the pages variably Returned books to shelves and/or table Did not draw on the books Did not crumple the pages of the book Threw the book after reading Sat and/or stepped on books
<b>Attending Behaviors During Free Reading</b>	
Print-based Focus	Finger spelled words in the text (signing students) Made sounds while looking at the text (oral students)
Picture-based Focus	Stared at story illustrations Acted out story illustrations Pointed and touched story illustrations Commented on story illustrations
Meaning-based Focus	Labeled story illustrations as one's self Labeled story illustrations by giving the sign equivalent of the illustration (signing students) Labeled story illustrations by inventing a gesture or sign for them Elaborated on a story illustration
Social Focus	Interacted around books with another child Interacted around books with an adult
<b>Engagement Behaviors During Group Story Reading Sessions</b>	
Print-based Focus	Pointed/traced the text with the storyteller (oral students) Finger spelled words in the text (signing students)
Picture-based Focus	Pointed to and touched story illustrations Commented on the story illustrations (signing students) Acted out story illustrations Watched illustrations passively on occasion Turned pages even when the text has not been completely read (oral students)
Meaning-based Focus	Labeled story illustrations as one's self Labeled story illustrations by giving the sign equivalent (signing students) Had fun during storytelling time Copied the actions of the storyteller Inferred story outcomes Reacted to story outcomes Related an event in connection with the current story

Social-based Focus	Told a misbehaving classmate to behave during story reading time Helped the storyteller hold the book Interacted with each other deaf children while participating in story reading process
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**Behaviors During Retelling of Familiar Stories**


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Book Handling and Reading	Opened the book correctly Read the cover page Read the title page
Retelling Categories	Print-governed retelling Picture-governed retelling Levels of picture –governed retelling: Level 2: The child knew a few signs, gave the names of the pictures and acted out the illustrations. The observer understood the story a little but had to see the book to understand the text fully. The child's retelling was different from the actual story. Level 3: The child knows more signs and is able to weave the story but the observer still has to see the book to understand the story; The child's retelling is a little different from the actual text. Level 4: The child knows most of the signs and is able to weave the story smoothly. The observer can understand the story without seeing the book and the retelling is similar to the actual story.

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*Book Orientation Behaviors.* Book orientation behaviors refer to the manner of handling books demonstrated by the deaf children during group story reading and free reading time. These include attending behaviors or the behaviors exhibited by children when examining books independently; and engagement behaviors or reading behaviors demonstrated by the children as they interacted with the books and the storyteller. Only signing children participated in the retelling of familiar stories. Familiar stories refer to the stories/books read during the group story reading time. Children's behaviors during retelling were classified using Sulzby's categories of story reading (1990). The deaf children's book orientation behaviors are listed in Table 1.

Deaf children's retellings of familiar stories were picture-governed than print-governed. The reported levels of attending were mainly picture – based. Most of the children did Level 2 retelling and only two were able to reach the third and fourth levels. Often, children added to the storyline by including as part of the story some of the illustrations on the page. Retellings involved copying the actions of the illustrations, inventing some signs and labeling illustrations.

*Early Reading Behaviors.* Early reading behaviors refer to deaf children's early attempts at recognizing and decoding print. These behaviors, which are presented in Table 2, were observed as children interacted with environmental print and as stimulus lessons were introduced.

While the children were able to identify and match letters, none of them exhibited phonemic awareness. The children from the oral school tended to move their lips and made sounds while reading but the sounds they made did not indicate knowledge of letter - sound relationships. Signing children, on the other hand, focused on correspondences between the hand-shape of signs and the initial letters of given words.

*Early Writing Behaviors.* These are deaf children's early writing attempts including hand dominance, grip control, strokes, and other kinds of attempts. Their composing behaviors, referring to the different stages of early writing are categorized and presented in Table 3. Scribbles, drawings, letter strings and single-letter representations of words were common in the children's written work.

**Table 2. Early reading behaviors of Filipino deaf children**

<b>Early Reading Behavior Categories</b>	<b>Specific Behaviors</b>
<b>Environmental Print Awareness</b>	Matched the logo and the product picture correctly Executed a correct action associated with the logo/label Matched the written brand name and the picture of the product
<b>Visual Discrimination</b>	Identified the different letter correctly Identified similar letters correctly
<b>Knowledge of the alphabet</b>	Matched upper and lower case letters correctly Named upper and lower case letters correctly (signing children) Identified given letters in a word correctly (signing children)
<b>Word Recognition</b>	Recognized one's name Recognized classmates' names Read familiar phrases (signing students) Identified animal names correctly (signing students)

**Table 3. Early writing behaviors of Filipino children**

<b>Early Writing Behavior Categories</b>	<b>Specific behaviors</b>
<b>Hand dominance and grip control</b>	Established hand dominance Demonstrated grip control and strokes
<b>Directionality</b>	Wrote from left to right
<b>Copying and Writing</b>	Copied letters correctly Wrote one's name correctly without a guide Copied one's name correctly
<b>Social Focus</b>	Interacted with other deaf children around their written work
<b>Composing Behaviors</b>	Used drawings as message carrier Used scribbles as message carrier Used conventional letters as message carrier (single letters, letter strings, conventional spelling) Wrote animal names correctly (signing children) Wrote single letters to represent words (signing children)

## DISCUSSION

Deaf children's emergent literacy behaviors are parallel to those of hearing children in terms of stages in early reading, early writing and book handling behaviors reported by Pado (1990) and Medrano (1997). These literacy behaviors, however, stem from a different center - a visual center. While hearing children are dependent on

oral-aural channels, deaf children are dependent on the visual - gestural channel. Their literacy behaviors are grounded on this visual orientation. This propensity for visual strategies has been reported in other deaf literacy research.

The attention and meaning deaf children attach to books center on pictures and how these form a story when presented in a sequence. Even the

children's retelling of stories is picture-governed. Knowledge of environmental print, which is dependent on visual association, is also demonstrated by deaf children. Their performance in environmental print tasks approximates that of hearing children.

Deaf children's strategies for reading and writing also use visual orientation. Signing children use sign-to-print strategies, which involve finding correspondences between the hand-shape of a word and its written form. Some oral children show a semblance of an awareness of grapheme-phoneme relationships by babbling when they see the printed text.

Considering the visual orientation of oral and signing children in the study, this paper calls for the recognition of visual strategies as legitimate learning strategies, which can be used to enhance deaf literacy. It also calls for the early acquisition of language through a channel that is comprehensible to a visually oriented child.

The lack of phonemic awareness in young deaf children is a predictor of future reading problems. Research on hearing children has reiterated the importance of oral language and phonemic awareness in children's reading performance. Clearly, deaf children will experience problems in this area. The deaf children in the study were delayed in their language development. Most of them were in the labeling stage when retelling stories. This behavior is generally observed in young children during the early stages of language development. There were individual activities that could not be administered due to difficulties in explaining instructions. The children from the manual communication school were able to do more activities because they could communicate by signing and were not dependent on speech. The inability to break the phonological code for this particular set of children was evident but there have been reports of profoundly Deaf individuals who have become successful readers (Bagga-Gupta, 2004). It would be worthwhile to look into the strategies that these successful readers use. Signing children have been observed to use finger spelling

as a bridge from sign to print. There is a need to explore the uses of this coding strategy especially for deaf children who are not able to break the phonological code.

Referring to the three circles of the literacy process (Figure 2), the provision of real-world experiences is a prerequisite to literacy learning. The deaf child who is beginning to read will need the richness of experience to help him/her understand and appreciate books. Another prerequisite to literacy learning is language acquisition and fluency. Early identification of hearing loss is a must. Oftentimes, the sensitive period for learning a language has almost passed by the time hearing impairment is detected or accepted. Early identification will enable parents to choose a communication mode that best suits their children. Wise (2006) reports that the success of deaf emergent readers depends on their families' commitment to a communication mode. This study recommends that the visual inclination of these children be considered when choosing the communication mode. It is necessary for parents and teachers to strive to be the best models of language for the children. However, for teachers and parents who choose manual communication, they are learning sign language as a third or even a fourth language. This affects their fluency, hence, it is important to involve Deaf adults who will serve as language models if fluency is to be targeted.

Parents and teachers are models of literate behavior. A print-rich environment with adults who model reading and writing behavior nurture the child's early literacy development. Weikle and Hadadian (2003) emphasize that parents need to realize the urgency of creating opportunities for children with disabilities to "assimilate language and emergent literacy experiences" as early as possible.

## **DIRECTIONS FOR FUTURE RESEARCH**

The learning differences between hearing and deaf children should impress the need for research



on the ramifications of deafness, focusing on how the Deaf perceive their own learning. There are but a few naturalistic studies and observations of Deaf literacy behavior. It is suggested that the three categories researched in this paper namely Book Orientation, Early Reading and Early Writing Behaviors of the Deaf be studied separately since each category has full research potential. Studies should be conducted over a longer period of time to determine the transitional strategies employed by children as they move closer to conventional reading and writing. It is also recommended that researchers who wish to replicate the study have considerable experience with young deaf children to facilitate better communication and interpretation of behaviors.

Another possible area of research is the study of literacy behaviors in the context of bilingual learning since sign language and English or Filipino are separate languages and deaf children are similar to second language learners. In closing, it is hoped that this study has blazed a path to a better understanding of literacy behaviors of Filipino deaf children.

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