

DOCUMENT RESUME

ED 366 479

RC 019 460

AUTHOR Walter, Eileen L.
 TITLE A Longitudinal Study of Literacy Acquisition in a Native American Community: Observation of the 4-Year-Old Classes at Lummi Headstart.
 PUB DATE Jan 94
 NOTE 56p.; Report submitted to the Lummi Tribal Council, State of Washington. For a related document, see RC 019 459.
 PUB TYPE Reports - Research/Technical (143)
 EDRS PRICE MF01/PC03 Plus Postage.
 DESCRIPTORS *American Indian Education; Classroom Observation Techniques; Classroom Research; Literacy; Longitudinal Studies; Parent Participation; *Preschool Children; Preschool Education; Reading Instruction; *Reading Readiness; Writing Instruction; *Writing Readiness
 IDENTIFIERS *Emergent Literacy; *Lummi (Tribe); Native Americans; Project Head Start

ABSTRACT

Literacy development was studied among 38 4-year-olds in Head Start on the Lummi Indian Reservation. Data consisted of observations during weekly visits throughout the school year, student writing samples, records of "pretend reading," responses to environmental print, and checklists assessing written language displays in the classrooms. Children's reading was assessed in terms of interest, stage of reading development, and level of print awareness. Children's writing was assessed in terms of interest, name representation, and stage of writing development. Level of engagement in reading and writing was high among 7-8 children, moderate among 14-16 children, and low or nonexistent among 13-16 children. Suggestions for promoting literacy involve encouraging children to participate in read-alouds; to explore books and stories; to make use of print in the classroom; and to explore writing through a writing table, small-group activities and functional uses of writing in the classroom. In addition, teachers can work together with parents as partners in their children's literacy development. Contains 75 references and extensive appendices of research materials and resources. (KS)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED 366 479

A Longitudinal Study of Literacy Acquisition
in a Native American Community

Observation of the 4-Year-Old Classes at Lummi Headstart

Eileen L. Walter
Western Washington University

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Eileen Walter

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originating it

Minor changes have been made to improve
reproduction quality

• Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy

Re 019460

Report submitted to the Lummi Tribal Council, State of Washington, January 1994

ABSTRACT

It has been commonly believed that Native American children do not do well in school---they are below the national average on standardized tests; their drop-out rate is high; they are frequently placed in remedial and learning disabled classes. It is further known that young children come to school with varying experiences, especially with reading and writing, and that some children have limited experiences with books and print. Since literacy is a prerequisite for later learning, it is imperative that young children are provided these experiences if they are lacking them. For these reasons, a longitudinal study was conducted to determine what experiences and knowledge Lummi children had about reading and writing in order to create a literacy program that would prepare them to handle the kind of reading and writing that is done in the public schools. Members of the Lummi community in northwest Washington were interested in having the study carried out. During the first year of the project, 3-year-old children were observed at Headstart on the Lummi reservation. During the second year, two 4-year-old classes at Lummi Headstart were observed. The children were observed once a week for one hour during their free play time. Each time the researcher set up a writing table with drawing and writing materials which the children could choose to use. The children could choose to draw or write but were then asked to write their name and anything else they could. Further, the researcher collected data on the literacy learning opportunities and experiences of the children in school, their "pretend reading" of a familiar storybook, and their recognition of environmental print. In addition, the researcher carried out other activities as part of being a participant-observer. She read big books to the class, read in the book corner with individual children and small groups, and assisted during clean-up time. From the data, the variation of children's reading and writing behaviors were described and their stances towards reading and writing were identified, i.e., whether they had high, some, or little engagement. Finally, implications for instruction are offered both for pre-school children in general and specifically for children with low levels of engagement in reading and writing.

A LONGITUDINAL STUDY OF LITERACY ACQUISITION
IN A NATIVE AMERICAN COMMUNITY:

Observation of the 4-Year-Old Classes at Lummi Headstart

Background

In 1988, a study of children's literacy acquisition on the Lummi Indian reservation in northwest Washington was begun. Because of the lack of success many Lummi children have had learning in the local public schools, a longitudinal study was conducted to determine what experiences and knowledge children had about reading and writing in order to create a literacy program that prepares them for the public schools. The Lummi Tribal Council and Lummi Headstart were both receptive to the study. During the first year of the study, the 3-year-old class at Lummi Headstart was visited once a week from October to April. The nature of their school literacy experiences and knowledge was reported in a document submitted to the Lummi Tribal Council (Walter, 1989). The following year, the 4-year-old classes at Lummi Headstart were visited about once a week from October to May. Thus, some of the children were observed for two years although the sample was small (n=10). This report presents the results and implications of the observations of the 4-year-old Lummi children's experiences and knowledge of reading and writing.

Methodology

At Lummi Headstart, two classes (N=38) were visited on a regular basis by the researcher from October 1989 to May 1990. The children's birthdays were from 9-19-84 to 8-27-85 at the beginning of the second year of the study, making their ages 4.1 years to 5.1 years. Ten of the children had been in the 3-year-old class and 10 of the children had been in the Homestart program the previous year.

All of the children spoke English as a first language. The two classes observed by the researcher were taught by experienced Lummi teachers.

The researcher spent one hour in a class during each visit. One class was visited 14 times and the other was visited 19 times, the difference due to availability of a class during a visit and time needed for final data collection. A writing table was set up by the researcher during the free play time in the mornings. This table was used for other things at other times. At the table, the children were asked to write whatever they could. Thus, the writing data was collected over the entire year. At times, children chose to "play" at the table and other times children were called over to the table by the researcher. In the latter case, children came only if they wanted to, resulting in more data for some children than others. During the final data collection stage, the researcher moved around the room, working with those children who had not come.

Generally, data was collected in the form of observational notes. However, samples of children's writing, transcripts of their "pretend reading", and their responses to environmental print were also collected. In addition, two checklists were used to assess the written-language displays in the classrooms (see Appendix A).

Although most of the children were not familiar with the researcher, not having been in the 3-year-old class, the children were used to having several adults in the classroom and considered the researcher to be another helper. Because the researcher read the big book Mrs. Wishy Washy soon after she started and every time thereafter, the children began to associate the book with the researcher. Upon seeing her, they would say "Mrs. Wishy Washy". The researcher responded by joking, "That's not my name!" From then on, the researcher was called Mrs. Wishy Washy by the children.

Results

The data that was collected are organized by literacy learning opportunities and experiences, description of reading and writing data, patterns of reading and writing behaviors, and children's stances toward literacy learning.

Literacy Learning Opportunities and Experiences

The two classrooms were very similar in the way written language was displayed and experienced. First, the written language displays are identified and analyzed in terms of opportunities for literacy learning. Second, the children's literacy experiences are described.

There was a book corner in each room where commercially published storybooks were available. In both rooms there were displays on the walls of colors, shapes, numbers, the alphabet, birthdays, and the calendar. The alphabet and numbers were depicted with objects found in the Lummi culture. In each room there were variable displays related to classroom activities: body parts, insects, food groups, health habit, and feelings. All of these displays had print labeling the pictures. Many of the displays were large and colorful. Written language displays were limited to signs, labels and names. Activity centers and other areas of the room were identified with signs in both classrooms, such as Housekeeping Corner, Water Table, Reading Corner, Exit, etc. The children's names were used as labels on tables, lockers, birthdays, and artwork. The children's art work was displayed and labeled only with children's names. In one class, there was a pocket chart with name cards to be placed in activity centers during free play time. There was no children's language, such as dictated sentences or stories, and functional uses of language, such as

directions, messages, records, or lists. In one class, however, there was a rebus story for children to read. Further, there were no literacy materials in the activity centers other than the reading corner. Writing/drawing materials were stored in one place and readily available to the children, such as paper, pencils, markers, glue, scissors, and chalk.

An analysis of the written-language displays indicated some opportunities for the children to learn about written language. There was some variation here between the two classrooms. In both classrooms there were displays for use by the children and for display only. In one classroom the displays were more accessible and observable by the children; they were at eye level and low enough for the children to touch. In the other classroom the displays were for the most part in areas of non-use or displayed high on the wall. In the former classroom, the displays were also changed frequently; that is, over time different displays were observed depending on the season, holidays, and activities. All of the displays in both classrooms served a purpose. The children were learning colors, shapes, numbers, and the alphabet. They were learning about insects, food, body parts, feelings, and their health. They were learning to read their names in a variety of contexts.

Implementation of displays were observed to a limited extent. Each day the calendar was "read" and children's birthdays and holidays were identified when appropriate. Some children were observed using the book corner during their free play time. In one classroom the teacher and/or children were observed 12 times using a display, while in the other classroom they were observed only 4 times. For example, one teacher made reference to the feelings display during a class discussion. The other teacher had the children read a rebus story chart. However, signs and labels were not directly referred to by the teachers or

children, only names on desks, cards, and lockers. Children were not observed writing or drawing on the chalkboard but evidence of their work was noted. It was observed that the materials for writing and drawing were used by the children under the teaching assistants' direction, mainly in the production of art projects.

In both classrooms, children were observed experiencing written language in two major ways, reading and writing their name, listening to and looking at storybooks. Children also were observed listening to storybooks on cassette. In addition, they frequently sang songs and recited rhymes (such as "Brown Bear, Brown Bear" using animal names in the Lummi language), ways that prepare children for literacy experiences. In one instance, a teacher assisted a child in telling the class a story and, in another, wrote a child's dictation on his picture. The teachers at times drew attention to print in the environment, such as print on stickers and words on displays. In one classroom children not only learned to recognize their name but had the opportunity to learn other children's names. The teacher would hold up a card with a child's full name; that child then was allowed to get in line for lunch. It was noticed that some children were able to recognize other children's names as well. The children were observed to practice writing their name by following dots or tracing a model. In one case, however, a child actually made her name with dots. Until the children could write their name themselves, it was written on their art work and projects by the teacher or teaching assistant. The children in both classrooms were read storybooks everyday and had the opportunity to look at books in the book corner during free play time. In one instance, the researcher observed a boy "reading" a book of nursery rhymes. Although he did not say each rhyme completely, he said the appropriate one. However, most children were not observed reading in the

book corner but chose to play in the other centers, such as the housekeeping corner, the blocks, etc., which displayed no written language.

Since the two classes were not compared in any way the children's reading and writing will be presented as a whole. First, the data collected are described. Second, patterns of reading and writing behaviors are identified. Third, different stances towards reading and writing are discussed.

Description of Reading and Writing Data

Reading Data

Children's reading was analyzed in terms of interest, stage of reading development, and level of print awareness. Interest was determined by the number of times children wanted to read with the researcher either by choice or by request. Stage of reading development was determined by the children's pretend reading of a familiar story, using Sulzby's (1985) categorization scheme. The story used was Mrs. Wishy Washy, which had been read to each class at five different times, sometimes more than twice each time. Level of print awareness was determined by the children's recognition of environmental print: Burger King, Cneerios, Crest, Soup (or Campbell's Soup or Chicken Soup), Milk (or Fred Meyer). (See Appendix B for copies of each item.) Each item was presented as a flat piece taken from the side of the original product, giving some context but not in the same form found at home or the store. In this activity children were asked to "read what it says" for each item and "show where it says that". The quality of their response was noted, such as type of word (product name, contents, or other), place pointed at (words, pictures) and directionality of pointing (if demonstrated).

Interest in Reading: All children enjoyed listening to stories, especially the big books the researcher brought to read. Many children wanted to hear the stories over and over again. In fact, Mrs. Wishy Washy was read more than 10 times in each class. Many children seemed to be interested in reading the book because of its size. One child who had never chosen to read a book or to read with the researcher, wanted to read the big book, Are You My Mother?, by himself in front of the class. However, most children did not choose to read books in the Reading Corner during free-play time although they were interested in reading their name and would frequently point out their name to the researcher. This does not mean children did not read in the Reading Corner; they did, but the Corner was not visited frequently and was not visited by all the children.

Most children read the smaller version of Mrs. Wishy Washy with the researcher, either by choice or by request (see Table 1). Two children wanted to read five times. Two children read four times. Eight children read three times. Nine children read two times. Fifteen children read one time, and 2 children did not choose to read. It should be noted that the children reading one time did so on request rather than by choice. In addition, there were other children who listened while a child was reading.

Number of Children	
Five Times	2
Four Times	2
Three Times	8
Two Times	9
One Time	15
No Times	2

Table 1. Interest in Reading: Reading with the Researcher

Stage of Reading Development: Most children attempted to pretend read Mrs. Wishy Washy when asked. There were a few who did not want to but still enjoyed listening to others read it. All of the children used the pictures to "pretend read" although some of the children knew that the words told the story. No children were able to pretend read the whole book. There was a great deal of variation in the amount of story language they used to "read" the story although they all tried to retell the story as they had heard it.

Thirty children attempted to read Mrs. Wishy Washy on their own. Two children read with the researcher, completing phrases the researcher did not finish. One child read the book with other children, saying those words she remembered. The researcher read the book to one child, talking about the story and asking questions during the reading. This child did not know the animal names but did know that they went into the mud at the end. One child read the title but refused to read the story. One child refused to touch the book but he listened to others reading it. (The other children accused him of tearing books.)

Of the 30 children who pretended to read Mrs. Wishy Washy, their story re-enactments were governed by the pictures and what language they remembered from the story (see B1b and B1c stage of story re-enactment in Appendix C). However, no stories were actually created in their re-enactments, except in one case, but rather descriptions were made of the actions of the pictures (see C1 in Appendix C) and, in two cases, pictures were labeled (see C2 in Appendix C). Since the pictures told a story, the children's descriptions were story-like but incomplete.

There were differences, however, in the level of story re-enactments that were not captured by the stages of story re-enactment. Some children were more

able to "pretend read" than others. Characteristics by which they varied were identified. Levels of pretend reading were determined by the number of pages attempted, the number of pages perfectly or nearly "read", word-pointing, other indications of focus on print, and indications of focus on meaning, such as self-correction and comments or questions about the story. The different levels that were distinguishable were: beginning pretend reading, attempted pretend reading, reading-like behavior, shared reading, and no pretend reading.

Eleven children were at the beginning stage of pretend reading. These are children who have some knowledge of story language. Even these children were not alike in their ability. None of these children could pretend read the whole book of sixteen pages. Five children pretend read fourteen pages, 3 children read thirteen pages, 2 children read twelve pages, and 1 child read eleven pages. None of these children read all the pages as written, but they read from six to twelve pages fairly accurately (37.5% to 75% of the pages). In addition, they indicated in other ways that they were focusing on print and/or meaning. For example, they made metacognitive comments, such as "what does it say", "all done", "I forget this story (page)". They pointed at the words although not all the time and not with voice-print match (n=5). They self-corrected or were aware of not saying the same words as in the story (n=2). The attention was focused on the book (n=4).

Seven children attempted to pretend read. These are children who were not able to recall the language of the story but tried to recall the story. Five of the children pointed at the words while attempting to read. However, none of these children retold the story. They "pretend read" from nine to fifteen pages but their accuracy rate was only from one to six pages. In addition, they talked during the reading, needed to be prompted, and were fidgety or distracted (n=6).

Eight children could not pretend read but they demonstrated reading-like behaviors nevertheless. They turned the pages as if they were reading and talked about the pictures. They commented on the actions or labeled the animals and people on from three to ten pages.

Four children were at the shared reading stage, where the researcher or another child read the story and the child participated by joining in or completing phrases. Two children refused to pretend read but one listened to other children read.

Number of Children	
<u>Attempts Governed by Pictures/Stories Formed (written influence)</u>	18
Beginning pretend reading	11
Attempted pretend reading	7
<u>Attempts Governed by Pictures/Stories Not Formed</u>	8
Reading-like behaviors	8
No Attempt	12
Shared Reading	4
Refusals	2
No Data	6

Table 2. Stages of Reading Development: Pretend Reading Mrs. Wishy Washy

Level of Print Awareness: All of the children had some knowledge of environmental print (see Table 3). Three children recognized all five labels. Thirteen children recognized four labels. Fourteen children recognized three labels. Four children recognized two labels and 1 child recognized one label. It should be noted that all words provided were logical. Most children either

said the name, such as Cheerios, or said the contents, such as cereal. Both were given credit. A few named what they saw, such as basketball, or said "I don't know." Further, the children identified the items by content twice as much as by name.

Upon further analysis of the responses, 16 children had pointed to words when they named the items, although not necessarily the correct words. In only four instances was the researcher able to determine that a child actually read a word. Four children recognized and pointed to milk or Fred Meyer on the item from the milk carton. It should be noted that this was the most frequently missed item because the words were the least contextualized. There were only words, color and design to provide context. The shape was minimal since it was a flat piece taken from a carton, and there were no pictures. Another indication of focus on print, if not reading, 1 child pointed to King in Burger King and said "came". Further, 1 child pointed to words and numbers, and 4 children pointed to either words or pictures. Two children only pointed to pictures. In addition, 12 children demonstrated left to right directionality when pointing to words, i.e., they moved their finger left to right when saying the word, although not necessarily the correct word. Four children demonstrated mixed directionality, and 2 children demonstrated right to left directionality.

Number of Children

Five Labels	3
Four Labels	13
Three Labels	14
Two Labels	4
One Label	1
No Labels	0
No Data	4

Table 3. Knowledge of Environmental Print: Recognition of Labels

Writing Data

Children's writing was analyzed in terms of interest, name representation, and stage of writing development. Interest was determined by the number of times children visited the writing table. Name representation was described in terms of the stage at which they could "write" their name, i.e., scribble, controlled scribble, letter-like shapes, any letters, name. Stage of writing development was determined by what they could write besides their name either in response to a request or by choice. This was done to determine the children's actual stage of development since it was believed that children can write their name before they can write anything else. The data collected in the fall and spring were analyzed separately. The fall period was from October to December, the spring period from January to April. There were data for 28 children in the fall and spring. All children were asked to write their name in the final data collection in May. Four children were not present and 6 did not respond.

Interest in Writing: Twenty-eight out of 38 children came to the writing table either by request or by choice (see Table 4). Six children came five times, 4 came four times, 4 came three times, 5 came two times, and 9 came one time. However, it should be noted that many children observed the activities at the table even though they did not participate. Since this movement was short and sporadic, no records were kept.

Number of Children	
Five Times	6
Four Times	4
Three Times	4
Two Times	5
One Time	9
No Times	10

Table 4. Interest in Writing: Participation at the Writing Table

Name Representation: While some children could write their name at the beginning of the school year, other children could not yet write their name at the end of the school year (see Table 5). However, most children demonstrated development over the year in representing their name.

Name Stage--Nine children could write their first name, 5 of whom could write it in the fall and 4 in the spring. Of the 5 children who could write their first name in the fall, 4 of them could also write their last name at that time and the fifth one could do so a month later. The 4 children who wrote their name in the spring could not write their last name at that time. In May, 9 children could write their first name.

Letter Stage--In the fall, 7 children used letters to represent their name although some of them made letter-like shapes and scribbled as well. Four of these children could write their names in the spring. Four more children used letters by the spring. In May, 13 children could write the first letter of their name. Nine of them could also write some of the other letters in their name in order and 2 of them could write other letters but out of order. Two other children could write two letters in their name but not the first letter.

Letter-Like Shape Stage--In the fall, 7 children created letter-like shapes for their names. One continued to do so in the spring. In addition, in the spring, 2 more children used letter-like shapes for their name. In May, 10 children wrote their name with letter-like shapes.

Controlled Scribble Stage--Three children used controlled scribble in the fall to represent their names and one continued to do so in the spring. In May, 3 children could not write their name and 3 would not try.

Scribble/Draw Stage--In the fall one child only drew pictures, and in the spring three children only drew pictures, when asked to pretend write their name.

Name	Number of Children		
	Fall	Spring	May
Name	5	9	9
First Name Only	1	4	4
First and Last Name	4	5	5
Letters	7	4	13
Letter-Like Shapes	7	3	10
Controlled Scribble	3	1	0
Scribble/Drawing	1	3	0
Could Not	n/a	n/a	3
Would Not	n/a	n/a	3
No Data	15	18	0

Table 5. Name Representation: Writing Their Name

Stage of Writing Development: The children demonstrated a range of writing behaviors in addition to name writing (see Table 6). When asked to write anything else besides their name, 2 children wrote other names. All of these children demonstrated left to right orientation. Seven children consistently wrote letters. All of these children could write their name as well and demonstrated left to right orientation except one. Fourteen children wrote a combination of controlled scribble, letter-like shapes, and letters at different times of the year. Three of these children also demonstrated left to right orientation. Two children produced letter-like shapes and controlled scribble.

One child produced only letter-like shapes. Four children produced only controlled scribble.

	Number of Children
Names/Words	2
Letters	7
Combination	14
Letter-Like Shapes	1
Controlled Scribble	4
No Data	10

Table 6. Stage of Writing Development: Writing Other Than Name

Patterns of Reading and Writing Behaviors

From the data collected, patterns of reading and writing behaviors were identified for the 4-year-old children at Lummi Headstart during the period of study. The patterns demonstrate that there was a great deal of variation in the children's interest, concepts, and knowledge of reading and writing. Variation was expected but the kind and the extent of variation may not have been obvious without close observation as done in this study. Although the patterns obscure the needs of individual children, they should be useful for teachers in planning a developmentally appropriate curriculum for the 4-year-old classes in the future.

Reading Behaviors

Interest in Reading: The children enjoyed listening to stories, especially while looking at big books, and enjoyed hearing them over and over again but they

did not often choose to read books on their own when they had other choices. Further, the children were very interested in learning to read their name and, for some children, other names. Most of the children were willing to pretend read although it was a new activity for all of them. Some of them were more interested than others. Even those children who would not pretend read were interested in reading with others or listening to others read. Although all children were interested in books, stories, and names, there was a great deal of variation in the amount of interest. In addition, those who were most interested did not necessarily do better at pretend reading.

Reading Development: Nearly all the children could pretend read familiar storybooks, using the pictures. They were not familiar with the language of stories but they were aware that the words told the story and not the pictures. They tried to recall the story as they had heard it rather than reconstruct their own version. However, there was a great deal of variation in the children's ability to pretend read the story. Some children were able to recall more of the story language than others and to use more of the actual words. Even those who did not recall the words tried to do so, resulting in unnatural language. In addition, the children who were more successful focused more on the meaning and the book itself. All children, except for perhaps two, were able to demonstrate reading-like behaviors. Further, during the reading of the big books, all of the children were able to complete a phrase or predict what would happen next. Some of them were more willing at an earlier stage of reading than others, such as after the first read-aloud.

Print Awareness: All of the children had some knowledge of environmental print although they were not necessarily able to read the labels. They were able to use the context of the print, such as pictures, shape, color, etc., to

identify the labels. Some children, however, were beginning to recognize words on the labels and many children were aware of print. Many children used left-to-right orientation in pointing at the words on the labels even though the words were not correct. However, there were a few children who could not recognize many of the labels and were not aware of print as meaningful.

Writing Behaviors

Interest in Writing: Most children at Lummi Headstart were interested in "writing" although they had never been asked to write before except for their name. Some children were more interested than others. There seemed to be a strong relationship between the ability to write their name, write letters and interest in writing. This could mean that the more children were able to do, the more interested they were, or the more they were interested, the more they were able to do.

Name Writing: Some children came to school knowing how to write their first name and even their last name. Most children were not able to write their name but some learned how during the year. Many children could write letters representing their name and several learned to write letters by the end of the year. A few children could only scribble or make letter-like shapes even at the end of the year.

Writing Development: Most children used a combination of controlled scribble, letter-like shapes and letters in their writing. Even those who could write their name used scribble sometimes. A few children were able to write other names and a few were only able to scribble and make letter-like shapes. The children progressed from drawing and scribbling to controlled scribbling, letter-like shapes, letters, and finally name writing. However, during the year

no child progressed through all the stages. It should be noted that not all letters of the alphabet were learned before the letters of a name were learned. Left to right orientation was also used before children could write their name, although not necessarily consistently. Further, scribbling and drawing seemed to be a necessary precursor since the children at those stages had less fine-motor control. In addition, at each stage the children seemed to develop better fine-motor control and eye-hand coordination.

Children's Stances toward Literacy Learning

Based on the data and subsequent analysis of patterns across children, individual stances toward reading and writing were determined. This was primarily done to compare individual children's development across time. That is, will they maintain their stance in subsequent years and what effect will their stance in pre-school have on their learning to read and write? Further, identification of stances can provide teachers with useful information for helping individual children. For instance, there will be children who have little or no engagement with books or print in spite of the teacher reading aloud. In addition, there will be children who have little interest in learning to write their name. The teacher needs to intervene more directly in helping these children acquire the interest, concepts, behaviors, and knowledge that prepare them for learning to read and write in the future.

Stances towards reading and writing were determined using the categories from the data analysis. The levels were labeled in terms of engagement since the purpose of categorization was to identify how involved the children were with reading and writing. Characterizations of each stance are given in Figure 1.

<u>Levels of Engagement</u>	<u>Stance Characterizations</u>	
	Reading	Writing
Little	little or no interest not aware that print "says" something cannot retell story	no interest scribble for name draws/scribbles
Some	looks at books knows print "says" something retells story using pictures	some interest letters for name uses combination of scribble/letter-like shapes/ letters
High	attempts to "read" recognizes words and others' names retells story using story language	likes to write writes first name writes other names

Figure 1. Stances towards Reading and Writing: Levels of Engagement

Children's stance was determined separately for reading and writing to see if there were any differences in their stances. Table 8 below identifies them separately if different for a child and together if the same for a child.

<u>Levels of Engagement</u>	<u>Stances</u>		
	Reading	Writing	Reading/Writing
Little	3	6	10
Some	7	5	9
High	3	2	5

Table 8. Children's Stances towards Reading and Writing

Seven to 8 children had high engagement with reading and writing, 14 to 16 children had some engagement and 13 to 16 children had little or no engagement. Further, more children had less engagement with writing than reading and few children had high engagement with both reading and writing. In most cases, children whose stances varied between reading and writing, only differed by one

level. However, one child demonstrated high engagement with reading but little or no engagement with writing. It should also be noted that the children at one level were not all alike in the form of their engagement. It would be necessary for teachers to become familiar with individual children's specific reading and writing behaviors and not assume it is the same.

Implications for Instruction

Two kinds of descriptions have been made of the 4-year-old children at Lummi Headstart, patterns of reading and writing behaviors and stances towards reading and writing. The patterns of reading and writing behaviors give a view of the variations in the class as a whole. This information can be used by teachers to plan a developmentally appropriate curriculum for the 4-year-old classes. A developmentally appropriate curriculum that is based on what research has said about how young children learn to read and write will go a long way in helping prepare 4-year-olds for successful learning experiences in the public schools. However, exposure to reading and writing in pre-school is not enough. Teachers must be able to meet individual children's needs. Stances towards reading and writing give a view of individual children's stage of development. This can be used by teachers to plan how they will meet their needs. Some children will have many experiences at home that promote the acquisition of reading and writing. These children are already highly engaged and are on their way to learning how to read and write. They just need opportunities to use what they know and to explore further. Most children have been exposed to a variety of reading and writing in their environment and will demonstrate some engagement in the classroom. These children need increased exposure to reading and writing activities in the classroom. However, some children will have limited experience

with reading and writing. They will have little or no engagement with reading and writing in the classroom and will not even be aware of the possibilities. These children need guidance from the teacher in their experiences with reading and writing. First, I will recommend activities for a developmentally appropriate curriculum for all children's literacy development. Then, I will suggest specifically how those children who need it the most can be helped.

A Developmentally Appropriate Curriculum

If teachers are to meet the needs of all of their students, they must first understand how children's acquire literacy, specifically emerging literacy (see Mavrogenes, 1986; Teale, 1987). Then they must identify what their students know about reading and writing (see Strickland & Morrow, 1989d). Finally, they must plan activities that facilitate, guide, and teach reading and writing at different stages of development (see Strickland & Morrow, 1989e, for steps in creating an emergent literacy curriculum).

The Early Childhood and Literacy Development Committee of the International Reading Association has provided two sets of general guidelines for administrators and teachers to use when planning a developmentally appropriate curriculum for young children (IRA, 1986a; IRA, 1986b). The emphasis is "on providing children with daily opportunities for holistic, functional, meaningful experiences with written language" (Teale & Martinez, 1988, p. 10), an approach consistent with the way young children learn (Weir, 1989). The guidelines have been compiled and organized into seven main categories (Appendix D):

- Build on what children already know about language, reading and writing.
- Focus on meaning and the functions of reading and writing.
- Foster both affective and cognitive development.

- Allow children to explore and experiment with language, reading and writing.
- Provide a model of language use, reading and writing.
- Monitor children's learning through informal means.
- Inform and involve parents in their children's learning.

These guidelines are based on what we know about how children learn language in general and, specifically, what children learn about reading and writing in early childhood.

Activities for Emerging Literacy

Recent research has identified many ways that teachers can facilitate, guide, and encourage emerging literacy. The most important ones include: participation in read-alouds, exploration of books and stories, engagement with print, exploration of writing, and involvement of parents.

Participation in Read-Alouds

Research has amply demonstrated how important reading to children is (Teale, 1978, 1987). In fact, books should be read aloud more than once a day. In addition, children should be read a variety of texts: rhymes, poetry, stories, and non-fiction. Anything can be read to children: messages, letters, invitations, recipes, etc. Predictable books have proven to be useful in developing children's expectations for what will happen next and even what word will come next.

Research has also shown that repeated reading improves children's comprehension of stories as demonstrated by the kinds of questions they ask (Martinez & Roser, 1985). Children frequently ask for favorite stories to be read again and again. Books should be read repeatedly so that children develop a deeper understanding of stories and become more familiar with story structure

and story language. Children are more apt to pretend read a book because it is familiar. Further, it has been found that children chose predictable books and books repeatedly read by the teacher more often than other books (Teale & Martinez, 1988).

Research has also shown how social interaction during reading alouds promotes literacy development (Teale, 1987). When stories are discussed and children are encouraged to ask questions, they are more apt to think about what is happening in the story. Perhaps most importantly, reading aloud may "enhance the child's reflective awareness, not only of language as a symbolic system but of the processes of his own mind" (Donaldson, 1978, p. 102).

....Through discussion, stories are related to children's own experiences and they are encouraged to reflect upon and ask questions about the events that occur, their causes, consequences, and significance, not only are their inner representations of the world enriched, but also their awareness of the ways in which language can be used in operating on these representations is enhanced. (Wells, 1985, p. 253)

Research on minority children (Baghban, 1984; Gutierrez & Garcia, 1989; Heath, 1983; Kawakami & Au, 1986) has also demonstrated how important it is to incorporate children's background knowledge in their understanding of what is being read and taught.

All children profit from reading aloud and participating in read-alouds, but those children who have limited experiences listening to stories must be exposed to as much reading aloud as possible and on a personal level. Teachers must seek out these children, reading to them on a one-to-one basis, talking with them about stories and relating stories to their lives. Holdaway has developed a shared book experience (see Appendix E) that involves children in reading in much the same way that parents involve their children. This method encourages children to participate interactively with the teacher. It also may be useful

for teachers to study the research on parent-child interaction during storybook reading to learn how parents involve their children in the stories they are reading (see Ninio, 1980; Snow, 1983; Teale, 1982; Teale & Sulzby, 1986; Wells, 1986). Strickland and Morrow (1989a, 1989h, 1990a) and Teale and Martinez (1988) offer other ways to promote children's participation during the read-aloud, such as predicting, chanting repetitive phrases, cloze reading, what if questioning, and relating stories to the children's lives.

Exploration of Books and Stories

After children have listened to books, poetry, and rhymes, they can continue to enjoy them in a variety of ways: dramatizing, role-playing, retelling, pretend reading, as well as other forms of communication: drawing, chanting, singing, and dancing. In this way children explore the meaning, language, and sounds of stories and poetry in a concrete way. Most young children need to express what they know, think, and feel in concrete ways but some children can only express themselves in this way (Cannella, 1985; Blank, 1982). These kind of activities give all children the chance to make a connection between the real world of objects and people and the abstract world of words and print. "In dramatic play, children employ a number of devices through which they distance themselves from the language in ways reminiscent of the conventions used in books" (Blank, 1982, p. 88). It is such "disembedded oral language skills" that are "precursors to written language mastery" (Blank, p. 80). This is a time for children to select and recall familiar stories, explore their understanding of stories, and develop their ways of making sense. Pre-school children are not expected to be able to read, but they can be encouraged to look at books, to re-enact stories, and to pretend read.

One way that children can explore literature is by looking at books in the library corner. Morrow (1982) and Morrow and Weinstein (1982) found that the design of the library corner affected children's choice of reading books during free play time. They suggested that library corners should be quiet, accessible, large enough to accommodate four children, comfortable, and partitioned off from the rest of the room, and have open-faced shelves for displaying a wide variety of trade books, bulletin board/poster displays and props for re-enactments. Providing an attractive library corner cannot be over-emphasized. In addition, time for looking at books may need to be set aside, since many children, especially boys and those not familiar with books, will not choose to read during free play time. This is a good time for teachers to interact with individual children who need more attention and more modeling.

Another way that children can explore literature is by re-enacting a story. There are a variety of means for doing so, from movement to drawing. Since children are naturals at pretending, they can role-play characters in a story or dramatize a story. Other common means are the use of puppets and felt-boards. Children at first will create their own story, making up their own words. As time goes on and children become more familiar with stories, they will begin to use the language of the story. Children will vary in their use of story language but it should be encouraged. Peterson (1982) has described a way children can be helped to use story language to retell stories, the Storybox. A Storybox is created for a story and consists of objects that represent key phrases in the story. Children then can use the objects to help them recall the story language (see Appendix F for an example). Drawing pictures and creating books are other ways that children can recall and retell familiar stories. However, children who

have not experienced some of these activities will need to have them modeled. Modeling is an important way that young children learn about reading and writing.

As children become familiar with stories, they often begin to pretend read on their own. Children will display various stages of pretend reading. Sulzby (1985) has shown how children develop in their ability to "re-enact" stories as they pretend read. This can be encouraged by having the children read Big Books, predictable books (Bridge, 1986) and language experience charts together. This can be facilitated by using cloze reading where children provide the missing word or phrase. Learning the language of literature can be further facilitated by having children chant repetitive phrases from stories, memorize rhymes and poetry, and even sing songs. Again, all children should be encouraged to pretend read at whatever level they can manage but teachers can help those who cannot or do not want to pretend read through assisted reading. During assisted reading, the teacher and child read together with the child saying whatever he/she can.

All of these ways not only promote the enjoyment of stories but also help children to learn the structure of stories and to recall the language of stories. Repeating the language of stories and, especially, poetry and rhymes may even help children develop phonological awareness, i.e, awareness of the sounds in words (Dickinson & Snow, 1987; Maclean, Bryant & Bradley, 1987). Strickland and Morrow (1988c) demonstrate how these types of experiences help children develop their oral language and communication skills as well.

Engagement with Print

Books are not the only means by which children experience print. There is plenty of print in the home environment. In fact, most children come to school already able to recognize environmental print (Harste, Burke & Woodward, 1982;

Teale, 1987). Children will, of course, vary in what they know but more children will have experienced print in their environment than stories read aloud.

Children's experiences with this type of print are highly contextualized, i.e., the context provides clues for reading the print (Teale, 1987). Out of context, most pre-school children are unable to read the print. This does not mean that teachers should ignore this type of print. Teachers can make use of the children's natural ability to make sense of print in meaningful contexts. One way is to make use of print that they are familiar with, including their name. Another way to do this is to create "a print rich environment" (Strickland & Morrow, 1988b).

The first print that children may recognize is their own name. In fact, children learn to write their name before they can write any other words. Since their name is very important to them, teachers can use their names to introduce the alphabetic principle, i.e., print and words are made up of letters. Once they can recognize their name, children soon learn to recognize the names of their family members and even pets. Children can go on to learn the names of their classmates. Recognition of names involve more than just visual discrimination, children learn that speech can be written down. At first, children perceive names as objects, especially when they have their name on a card which they can hold in their hands. Later, as children begin to write their name and other names, they learn that names are symbols for words, a beginning level of abstraction (Vellender, 1989). When they see their name as a symbol for speech, they begin to learn the concept of word and begin to discriminate on the basis of form rather than context. Thus, teachers should have children read their name and other names whenever possible. Children will vary in how quickly they learn names but all children will be interested and will learn to read their

they learn names but all children will be interested and will learn to read their name as well as names of other children in the class.

Teachers can also begin to talk about letters of the alphabet. It is much more meaningful for children to learn the letters in their name than to learn the letters in alphabetical order, which has no meaning to children, except as part of the alphabet song. It is by drawing attention to letters in their names that children learn the letters of the alphabet and begin to discriminate letters on the basis of features rather than context (Kontos, 1986; McGee & Richgels, 1989). Then learning the names of the letters becomes a useful activity because it gives children a way of talking about print (Vellender, 1989) and a way to start learning the sounds of letters (Kontos, 1986). However, at this stage, "the focus on letters and sounds is appropriate only when children begin to get interested in and ask questions about graphic cues in print" (Kontos, 1986, p. 65). "Effective teachers will observe children as they engage in reading and writing activities to find out what letters and aspects of letters children are exploring" (McGee & Richgels, 1989, p. 223).

Names are only one type of print that children can learn to recognize in the pre-school classroom. Recent research has examined the effects of providing print and reading and writing materials in play centers, such as the block center or the playhouse (Morrow & Rand, 1991; Neuman & Roskos, 1990; Strickland & Morrow, 1989g). It was found that children increased their interactions with print when it was made available in the play centers. Since children's dramatic play is an enactment of what they know from their own lives, print and reading and writing materials become a natural part of their play. Possible literacy props to place in play centers are up to the imagination of the teacher and the children (they can help, too) but many ideas are provided in the literature (see

Appendix G for some ideas). Play centers can be organized around a theme or a topic of study, such as a restaurant, a bakery, a grocery store, a newspaper office, a post office, an airport, a gas station, a car repair shop, a veterinarian's office, and so on (Morrow & Rand, 1991). It was also found that children are more likely to engage in literacy behaviors when teachers guide the children by modeling behaviors and giving directions for using literacy materials in the play centers. All children may not need this type of guidance but certainly some children will need it. Thus, teachers must take time to observe children's play and decide which children need guidance.

Other meaningful and functional uses of print in the classroom have been suggested in the literature. This is more than just posting signs and labels in the classroom. Print needs to be used for real purposes. Before children learn the form of print, they "must first understand what print is for and how it is used" (Kontos, 1986, p. 65). Researchers have found that knowledge of environmental print does not necessarily "lead" children into word recognition (Teale, 1987). This may be because environmental print is not used for a specific purpose. Examples of functional uses of print include directions, lists, messages, records, charts, graphs, news, letters, greeting cards, invitations, rules and so on (Goodman & Goodman, 1979). Children can even assist in the creation and use of such print (Strickland & Morrow, 1990e). According to Cairney & Langbien (1989), "if one creates an environment in which literacy is an important part of the children's world, this has a strong positive effect upon literacy development" (p. 564). They found that even 4-year-old children could use reading and writing to communicate and share with others.

Exploration of Writing

According to Clay (1991), "the first explorations of print in the preschool years may occur in writing rather than reading" (p. 108). Pre-school children need to explore and experiment with writing (Cannella, 1985; Dyson, 1984a). This does not mean that they should be taught to write or even required to write (Bakst & Essa, 1990). It means that children need opportunities to use pencils, pens, markers, and crayons to draw, scribble, and pretend write. In fact, children who have opportunities to draw and scribble may begin to write sooner and with greater ease because they are developing their eye-hand coordination and fine motor control. It has been found that children as young as three are beginning to differentiate drawing from writing and to identify features of print (DeFord, 1980; Harste, Woodward, & Burke, 1984; Voss, 1988). Pre-school children become interested in writing when they see others writing (Dyson, 1982a). Their initial attempts at writing may not be letters but their scribbles take on the form of print and even become letter-like (see Harste, Woodward & Burke, 1984). They first learn to write letters when they attempt to write their name (Dyson, 1984a). Teachers can encourage children's writing development in several ways: setting up a writing table, incorporating writing in small-group activities; and modeling the functions of writing.

The Writing Table: A writing table should be set up with a variety of paper and writing tools, the alphabet at eye level, and three dimensional letters (Strickland & Morrow, 1989b). The table should be available for children to use at free play time and other times of the day. At the table, children can draw and write whatever they choose, dictate captions for their drawings, copy letters and names, and pretend write. Their writing will not necessarily be meaningful in and of itself (Dyson, 1982b). Initially letters and names represent objects

and only later symbols for oral language (Dyson, 1984b). At first, children may just want to "draw" letters and names; often they will want to experiment, trying out different ways of forming letters (Cannella, 1985; Dyson, 1984c); sometimes they will want to practice what they know; later they will explore the relationships between print and speech (Dyson, 1982b, 1991); then they will want to label (Dyson, 1981, 1982b); eventually they will imitate their teachers' use of writing in the classroom. While children are writing, teachers will observe them talking, singing, drawing, and acting (Karnowski, 1986). These are familiar ways that children communicate which help them to make the connection between concrete objects and events and abstract words and print in much the same way that they act out stories to understand them.

Children who have limited experiences with drawing, scribbling, and writing will not choose to do so even when given the opportunity unless they see a purpose and a connection with their own lives. This can be accomplished through small group activities where the teacher facilitates and guides the writing process and functional uses of writing in the classroom where the teacher models the forms and functions of writing. Once these children get started through teacher intervention, they will continue to do so. According to Piaget, "the more a child explores in a particular domain, the more he or she wants to experience" (Cannella, 1985, p. 284). As Langer claims, "meaning-making, like eating and sleeping, is an inherent part of being alive" (Dyson, 1991, p. 158).

Small-Group Activities: There should be a time set aside for drawing and writing just as there is time set aside for play and for read-alouds. Although the writing table can be used during free play time, children will not often choose the table because other play activities are more interesting and certainly just as important. Perhaps teachers can meet with small groups of children to

carry-out activities as described by Kantor, Miller, and Fernie (1992). The purpose of the activities is not to teach writing but to use writing as a tool to accomplish other tasks (Dyson, 1984c).

According to their curriculum (cited in Kantor, Miller, and Fernie, 1992),

Early in the year, we begin the small group curriculum...with an introduction to new materials...While we each work with our own, but identical materials we talk: we notice each other's work, we describe what we're thinking about, we describe what we're doing...During the second half of the year, or whenever the teacher determines that the group is ready, our goal is to work collaboratively on a single project...to experience the idea of working in and as a group, of making unique contributions to a group effort through collaboration and cooperation. (p. 191)

As an example, the teacher "presented materials to explore (math, science, games, or literacy-related materials). At the conclusion of these experiences, written language was often introduced; for example, a chart of some kind might have accompanied a science exploration to classify and record the outcome. The social purpose for the literacy event...[was] 'so that everyone would know what we found out.' " (Kantor, Miller, & Fernie, 1992, p. 193). A variety of activities can be carried out at this time: making holiday cards, writing recipes, creating books, creating Legos constructions, writing rules for the care of a classroom pet, creating signs, playing games, experimenting with art media, exploring the properties of materials, and so on.

In addition to the teacher-directed small group activities, Kantor, Miller, and Fernie (1992) describe self-directed activities where children often chose to integrate print and writing in their play, although the purpose was not to practice or even explore print and writing:

The activity table area was a context where children were encouraged to try out their ideas through the use of a wide range of art and construction media. A daily free choice activity, this context was structured each day by the teacher's selection of open-ended materials. These materials for painting, drawing, printing, working with dough and clay, and constructing collages and sculptures were selected to promote unique, divergent, creative work instead of products which looked identical from artist to artist. The main purpose of the activity tables was to introduce children to materials for extensive free exploration. (p. 195)

As an example, in a balancing scale activity, the teacher "presented a dry mixture of small alphabet noodles and other materials (cornmeal, rice, pasta) as media to explore, weigh, measure, scoop, and so forth" (Kantor, Miller, and Fernie, p. 195). Rather than using the scale, the children chose to play with the letters, finding letters they knew, spelling their name, and singing the alphabet song. If teachers feel that children need direction or supervision with this kind of activity, then they should "view themselves as coexplorers of the media and cocreators of ideas", following the "lead of the children" and helping them "articulate, implement, and extend their art and construction ideas and knowledge" (Kantor, Miller, and Fernie, p. 195).

These types of activities provide children a purpose for writing, i.e., to accomplish personal and group goals (Dyson, 1984c), a sense of audience as they interact with others (Dyson, 1991; Rowe, 1989), and control over their own learning (Dyson, 1984c). They are especially important for teachers to do with children who have limited experiences with writing, because teachers not only can provide them guidance but they can observe what they know (1982c).

Forms and Functions of Writing: In addition to opportunities for writing, teachers need to model the forms and functions of writing (Strickland & Morrow, 1989b). These models then form the basis of the children's exploration and experimentation. Just as children need to see a variety of written texts that the teacher reads, they need to see the teacher writing a variety of written

texts: lists, signs, letters, messages, recipes, charts, stories, poems, posters, maps, invitations, and so on. In other words, teachers need to use writing "opportunistically", when the chance occurs (Kantor, Miller, and Fernie, 1992, p. 199). For example,

The teacher and children are gathered around the guinea pig cage discussing their new pet. The teacher is explaining the food guinea pigs eat and is showing the children the food they will be feeding their pet. One of the children remembers that the class goldfish died because too much food was put in his bowl. The teacher suggests that the class make a sign to put on the package telling the right amount of food and a chart to put near the cage to be checked on the day he is fed. She discusses the reasons these written records will help. (Taylor & Vawter, 1978, p. 942)

If teachers use writing in a meaningful and functional way, children will begin to imitate the teacher to accomplish their personal goals. Children will not only imitate the forms of writing but they will imitate how an activity involving literacy is carried out, i.e., the materials, actions, and talk that are used (Dyson, 1984b, 1984c). Their focus, of course, is on the activity as a whole rather than on the forms and functions of writing (Dyson, 1984c). To create activities where children can spontaneously make use of reading and writing, some teachers create a classroom postal system or a message board to foster communication between classmates, between teacher and children, and even between classrooms. In this way, literacy becomes an integral part of "doing school" (Kantor, Miller, and Fernie, 1992, p. 199). "It is important to keep in mind that purposes, functions, or uses must be made apparent to children within the framework of their own interests" (Taylor & Vawter, 1978, p. 944). This is particularly essential for children with limited experiences with print and writing.

Involvement of Parents

Research has demonstrated the importance of parents' contributions to their children's literacy development (Strickland & Morrow, 1989c, 1990c; Teale, 1987). (It should be noted that the term "parents" can refer to any significant adult or older sibling who has the role of caregiver.) Not only do children become aware of print and become familiar with books, their name, and the alphabet before they come to school, they learn that reading is enjoyable, meaningful, and functional (Teale, 1987). Children's early experiences with print and books form the foundation of later learning. In fact, it has been found that the concepts of print and reading that children acquire before they learn to read are a necessary prerequisite (Lomax & McGee, 1987). Children, however, vary in the kinds and amount of experience they have with print and books. In addition, as explained by Y. Goodman, "literacy development cannot be understood without recognizing the significance of literacy in culture, i.e., the culture of both the larger society and the specific culture of which the child is a part" (Gutierrez & Garcia, 1989, p. 114). In other words, it is "through the place and value given to literacy in the everyday activities of the family" (Wells, 1985, p. 234) that children learn to read. Thus, it can be said that children learn to read and write because they see significant people in their environment reading and writing, they have opportunities to explore and experiment with reading and writing, and they have assistance in their attempts.

Because of the importance of children's experiences at home, parents and teachers must work together to help children grow and develop. Whether educators and teachers offer a formal course, such as The Intergenerational Literacy Model Project (Quintero & Velarde, 1990) or The Intergenerational Reading Project (France & Hager, 1993), or teachers work with parents informally, such as during

home visits, parent conferences, or newsletters, teachers must actively involve parents in their children's education. Parents are more apt to spend time helping their children if they know they have something to contribute and their contributions are valued. In their Intergenerational Reading Project, France and Hager (1993) identified three important principles for increasing parent involvement: recruit parents, respect their efforts, and respond to the needs of the parents.

Parents can be asked to do a variety of activities with their children (see France & Hager, 1993; and Quintero & Velarde, 1990), but it is probably best to keep it simple. First, parents can read to their children. This is of primary importance. Teachers should show parents ways to read and discuss stories with their children. Second, parents can take their children to the library regularly. Teachers should organize a field trip to the library for parents and children or even take them there. However, if this is not possible, teachers can send books home. Third, parents can make writing materials available, such as paper, pens, pencils, markers, and crayons. Teachers should demonstrate what children are expected to be able to do and how this contributes to literacy development. They can also send writing materials home for children to use. Fourth, parents can make their children aware of the print around them, including signs, logos, names, and letters of the alphabet. Teachers should find out what print is available in the children's environment and how print is used (see van Kleeck, 1990, p. 28, for a list of possibilities). Then they can show parents to draw attention to print and how this contributes to their children's literacy development. Finally, parents can visit the classroom and share their knowledge with the children. Teachers should find out what parents know and can do. Perhaps Lummi parents are storytellers or artists. Parents can also be asked to

narrate the history of their community or their own personal histories (see an example of this in Britsch, 1989). Whatever parents are able and willing to do should be encouraged and appreciated.

Summary

Although reading and writing are not commonly part of the pre-school curriculum, other than the teacher reading stories and perhaps the children acting them out, pre-school teachers can do much to facilitate their students' emerging literacy. Children know so much more than we think and can learn so much more than previously realized. Teachers need to find out what their students know and to offer them opportunities to grow in their knowledge of reading and writing. Only a few ways for promoting literacy have been offered in this report: encouraging children to participate in read-alouds, to explore books and stories, to make use of print in the classroom, and to explore writing through a writing table, small-group activities and functional uses of writing in the classroom. In addition, teachers can work together with parents as partners in their children's literacy development. There are other ways as well but, if these are implemented, all children will acquire the necessary foundations for learning to read and write.

References

- Baghban, M. (1984). The application of culturally relevant factors to literacy programs in Appalachia. Reading Horizons, 24, 75-82.
- Britsch, S. (1989). Research currents: The contribution of the preschool to a Native American community. Language Arts, 66, 52-57.
- Bakst, K., & Essa, E.L. (1990). The writing table: Emergent writers and editors. Childhood Education, 66, 145-150.
- Blank, M. (1982). Language and school failure: Some speculations about the relationship between oral and written language. In L. Feagans & D.C. Farran (Eds.), The language of children reared in poverty (pp. 75-93). New York: Academic Press.
- Bridge, C. (1986). Predictable books for beginning readers and writers. In M.R. Sampson (Ed.), The pursuit of literacy: Early reading and writing (pp. 81-96). Dubuque, IA: Kendall/Hunt.
- Cairney, T., & Langbien, S. (1989). Building communities of readers and writers. The Reading Teacher, 42, 560-567.
- Cannella, G.S. (1985). Providing exploration activities in beginning reading instruction. The Reading Teacher, 39, 284-289.
- Clay, M. (1991). Becoming literate. Portsmouth, NH: Heinemann.
- Cowley, J. (1980). Mrs. Wishy-washy. San Diego, CA: The Wright Group.
- DeFord, D.E. (1980). Young children and their writing. Theory into Practice, 19, 157-162.
- Dickinson, D.K., & Snow, C.E. (1987). Interrelationships among prereading and oral language skills in kindergartners from two social classes. Early Childhood Research Quarterly, 2, 1-25.
- Donaldson, M. (1978). Children's minds. New York: Norton.
- Dyson, A.H. (1981). Oral language: The rooting system for learning to write. Language Arts, 58, 776-784.
- Dyson, A.H. (1982a). Reading, writing, and language: Young children solving the written language puzzle. Language Arts, 59, 829-839.
- Dyson, A.H. (1982b). Talking with young children writing. Childhood Education, 59, 30-36.
- Dyson, A.H. (1982c). Teachers and young children: Missed connections in teaching/learning to write. Language Arts, 59, 674-680.

- Dyson, A.H. (1984a). "N spell my Grandmama": Fostering early thinking about print. The Reading Teacher, 38, 262-271.
- Dyson, A.H. (1984b). Emerging alphabetic literacy in school contexts. Written Communication, 1, 5-55.
- Dyson, A.H. (1984c). Research currents: Who controls classroom writing contexts. Language Arts, 61, 618-626.
- Dyson, A.H. (1991). Towards a reconceptualization of written language development. Linguistics and Education, 3, 139-161.
- France, M.G., & Hager, J.M. (1993). Recruit, respect, respond: a model for working with low-income families and their preschoolers. The Reading Teacher, 46, 568-572.
- Goodman, K.S., & Goodman, Y.M. (1979). Learning to read is natural. In L.B. Resnick & P.A. Weaver (Eds.), Theory and practice of early reading (pp. 137-154). Hillsdale, NJ: Lawrence Erlbaum.
- Gutierrez, K.D., & Garcia, E.E. (1989). Academic literacy in linguistic minority children: The connections between language, cognition and culture. Early Child Development and Care, 51, 109-126.
- Harste, J.C., Burke, C.L., & Woodward, V.A. (1982). Children's language and world: Initial encounters with print. In J.A. Langer & M.T. Smith-Burke (Eds.), Reader meets author/Bridging the gap (pp. 105-131). Newark, DE: International Reading Association.
- Harste, J.C., Woodward, C.L., & Burke, V.A. (1984). Language stories and literacy lessons. Portsmouth, NH: Heinemann.
- Heath, S.B. (1983). Ways with words: Language, life and work in communities and classrooms. London: Cambridge University Press.
- Holdaway, D. (1979). The foundations of literacy. Sydney: Ashton-Scholastic.
- IRA, Early Childhood and Literacy Development Committee (1986a). Joint statement on literacy development and pre-first grade. The Reading Teacher, 39, 819-821.
- IRA, Early Childhood and Literacy Development Committee (1986b). IRA Statement on reading and writing in early childhood. The Reading Teacher, 39, 822-824.
- Kantor, R., Miller, S.M., & Fernie, D.E. (1992). Diverse paths to literacy in a preschool classroom: A sociocultural perspective. Reading Research Quarterly, 27, 185-201.
- Karnowski, L. (1986). How young writers communicate. Educational Leadership, 44, 58-60.

- Kawakami, A.J., & Au, K.H. (1986). Encouraging reading and language development in cultural minority children. Topics in Language Disorders, 6, 71-80.
- Kontos, S. (1986). What preschool children know about reading and how they learn it. Young Children, 42, 58-66.
- Lomax, R.G., & McGee, L.M. (1987). Young children's concepts about print and reading: Toward a model of word reading acquisition. Reading Research Quarterly, 22, 237-256.
- Maclean, M., Bryant, P., & Bradley, L. (1987). Rhymes, nursery rhymes, and reading in early childhood. Merrill-Palmer Quarterly, 33, 255-281.
- Martinez, M. & Roser, N. (1985). Read it again: The value of repeated readings during storytime. The Reading Teacher, 38, 782-786.
- Mavrogenes, N.A. (1986). What every reading teacher should know about emergent literacy. The Reading Teacher, 40, 174-178.
- McGee, L.M., & Richgels, D.J. (1989). "K is Kristen's": Learning the alphabet from a child's perspective. The Reading Teacher, 43, 216-225.
- Morrow, L.M. (1982). Relationships between literature programs, library corner designs, and children's use of literature. Journal of Educational Research, 75, 339-344.
- Morrow, L.M., & Rand, M.K. (1991). Promoting literacy during play by designing early childhood classroom environments. The Reading Teacher, 44, 396-402.
- Morrow, L.M., & Weinstein, C.S. (1982). Increasing children's use of literature through program and physical design changes. The Elementary School Journal, 83, 131-137.
- Neuman, S.B., & Roskos, K. (1990). Play, print, and purpose: Enriching play environments for literacy development. The Reading Teacher, 44, 214-221.
- Ninio, A. (1980). Picture-book reading in mother-infant dyads, belonging to two subgroups in Israel. Child Development, 51, 587-590.
- Peterson, S. (1982). Storybox. Bellingham, WA: Susan Peterson.
- Quintero, E., & Velarde, M.C. (1990). Intergenerational literacy: A developmental bilingual approach. Young Children, 44, 10-15.
- Rowe, D.W. (1989). Author/audience interaction in the preschool: The role of social interaction in literacy learning. Journal of Reading Behavior, 21, 311-347.
- Shannon, G. (1983). The surprise. New York: Greenwillow.
- Snow, C.E. (1983). Literacy and language: Relationships during the preschool years. Harvard Educational Review, 53, 165-189.

- Strickland, D.S., & Morrow, L.M. (1988b). Emerging Readers & Writers: Creating a print rich environment. The Reading Teacher, 42, 156-157.
- Strickland, D.S., & Morrow, L.M. (1988c). Emerging Readers & Writers: Reading, writing, and oral language. The Reading Teacher, 42, 240-241.
- Strickland, D.S., & Morrow, L.M. (1989a). Emerging Readers & Writers: Interactive experiences with storybook reading. The Reading Teacher, 42, 322-323.
- Strickland, D.S., & Morrow, L.M. (1989b). Emerging Readers & Writers: Young children's early writing development. The Reading Teacher, 42, 426-427.
- Strickland, D.S., & Morrow, L.M. (1989c). Emerging Readers & Writers: Family literacy and young children. The Reading Teacher, 42, 530-531.
- Strickland, D.S., & Morrow, L.M. (1989d). Emerging Readers & Writers: Assessment and early literacy. The Reading Teacher, 42, 634-635.
- Strickland, D.S., & Morrow, L.M. (1989e). Emerging Readers & Writers: Creating curriculum: An emergent literacy perspective. The Reading Teacher, 42, 722-723.
- Strickland, D.S., & Morrow, L.M. (1989g). Emerging Readers & Writers: Environments rich in print promote literacy behavior during play. The Reading Teacher, 43, 178-179.
- Strickland, D.S., & Morrow, L.M. (1989h). Emerging Readers & Writers: Oral language development: Children as storytellers. The Reading Teacher, 43, 260-261.
- Strickland, D.S., & Morrow, L.M. (1990a). Emerging Readers & Writers: Sharing Big Books. The Reading Teacher, 43, 342-343.
- Strickland, D.S., & Morrow, L.M. (1990c). Emerging Readers & Writers: Family literacy: Sharing good books. The Reading Teacher, 43, 518-519.
- Strickland, D.S., & Morrow, L.M. (1990e). Emerging Readers & Writers: Linking theory and practice: Resources for an emergent literacy curriculum. The Reading Teacher, 43, 690-691.
- Sulzby, E. (1985). Children's emergent reading of favorite storybooks: A developmental study. Reading Research Quarterly, 20, 458-481.
- Taylor, N.E., Blum, I.H., & Logsdon, D.M. (1986). The development of written language awareness: Environmental aspects and program characteristics. Reading Research Quarterly, 21, 132-149.
- Taylor, N.E., & Vawter, J.M. (1978). Helping children discover the functions of written language. Language Arts, 55, 941-945.
- Teale, W.H. (1978). Positive environments for learning to read: What studies of early readers tells us. Language Arts, 55, 922-932.

- Teale, W.H. (1982). Toward a theory of how children learn to read and write naturally. Language Arts, 59, 555-570.
- Teale, W.H. (1987). Emergent literacy: Reading and writing development in early childhood. In J.E. Readence & R.S. Baldwin (Eds.), Research in literacy: Merging perspectives. Thirty-Sixth Yearbook of the National Reading Conference (pp. 45-74). Rochester, NY: The National Reading Conference.
- Teale, W.H., & Martinez, M.G. (1988). Getting on the right road to reading: Bringing books and young children together in the classroom. Young Children, 44, 10-15.
- Teale, W.H., & Sulzby, E. (1986). Emergent literacy: Writing and reading. Norwood, NJ: Ablex.
- van Kleeck, A. (1990). Emergent literacy: Learning about print before learning to read. Topics in Language Disorders, 10, 25-45.
- Vellender, A. (1989). Teacher inquiry in the classroom: What's in a name? Literacy events in an infant classroom. Language Arts, 66, 552-557.
- Voss, M.M. (1988). "Make way for applesauce": The literate world of a three year old. Language Arts, 65, 272-278.
- Walter, E.L. (1989). Learning to read and write in a Native American Community: Observation of the three-year-old class at Lummi Headstart. Report submitted to the Lummi Tribal Council and Lummi Headstart. (ERIC Document Reproduction Service No. ED 314 745)
- Weir, B. (1989). A research base for prekindergarten literacy programs. The Reading Teacher, 42, 456-460.
- Wells, G. (1985). Preschool literacy-related activities and success in school. In D.R. Olson, N. Torrance, & A. Hildyard (Eds.), Literacy, language and learning (pp. 229-255). Cambridge: Cambridge University Press.
- Wells, G. (1986). The meaning makers: Children learning language and using language to learn. Portsmouth, NH: Heinemann.

APPENDIX A: Checklist for Written Language Displays
(Taylor, Blum & Logsdon, 1986)

I. DOMAINS AND TAXONOMIC ANALYSIS OF WRITTEN-LANGUAGE DISPLAYS

Books

1. Commercially published story books
2. Commercially published reference/information books
3. Individual child-authored stories
4. Group-authored stories
5. Individual child-authored information books
6. Group-authored information books

Communications

1. Child-authored notes
2. Child-authored messages
3. Child-authored letters
4. Adult-authored notes
5. Adult-authored messages
6. Adult-authored letters

Lists

1. Sign-up
2. Records
 - a. Songs we know
 - b. Books we read
 - c. "What we saw on our science walk"
3. Summary
 - a. "Animals we saw at the zoo"
 - b. "Paintings we saw on our museum trip"
4. Reference
 - a. Color chart
 - b. Alphabet chart

Directions

1. Classroom rules
2. Directions for activities
3. Directions for use of centers
4. Personal directives (Example: Do not move these blocks)

Schedules

1. Daily schedule
2. Monthly objectives
3. Choice-time selection
4. Job schedule
5. Attendance schedule
6. Group rotation schedule

Labels

1. Organization
 - a. Location of centers or activity area
 - b. Contents of shelves
 - c. Containers that hold things
2. Identification
 - a. Pictures labeled for references
 - b. Captioned artwork

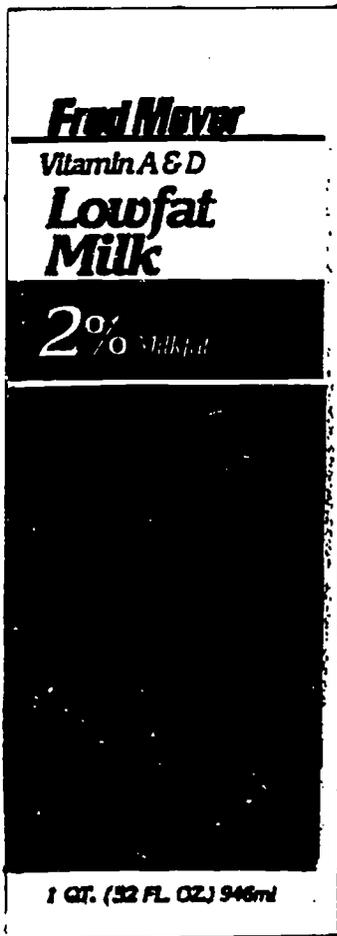
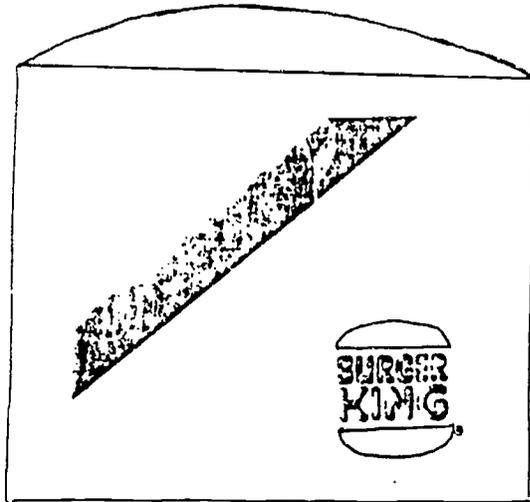
Writing Materials

Paper	Glue
Chalkboard	Scissors
Flannel boards	Stencils
Pens	Dittos
Pencils	Things to trace
Markers	Color forms
Crayons	Plastic letters
Staples	Chalk

II. ANALYSIS OF COMPONENTS OF WRITTEN-LANGUAGE DISPLAYS

	Implementing	Nonimplementing
ACCESSIBILITY	In activity centers Easily observable Displayed low so Ss can get up close	In areas of non-use/out-flow Frequently obscured by other things Displayed high on the wall Limited to bulletin boards
PURPOSE	Designed for use by Ss Designed so parts could be manipulated Directions Records of classroom activities Facilitation of classroom routines Planning for future Used by Ss to do something	Designed for display Static, not designed to be used No clear purpose Lists Labels Decorations (bulletin boards)
LANGUAGE	Whole sentences and stories Topic-centered Topic reflects classroom activities When at word level, reflects larger concepts Language reflects Ss's input	One word or limited phrase Lists Reflects system-imposed priorities Language reflects teacher composition
CHILDREN'S WRITING	Child-made books Examples of spontaneous writing Child language used to label	Children copy Children restricted to dittoes
CHANGE	Displays change frequently Activities change in form as children's abilities and interests change	Displays change rarely Once conceived, activity rarely changes

APPENDIX B: Environmental Print Test Items



APPENDIX C: Stages of Story Re-Enactments
 "Emergent Reading Ability Judgements for Favorite Storybooks"
 (Sulzby, 1985)

A. ATTEMPTS WHICH ARE GOVERNED BY PRINT

1. Holistic attempts. Here the child creates a version almost exactly like the written version.

(a) Independent reading. The child is actually reading the print independently, using comprehension, letter-sound knowledge, and known words in a co-ordinated fashion in re-creating the text. Miscues made show all aspects of independent reading.

(b) Strategy-dependent. Here the child seems to be reading independently by creating a print-governed version of the text, but shows definite strategies keyed to the "aspectual" nature of reading attempts. Thus, the child's reading process does not seem to be fully "balanced" or integrated.

2. Aspectual attempts. In this category, the child focuses upon one or two aspects of reading. The following examples highlight each aspect separately; however, the child may show different combinations of behavior. The descriptions that follow do not imply order of acquisition.

--- LETTER/SOUND ASPECT. The child may treat reading as a sounding out process and may laboriously try to sound-out words with varying degrees of success.

--- KNOWN WORD ASPECT. The child will go through meaningful text, reading only words that s/he knows.

--- COMPREHENSION ASPECT. Comprehension here is "memory for text", rather than anticipated meaning. The child recites the text almost verbatim and clearly indicates that it is print that is read. Actual tracking of the print seems to interfere with memory for text and the wording deteriorates.

3. Print-governed refusal. Here the child refuses to read and refuses to "pretend-read," insisting that print is what gets read and s/he cannot read.

B. ATTEMPTS WHICH ARE GOVERNED BY PICTURES AND STORIES ARE FORMED

1. Written language-like attempts

(a) Verbatim-like attempts. Child recites story that is close to verbatim and uses written language phrases when departing from verbatim. Child uses self-correction behaviors as if attempting to retrieve wording of original. (Judgment of attempt is made by child's inferred intention, not accuracy.)

(b) Similar to written text. Child renders story that is similar to the original but not close to verbatim. Child creates patterns that are written language-like but not contained in the original. Child "reads" with "reading intonation" much of the time and the wording is like written language. The story created is a decontextualized, coherent whole.

(c) Created story, written influence. Child renders story that is primarily but not entirely decontextualized. The wording and intonation may be mixture of oral language-like and written language-like speech. Story may depart from actual text in actual content or in match of content to pages.

2. Oral language-like attempts

(a) Story told for an audience. Child tells the story from the pictures as if for an audience. The story forms a coherent whole and the child's intonation sounds like storytelling rather than reading. Sentence syntax and phrasing sound like speech, with a high degree of contextualization.

(b) Disconnected oral dramatic dialogue and/or interactive conversational comments. The overall attempt is disconnected but a story-like sequence can be inferred. The child may create dialogue to go along with the pictures, often depending upon "voices" for characters. Child may give sentential comments that sound interactive rather than narrative. Mixture of present, present progressive, and past tenses add to judgement that attempt is disjointed in contrast with 2a which is coherent.

C. ATTEMPTS WHICH ARE GOVERNED BY PICTURES BUT STORIES ARE NOT FORMED

1. Action-governed attempts. The child's comments sound as if s/he thinks the action in the picture is almost taking place here-and-now. Verb forms are usually present progressive; future sounding statements, like "he's gonna catch him", can be inferred from the picture being examined. At times, the comments and the child's pointing almost seem to be comments to self instead of to an audience; at other times, the child directs the adult with comments like, "Lookit. He's running." The child may skip parts of the book or re-cycle in varying orders.

2. Labelling and commenting attempts. The child comments on pictures to adult, naming items or parts or commenting on parts for the adult, e.g., "This is X", "Doggie", "Brush him teefs," etc. No coherent story formed. Very young children skip many parts of the book and/or re-cycle in varying orders.

APPENDIX D: Compilation of IRA Statements on
Literacy Development in Early Childhood
(IRA, 1986a; IRA, 1986b)

BUILD ON WHAT THE CHILDREN KNOW

1. Respect the language children bring to school, and use it as a base for language and literacy activities.
2. Build instruction on what children already know about oral language, reading and writing.
3. Focus learning activities to build on functions, uses and strategies of reading and writing that prevail in the children's home background.
4. Use materials for instruction that are familiar, such as well-known stories, because they provide the child with a sense of control and confidence.

FOCUS ON MEANING AND FUNCTION

5. Provide reading and writing opportunities that focus on meaning rather than on abstract, isolated skills.
6. Defer instruction in the **forms** of reading and writing until children have a good grasp of the **functions** of reading and writing. Form, isolated units of language, should be presented in the context of the meaningful whole.
7. Provide reading and writing experiences as an integrated part of the broader communication process, which includes speaking and listening, as well as other communication systems, such as art, math, music and dance.
8. Provide opportunities for children to use written language for a wide variety of purposes, for a wide variety of audiences and in a wide variety of situations.
9. Provide daily opportunities for all children to engage in meaningful, independent reading and writing (or reading-like and writing-like) activities.

FOSTER AFFECTIVE AND COGNITIVE DEVELOPMENT

10. Foster children's affective and cognitive development by providing opportunities to communicate what they know, think and feel.
11. Encourage feelings of success for all children, helping them see themselves as people who can enjoy exploring oral and writing language.

ALLOW CHILDREN TO EXPLORE AND EXPERIMENT

12. Encourage children to be active participants in the learning process rather than passive recipients of knowledge, by using activities that allow for exploration and experimentation with talking, listening, reading and writing.

13. Encourage risk-taking in first attempts at reading and writing and accept what appear to be errors as part of children's natural patterns of growth and development.

14. Encourage children's first attempt at writing without concern for the proper formation of letters or correct conventional spelling.

PROVIDE A MODEL

15. Present a model for children to emulate, using language appropriately, listening and responding to children's talk, especially questions, engaging in their own reading and writing, demonstrating reading and writing activities in which they wish children to engage, and modeling of the pleasure and satisfaction found in such experiences.

16. Take time to read regularly to children from a wide variety of poetry, fiction and nonfiction, reading at least once and preferably two or more times a day.

MONITOR LEARNING INFORMALLY

17. View reading and writing as a process where children develop at an individual rate and therefore use sensitive monitoring of progress through careful observation and informal assessment rather than competency testing or other forms of standardized testing in early childhood.

18. Use evaluative procedures that are developmentally and culturally appropriate for the children being assessed and based on the objectives of a developmentally appropriate instructional program.

INFORM AND INVOLVE PARENTS

19. Make parents aware of the reasons for a total language program at school and provide them with ideas for meaningful and developmentally appropriate activities to carry out at home.

20. Alert parents to the limitations of formal assessments and standardized tests of pre-first graders' reading and writing skills.

APPENDIX E: Abbreviated Version of the Shared Book Experience
(Holdaway, 1979)

Step I. Whet the Appetite.

1. Mention the name of the "big book" for several days before the presentation.
2. Mention the activities planned for the class in connection with the "big book."

Step II. Present the Story.

1. Discuss the cover of the "big book," the author, the illustrator, the publisher, and place and date of publication.
2. Read the story to the whole group using lots of expression.
3. Point to the words as they are being read, using a sliding motion with a pointer or your hand.
4. Read the story a second time, encouraging the children to supply the words to complete phrases.

Step III. Read the Story Again and Again.

1. Read to individuals or groups of no more than three or four children from a "small book," which is a replica of the "big book."
2. Be sure each child is sitting close enough to see the print and maintain physical contact with the adult.
3. Point to the words as they are being read, using a sliding motion with a pointer or your hand.
4. If possible, read the book as often as the children request it.
5. Encourage parents or other adult volunteers to help with small-group readings.

Step IV. Implement Multisensory Activities.

1. Plan art activities to correlate with the story, such as drawing the characters.
2. Dramatize the story by using puppets or having children portray characters.
3. Sing a song composed from the words of the story, or sing a familiar song about a related character or activity.
4. Use materials related to the story for math activities.
5. Develop science activities to illustrate the story.
6. Carry out a cooking activity related to the story, and let the children eat what they've cooked.
7. Let children listen to taped versions of the story, and read along in a small book as they listen.
8. Read other books that reinforce or extend the subject of the story.
9. Have available in the library center other books on the subject for the children to enjoy.

APPENDIX F: Example of a Storybox

Story: The Surprise by George Shannon

Page

- 1 Squirrel was worried.
- 2-3 His mother's birthday was one day away, and he still hadn't found her a present.
- 4-5 He had looked in all the stores in town, but nothing seemed just right.
- 6-7 She had perfume and books and the most beautiful garden. He'd already given her drawings, and songs that he'd made up.
- 8-9 And every time he made a cake, he burned it.
- 10-11 He sighed and said, "I'll just have to send her a plain old birthday card." But as he was putting the stamp on, he had an idea.
- 12-13 He called his mother on the telephone and said, "I'm sending you a package with a surprise inside. Be sure to open it right away."
- 14-15 The next day when the package arrived, his mother took off the ribbons and opened the box.
- 16-17 But there was only another box inside.
- 18-19 So she opened that box and found another box.
- 20-21 And opened that box and found another box.
- 22-23 And opened that box and found another box.
- 24-25 And when she opened that box...
- 26-27 Squirrel jumped out and gave her a kiss!

Storybox Props:

small squirrel
 calendar
 child's drawing
 black tissue paper
 birthday card
 envelope with stamp
 telephone
 large squirrel
 ribbon
 5 boxes of decreasing size, wrapped with decorative paper

APPENDIX G: Examples of Literacy Props for Play Centers
(Neuman & Roskos, 1990; Morrow & Rand, 1991)

<u>Play Center</u>	<u>Literacy Props</u>
Kitchen	books to read to dolls/animals, telephone book, telephone, emergency number decals, cookbook, blank recipe cards, recipe boxes, decorative magnets, personal stationery, food coupons, grocery store ads, play money, empty grocery containers, small message board, calendar, notepads, pens, pencils, markers
Office	calendar, appointment book, message pads, signs (e.g., open/closed), books, pamphlets, magazines, file folders, in/out trays, index cards, business cards, assorted forms, play money, ledger sheets, typewriter or computer keyboard, clipboards, post-it notes, address labels, paper clips, pens, pencils, markers
Post Office	envelopes, assorted forms, stationery, pens, pencils, markers, stickers, stars, stamps, stamp pads, cash register, mailbox, tote bag for mail, address labels, calendar, posters/signs for mailing, no smoking sign, pens, pencils, markers
Restaurant	menus, order pads, cash register, recipes, special of the day, no smoking sign, other signs, pens, pencils, markers
Newspaper Office	writing paper, telephones, directories, maps, typewriter, computer, signs, pictures, photographs, pens, pencils, markers
Supermarket	food containers, cash register, telephone, shopping receipts, checkbook, coupons, promotional flyers, signs, labeled shelves, pens, pencils, markers
Airport	signs, tickets, boarding passes, luggage tags, airplane magazines, name tags, safety messages on plane, pens, pencils, markers
Gas Station	toy cars and trucks, receipts, road maps, auto repair manuals, empty cans of products sold in stations, ads for automobile parts and tires, cash register, no smoking sign, tune-up sign, other signs, pens, pencils, markers
Veterinarian	magazines, books, pamphlets on pet care, posters about pets, office hours, no smoking sign, telephone, address book, telephone book, appointment cards, calendar, patient folders, prescription pads, stuffed animals, pens, pencils, markers