1995

Promoting literacy during play by designing early childhood classroom environments

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Abstract

The purpose of this study is to explore the utilization of play activity in a kindergarten classroom to nurture children's emerging literacy. First, a review of professional literature that supports such an instructional development project will be presented. Then, the implementation of a learning environment that integrates reading and writing with play experiences in literature-based thematic units will be described. In this project, the writer will extend play opportunities supported by literature experiences and related language activities.

Promoting Literacy During Play by Designing Early Childhood Classroom Environments

A Graduate Project

Submitted to the

Department of Curriculum and Instruction

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in Education

UNIVERSITY OF NORTHERN IOWA

by

Marilyn E. Sensor

April 1995

This Project by: Marilyn E. Sensor

Entitled: Promoting Literacy During Play by Designing Early Childhood Classroom Environments

has been approved as meeting a project requirement for the Degree of Master of Arts in Education.

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Introduction

Rationale for the Project

Play is a natural and important activity for young children. It is the vehicle through which they develop new and better cognitive abilities. Play is assimilation, the process of taking information from the environment and incorporating it into what the child already knows (Piaget, 1962).

Children need time to experiment through play with interesting materials in order to learn. Young children naturally seem to use dramatic play settings, not only to try out oral language and behaviors of different social roles, but also to practice their developing understanding of print and its uses (Vukelich, 1990).

Recent research has documented that the physical environment, combined with clearly defined teaching purposes, plays an important part in classroom learning experiences (Loughlin & Suina, 1983; Rivlin & Weinstein, 1984). In creating a developmentally appropriate instructional program for young children, the learning environment needs to be activity-based with many manipulative and sensory experiences. Many literacy activities can be integrated into the early childhood curriculum through play.

Purpose of the Project

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Review of Related Professional Literature

Literacy behaviors begin early in life and gradually emerge. Young children learn very early that print in their environment has meaning. They quickly come to expect written language to be meaningful, relating in some way to the situation in which it occurs (Newman, 1984). Frank Smith (1983) says there is only one essential precondition for children to learn language. It should make sense to them both in content and motivation. Therefore, as Goodman (1986) relates, learning language involves whole units and should be associated with meaningful experiences. A student-centered environment in which students are actively engaged in the learning process facilitates emerging language abilities.

Environment and Emerging Reading and Writing Abilities

Learning to read and write requires children to take an active part in activities that have meaning to their lives. Children involved in the language processes need listening, speaking, reading and writing activities (Graves, 1983). Their environment needs to be print-rich and hold opportunities for social development. The environment created must be one in which children will want to read and write (Newman, 1984).

The classroom environment needs to allow for risk-taking. The teacher must accept what the child does. Frank Smith (1983) says that in order to learn you must take a chance. Too many times children are afraid to do something for fear of making a mistake.

Cambourne (1988) examined the conditions under which children learn to talk. These conditions are immersion, demonstration, engagement, expectation, responsibility, approximation, use and response. He states that while these conditions for learning to talk cannot be precisely replicated for the written mode of language, the principles that they exemplify can. When teachers understand these principles, they can arrange their classroom so that students can take part naturally in learning to read and write.

Careful attention to the classroom's physical design contributes to the success of an instructional program. Materials

and settings throughout the classroom should be designed to reflect real life experiences and make literacy meaningful to children (Morrow, 1990).

The teacher plays an important role in young children's learning environment. Natural learning is shaped by adult intervention based on a child's needs and abilities (Holdaway, 1979). Teacher involvement has been found to assist "nonplayers" to begin engaging in dramatic play, to help more proficient players enrich and extend their dramatization, and to incorporate literacy into their play activity (Christie, 1983; Morrow & Rand, 1991; Smilansky, 1968). Morrow (1990) concludes that preschool and kindergarten children are likely to engage in more voluntary literacy behaviors during free-play periods when materials and experiences are introduced and teachers guide children to use those materials.

Play and Emerging Reading and Writing Abilities

Play activity in the learning environment can foster beginning literacy. Play allows the young child to practice, elaborate, and extend emergent literacy abilities (Morrow & Rand, 1991). Children need to be given time to learn about their world. Through many repeated play experiences, children can classify and master many fundamental physical, social, and intellectual abilities and concepts (Isenberg & Jacob, 1983).

Froebel, who originated kindergarten in 1837, based his program on the idea that children's play was significant. He intended that children should grow freely as a flower in a garden. He used games, songs, specifically chosen work materials, and stories to address the needs of young children (Saracho & Spodek, 1991).

Dewey advocated an education for young children that was embedded in their experiences and the world around them. Play was used to help children reconstruct their experiences to function at higher levels of consciousness and action (Saracho & Spodek, 1991).

Play, according to Piaget (1962), allows children to abstract aspects from the outside world and manipulate them in a way that can be adapted into their personal organizational schemes. Play allows children to experience symbolic representation (Fields, Spangler & Lee, 1991). Symbolic representation means using one thing to represent another as letters are used to represent ideas. This abstract concept cannot be effectively explained to children; they must experience it themselves.

Children participate in play activities in a natural way. Play helps them understand and express their thoughts and feelings about the world. Through play, children have a feeling of control over their environment. Children employ symbolic actions or

objects to represent reality. Play allows children to take imaginative journeys that develop their understanding of the reality around them (Isenberg & Jacob, 1983).

Literary behaviors, such as paper-handling, story-telling, and early reading and writing, can be observed among young children at play (Roskos, 1988). Morrow and Rand (1991) concluded from their study that the amount of literacy activity increased significantly when teachers added reading and writing materials based on a specific theme to a play area. Areas stocked only with the usual dramatic play materials such as blocks, kitchen items, and dress-up clothes did not show an increase in language use.

Lamme (1989) relates that the classroom environment is a powerful determinant of the amount and kinds of drawing and writing done in the kindergarten classroom. Children need to sense the support of one another to produce good reading and writing.

Literature, Play, and Emerging Reading and Writing Abilities

Literature works need to be an integral part of the learning environment. Literature-based themes that encourage play activity can extend children's literacy. Experiences with literature can energize children's imaginations and can provide models of language (Huck, Hepler, & Hickman, 1993; Strickland & Morrow, 1989). Literature as the mainstay of the literacy program needs

to include all types of genres and to enhance the content areas (Routman, 1991).

When literature experiences become a part of children's dramatic play, literacy is promoted in a number of ways: Children have an opportunity to consolidate and demonstrate what they have learned about everyday uses of language. Children can experiment with written language through scribbling and invented spelling. Engaging in dramatic play can nurture children's knowledge of story structure by giving them opportunities to use vocabulary and language patterns in meaningful contexts (Christie, 1990).

Project: Implementation of a Kindergarten Classroom Environment to Promote Literacy Through Play

The writer engaged in a project to extend opportunities through literature-based thematic units for her kindergarten students to participate in play in order to nurture their reading and writing abilities. These developmentally appropriate themes were presented through centers.

Thematic Units and Children's Response

The literature-based dramatic play centers with related expressive activities are described in the order that they were presented in the school year. (Permission slips for use of children's pictures are on file; see Appendix A.)

Housekeeping center. In September the theme of Housekeeping Center was presented. This center gave the students the

opportunity to act out roles that are familiar to them. Children could experiment through role-playing supported by props such as dress-up clothes, refrigerator, stove, sink, doll, doll bed, and pots and pans. As they played out their ideas, they made sense of their experiences. Since this setting was so familiar to the children, teacher involvement was kept at a minimum. Literature experiences that were added to the center were as follows: recipe books such as Fun to Cook (Blake, 1971), telephone books, newspapers and magazines, and calendars, as well as blank recipe cards and other materials for writing.

A Survey Recording Sheet (see Appendix B) was used to record the literacy stimuli provided in the play environment. The author looked at the dramatic play area and recorded the materials displayed. Literacy stimuli items are defined as child-generated messages, directions, books, recording tools and materials, and different information sources children could use to help them explore the current theme in the dramatic play area. Based on work by Loughlin & Martin (1987) each item to be counted had to be clearly visible and displayed at children's eye level or below.

As the children played in the housekeeping center they were observed writing recipes and using them to cook in their dramatized experiences (see Figure 1). They also engaged in reading newspapers and magazines as they have seen their parents

Figure 1. Trying New Recipes in Housekeeping

do in the evenings. Another popular activity was writing important information on the calendar.

Most of the children's writing was scribble writing in which they are experimenting with writing. In Figure 2, the child is beginning to string marks together which shows that the child knows how writing should look. This type of writing is common among kindergartners at the beginning of the school year. A few children used random letters. By adding a few simple props, such as reading materials and labels on furnishings, more reading and writing activity occurred than in previous years.

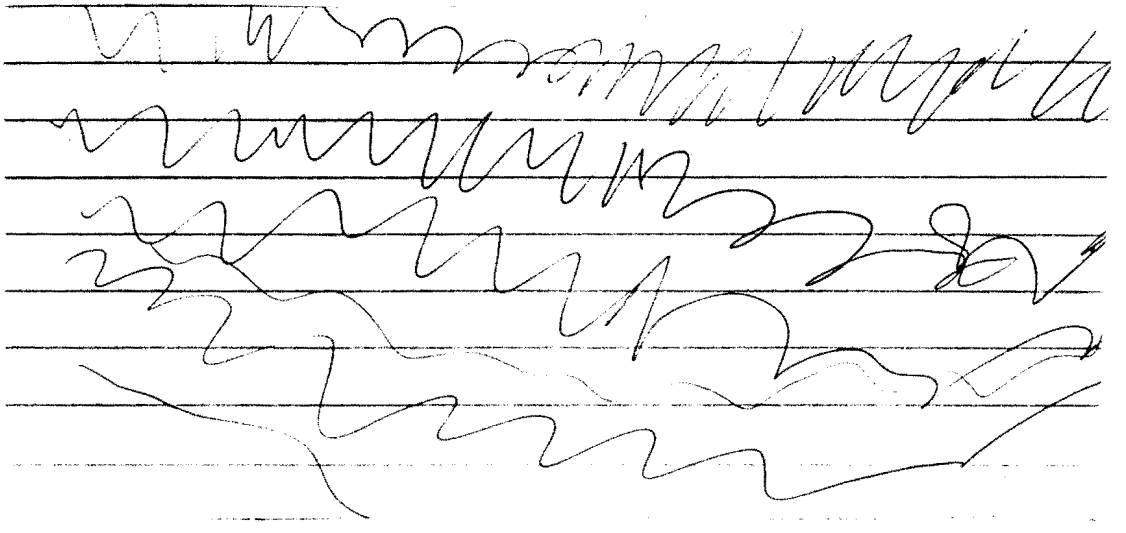

Figure 2. Recipe for Lasagna

As an expressive activity, children wrote and illustrated their own recipes. These were stapled together to make a cookbook which was added to the literature collection in the classroom. It was referred to many times during the year as children engaged in cooking activities.

Veterinarian clinic center. In October the play center was changed to a Veterinarian's Clinic. The children's studying of animal homes led to discussions on the care of animals. A visit to the local small animal hospital introduced this center. Also several books, fiction and nonfiction, were used as well as pamphlets on pet care donated by the local clinic. Pet Doctor (Sobal, 1988) and I Can Be an Animal Doctor (Lumley, 1985) helped the children understand the responsibilities of a veterinarian's occupation.

The center included a waiting room with children's magazines and the pamphlets and a secretary's desk with patient forms, clipboards, appointment books, typewriter, pencils, and paper. The doctor's examining room had a clipboard and paper, prescription pads, doctor's kit, and pencils. The children brought many stuffed animals to use as patients. A letter (see Appendix C) was sent home each month asking for used items to help set up the changes in the play area.

Since the children had visited a clinic and the teacher had read several books to them about veterinarians, they were ready to engage in center play. The teacher explained what was included in the center and how many could be in the center at a time. Several days were spent role playing with the stuffed animals. When the novelty of this activity wore off, they began doing more reading and writing: The secretary made appointment times; the doctor wrote instructions on how to take care of the animals. Mostly scribble writing and the use of random letters were observed. Some students began to write other children's names for the appointment books.

As a final activity, the children worked on double-entry journals: On one side of the page, they drew an animal. On the other side, they dictated a fact about the animal. Parents volunteered to help write these facts. Some of the children wrote

the words "cat" and "dog." A few students also developed pamphlets on how to care for their pets.

Housekeeping center. In November and December the children asked if the Housekeeping Center could be set up again. They were anxious to use the dress-up clothes and the recipe books they had written. The teacher observed more reading and writing activities than had taken place in September.

Hospital center. In January the children decided to set up a hospital. This popular change in the dramatic play area was preceded by several cases of chicken pox and many colds. The children found two books in the library that helped them understand what happens in a hospital. Why am I Going to the Hospital? (Cilotta & Livingston, 1981) and A Hospital Story (Stein, 1984) gave the children factual information at their level of understanding. Children set up an office for the secretary (see Figure 3) and another room with a hospital bed and other props. They had definite ideas on what needed to be included. The teacher's role was to find the props.

The doctors and nurses carried around clipboards and wrote pages of notes on each patient (see Figures 4 and 5). Phone numbers were written down so the secretary could call and remind the patient of their appointments. Many prescriptions for medicine were written. They also wrote orders for patient care.

Figure 3. Making Appointments to See the Doctor

When they ran short of blood, they decided to "just make some more." They eventually even sent out bills to the patients.

The child's writing (see Figure 5) is moving from the scribble stage to letter and early word symbol relationships. Whole words are often represented by just one letter. The children were also writing names that were familiar to them.

Figure 4. Recording Patient Care

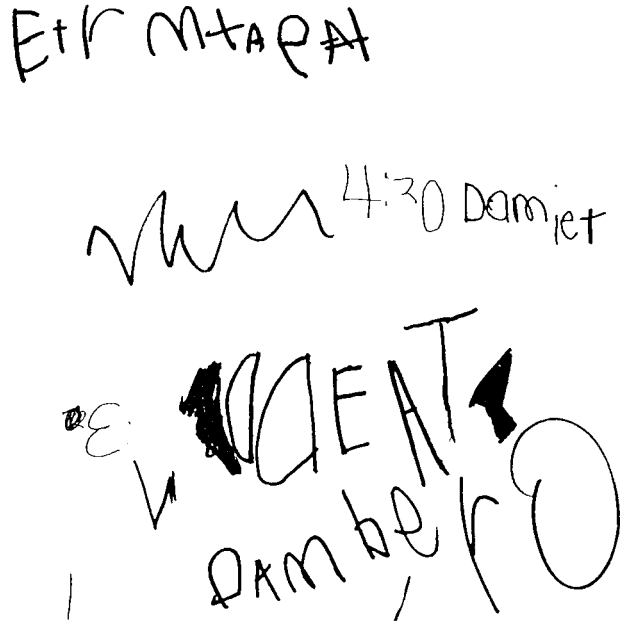

Figure 5. "Drink the medicine and come back at 4:20 tomorrow."

Post office center. Since February includes Valentine's Day, the children began sending notes to each other. This activity developed into setting up a post office. The teacher introduced the unit by modeling writing a letter to her son. The Post Office Book (Gibbons, 1982) and The Jolly Postman (Anlberg, 1986) were used for information about writing letters and using the post office.

Equipment such as stationery, cards, address books, stamps, and a mail carrier hat and bag were put in the center. A large box was painted blue for the mailbox (see Figure 6). Children used their cubbyholes for individual mailboxes.

The children wrote and typed many letters and cards. They enjoyed delivering them to their friends and receiving them. Many children were writing random letters and using temporary spellings. The children were beginning to realize that each letter has a sound and that these letters are used to make words. Some children tried out the typewriter (see Figure 7).

The teacher did more modeling during the study of this theme: Correct form for a letter, how to address an envelope, and how to write the other children's names correctly so the mail carrier could deliver to the correct mailbox were modeled on the overhead and were displayed on wall charts.

Figure 6. Ready to Deliver the Mail

As a final activity, each child brought a stamped envelope from home with the address of someone to whom they wanted to write. The children each dictated a short letter to the teacher and then copied it on a sheet of stationery. The class walked to the Decorah Post Office and mailed their letters.

Figure 7. A Letter to a Friend

Grocery store center. In March the play center was changed to a grocery store. One of the local grocery stores gives an excellent tour so the unit was introduced with a field trip. The children and teacher made a list of what equipment would be needed to develop a grocery store. The children brought empty boxes of products found in grocery stores from home to stock the shelves. Other supplies placed in the center were a cash register, telephone, shopping receipts, checkbooks, money, coupons, and promotional flyers. I Want to be a Storekeeper (Green, 1958) and Eating the Alphabet (Ehlert, 1989) were available for the children to view and read.

The children decided to organize the store by departments. Each area had a label such as "dairy" and "bakery." The children wrote the wording for the signs and found pictures to put on the signs. Using advertising from a variety of grocery stores, the children all wrote shopping lists (see Figure 8) and cut out coupons.

Figure 8. Preparing the Grocery List

As they shopped in the center, their math abilities were reinforced in the process of checking out (Figures 9 and 10). The center on the grocery store provided many opportunities for the children to read and write with purpose, for example the experiences of developing a shopping list and reading newspaper ads and names of products from packaging.

Figure 9. Shopping Using a Grocery List

Farming center. The children were very interested in what the next change in the play center would be and often asked "What are we going to do next?". In April the class suggested a list of topics they were interested in and the teacher wrote them on the blackboard. A show of hands unanimously chose farming. It was an excellent follow-up on the grocery store theme since some of the children wondered about the source of the food on the shelves.

Figure 10. Buying the Groceries

A trip with the children to the school and public library yielded several books about farming (see bibliography). Equipment placed in the center included toys that were replicates of farm machinery, a water table filled with corn, a computer, and farm magazines. Each child made his/her own alphabet book about the farm. The children now wrote beginning and ending letters for many of the words they found in their alphabet books. They experimented with periods, question marks, and quotation marks. The unit culminated with a trip to a local dairy farm. When returning to the classroom, the children wrote thank you notes to the farmer.

Assessment of Children's Response to Thematic Units

Assessment in kindergarten should be part of the everyday activity. It should not involve a test to be administered at the end of a unit. The teacher observed her young children while they were playing the dramatic play area. While observing, a checklist was used by the author (see Appendix D). It offered an organized means for checking the children's involvement in the activities.

Examples of the children's work were also saved to use as part of their portfolios. This information was presented at parent-teacher conferences to help document each child's level of development.

Summary

The thematic unit based on young children's need to learn through play offered many reading and writing opportunities. Different types of literature were presented in the centers to enrich the learning environment.

In the kindergarten year, children's emerging literacy is evident. The responses of the children in this program indicated that involvement in the literature-based language activities was enhancing their literacy. More so than in past years, the teacher observed children experimenting with language, because reading and writing was a natural part of the learning environment and furthered their need to create meaning. Also, the children were more eager to interact with others and share their experiences.

Most of the children at the end of the year had a better sense of what language could do for them and that school was a place that offered meaningful experiences. The children saw themselves as readers and writers.

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Children's Books

September: Housekeeping

Recipe book: Blake, M. (1971). Fun to cook book. Los Angeles: Carnation Co.

Newspaper: Decorah Public Opinion. Published: Decorah, Iowa.

Magazines: National Geographic World

Highlights

Turtle

October: Veterinarian's Office

Non-fiction: Goldreich, G. (1972). What can she be? a veterinarian. New York: Lothrop.

Lumley, K. (1985). I can be an animal doctor. Chicago: Children's Press.

Sobal, H. (1988). Pet doctor. New York: Putnam's Sons.

Pamphlets on pet care donated by Decorah Pet Hospital

Fiction: Abolafa, Y. (1988). A fish for Mrs. Gardenia. NY: Greenwillow.

Asch, F., & Vagin, V. (1988). Here comes the cat. NY: Scholastic.

Cristelow, E. (1989). Five little monkeys jumping on the bed. NY: Clarion.

Numeroff, L. J. (1985). If you give a mouse a cookie. NY: Harper & Row.

Rosen, M. (1989). We're going on a bear hunt. NY: Mc Elderry.

Tafuri, N. (1984). Have you seen my duckling? NY: Greenwillow.

Poetry: Ryder, J. (1985). Inside turtle's shell. New York: Macmillan.

Magazines: Ranger Rick

Zoobooks

Your Big Backyard

January: Hospital

Non-fiction: Cilotta, C., & Livingston, C. (1981). Why am I going to the hospital? Secaucus, NJ: Musson Book Co.

Stein, S. (1984). A hospital story. New York: Walker.

Fiction: Keller, H. (1989). Best present. New York: Greenwillow.

February: Post Office

Non-fiction: Barr, J. (1964). Mr. Zip and the U.S. mail. Chicago: Albert Whitman & Co.

Gibbons, G. (1982). The post office book. New York: Crowell.

Skurzynski, G. (1992). Here comes the mail. New York: Maxwell.

Fiction: Anlberg, J., & A. (1986). The jolly postman. Boston: Little, Brown & Co.

Hoffman, M. (1991). Amazing grace. New York: Dial.

March: Grocery Store

Non-fiction: Green, C. (1958). I want to be a storekeeper. Chicago: Children's Press.

Fiction: Blacker, T. (1987). If I could work. New York: Lippencott.

Ehlert, L. (1989). Eating the alphabet. N.Y.: Harcourt.

April: Farm

Non-fiction: Azarian, M. (1981). A farmer's alphabet. Godine.

Banks, M. (1963). How we get our dairy foods. Chicago: Benefie Press.

Gibbons, G. (1988). Farming. NY: Holiday House.

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Murphy, J. (1984). Tractors. New York: Lippencott.

Ziegler, S. (1987). A visit to a dairy farm. Chicago: Children's Press.

Fiction: Aylesworth, J. (1991). Country crossing. NY: Atheneum.

Aylesworth, J. (1988). Hanna's hog. NY: Atheneum.

Brown, C. (1989). The patchwork farmer. NY: Greenwillow.

Ernst, L. C. (1992). Zinna & Dot. NY: Viking.

Hutchins, P. (1968). Rosie's walk. NY: Macmillan.

Rylant, C. (1986). Night in the country. NY: Bradbury.

Poetry: Hopkins, L. B. (compil.) (1991). On the farm. Boston: Little, Brown.

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Appendix A

Parental Permission Slip

Permission Slip

Marilyn Sensor has permission to include my child's picture in her graduate paper on play.

_____

parent's signature

_____

date

Appendix B

Survey Recording Sheet

Displayed Literacy Stimuli	Housekeeping	Vet Clinic	Hospital	Post Office	Grocery	Farm			
1. Current child-generated messages, labels, or stories									
2. Messages about the current day									
3. Displayed directors for activities									
4. Sign-on charts or sheets									
5. Different kinds of books									
6. Different kinds of recording tools.									
7. Different kinds of recording materials									
8. Different references									
9. Print or writing segments related to nearby materials, objects, or pictures									
10. Books related to nearby materials, objects, or pictures									
11. Community culture language books or print segments									
12. Presence of empty display space									
13. Presence of display tools									
14. Presence of clearly legible handwritten or machine-printed segments									
15. Presence of books with cover or page displayed									
16. Presence of functional labels									

Loughlin, C.E. & Martin, M.D. (1987)

Appendix C

Sample of the Letter Sent to Parents

Dear Parents,

This year we have been changing our housekeeping center into different play areas. For January we will be setting up a doctor's office and hospital. Does anyone have anything they would like to donate that we could use?

Thanks for your help!

Mrs. Sensor

A few ideas:

appointment book

message pads

bandaids

blood pressure cuff

nurse's hat, white jacket, etc.

stethescope

Literacy Behavior During Play

Child's Name: _____ Date: _____ _____

Paper Handling		
a. sorting		
b. shuffling		
c. scanning		
Writing		
a. drawing		
b. scribbling		
c. tracing		
d. copying		
e. dictating		
f. writing on computer or typewriter		
g. play related to writing		
h. story writing		
i. invented writing		
Reading		
a. browsing		
b. pretend reading		
c. book handling		
d. story-telling		
e. reading aloud to oneself/others		
f. reading silently		

based on the work of Roskos, 1988