Using Observation

A Mini-Experience in the Life of Children and Teachers

by Eileen Hughes and Alice Hess

Understanding how to develop meaningful curriculum that sparks the interests of children and promotes sustained attention to topics can be a challenge. The concept of planning curriculum with children, by observing their actions, and listening closely to their ideas is not as easy as it may at first appear. Learning to understand children's actions, to integrate knowledge of child development, and to make informed decisions for organizing materials or the environment requires time for analysis, discourse, and reflection.

Inspired by the underlying principles of the Reggio Emilia approach (Edwards, Gandini, & Forman, 1998; Hendricks, 1997), a university faculty member, university students, and preschool teachers examined the roles of children and teachers as researchers using observation as a means to study children's actions. Practicum students, the university instructor, and teachers in the preschool learned to observe children in a different way. They observed and documented children's actions and words to better determine how to arrange the environment, select topics of study, and plan for subsequent experiences with the children.

Using observation to plan curriculum means understanding children's actions and words to glean insights into their interests, questions, ideas, or feelings. Subsequent experiences are planned from the study of teacher's documentation (written notes, photographs, video, audio tapes, reflections, children's work samples). Essential to this process is a meaningful environment to inspire children's thinking and creativity. The following is a description of the experiences of a preschool teacher who introduced materials into the classroom to learn how to create curriculum with the children.

Alice, a preschool teacher who was working on her associate degree in early childhood, started her inquiry by inviting the children to participate in her observation of the seasons in Alaska.

Sparking Children's Interest

Preschool teachers often use a *theme* approach to design curriculum. Many of these themes offer learning experiences for children, and the intent is that the accompanying activities will engage the attention of the children and provide meaningful learning related to the

theme. However, it is not uncommon that with our best intentions to organize curriculum around a theme we present

children with prepared materials or toys and fast paced activities. It is often the case that the children move too quickly through the activities or materials and that the teachers assume curriculum goals are reached. When there is little time to really attend to the ideas, questions, and theories of the children, teachers and children can lack excitement and curiosity for learning. Ultimately, children may not have the experi-

Dr. Eileen Hughes coordinates the
Early Childhood Development
Program at the University of Alaska
Anchorage. She teaches both
undergraduate and
graduate students
working in child care
or public school
settings. For the past

14 years she has studied elements underlying the Reggio Emilia approach to support teachers in their of study young children to plan meaningful experiences.

the University of Alaska Anchorage.

She works in early childhood. She was born and raised in Alaska and lived in

Alice Hess completed her studies at

villages. Alice
is a keen observer
of nature and children.

several native

ences to learn to observe, to ask questions, to reflect on their actions, or to engage in meaningful activity of "hands and mind." For her practicum experience, Alice wanted to better understand ways to use her observations of the children to plan curriculum. The process for finding the children's interests puzzled Alice. She felt uncertain how to find direction, or to identify a focus without imposing or directing the entire experience. Alice noted changes in the outdoors as fall approached in Alaska. The season happens quickly with leaves falling one day and shortly thereafter termination dust (first dusting of snow) appearing on mountain peaks. Alice decided to share her observations with a small group of children and read them a book about leaves. Alice then brought in leaves from outdoors. The leaves were wet from the first frost so she decided to lay them out on paper towels. The arrangement made an attractive display and served to invite the children to examine her collection.

Alice then discussed with the classroom teacher her ideas to extend the morning discussion. The teacher suggested that part of the classroom might be used for creating a place for the children to further explore the leaf collections. The purpose of the area was to support the children to slow down and observe the leaves more closely, while offering a place for children to discuss their observations. The area was arranged to support the children as observers and served to create an opportunity for the children to create new ideas. The environment would support the curriculum, rather than merely being a place for housing activities or materials.

Preparing the Environment. The classroom teacher encouraged the children in her class to help with the design of their environment. Alice quickly understood this concept and decided to have the children organize and categorize the materials for the observation area. Alice remembered comments from the children as they spoke about features of the leaves, noting the differences and similarities. She did not record their words but decided that she would start writing down what the children said as they examined the leaves. She thought the children might use their ideas to create a display for the leaves. She allowed the children to handle and examine the leaves, and generate new ideas from their observations. Alice made the children's ideas visible by noting their ideas, pictures, or comments with photographs, drawings, and transcriptions of their conversation.

Ownership of the Environment. By allowing the children to create the area, the teachers actually encouraged further interest and observation, and encouraged the children's curiosity for the *study* of the leaves. The children considered how to organize the furniture and select materials that should go in the observation area. They carefully sorted the leaves by size or shape and selected small plates for their leaf displays.

The children claimed ownership of the observation area as they worked together to arrange the materials. It taught the children to *respect* their materials, to demonstrate *care* for materials, and the children learned to represent their ideas about the materials. The children placed the leaves that *looked* alike onto different colored plates and arranged them next to each other on small shelves. The children collaborated with each other to create a sense of community as they organized the observation area.

Observation Materials in the Environment. Alice and the children had a place in the classroom dedicated for subsequent experiences with the leaves. Alice brought in a light box to the classroom for closer examination of the leaves. In a large group demonstration, Alice showed the children how the light box highlighted aspects of the leaves. She ran her finger over the leaves as the children watched. The children decided that the light box should go into the observation area.

While observing the leaves, a five-year-old boy told Alice that the children needed a "telescope." Looking through the classroom materials, Alice found several different types and sizes of magnifying glasses. After the practicum instructor and Alice talked about ways the children might record their observations, Alice decided to place paper and pencils in the area so the children could draw or write their ideas about their observations (Figure 1). As the children drew pictures or traced the leaves, Alice listened for the ways the children described their observations of the leaves: "bendy stick," "skin," "veins," "blood veins," "cracks," "stem," "lines." She noted that the children were looking closer at the structure of the leaves and decided to place books in the area which identified the parts and structures of leaves.

Teachers and Children as Observers

Careful preparation of the environment encouraged the children's sustained interest, and the children were eager to talk and share their experiences in the observation area. The environment offered the context for observing, listening, and recording ideas. Through careful selection of materials and by having a place for children to meet in small groups the teachers enabled the children to view each other's observations and talk about their ideas.

Teachers' Role as Observer. The interest in the leaves provided a focus for Alice's observations. Drawing pictures of the leaves or tracing the leaves on the light box offered another opportunity for the children to talk about the leaf collection. She realized that listening to children meant paying close attention to their actions and words. Alice recorded the children's words as they shared ideas which demonstrated a respect for the children's ideas. Alice brought the observations to her practicum instructor or classroom teacher to discuss, interpret, and make meaning of the observations. The teacher's

role of observer in this type of approach requires careful attention to the children's actions, interpretation of the actions, and talking with other colleagues (Cadwell, 1997). She used the observations of the children's actions and words to make decisions for planning subsequent experiences.

In the following dialogue between Alice and Ben, Alice tries to help the young boy reflect on his drawing and to understand his notion of blood veins in leaves. Showing Ben his drawing, Alice starts the conversation.

Alice: What did you say about the lines? Ben: I said they have blood veins and they're special blood veins, because they're leaves.

Alice: Okay, you said blood veins. What are blood veins on a leaf?

Ben: They're about these.

Alice: What are the blood veins for on a

leaf?

Ben: It's for blood veins, your blood veins to go cruise for blood. Back and forth, back and forth.

Alice commented or re-stated the children's words. She asked the children if they wanted to record their observations for the other children. Alice, like other teachers, found that analyzing dialogues with the children also helped her to reflect on the ways she asked questions, or made comments to the children (Hughes, 1999). Alice learned that this way of approaching curriculum planning requires time, and a pace that is sometimes inconsistent with the context of many child care settings.

Children as Observers. The children learned quickly that the observation area was an interactive area. As the children used the materials, they shared ideas, noting detail in the features of the leaves. For example, Logan placed a leaf on the light box and was tracing the leaf when he said, "I can see freckles, I see the

whiskers, and a little bendy stick." As the children observed and described their observations they gave other children ideas to extend their own ideas.

On another day, five-year-old Logan described to his three-year-old friend, Tyler, his description of a leaf as he examined it with a magnifying glass at the light box. Logan told Tyler, "Draw what I see." Tyler, with a pencil and paper in his hand, draws as Logan looked through a magnifying glass and mentioned, "lines," "cracks," "bendy stick," "dots." As the adults reflected on their documentation they realized how the children naturally formed collaborative partnerships as they studied their work. The experiences drew the children together because of their common interests and daily experiences.

Using Observations to Make Curricular Decisions. When teachers and children engage in inquiry together, the documentation of their observations can become records for the process of their inquiry. As teachers study records of their observations they are better prepared to understand children's actions and can appropriately plan additional experiences in the curriculum, or arrange the environment to extend learning. They can also be better prepared to interact with children in ways that support the children's interests, ideas, theories, or questions. Curriculum then becomes more meaningful to both teachers and children. Observations can become more focused as the cycle of observation, documentation, and reflection are implemented.

Alice was faced with many decisions. The following decisions were central to the directions of the experiences. First, Alice decided to invite the children to prepare the environment that served as the introduction to the observations with the leaves. Alice observed how the children explored the leaves and listened to initial conversations to decide the selection of materials.

Second, as the children talked about their observations and their drawings she organized materials to further extend their ideas. For example, Alice decided to add the light box to the area to encourage the children to see details in the leaves. She wanted to extend their skills to observe while encouraging imagination.

Third, she noted the descriptions and beginnings of stories when the children talked about their pictures of the leaves. Her decision to create a collection of the leaf stories for the classroom library resulted from her study of the children's pictures and from listening to their conversations about their observations.

Throughout the process Alice was talking to the children, practicum instructor, and classroom teacher. It is meaningful when teachers can find a teacher assistant. another teacher, or parent who is willing to sit and share ideas related to their observations of the children.

Children's Work: Outcomes of Observation

As Alice and the children continued to talk about their drawings and observations, they decided to organize their



collections in the form of a big book that was placed in the reading area of the room and later reproduced for the children's families.

Young children learn to categorize information by attributes. For example, the children first noticed the differences in the leaves. They noted the sizes of the leaves and features of the leaves. The color of the leaves did not come up in the children's observations as Alaskan fall leaves are many shades of yellow. The children commented more on the details in the leaves. "It has stripes on it. It has spikes and it has a short stem." They noticed the lines (veins) in the leaves. Alice noted words like the following: "stem," "flat," "top-lines that are tied together," "lines that go like this," "curly," "bumpy on top," "little dot," "little stem," "little cracks." The children also described the leaves using human characteristics such as, "I see whiskers." Some noted that the leaves had "dots" or "freckles." "It has like feathers."

As the children had more experiences, Alice was quick to note the imagination that the children demonstrated in their descriptions of the leaves and the ways they characterized the description to compare to human characteristics. She also noted that they gestured or moved their bodies as they spoke of their observations.

Alice was particularly excited when the children began to draw leaves and to tell stories about their drawings. Alice made it a point to sit with the children and to write down their ideas after they drew about their leaves. Alice followed the natural progression of the experiences into a mini-project that fostered the literacy abilities of the children. The children and teacher shared with the families the collection of leaf stories as a way to communicate the experiences with the leaves. By sharing with the families children and teachers celebrated their work.

Below are some of the samples of the stories:

Five-year-old Autumn:

The leaves can fall when it's fall. And the leaves are picked up by people. And they can be colored on the paper. And you put a leaf under the paper and you scribble on the outside. And they sometimes they burn the leaves. And the kids be happy to have the leaves forever and ever. The people are happy to keep them today. And they will put the leaves in the water, and they will turn to a little tree.

Four-year-old Logan:

How I found the leaf a long, long time ago, when I was small, when I was one and a half. I think I did, but I don't remember if I did. Probably, I might have dropped it.

Three-year old Kieran:

My leaf is in my backyard, not this one. My leaf is going to come. And the leaves are going to go up the mountains. The snow is going to come down from the mountains. When there is no leaves on the ground, there's snow on the ground.

Four-year-old Emma:

My leaf is going to stay on the tree. And then it will come down in fall. Then it will go fly up the mountains from the wind.

Four-year-old Regan:

I like to jump in them. And I like to catch them from the sky. And when they're on the ground, I pick them back up. And I like to kick them. And I like to put my body in them backwards. And I then like it right side up. And I like to throw them in the air. And I like to run through them. And I like to break them off the trees. And I like to throw things in them.

Four-year-old Allie:

They grow in water and they grow to be big trees. And sometimes they start to go down. And sometimes they come zooping down to the water and they float down to the bottom. And they sometimes start to grow up again. And sometimes they grow up as high as the sky. And sometimes they turn into plants. And sometimes they fall and sometimes you see leaves on the snow. Sometimes you pick them up and you put them in bags. Sometimes you carry them home and put them in places wherever you want. And when they start to grow up the trees, and sometimes the sun turns them into purple. And sometimes they change into a green leaf.

Conclusion

Alice and the children learned to add more meaning to their work by extending their ideas. For the brief time in fall, the children and Alice were able to work together to listen to each other and to collaborate in a way that was different. The children and Alice were learning to become more attentive to their physical world and to their relationships with each other. By slowing down the pace with the experiences associated with the leaves, the children and Alice had time to look deeper into their interests. The work of the teacher and children was valuable, meaningful, and lead to the development of the stories. These experiences with Alice give us a way to better understand how to use observations in curriculum planning and how content areas such as literacy are embedded in meaningful ways into children's experiences.

References

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