

Pre-K

Community
Studies

The Zoo

Learning about Animals



The Zoo

Learning about Animals

by Margit E. McGuire, PhD

Professor of Teacher Education, Seattle University

STORYPATH®

ACKNOWLEDGMENTS

Field Test Sites

I am grateful to the following educators who piloted this unit in their schools and classrooms. Many thanks to them for their ideas and suggestions in the development of the unit. —*Margit E. McGuire*

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The panel members reviewed *Pre-K Storypath* units prior to publication. We sincerely thank the following advisors for their comments and recommendations regarding the *Pre-K Storypath* curriculum.

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Culver City, California 90232-0802
United States of America

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www.socialstudies.com

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ISBN: 978-1-59647-641-7

e-book ISBN: 978-1-59647-642-4

Product Code: STP803 v1.0

The Zoo

Learning about Animals

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THE PRE-K STORYPATH STRATEGY

The *Pre-K Storypath* structure is a familiar one: the story. The *Pre-K Storypath* strategy is grounded in the belief that children learn best when they are active participants in their own learning. Through dramatic play, children connect what they already know to new learning. They rehearse real-life events as they tackle the problems presented through the plot of the story. Together, the structure and the teaching strategy ensure that children feel strongly motivated and have meaningful and memorable learning experiences.

Originally developed in Scotland during the 1960s, *Pre-K Storypath* draws support from decades of experience with teachers and children. The approach has its roots in these beliefs about learning:

- **Constructing Meaning:** When children build on their prior knowledge during dramatic play, new understandings are acquired. Because children construct their own knowledge and understanding of their world, their play is more meaningful and memorable.
- **Social-Emotional Learning:** Through dramatic play, children develop important social skills. They learn to conduct themselves in appropriate and positive ways as they negotiate the problems presented through the storyline.
- **Problem Solving:** When children are engaged in problem solving that is developmentally appropriate, they take ownership for their learning and develop self-confidence.
- **Integrated Learning:** The story structure integrates ideas about the social world with skills for literacy, mathematics, and other subjects.
- **Universal Appeal:** The story structure is universal, and children, whatever their background and prior experience, find a place in the unit to build and deepen their prior knowledge and understanding.
- **Literacy Development:** When children engage in rich dramatic play, they rehearse the oral language skills necessary for developing strong reading and writing skills.

An Inquiry Approach

Questioning, by both the teacher and children, is a key aspect of *Pre-K Storypath*. Through the story structure and the conversation it creates, the teacher guides children in their search for meaning and understanding as they acquire new knowledge and skills. Asking open-ended questions results in more complex responses and further develops children's oral communication skills.

Pre-K Storypath Engages the Imagination

Each *Pre-K Storypath* unit challenges children to imagine themselves in new roles and in new places. *Pre-K Storypath* stimulates children's imaginations through dramatic play as well as a variety of other activities, such as listening to stories, engaging in story dictation and dramatization, and creating art projects.

PRE-K STORYPATH AND THE YOUNG CHILD

The Importance of Dramatic Play

Young children are active learners, constructing new understandings of their world through play and other hands-on experiences. *Pre-K Storypath* takes advantage of children's natural and spontaneous desire to pretend. It's important that teachers allow the dramatic play related to the topic to develop at a loose and fluid pace. Children should be allowed to spontaneously change roles and introduce new and unusual ideas to the scenarios they create. Each school day should include at least 45 minutes of uninterrupted play, to allow these pretend scenarios to develop.

A Rich Early Literacy Environment

Reading picture books aloud to young children is a significant source of learning and pleasure in early childhood classrooms. When we share the pleasure of books with young children, we help children develop early literacy skills. *Pre-K Storypath* units incorporate group storytime into almost every episode. There is a list of recommended picture book titles on page 77. Titles in both English and Spanish are included.

Story Dictation

Another valuable early literacy experience for young children is dictation, when an adult writes a child's words and ideas. Dictation can be either teacher-directed or child-directed. Teacher-directed dictation occurs when the teacher writes the child's response to a specific question. Child-directed dictation occurs when the teacher writes a child's creative story. Story dictation can be an especially rich practice because these stories can also be acted out, or dramatized, during group time. In the *Pre-K Storypath* units, dictation is a key activity because it allows teachers to document and measure children's knowledge, skills, and progress. The information learned through dictation and dramatization can be used to make teaching decisions and guide planning.

Children Needing Extra Support

The *Pre-K Storypath* structure is especially suited to meet the needs of young children who may need extra support, such as children living in poverty, children with special needs, and children who are learning English as a second language. These children need content-rich instruction. The meaningful, relevant *Pre-K Storypath* content engages children's senses and teaches skills within a context that makes sense to children. The unit's structure encourages children to question, discover, evaluate, and use higher-order thinking skills which are important for all learners.

Pre-K Storypath unit topics have been selected because they are based on children's universal experiences. Each topic can be adapted and tailored to reflect the economic and cultural experiences of the children in each classroom.

Flexibility for Following Children's Interests

The *Pre-K Storypath* structure balances the child-directed approach of an emergent curriculum with the teacher-directed approach of a theme-based curriculum. *Pre-K Storypath* allows teachers the flexibility to respond to children's emergent interests within a predictable structure that provides accountability for meeting specific curriculum standards. Each *Pre-K Storypath* episode provides opportunities for children to play, construct their own knowledge, make decisions, and solve problems together. The structure also provides frequent opportunities to include parents and family members in the children's learning activities.

Anti-Bias and Culturally Relevant Practices

Equitable learning opportunities are essential for effective early childhood programs. Being mindful that we bring our own set of experiences and understandings to the instructional process, an openness to families and their children is necessary to achieve equitable learning opportunities. Each *Pre-K Storypath* unit has suggestions for addressing children's identities and life experiences as they would naturally occur in a child-centered curriculum. It is also necessary to confront inequities and oppressions.

Equitable learning opportunities also extend to gender-inclusive classrooms. Throughout the curriculum, you will note that role plays do not impose gender expectations. Materials that allow children to bring their own ideas and imagination to the experience affirm their agency and ability to collaborate and play with others without being confined by predetermined roles. It is important that we challenge children to think more deeply about the roles they play. Something as simple as asking if all children can play with fire trucks and dolls opens the door to a richer and more diverse learning environment. For additional information about anti-bias and creating a culturally responsive and gender-inclusive classroom, see resources on page 77.

EARLY LITERACY AND LANGUAGE LEARNING

The *Pre-K Storypath* approach creates natural and authentic opportunities to develop children's language and literacy learning. Over the course of each *Pre-K Storypath* unit, teachers read many picture books aloud; children dictate words, sentences, and stories; and children discuss the photos and text on the *Discussion Posters*. Dramatic play is a key component of *Pre-K Storypath* and, as a result, children have many opportunities to develop their oral language skills. Children also use simple props during dramatic play that promote interaction with print. All these activities, along with the rich discussions based on an inquiry approach, contribute to children's language and literacy development.

Language and Literacy Goals and Objectives

Each episode in a *Pre-K Storypath* unit is designed to meet language and literacy objectives. These objectives are aligned with early learning goals based on NAEYC (National Association for the Education of Young Children) accreditation criteria, the Head Start Child Outcomes Framework, and state early learning standards. See page 78 for a list of *Pre-K Storypath* Early Learning Goals.

The Significance of Open-Ended Conversations

Throughout each *Pre-K Storypath* unit, teachers support children's language and literacy learning by engaging children in conversations. During these conversations, teachers respond to and expand on children's conversations by adding new information, asking questions, and making connections to what is familiar. Teachers model vocabulary specific to the *Pre-K Storypath* topic and "think aloud," so that children learn how to make decisions, solve problems, and figure out meanings of new words. During dramatic play, teachers introduce print-related props, such as newspapers, advertisements, signs, manuals, and notepads, that provide children with opportunities to interact with print within the *Pre-K Storypath* context.

Word Charts and Environmental Print

Teachers are encouraged to create environmental print, such as word charts or lists of important words, that can be posted on the wall of the classroom. When young children observe teachers writing these words, they begin to understand the connections between spoken language and

print. The process of creating word charts also helps children develop phonemic awareness. There is no expectation that children will begin to read these words independently. These activities expose children to concepts that they will be learning for many years to come.

Parents and Families

Parents and family members play an important role in language and literacy learning. Take advantage of every opportunity to include parents and family members in the *Pre-K Storypath* unit. When children see and hear their parents and other family members engage in conversations and interact with print materials related to *Pre-K Storypath*, their learning will be enhanced.

ENGLISH LEARNERS

English learner, or EL, is a term that applies to children whose home language is not English. These children are in the process of acquiring English as a way to communicate ideas and gain knowledge in environments where English is the primary language.

According to the NAEYC (National Association for the Education of Young Children) position statement *Advancing Equity in Early Childhood Education: A Position Statement of the National Association for the Education of Young Children*, early childhood programs are responsible for both promoting the acquisition of English and preserving children's home languages.

There are some basic actions teachers can take to make the early childhood classroom a welcoming environment and a place of learning for children who are English learners.

Incorporate the Home Language into Classroom Life

Children will more easily learn new concepts in a familiar language. Recruit staff members and volunteers who can translate important information for children and their families. Whenever possible, use books and print materials written in the child's home language.

Activate Prior Knowledge

Young children who are English learners, like native English speakers, possess a great deal of prior knowledge about *Pre-K Storypath* topics. Provide children with many different kinds of opportunities, both verbal and nonverbal, to show what they know.

Develop Vocabulary

Vocabulary development is key to comprehension, so use a variety of strategies to teach vocabulary. *Pre-K Storypath* units provide multiple opportunities to teach vocabulary through illustrated word charts, picture books, *Discussion Posters*, and dramatic play.

Encourage Involvement in Discussions

English learners will likely be reluctant to contribute to whole-group discussions. Encourage children to contribute in ways that are comfortable for them, such as using gestures or single-word answers. Conduct discussions in small groups as often as possible. Encourage children to elaborate on their ideas with open-ended questions. Young children who are learning English may also benefit from being paired with children who speak English at home.

Modify Activities and Assessments

Children can communicate what they have learned in many different ways. In addition to the tangible products of children's work, observations of children's play and behavior are an important source of assessment information.

Engage the Senses

Visually rich activities should be commonly used and all the senses should be engaged whenever possible. Music and kinesthetic activities, such as role-playing, are excellent tools for children who are learning English.

See page 74 for additional information about English learners.

ASSESSMENT

Each *Pre-K Storypath* unit offers a range of options for assessing children's learning.

The *Pre-K Storypath* assessments contain flexible suggestions that support a variety of assessment structures. Within this teacher's guide, *Pre-K Storypath* assessment practices are seamlessly integrated into daily activities. The results of these assessments are immediately useful to teachers, allowing them to make adjustments in their teaching that deepen opportunities for learning.

Pre-K Storypath is designed to support early learning goals that align with NAEYC accreditation criteria, the Head Start Child Outcomes Framework, and state early learning standards. Examples of these goals are listed on page 78. Additionally, learning objectives are listed at the beginning of each *Pre-K Storypath* episode. The objectives relate to the early learning goals in the domains of social-emotional development, language development, early literacy, science, social studies, and problem solving.

Assessing Individual Children

Pre-K Storypath offers both formal and informal assessment options for tracking the progress of individual children. The *Child Observation Form* can be used as the foundation of each child's individual portfolio. The *Child Observation Forms* are intended for use in combination with artifacts that represent children's learning, such as artwork, dictated words and sentences, and photographs. A *Group Assessment Summary* is also provided. This form allows teachers to track the progress of the entire group.

Suggestions for assessing individual children and developing portfolios are included throughout this teacher's guide. Teachers are encouraged to frequently record children's comments and ideas through dictation and anecdotal observations. Other examples of documentation include photos of children engaged in activities and samples of children's art. Parents and family members are encouraged to participate in the assessment process through the use of Teaching Masters such as the *Family Talk* (Episode 5).

Assessing the Group

Throughout each unit, teachers are encouraged to use observations of children's play to inform planning. The *Play Observation Form* can be duplicated and used to document children's emergent interests and understanding. Observing dramatic play allows teachers to collect information during each episode that can be used to make decisions about the content and pacing of the unit. These observations, combined with teacher reflection, guide and inform planning in a flexible, authentic, and child-centered way.

Communicating with Families

Pre-K Storypath also includes a *Family Poster*, which can be used to inform parents and family members of the learning opportunities offered in each unit.

THE UNIT COMPONENTS

Teacher's Guide

Each *Pre-K Storypath* unit includes a teacher's guide. You can follow the graphic story to see how one teacher uses the *Pre-K Storypath* unit in her classroom.

Assessments

You can use the *Child Observation Form* to document children's behaviors and progress in each episode, as well as to maintain anecdotal records. A summary of key information from the *Child Observation Forms* can be recorded on the *Group Assessment Summary*. The *Family Poster* keeps parents informed about children's learning.

Discussion Posters

Each unit includes a packet of six *Discussion Posters*. These posters provide visuals and a guiding question to stimulate discussion with children. The posters can be used to introduce and reinforce new concepts and vocabulary.

The back of each poster provides open-ended discussion questions and vocabulary words that may arise naturally from conversations with children. This information is provided in both English and Spanish.

Teacher's Guide



Assessments

CHILD OBSERVATION FORM

How to Use This Form

Use this form to record observations of children's behaviors and progress in each episode, as well as to maintain anecdotal records. A summary of key information from the *Child Observation Forms* can be recorded on the *Group Assessment Summary*. The *Family Poster* keeps parents informed about children's learning.

Class name: _____

Teacher: _____

Child's name: _____

Child's age: _____

Child's gender: _____

Child's date: _____

Child's age at start of unit: _____

GROUP ASSESSMENT SUMMARY

The Zoo

Learning about Animals

Episode	Child's name	Child's age	Child's gender	Child's date	Child's age at start of unit
1. What is a zoo?					
2. What does a zoo look like?					
3. Why do people go to a zoo?					
4. What kinds of animals live in a zoo?					

FAMILY POSTER

Dear Families,

When your children participate in the *Pre-K Storypath* curriculum unit called *The Zoo*, they will explore and create their own zoo. When children create, they gain a broad range of language, literacy, social, and cognitive skills.

Episode 1: What is a zoo?

Learning Objectives:

- Understand the concept of a zoo.
- Identify the purpose of a zoo.
- Identify the types of animals that live in a zoo.
- Identify the types of people who work in a zoo.
- Identify the types of things that are in a zoo.

Episode 2: What does a zoo look like?

Learning Objectives:

- Identify the types of things that are in a zoo.
- Identify the types of people who work in a zoo.
- Identify the types of animals that live in a zoo.
- Identify the types of things that are in a zoo.

Episode 3: Why do people go to a zoo?

Learning Objectives:

- Identify the types of things that are in a zoo.
- Identify the types of people who work in a zoo.
- Identify the types of animals that live in a zoo.
- Identify the types of things that are in a zoo.

Episode 4: What kinds of animals live in a zoo?

Learning Objectives:

- Identify the types of things that are in a zoo.
- Identify the types of people who work in a zoo.
- Identify the types of animals that live in a zoo.
- Identify the types of things that are in a zoo.

Discussion Posters



Discussion Poster 1

WHAT IS A ZOO?

¿QUÉ ES UN ZOOLOGICO?

OPEN-ENDED DISCUSSION QUESTIONS

- What is a zoo?
- What does a zoo look like?
- Why do people go to a zoo?
- What kinds of animals live in a zoo?

GUIDED RESPONSES

- A zoo is a place where people keep animals. It is a place where people can see and learn about animals.
- A zoo is a place where people keep animals. It is a place where people can see and learn about animals. There are many different types of animals in a zoo. The animals are kept in cages or enclosures. The animals are kept in cages or enclosures. The animals are kept in cages or enclosures.
- People go to a zoo to see the animals. They go to a zoo to see the animals. They go to a zoo to see the animals. They go to a zoo to see the animals. They go to a zoo to see the animals.
- There are many different types of animals in a zoo. The animals are kept in cages or enclosures. The animals are kept in cages or enclosures. The animals are kept in cages or enclosures.

VOCABULARY

English	Spanish
1. zoo	zoo
2. animal	animal
3. habitat	hábitat
4. study	estudio
5. protect	proteger

PROPIETAS LINGÜÍSTICAS

English	Spanish
1. <i>What is a zoo?</i>	¿Qué es un zoológico?
2. <i>What does a zoo look like?</i>	¿Cómo se ve un zoológico?
3. <i>Why do people go to a zoo?</i>	¿Por qué van las personas al zoológico?
4. <i>What kinds of animals live in a zoo?</i>	¿Qué clases de animales viven en el zoológico?

VOCABULARIO

English	Spanish
1. <i>What is a zoo?</i>	¿Qué es un zoológico?
2. <i>What does a zoo look like?</i>	¿Cómo se ve un zoológico?
3. <i>Why do people go to a zoo?</i>	¿Por qué van las personas al zoológico?
4. <i>What kinds of animals live in a zoo?</i>	¿Qué clases de animales viven en el zoológico?

PREPARING TO TEACH PRE-K STORYPATH

THE ZOO

Involve Families

Young children become more engaged in learning when their parents and family members are actively involved in their school experiences. This teacher's guide provides suggestions for involving families in every episode of the unit.

Before you begin the unit, inform families of your plans, both verbally and in writing. Use the *Family Letter* to ask families to save the date of the celebration at the end of the unit. If a family's home language is not English, make sure the family receives a translation of the *Family Letter*.

Have conversations with families about children's prior experiences visiting zoos, wildlife parks, or farms. The tear-off section of the *Family Letter* can be used to help collect this information, but many families will prefer to share this information with you verbally. Use conversations and the *Family Letter* to find out if any parents or family members have expertise related to the unit. Invite them to share what they know.

Follow Children's Interests

You may want to modify this curriculum to suit the needs of your classroom. Alternative activities or special arrangements are suggested at various points during the unit to assist you in adapting the curriculum. Frequently children will provide an unanticipated twist to the unit or important learning opportunities will arise, especially during children's play. The *Pre-K Storypath* structure encourages teachers to be open and alert to these opportunities to expand or adapt the curriculum based on children's interests and ideas.

Gather Resources and Information about Wild Animals

In this *Pre-K Storypath* unit, children will imagine and create their own zoo. If you allow children to follow their own interests, your zoo will probably house a wide variety of creatures from all over the world. Some teachers may prefer a narrower focus by directing children to create zoo habitats for specific types of animals. In either case, be prepared to use nonfiction books and zoo websites to gather information about the animals that are of particular interest to children.

Manage Class Time

Pre-K Storypath activities can be integrated into either a full-day or a part-day early childhood program. Each unit usually takes about four to six weeks to implement, with a new episode introduced every few days. Each episode begins with a large group meeting, which can take place during your regular storytime. Small group activities can occur during center time, free play, or other time periods set aside for playing and learning in small groups. The *Pre-K Storypath* topic can be woven into activities throughout the day. The dramatic play props related to this *Pre-K Storypath* topic should be available to children during free play. You will want to provide at least 45 minutes of uninterrupted play throughout the day.

Gather Props

Invite families to bring in toy animals that can be the focus for the animal habitats, or gather plush animals or other toy animals for the same purpose. Other props helpful for dramatic play might include aprons, rubber boots, watering cans, brushes, brooms, and bowls.

Gather Books and Art Supplies

A list of picture books for reading aloud can be found on page 77. These books should be easily available from your local library. Also, collect a variety of art materials to have on hand throughout the unit. You will need art materials such as colored construction paper, markers, crayons, glue, and scissors. A list of materials can be found at the beginning of each episode.

Organize Your Room for *Pre-K Storypath*

- **Wall Space:** You will need ample wall space for displaying the frieze, a mural of the zoo. Additionally, you will need space to display various lists, artifacts, children's writing and drawing, and other materials that are created.
- **Art Table:** You will need art materials for children to make the buildings for the frieze (mural) and draw pictures related to the events of the unit. Collect photos of animals from magazines like *National Geographic Kids*.
- **Writing Center:** Include paper for writing or drawing signs for the zoo and invitations to visit the zoo.
- **Dramatic Play Area:** Throughout this unit, children will pretend to be zoo workers using a variety of props. You may want to reserve space in your dramatic play area for stuffed or plastic animals and the things they need to survive—food and water. Children will also be introduced to zoo veterinarians, so a play doctor's kit is also desirable. Children construct a zoo exhibit in Episode 3, so set aside space for this purpose.
- **Book Corner:** See the resource list on page 77 for suggested children's books related to zoos and wildlife habitats. Also include magazines that contain photos of animals.

Consider a Field Trip to a Zoo

This *Pre-K Storypath* unit can be implemented without a field trip, but many young children will certainly benefit from the firsthand experience of visiting a zoo or other kind of animal habitat, such as a wildlife park or farm. Children who have very limited experience with zoos or live animals will especially benefit from such a field trip.

Consider Inviting Pets to Visit the Classroom

Young children will benefit from safe and sensory experiences with live animals. Invite families to bring pets to class during Episode 3, provided the pets are appropriate for a preschool classroom and no children are allergic to animals.

Involve Experts

At any time in the unit, you may want to invite an expert to talk with the children. Consider experts such as zookeepers, humane society volunteers, veterinarians, farmers, biologists, and pet store owners. Be sure to tell them about the *Pre-K Storypath* unit and the specific information that would be most helpful. Ask experts to wear specialized clothing, if appropriate, and bring tools that help them demonstrate how they do their jobs.

Create a Learning Community

An open and supportive atmosphere is essential for children to engage in the *Pre-K Storypath* approach. Dramatic play is central to the learning experience. It is during dramatic play that children encounter problems and find solutions, building their confidence and deepening their understanding of their social and physical world.

MEET BETH

HI, MY NAME IS BETH. I'M A PRESCHOOL TEACHER IN A BUSY CHILD CARE PROGRAM. FINDING CREATIVE WAYS TO INVOLVE PARENTS IS ONE OF MY TOP PRIORITIES.

RECENTLY, I USED THE *PRE-K STORYPATH* UNIT CALLED *THE ZOO* TO SUPPORT AND EXTEND THE CHILDREN'S INTEREST IN ANIMALS. THIS UNIT WAS A WONDERFUL OPPORTUNITY FOR CHILDREN TO DEEPEN THEIR UNDERSTANDING OF ANIMALS THROUGH THEIR OWN RESEARCH AND INVESTIGATIONS. WE ALSO DEVELOPED SOME NEW WAYS TO INVOLVE PARENTS IN OUR CLASSROOM.

HERE'S WHAT HAPPENED ...



Using *Pre-K Storypath* in Your Classroom

In this teacher's guide, you will read about Beth, a teacher in a community-based child care program. Beth's story is shown here as an example of one teacher's experience implementing the *Zoo* unit, but you can easily modify the curriculum to meet the needs of your own classroom.

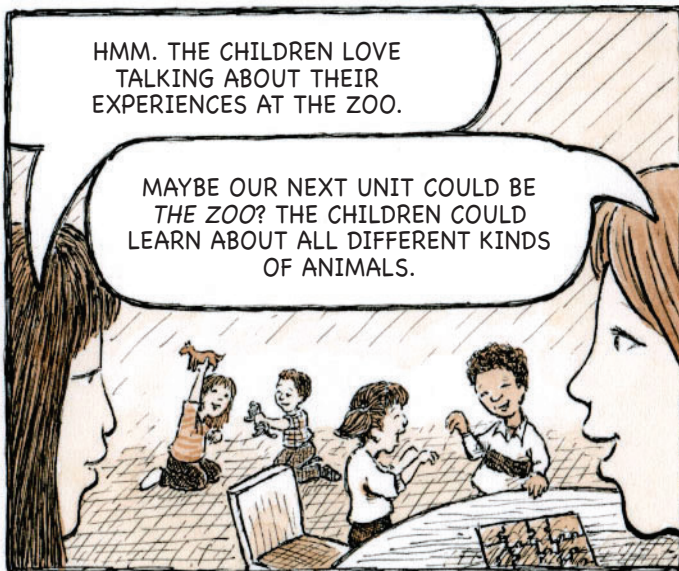
Most of the pages in this book will show Beth's story in the top part of the page and the instructional text in the bottom part of the page. You may choose to read only the illustrated story, only the text in the bottom, or a combination of both. Any of these choices will give you all the information you need to implement the *Pre-K Storypath* unit in your classroom.

OBSERVE CHILDREN'S INTERESTS

My assistant teacher, Jenny, and I had observed that some of the children seemed interested in tigers.



Jenny and I started planning a curriculum unit on tigers. But then we noticed that the children's interests were broader than just tigers.



Incorporate Children's Dramatic Play in Curriculum Plans

When children pretend to be fantastical creatures, such as talking animals, they are engaging in a form of **dramatic play** that fully stimulates their imagination. This type of play is valuable because it challenges children to think symbolically and abstractly and to see their world in new ways. Vivian Paley, in her book *A Child's Work: The Importance of Fantasy Play*, writes that "fantasy play is the glue that binds together all other pursuits, including the early teaching of reading and writing skills."

Observe and note children's dramatic play and choose curriculum topics that are directly related to the scenarios displayed during play. Remember that children's pretending doesn't only take place in the dramatic play area; children may also engage in dramatic play outdoors and during meals or rest time.

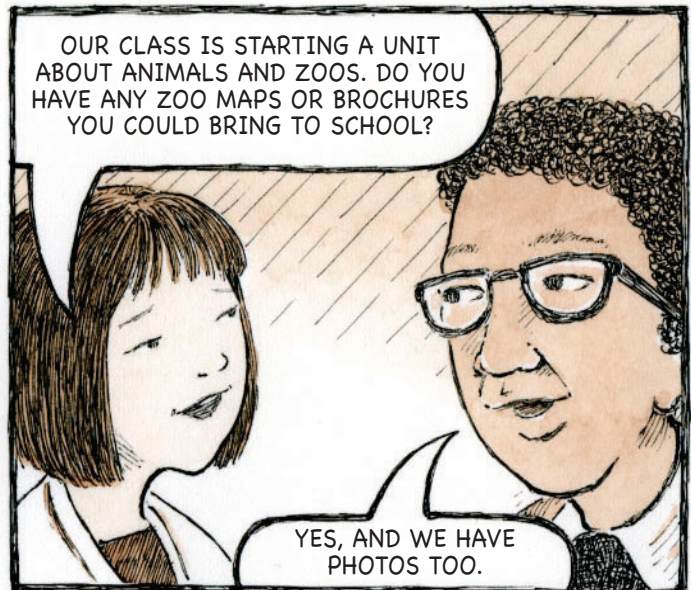
When children are encouraged to develop their play scenarios and explore the topics that are of interest to them, they will become more engaged in learning and motivated to take on new challenges.

PROFESSIONAL VOCABULARY

dramatic play *noun* play that engages children's imagination, in which children sometimes pretend to take on roles that are very different from their ordinary lives

PLAN AHEAD

Jenny and I began planning the Zoo unit and sharing our plans with the children's families.



As Jenny and I planned the unit we realized that the zoo topic gave us a structure that helped us organize our plans and ideas.



Our Checklist

- Organize toy animals.
- Collect cardboard boxes to use for cages and habitats.
- Gather props for zookeeper play, like buckets, aprons, bowls, and brushes.
- Borrow picture books about zoos from the library.
- Send Family Letter home on Friday.

Family Connection

Before beginning the *Pre-K Storypath* unit, distribute the *Family Letter*, pages 52 and 53, to parents and family members. The letter introduces the Zoo unit to families and includes a space to write in the time and place of the concluding event, which will be the “grand opening” of the pretend zoo.

A tear-off portion at the bottom of the letter asks for information about children's previous experiences with animals and zoos. It also asks parents who have expertise or knowledge about animals or zoos to share their knowledge with the class. If parents or family members have studied animals or work at a zoo, aquarium, or pet store, they might be willing to visit your classroom. For this unit it is also important to know which children are allergic to animals, in case you are planning any visits with pets.

ADAPTING THE UNIT

This unit is focused on responding to children's interest in animals that live in a zoo. If your children show interest in other kinds of animals, such as pets, farm animals, or sea life, then you can adapt the unit to follow their interests. For example, your class may want to create a petting zoo or an aquarium, rather than a traditional zoo.

BEGIN CREATING THE ZOO

PLAY WITH TOY ANIMALS

page 14

Children play with toy wild animals as teachers assess children's prior knowledge.

Materials A collection of stuffed or plastic animals appropriate for a zoo

Schedule Allow time for the children to play with animals during free play; spend approximately 15 minutes in group time discussing zoo plans.

READ AND TALK ABOUT ANIMALS AND ZOOS

page 16

Children listen to a story and talk about the *Discussion Posters*. Children help create a chart of vocabulary words.

Materials ■ *Discussion Posters 1 and 2*

■ Picture book about the zoo, such as *My Visit to the Zoo* by Aliko Brandenburg (see p. 77 for list)

Schedule Allow approximately 20 minutes for story and discussion.

BEGIN A DOCUMENTATION PANEL

page 17

Children create paper or clay animals and habitats. Their work is displayed on a documentation panel.

Materials ■ Wall space, about 3' high and 4' wide, divided into areas for different animal habitats

■ Construction paper, old magazines, animal stencils, colored markers/crayons or paint, glue sticks, scissors

■ Modeling clay

■ Books and magazines with photos of wild animals in their natural habitats

Schedule Include as a choice during free play over the course of 1 to 3 days.

ASSESS AND REFLECT

page 19

Children make signs and labels for the zoo and dictate stories.

Materials ■ Black marker, paper for posting signs and labels

■ Paper and pencils for dictation

Schedule Make signs and labels in small groups for approximately 15 minutes; include dictation as a choice during free play.

EPISODE OBJECTIVES

Social-Emotional Development

- Use language to communicate needs.
- Take turns and share materials.
- Listen to the ideas of others.

Language Development

- Listen for information.
- Allow others to speak without frequent interruptions.
- Contribute to group discussions.
- Use new vocabulary in speech.

Cognitive Development: Early Literacy

- Listen attentively to the reading of a picture book.
- Focus on illustrations for details.
- Recognize print in the local environment.
- Dictate sentences or stories.

Cognitive Development: Social Studies

- Understand that zoos are places where wild animals from different parts of the world live and are cared for.
- Understand that people visit zoos to learn about the animals.

Cognitive Development: Science

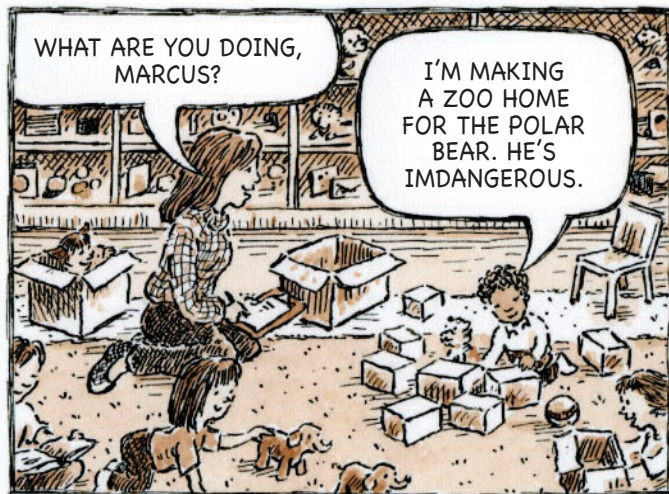
- Use ideas from the class discussion to contribute to the creation of zoos and animal habitats.

PLAY WITH TOY ANIMALS

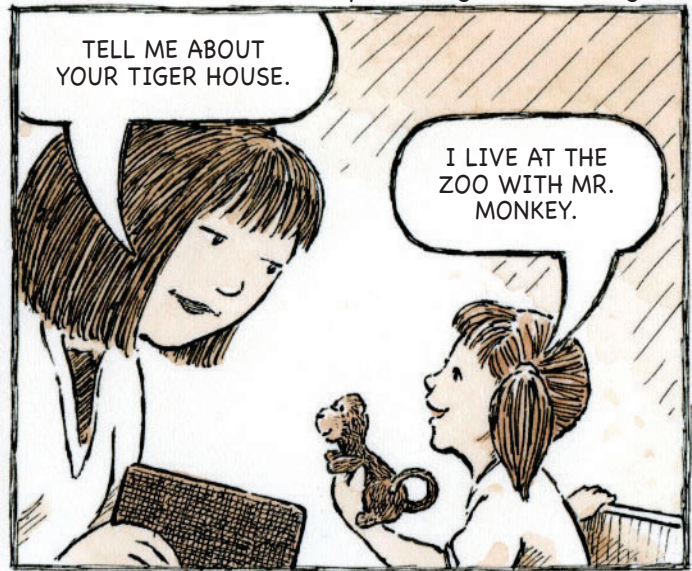
To gather information about what the children already knew about zoos and animals, we invited children to play with toy animals and cardboard boxes.



Jenny and I observed the children and took notes. We discovered that the children already knew quite a bit about animals and zoos.



I noticed that Ellie was still pretending she was a tiger.



Jenny made a note to include "endangered" and "protect" on our word chart, a list of important vocabulary words for the unit.

PLAY WITH TOY ANIMALS

Introduce the zoo topic to children with a display of stuffed or plastic animals. Allow children to touch and play with the toy animals as they come into school and make sure the animal toys are available to children during free play over the course of the entire unit. Allow children to explore the items in an open-ended way and encourage discussion about the animals.

To encourage conversations about animal homes and zoos, include a variety of cardboard and plastic boxes and containers for children to use as they play with the toy animals. For more information about using open-ended props and playthings, like empty boxes, read the Teacher Workshop on page 68.

ASSESS Pre-assess individual children

During play, observe what children already know about animals and zoos. As children play, look for opportunities to ask a few open-ended questions and write down their answers. Keep these responses in the child's individual portfolio for future reference.

Suggested open-ended questions:

- What animals do you like? Why?
- Where do these animals live?
- Have you ever been to a zoo? What was that like?
- What happens in a zoo?
- What might you see, hear, or smell in a zoo?

PLAY WITH TOY ANIMALS *continued*

Jenny and I wanted to include the children in the planning process. So we used group time to share our ideas for the unit and to see how the children responded.



Invite children to share ideas

Announce to children that they will have the opportunity to create their own zoo. Invite them to share their ideas with you. Collaborating with children and encouraging them to take initiative is an important part of **intentional teaching**. Throughout the unit, practice intentional teaching by giving children opportunities to make their own plans and reflect on their learning.

Encourage discussion by asking children open-ended questions, such as “What do you like best about zoos?” and “What animals do you think we should include in our zoo?” Document children’s ideas and responses.

Use anti-bias practices

Due to the diversity of geography and economic backgrounds, some children will likely have more experience visiting zoos than others. Be sure to also discuss animals that are familiar to all the children, such as pets or birds.

PROFESSIONAL VOCABULARY

intentional teaching *noun* teaching with specific outcomes or goals in mind for children’s development and learning. (For more information about intentional teaching, read the article on page 71.)

READ AND TALK ABOUT ANIMALS AND ZOOS

Next, I read a picture book about animals in a zoo. We talked about homes for animals and I introduced the word “habitat.” Jenny started making a word chart, a list of important vocabulary words related to animals and zoos.



READ AND TALK ABOUT ANIMALS AND ZOOS

Select a book to read aloud that explains some basic concepts about zoos, wild animals, and animal habitats. (Suggested picture books are listed on page 77.) Prepare for story time by identifying a few important vocabulary words and concepts in the book. Keep these ideas in mind when you present the book to the children.

After reading the book aloud, ask children, “Why do you think we have zoos?” Talk about the ways zoos help us understand and protect animals. During the discussion, start a word chart, which will list vocabulary words related to zoos and animals.

Share Discussion Posters

Share *Discussion Posters 1* and *2*. Use the *Discussion Posters* throughout the unit, whenever you think children would benefit from seeing these visual representations of the zoo concepts.

EL If possible, include words from children’s home languages on the word chart. Consider making a copy of the word list for a volunteer or family member who can translate the words for you.

LANGUAGE AND LITERACY

When having conversations with young children, resist the temptation to oversimplify the vocabulary. Instead, use words that best fit the context and provide definitions and examples to support children’s understanding.

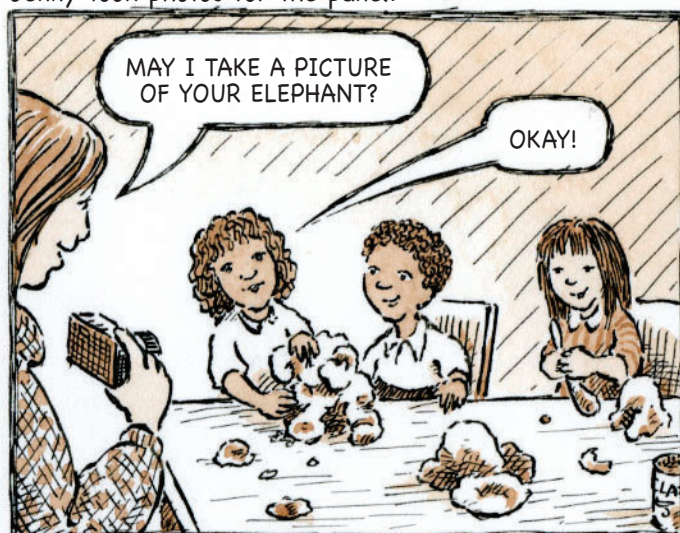
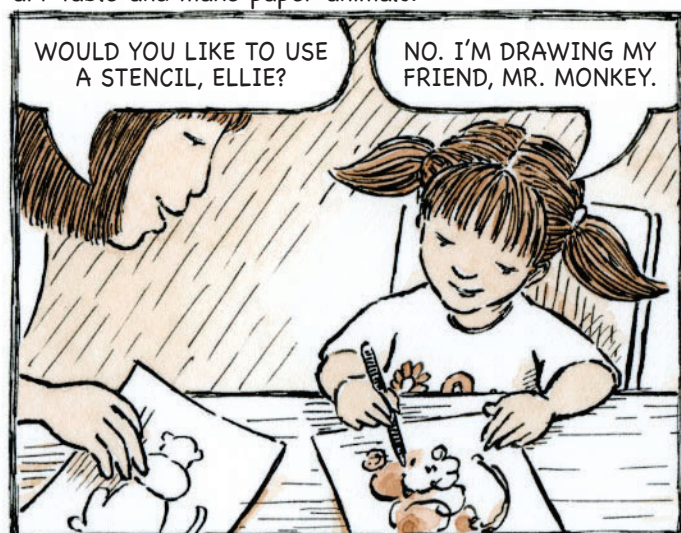
BEGIN A DOCUMENTATION PANEL

Jenny and I set aside some wall space for a documentation panel. We organized the panel like a zoo map, with a space for each habitat.



During free play, we invited the children to come to the art table and make paper animals.

We also invited children to make animals out of clay. Jenny took photos for the panel.



BEGIN A DOCUMENTATION PANEL

Prepare space on the classroom wall for a **documentation panel**. The space should be within reach of the children. Explain to the children that the panel is a place to show what they are learning about zoos and animals.

Invite children to create animals

Invite children to create zoo animals out of paper or clay. Children may choose to draw the animals their own way or you may provide stencils for tracing. Another option is to invite children to cut pictures of animals out of magazines.

Some children may prefer to make three-dimensional animals out of clay or dough. As they work, take pictures to post on the documentation panel.

Guide children's work

As children work, try to limit your role to asking questions and making very general suggestions. If children want to add unusual items to their habitat, allow them to do so and use the items later as opportunities for discussion.

PROFESSIONAL VOCABULARY

documentation panel *noun* a display of images and text that demonstrates children's learning. (For more information about documentation panels, read the article on page 73.)

BEGIN A DOCUMENTATION PANEL *continued*

The children taped the paper animals and photos on the panel. Then we invited them to research the animal habitats by looking at photos of animals in the wild.



Some children preferred creating imaginary habitats, which was fine.

We allowed the children to make their own decisions about the habitats.



RESEARCH Add features to the habitats

Encourage children to make habitats for their animals. For the paper animals, children can cut out or draw features for the habitats. For the clay animals, children can make features out of clay, blocks, or paper.

Research animal habitats

Encourage children to look at photos to find out information about the animals' habitats. Show children photos of wild animals in their natural habitats. Ask open-ended questions that will help children "read" the photo, such as

- What plants do you see growing here?
- What kinds of rocks and soil do you see?

- Where might this animal find water in this habitat?
- What kind of weather do you think they have here?
- What other animals might live here?

Encourage children to use the information they learn through their research to help them create the features of their paper or clay habitats.

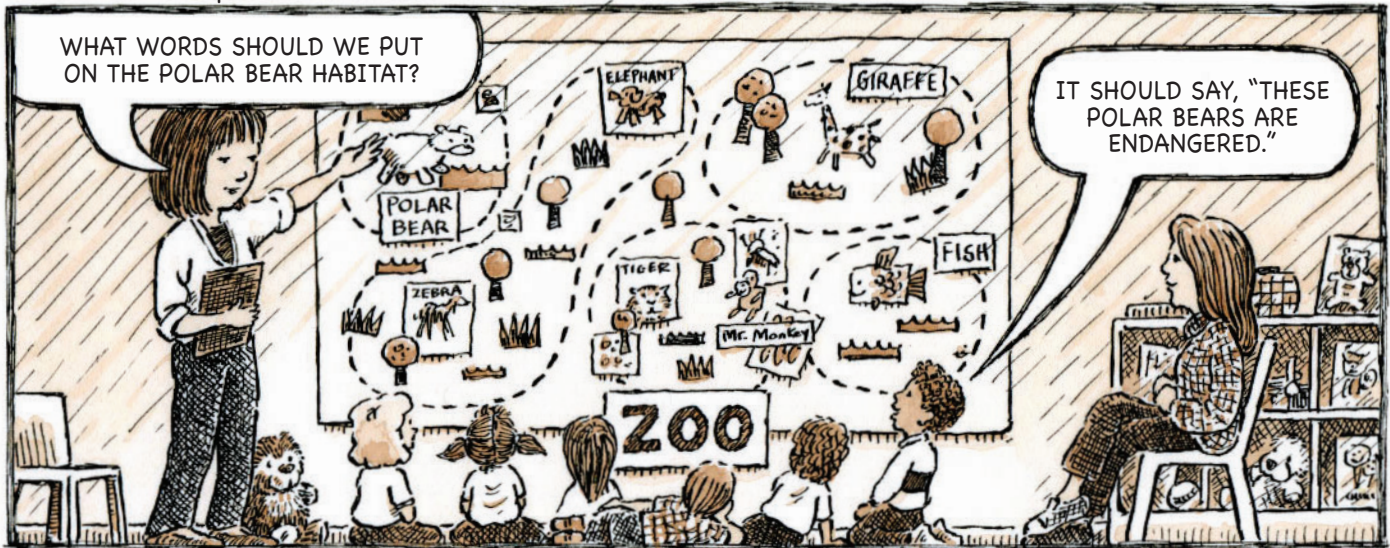
SCIENCE AND RESEARCH

Invite children to gather information by looking at photographs of animals in

- nonfiction picture books
- encyclopedias
- magazines
- the internet

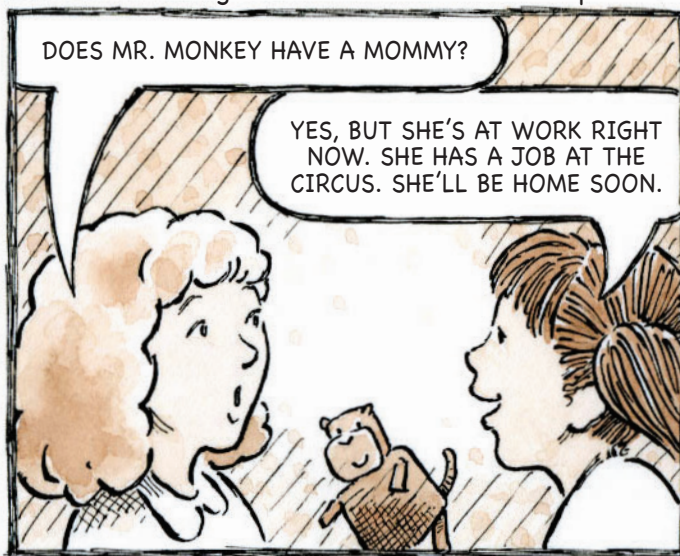
ASSESS AND REFLECT

Throughout the week, we helped the children add signs and labels to the panel. The children dictated words and we helped them write or trace the letters.



The children had great conversations about the panel.

We also invited children to dictate stories about animals.



ASSESS AND REFLECT

Add signs and labels

In small groups, assist children in creating signs and labels for the zoo and the habitats. The children may choose to name their zoo and create a large sign announcing the zoo's name. They may choose to label each habitat with the name of the animal. They may also become interested in creating signs describing the animals and their habitats.

Offer a variety of writing options for children. You could write words for them as they dictate. They could trace or copy words or letters. They could experiment with writing letters or words their own way.

Encourage conversations

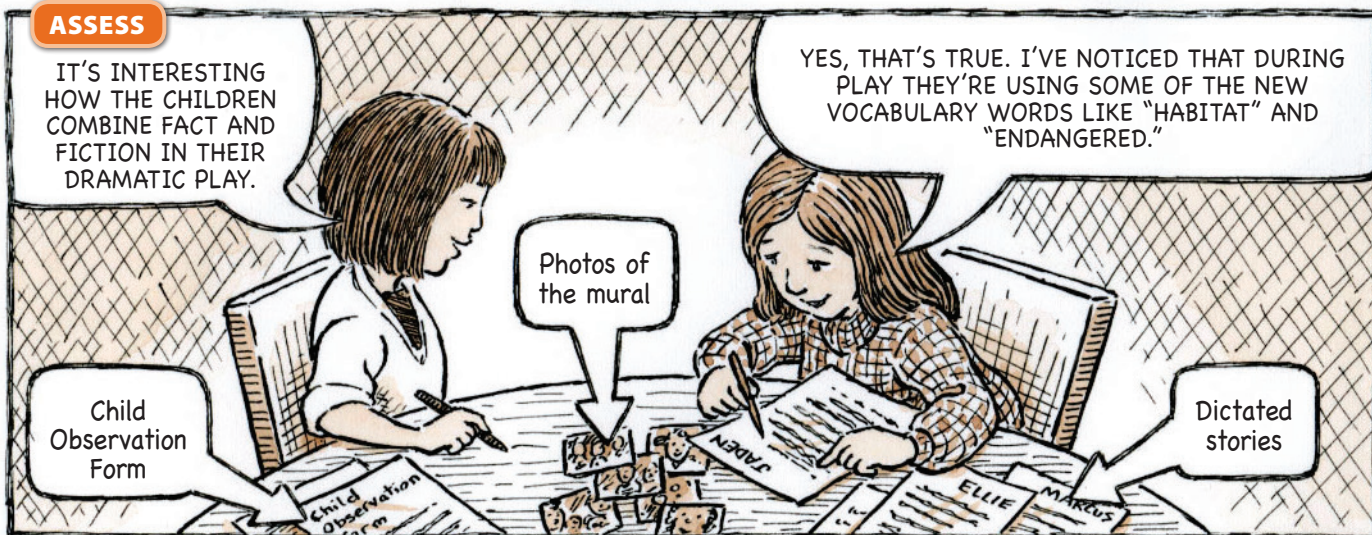
Provide plenty of opportunities for open-ended conversations about the animals and the documentation panel.

Dictate sentences and stories

During free play, provide opportunities for children to dictate sentences and stories. Post these sentences and stories. Many children will also enjoy dramatizing or acting out the stories during group time.

EL Acting out the stories is a great way to support language development for all children, especially those who are English learners.

During our next planning meeting, Jenny and I talked about how the unit was going and what we had observed about the children's interests in animals and the zoo.



During pick-up time, I talked with parents about how the zoo unit was progressing. I used the *Family Poster* to show them how much the children were learning.



ASSESS AND REFLECT

ASSESS Assess the group

Did children

- demonstrate interest in the zoo topic by becoming engaged in the discussion and the creation of the animals?
- use information from the discussion, books, and the *Discussion Posters* to make their habitats?
- work together by listening to each other, sharing materials, and helping each other?

Use your observations of the group to help shape your plans for next steps.

ASSESS Assess individual children

Use the *Child Observation Form* to assess each child's learning. Include this form and other items such as dictated stories and photos in children's portfolios. For more information about using portfolios for assessment, read the article on page 76.

Connect to families

Let families know how the unit is progressing and invite them to view the documentation panel. If you have not already done so, send home a copy of the *Family Letter*, page 52.

EL This letter is available in Spanish on page 53.

RESEARCH ANIMALS

ASK QUESTIONS ABOUT ANIMALS

page 22

Children listen to a story about the zoo and talk about what they want to know about animals. Then children create a list of questions to guide their research.

- Materials**
- Picture books about the zoo (see p. 77 for list)
 - Chart paper and marker

Schedule Allow approximately 20 minutes during small or large group time.

RESEARCH ANIMALS

page 23

Children gather information about animals from a variety of sources. Children write and draw to record the information they have learned.

- Materials**
- *Discussion Posters 3 and 4*
 - A variety of nonfiction picture books about animals
 - A children's encyclopedia
 - Paper or notebooks for writing and drawing

Schedule Allow time during free play to conduct research.

MAKE AN ANIMAL EXHIBIT

page 26

Children use what they have learned to cooperatively create a new animal exhibit.

- Materials**
- A section of the room designated for an exhibit
 - Blocks and other materials to make an animal enclosure
 - Art materials to make the items found in the habitats, such as trees, shelter, and food
 - Toy animals or animals made by children

Schedule Include as a choice during free play over 3 or 4 days.

ASSESS AND REFLECT

page 28

Children discuss the zoo exhibit, dictate sentences, and make signs and labels.

Materials Chart paper and markers for dictating sentences and making signs and labels

Schedule Allow approximately 15 minutes in group time; sentence and sign dictation to take place during free play.

EPISODE OBJECTIVES

Social-Emotional Development

- Use language to communicate needs.
- Take turns and share materials.
- Listen to the ideas of others.

Language Development

- Listen for information.
- Allow others to speak without frequent interruptions.
- Contribute to group discussions.
- Use new vocabulary in speech.
- Understand and follow oral directions.

Cognitive Development: Early Literacy

- Listen attentively to the reading of a picture book.
- Understand that different text forms are used for different purposes.
- Communicate ideas and thoughts through dictation and drawing pictures.

Cognitive Development: Science

- Pose questions about animals and participate in the creation of a research plan.
- Describe animals, their behaviors, and what they need to stay healthy and safe.

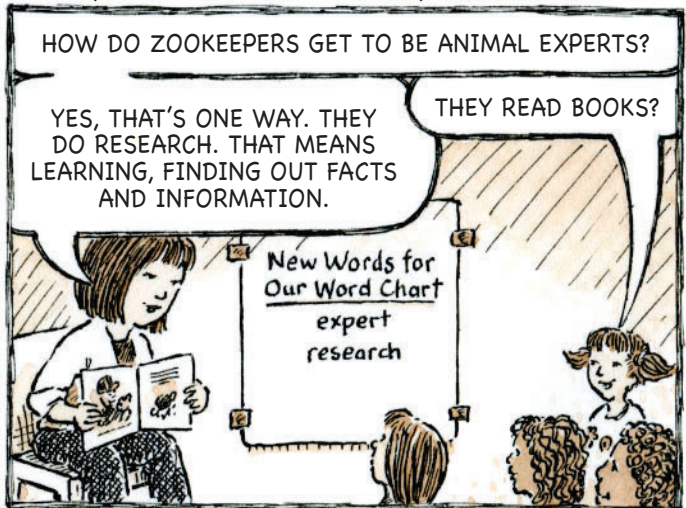
Cognitive Development: Problem Solving

- Participate in discussion and decision-making.
- Use ideas from the class discussion and observation to help create an animal exhibit.

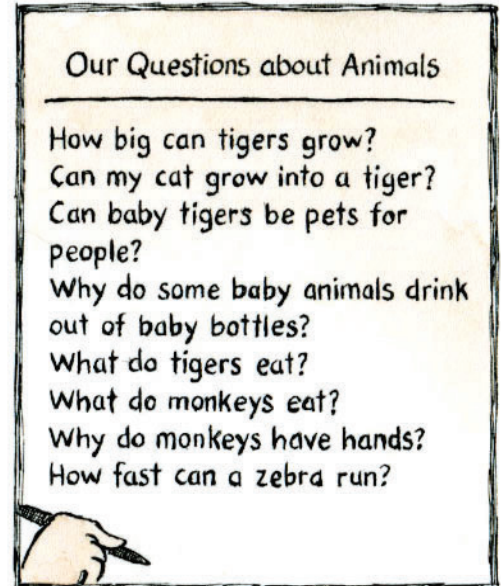
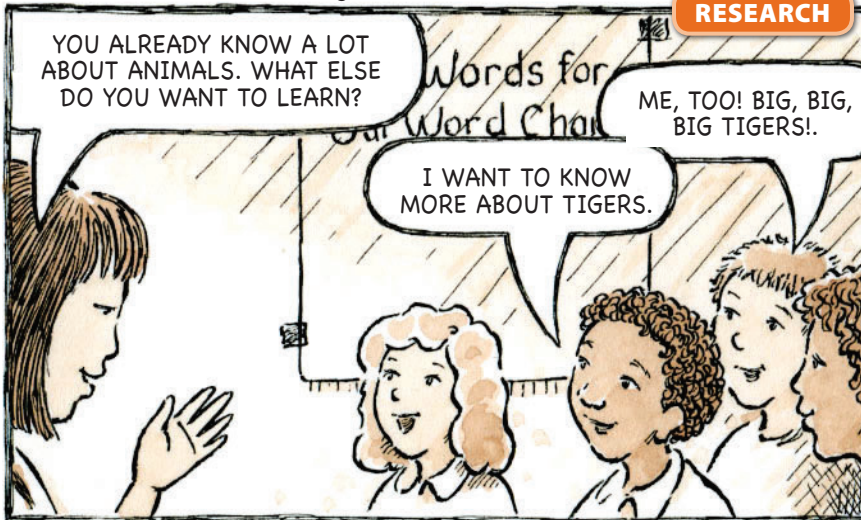
ASK QUESTIONS ABOUT ANIMALS

Over the next few days, I observed that the children were still engaged in learning about animals and zoos and ready to learn more.

Then Jenny and I took turns meeting with the children in small groups. We used a picture book about a zookeeper to talk about animal experts.



I explained that the first step in doing research is asking questions. Then we made a list of things they wanted to know.



ASK QUESTIONS ABOUT ANIMALS

In this episode, you will introduce children to some of the fundamental tasks in a scientific investigation. Children will learn to ask questions, use a variety of sources to research the answers to their questions, and write or draw what they learned.

Read aloud a picture book that features zookeepers. (See list on page 77.) Guide the children to focus on the zookeepers' knowledge of animals. Explain that a zookeeper is an "animal expert," someone who knows a lot about animals. Invite children to learn more about animals and become animal experts.

Make a list of questions

Acknowledge that children already know a lot about animals. Then ask, "What else do you want to know about animals?" Make a list of their questions.

To spark children's curiosity, ask open-ended questions, such as "Which animals are you most curious about?" or "What do you want to know about animal habitats?"

SCIENCE AND RESEARCH

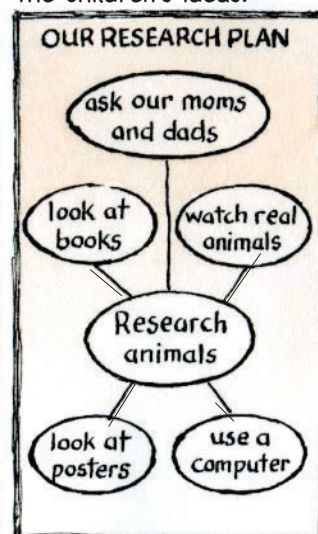
Even very young children can learn the three fundamental tasks in a scientific inquiry:

1. asking questions
2. researching the answers
3. recording new information (writing, drawing, etc.)

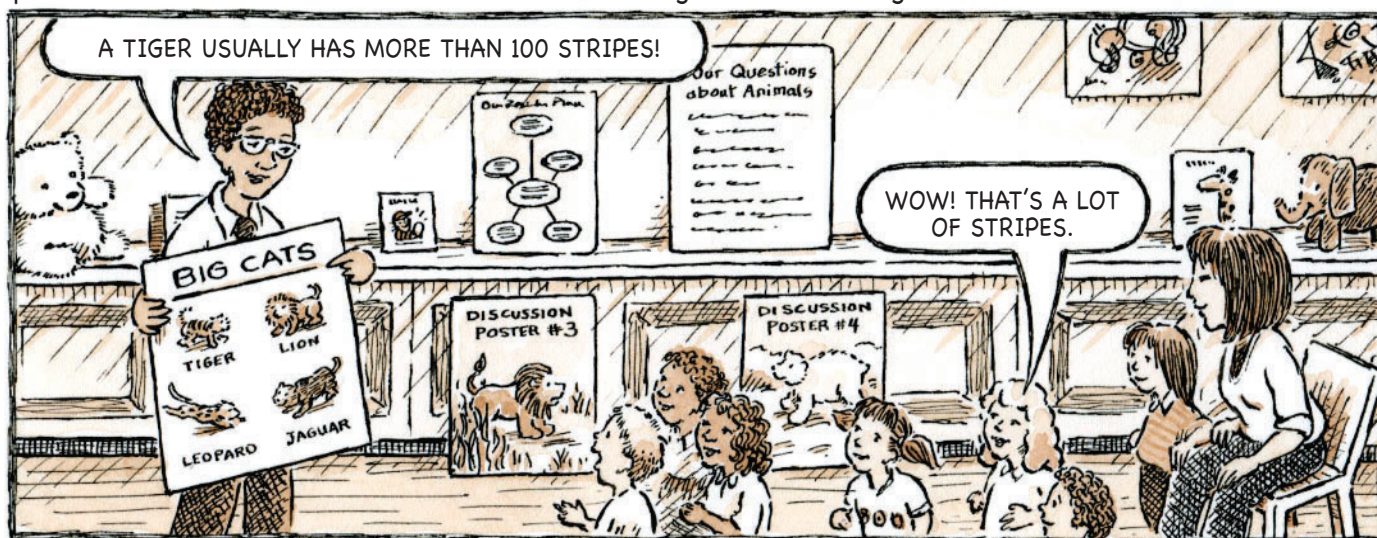
RESEARCH ANIMALS

Then we had a discussion about how to find out the answers to their questions. The children's ideas became our research plan.

I drew a web showing the children's ideas.



Marcus' father was already scheduled to visit our classroom later that week. He used charts and posters from the local zoo to share information about tigers and other "big cats."



RESEARCH ANIMALS

After the children finish the list of questions, ask, "How can we find out the answers to these questions?" Explain to children that they, like scientists and zookeepers, can use their senses to learn about animals. Remind children that their five senses are sight, sound, touch, smell, and taste. For example, children can use their eyes to observe animals or look at pictures of animals.

Connect with families

Parents or other family members may have special expertise they can share with your class. Talk with families about their experiences with animals, such as training dogs, riding horses, or raising chickens.

Make a research plan

Invite the children to make a plan for how they will become animal experts. Offer children a variety of opportunities, such as

- Looking at pictures of animals in posters and books
- Observing pets at home or in the neighborhood
- Inviting zookeepers or other animal experts to visit the classroom and talk about their experiences

EL *Discussion Posters 3 and 4* provide images of a variety of animals and habitats. These visuals are especially helpful to children who are English learners.

We invited the children to write and draw what they were learning. We gave each child a spiral notebook for recording their research. We stored these notebooks in the science center so children could add to them whenever they found out something new.



But Jenny and I also knew that children learn best from hands-on experiences. So one day Jenny brought her cat, Max, to school for a brief and carefully supervised visit.



Continue research

Over the next week, provide opportunities for children to complete the tasks in their research plan. For example, you might

- display a variety of nonfiction picture books on a table.
- show a movie or video about an animal that interests the children.
- invite a zookeeper to visit your classroom and talk with the children.
- allow children to bring books home to look at with their families.

Record information

As children carry out their research plan, encourage them to write and draw what they have learned. Invite children to “take notes” as they observe animals or interview animal experts. These notes can be drawings, scribbles, emergent writing, or dictation.

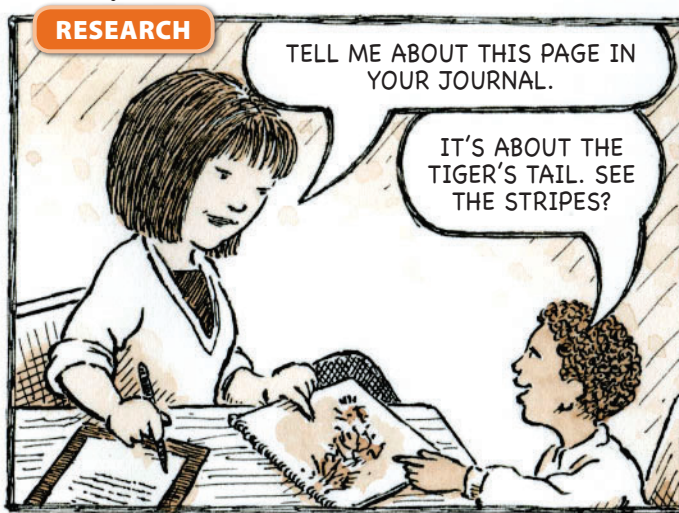
EL You can also have children act out or dramatize dictated sentences and stories.

Meet family pets (Optional)

Hands-on experiences with animals are the best way for children to develop knowledge of and empathy for animals. If possible, schedule a visit from a family pet.

RESEARCH ANIMALS *continued*

The children became very passionate about their research journals. I learned a lot about each child's interests by talking to them about what they recorded in their journals.



I noticed that the children's drawings in their journals were much more detailed than the drawings they did at the beginning of the unit.



At group time, the children enjoyed acting out some of the drawings and words in their journals.



ASSESS

Assess children's vocabulary acquisition

As children conduct research, take note of any new vocabulary words they use during discussions or dictation. New words may include specialized vocabulary such as *habitat*, *diet*, *predator*, or *mammal*. Note these words in children's individual portfolios and add them to the class word chart.

Use culturally relevant practices

Attitudes and feelings about animals will vary from family to family. For example, families with close ties to farming may see animals as a source of food, rather than as pets or as objects of scientific study. Be open and accepting of all families' values about animals.

SCIENCE NOTE: SENSITIVE TOPICS

Be aware that learning about animals often leads to a discussion of *predators*, animals that hunt and eat other animals. Some young children may be frightened by this concept while others will be quite comfortable. A calm, matter-of-fact approach to this topic will reassure sensitive children.

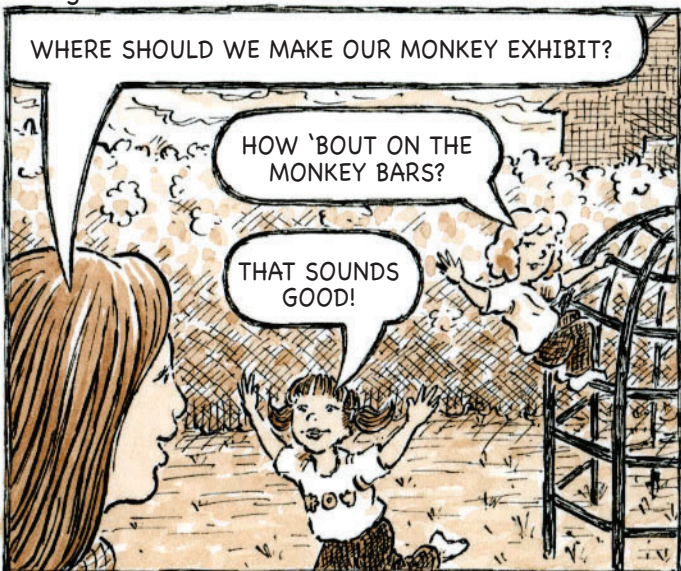
MAKE AN ANIMAL EXHIBIT

At our next planning meeting, Jenny and I talked about hands-on ways the children could demonstrate their new knowledge of animals. The children had already made small animal habitats out of paper, clay, and blocks. So we decided to create a large space for a special zoo exhibit.



So Jenny led the development of the monkey exhibit during outdoor time...

...And I led the development of a tiger exhibit indoors.



MAKE AN ANIMAL EXHIBIT

Choose an animal for the exhibit

In the dramatic play area, set aside space for creating a special animal exhibit. Children may have already created animal exhibits during dramatic play, but this exhibit will be an opportunity for the whole group to think more deeply about the specific needs of one type of animal. You may decide on a type of animal for the class to study, or you may want to allow the children to decide. To guide the decision-making process, observe children's play and then offer suggestions based on the most popular or interesting choices children have made.

Construct the exhibit

Invite children to set up blocks or other materials to make an enclosure. Encourage children to include the items in the exhibit that represent natural features, sources of food and water, and walls or fences. Create the items with blocks or paper, or use props and toys that are already available. Encourage children to use the information they learned in their research to help them create the animal exhibit.

LANGUAGE AND LITERACY

Use questions to guide children's work on the exhibit, such as

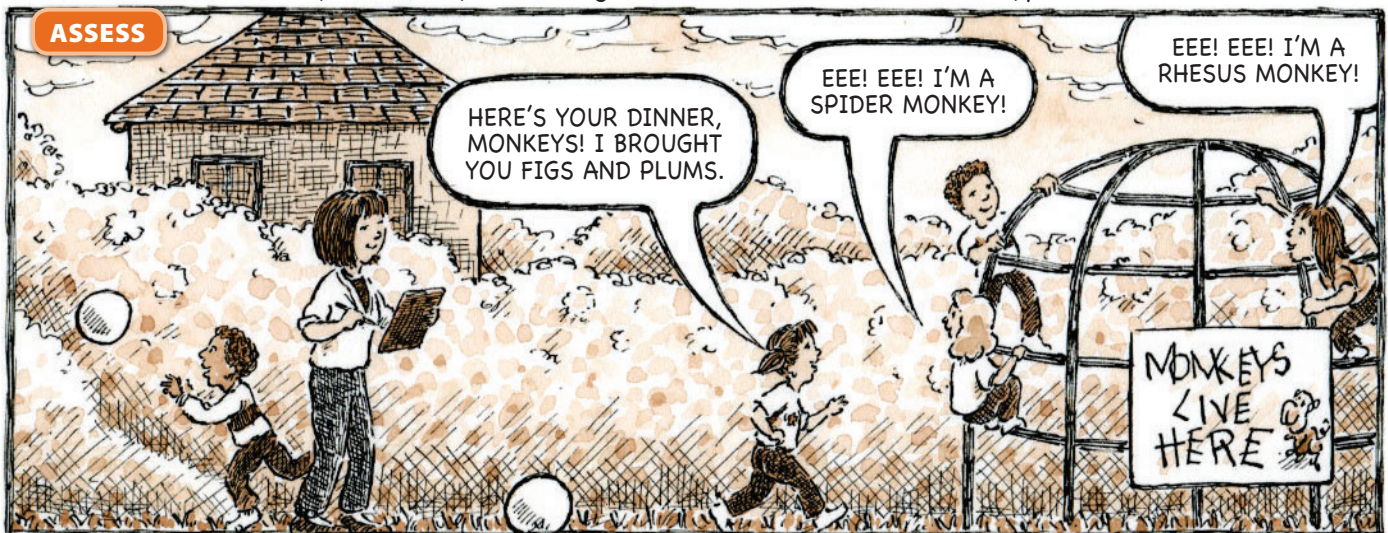
- What does this animal eat?
- How will this animal exercise?

MAKE AN ANIMAL EXHIBIT *continued*

The children's play demonstrated their new knowledge of animals, natural habitats, and zoo habitats.



The children loved making the exhibits and using the exhibits for dramatic play. I observed their play and took note of the new vocabulary words they were using, such as the names of different types of animals.



Encourage dramatic play

Provide many opportunities for the children to spontaneously create their own dramatic play scenarios using the zoo exhibits as well as toy animals and other props. Occasionally enter into the play to extend and engage children's understanding. For example, you can ask about how the wild animals like their new home.

ASSESS Assess the group

Use the *Play Observation Form*, pages 54 and 55, to document the language and behaviors during children's play. Look for examples that illustrate children's new vocabulary words, their knowledge of animals, and their problem-solving skills.

Make signs for the exhibit

At the writing table have children make and decorate signs for the exhibit. Children can copy or trace the letters that you write or they can use emergent writing, such as controlled scribbling or invented spelling. Children can also draw pictures for the signs.

Ask open-ended questions, such as, "What might visitors want to know about these animals?" This process will help children make decisions about what to put on the signs.

ASSESS AND REFLECT

Over the course of the unit, I looked for opportunities to have informal conversations with the children about what they were learning. Conversations at the snack table were often lively and interesting. I asked open-ended questions to help the children develop and expand their ideas.



ASSESS AND REFLECT

Discuss the animal exhibit

Look for opportunities to have informal and relaxed discussions about the animal exhibit. For example, for the monkey exhibit, you might ask “Do you think the animals like their new home? Why or why not?”

LANGUAGE AND LITERACY

After a guest visits your class, write a group thank you note. Dictating sentences for the note encourages children to

- recall and describe events
- develop social skills
- recognize a function of print
- use specialized vocabulary

ASSESS Assess individual children

Use the *Child Observation Form* to assess individual children’s learning. Collect items for children’s portfolios such as

- drawings and emergent writing samples
- photos of the animal exhibit

Connect with families

At drop-off and pick-up time, invite families to view the exhibit and talk with their children about the animals and the habitat.

CREATE ZOO WORKERS

IMAGINE AND DISCUSS ZOO WORKERS

page 30

Children discuss the jobs of zoo workers and participate in dramatic play.

Materials

- Picture book about zoos and jobs in the zoo, such as *Who Works at the Zoo* by Alyze Sweeney (see p. 77 for list)
- Props for dramatic play, such as buckets, work shirts, aprons, coats, and toy doctor kits
- *Discussion Posters 5 and 6*

Schedule

Allow approximately 15 minutes for group discussion; dramatic play to take place during free play throughout the unit.

CREATE ZOO WORKERS

page 33

Children create paper zoo workers.

Materials

- Teaching Master 3, *Paper Figure*, p. 58 (pre-cut paper figures in a variety of skin colors can also be purchased from art supply companies)
- Markers or crayons

Schedule

Include this activity as a choice during free play over the course of 1 to 3 days.

ASSESS AND REFLECT

page 34

Children dictate sentences and stories about zoos and zoo workers.

Materials

- Optional: camera for individual photos with paper zoo workers
- Paper and pencil for dictation

Schedule

Take photos and dictation during free play; allow approximately 15 minutes for group discussion.

EPISODE OBJECTIVES

Social-Emotional Development

- Use language to communicate needs.
- Take turns and share materials.
- Listen to the ideas of others.

Language Development

- Listen for information.
- Allow others to speak without frequent interruptions.
- Contribute to group discussions.
- Use new vocabulary in speech.
- Understand and follow oral directions.

Cognitive Development: Early Literacy

- Listen attentively to the reading of a picture book.
- Focus on illustrations for details.
- Recognize print in the local environment.
- Understand that different text forms are used for different purposes.

Cognitive Development: Social Studies

- Understand that zoos are places where wild animals from different regions of the world are kept, studied, and cared for.
- Understand that zookeepers look after the animals in the zoo.

Cognitive Development: Problem Solving

- Use ideas from the class discussion to create zookeepers.

IMAGINE AND DISCUSS ZOO WORKERS

Jenny and I noticed many children pretending to be zookeepers during free play. So one day at group time, I dressed up like a zookeeper. The children were excited and curious.



Earlier that week, I had prepared for story time by choosing several vocabulary words and concepts from the book to focus on. This helped me make the most of the conversations that followed.



Of course, the mention of "poo" made the children laugh. But I calmly explained that all animals make "waste" and that cleaning up is an important zookeeper job.

IMAGINE AND DISCUSS ZOO WORKERS

Talk about zoo workers

In this episode, children will learn about the various jobs in a zoo. Begin a discussion about the people who work in the zoo by asking **open-ended questions** and reading aloud a picture book such as *Who Works at the Zoo?* For example, ask, "How do you think animals get food and the things they need if they live in a zoo?"

You may want to take on the role of a zookeeper and pretend to feed the toy animals. Ask children, "What job do you think I have?"

Continue the discussion by asking, "What do you think I have to do to care for these animals?"

EL During discussions, children who are English language learners benefit from the use of props, such as toy animals, and demonstrations of key concepts, like feeding the animals.

PROFESSIONAL VOCABULARY

open-ended question *noun* a question that inspires creative thinking and cognitive growth because it has more than one correct answer. (For more information about open-ended questions, read the Teacher Workshop on page 62.)

IMAGINE AND DISCUSS ZOO WORKERS *continued*

During free play, we put buckets, aprons, lab coats, doctor kits, and other zookeeper and veterinarian props in the dramatic play area.



Later that day, Jenny and I met with children in small groups to discuss zoos and people who work there. We used Discussion Posters 5 and 6 to help extend the children's thinking.

We made a new word chart and included words in Spanish.



Our Word Chart	
ENGLISH	SPANISH
zookeeper	trabajador del parque zoológico
diet	dieta
veterinarian	veterinario
medicine	medicina
health	salud
stethoscope	estetoscopio

Use dramatic play

In the dramatic play area, provide props for zookeeper play, such as toy animals, aprons, brooms, buckets, dishes for food, and a doctor's kit. Over the next several days, provide many opportunities for children to spontaneously create their own dramatic play scenarios.

EL During play, try to pair children who do not speak English at home with native English speakers.

Create additional word charts, incorporating new vocabulary words related to zookeepers and veterinarians. Use the visual images on *Discussion Posters 5* and *6* to talk about zookeepers and veterinarians. Ask children open-ended questions, such as, "What tools do zookeepers need to do their jobs?"

Talk about other jobs at the zoo

Depending on children's interests, you may want to introduce the range of jobs at the zoo. Some children may want to discuss the workers who sell tickets, souvenirs, or food. Present a range of job roles that meets the interests and developmental levels of the children in your group.

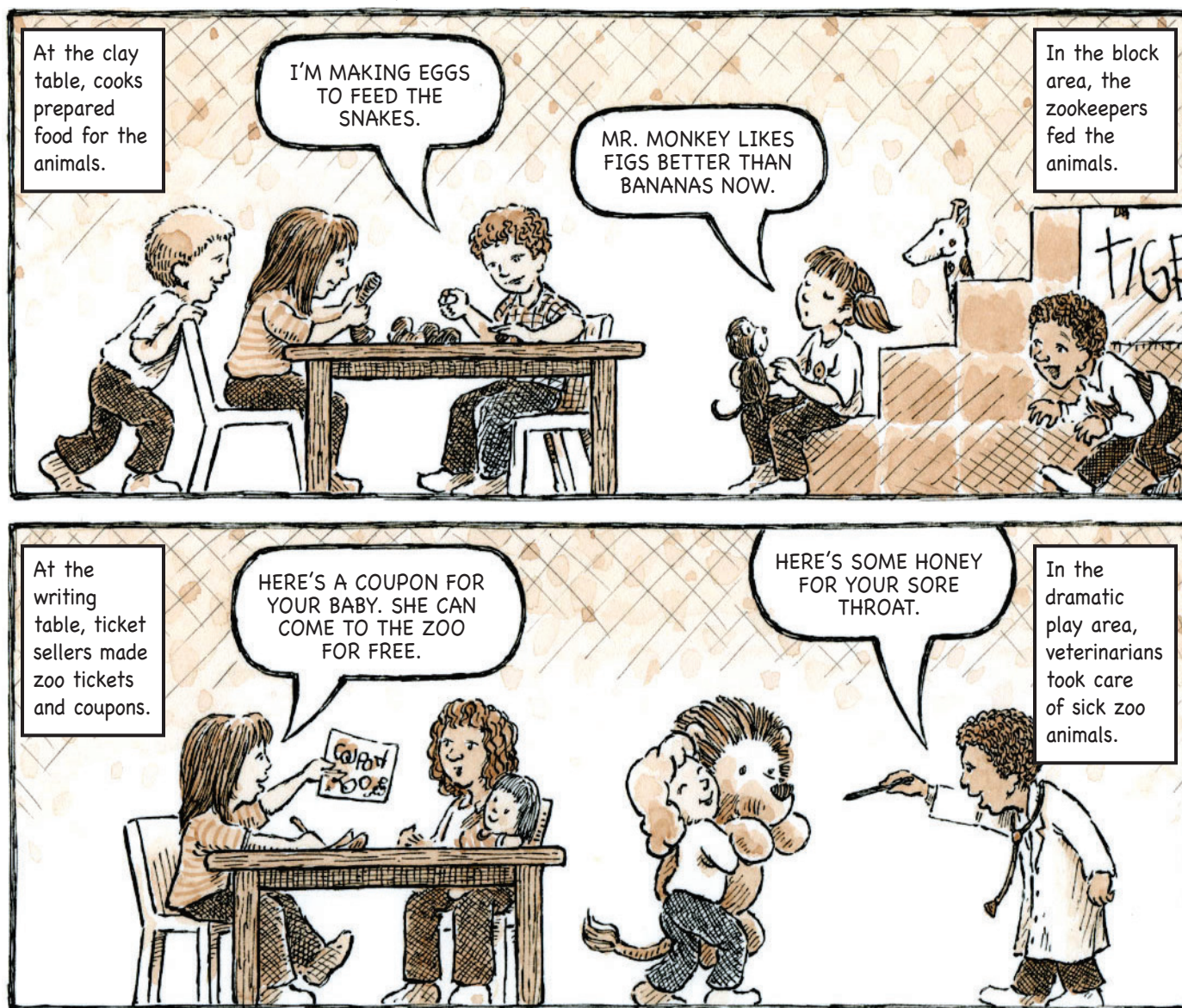
LANGUAGE AND LITERACY

Adding to the word chart

- reinforces new vocabulary learning
- increases print awareness
- documents children's ideas and interests

IMAGINE AND DISCUSS ZOO WORKERS *continued*

Over the next few days, the children pretended to be zoo workers in all areas of the classroom.


ASSESS **Observe children's play**

Make copies of *Play Observation Form*, pages 54 and 55, and use it to document your observations of children's dramatic play. This form can be used to document children's

- use of vocabulary
- understanding of workers' roles
- knowledge of the zoo and animal care

The results of these observations can be used to guide your planning.

By observing children's play, you can discover children's interests, assess development, and identify areas that need more practice.

Extend children's play

Occasionally enter into the play to extend and engage children's understanding. For example, you can take on the role of a zoo visitor and ask children about the wild animals and what kind of food they eat.

LANGUAGE AND LITERACY

When the teacher joins in the play, the teacher can

- model new ways to use language
- introduce new ideas and concepts
- challenge children's thinking
- help engage children who might be reluctant to join in

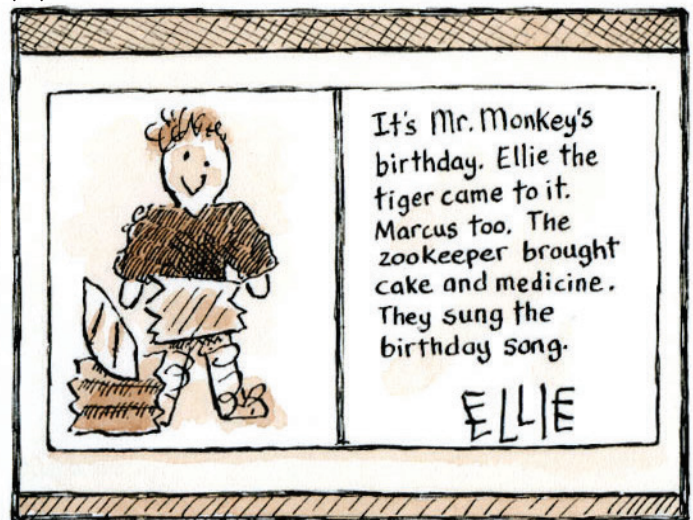
CREATE ZOO WORKERS

Next, the children made zoo workers out of paper. This process challenged the children to think more deeply about the workers and their jobs. The children drew, cut, pasted—whatever they wanted to.



Jenny and I invited the children to dictate stories about their workers. We noticed that some children included words and ideas from previous discussions.

We posted the stories on the wall, next to the paper workers.



CREATE ZOO WORKERS

Make paper zoo workers

At the art table, invite children to make zookeepers or other zoo workers. When children make their own paper zoo workers, they are often inspired to think more deeply about the workers and the tools they use. Provide a paper cut out or Teaching Master 3, *Paper Figure*, page 56. Have children draw on the paper figures. They may also want to glue paper or fabric scraps.

Discuss with children the kind of clothing zookeepers wear and what tools they need to do their work. Suggest that children draw tools to go with the paper workers. Children could also cut out pictures of tools from catalogs or newspaper ads.

Dictate stories about the workers

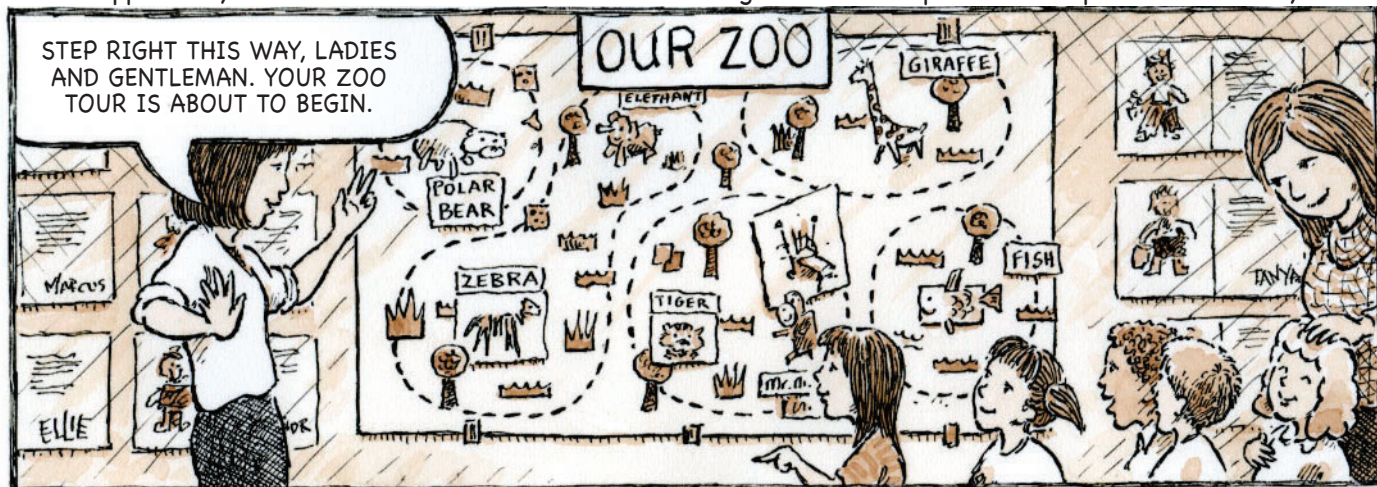
Invite children to dictate stories about their workers. Dictating stories is a valuable opportunity for children to use their imaginations, express their ideas, and develop an understanding of the functions of print. Ask open-ended questions, such as, "What does your worker do?" and write down the child's answer, word for word. For more information about story dictation, read the Teacher Workshop on page 66.

Use culturally relevant practices

When making the paper figures, be sure to include paper in a variety of skin colors.

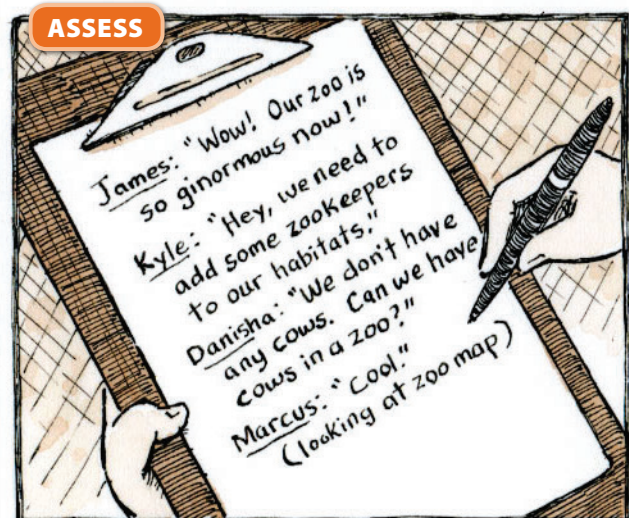
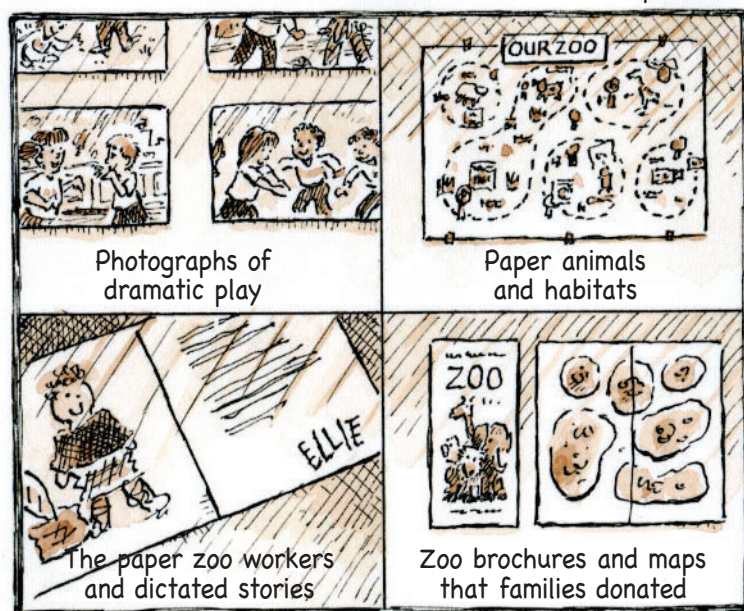
ASSESS AND REFLECT

One day, I used the growing documentation panels to pretend I was giving the children a “tour” of their zoo. This was an opportunity for the children to reflect on their learning and review important concepts and vocabulary words.



The “tour” included all sections of the documentation panel.

Jenny wrote down some of the children’s reflections as they viewed their own work. These comments gave us some ideas about how to plan the rest of the unit.



ASSESS AND REFLECT

Reflect on learning

Invite children to look at their documentation panel and talk about what they see. Ask children open-ended questions, such as

- What do you see here?
- How did you make this?
- How did you decide what to make/write/draw?
- Do you think we need to add to or change anything in our zoo?

These kinds of questions encourage reflection and help deepen learning. Write down children’s answers and post them by the display.

ASSESS Assess individual children

Use the *Child Observation Form* to assess individual children’s learning. Collect items for children’s portfolios such as

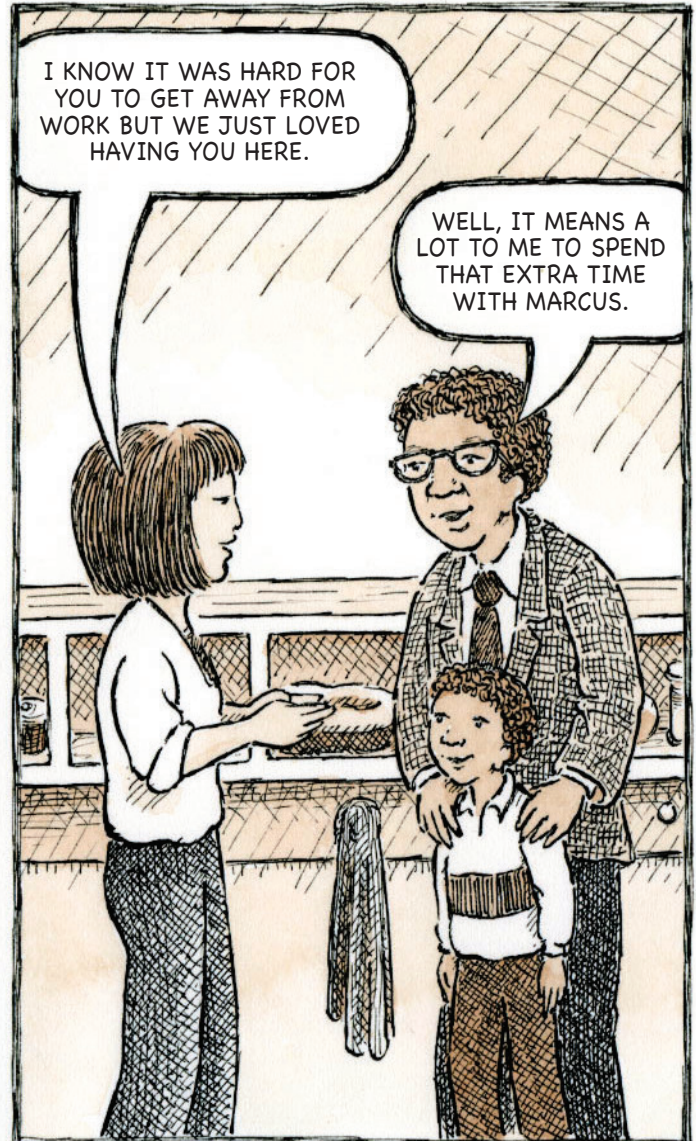
- dictated words and sentences
- copies of the paper workers
- photos of children during dramatic play

ASSESS AND REFLECT *continued*

Every day Jenny and I tried to connect with each parent at drop-off and pick-up times.



We also gave Marcus's dad a card made by the class to thank him for visiting the other day.



Connect to families

Informally invite family members to view and enjoy the paper zookeepers, the dictated sentences and stories, and all the documentation displayed in the classroom. If parents are not able to visit the classroom, make copies to send home.

Use the *Family Poster* to talk with families about what their children are learning. For example, point out to parents that pretend play develops many language and literacy skills. These skills will help prepare children for kindergarten and grade school. For more information about building supportive partnerships with parents, read the article on page 75.

HOME-SCHOOL CONNECTION

Encourage parents to support children's learning. For example, parents and children can

- look at animal books together
- make a list of animals they see in their neighborhood
- visit a pet store and talk about how people care for their pets

SOLVE A PROBLEM

OBSERVE CHILDREN'S PLAY

page 37

Teachers observe children's play and identify problems and issues that are important and meaningful to children.

Materials *Play Observation Form*, pp. 54–55

Schedule Observe both indoor and outdoor play over the course of several days.

INTRODUCE THE PROBLEM

page 38

Children learn about a problem at the zoo.

Materials Optional: props for role-play presentation

Schedule Allow approximately 10 minutes for the role-playing or storytelling during group time.

DISCUSS AND SOLVE THE PROBLEM

page 40

Children hold a meeting to discuss and solve the problem.

Materials Will vary, depending upon the problem.

Schedule Allow approximately 15 minutes for discussion in small or large groups.

MAKE MAPS, CHARTS, OR GRAPHS (OPTIONAL)

page 41

Children use maps, charts, or graphs to solve problems or represent what they have learned.

Materials Paper, markers, rulers, stickers, and stencils

Schedule Include as a choice during free play over the course of 2 to 3 days.

ASSESS AND REFLECT

page 43

Children reflect on how they solved the problem.

Materials Paper and markers for writing children's ideas

Schedule Discuss for approximately 15 minutes during group time.

EPISODE OBJECTIVES

Social-Emotional Development

- Contribute to group discussions.
- Work with others to make a decision.
- Suggest solutions for problems.

Language Development

- Contribute to group discussions.
- Use new vocabulary in speech.

Cognitive Development: Early Literacy

- Understand that pictures and text convey meaning.
- Show an awareness of print in the environment.
- Communicate ideas and thoughts through dictation and drawing pictures.

Cognitive Development: Social Studies

- Understand that zoos are places where wild animals from different regions of the world are kept, studied, and cared for.
- Understand that zookeepers look after the animals in the zoo.

Cognitive Development: Science

- Collect, record, and display data by creating charts, graphs, or maps.
- Describe what animals need for healthy living.
- Observe differences in the natural environment for different animals.

Cognitive Development: Problem Solving

- Participate in identifying a problem at the zoo and then make decisions on how to respond.
- Participate in resolving the problem.

OBSERVE CHILDREN'S PLAY

Over the next few days, I used the Play Observation Form to record my notes about the children's play. I was looking for a problem or issue that the children could work on together.



I observed that Ellie and Marcus weren't ready to solve this problem on their own. I decided to talk with Jenny about presenting this issue to the whole class.

OBSERVE CHILDREN'S PLAY

In this episode, children will work together as a team to solve an important problem. To engage the children in the problem-solving process, it is important that the problem you present to children is an issue they will find important and meaningful.

Observe children's play, indoors as well as outdoors, over the course of several days. Use the *Play Observation Form* on pages 54 and 55 to record information about the issues and conflicts that arise naturally and spontaneously.

Practice active listening

When their play is going well, children are completely engaged. Their attention is focused on their playmates or

toys. They may not even be aware of what is going on in the rest of the room. These are the best times to simply observe children. There is no need to join or facilitate their play.

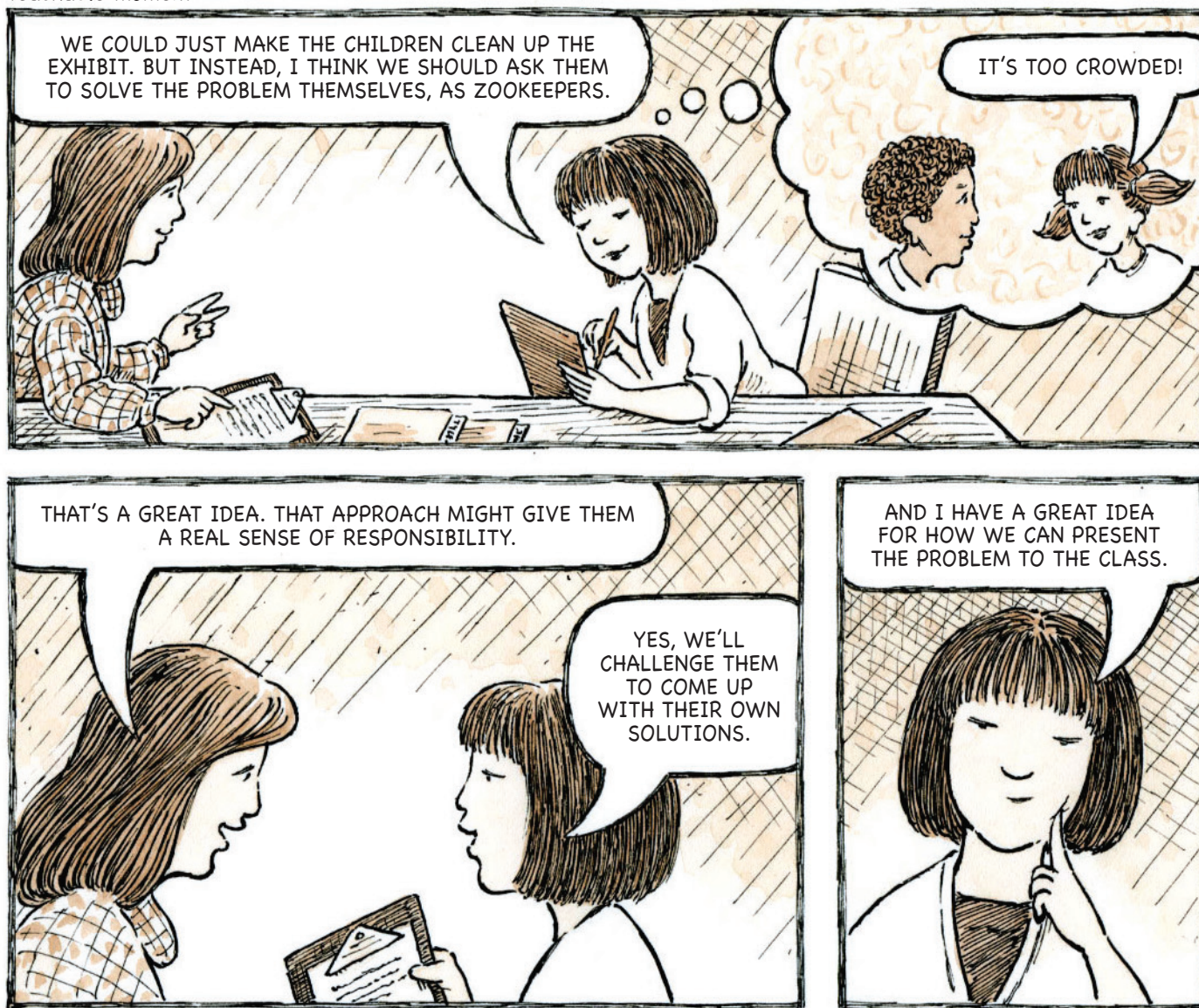
Sometimes the flow of play is interrupted by conflicts and problems. These are wonderful opportunities for teachers to become active listeners. Active listening means asking questions that help children express and clarify what they are feeling and experiencing.

Active listening questions and comments include

- "Tell me about what is happening here."
- "How do you feel about that?"
- "What do you wish would happen next?"

INTRODUCE THE PROBLEM

At our planning meeting, I told Jenny about my observation of Marcus and Ellie. It seemed like a perfect teachable moment.



INTRODUCE THE PROBLEM

Choose a problem to solve

Based on your observations, choose a **teachable moment**—an opportunity for the children to develop and practice problem-solving skills. The problem you choose may be related to conflict resolution, such as children arguing over who gets to wear the zookeeper boots. Or the problem may be “pretend,” something that happens as part of children’s dramatic play, such as a predator getting into another animal’s exhibit by mistake. Or the problem could be based on the interactions among the children, such as a conflict about who gets to be in charge of the zoo.

When selecting a problem, consider the following:

- Does the problem allow for multiple solutions?
- Does it allow the children to participate in solving the problem?
- Is it culturally relevant to the children in your class?

A picture book, such as *Never, Ever Shout in a Zoo* by Karma Wilson, could also be helpful in imagining a problem to solve.

PROFESSIONAL VOCABULARY

teachable moment *noun* something that happens in the classroom that can be used as a natural opportunity to teach new concepts

INTRODUCE THE PROBLEM *continued*

At group time, I explained to the children that the teachers were going to act out a problem and then the children would have a chance to solve the problem together.



Present the problem

To help children understand and imagine the problem, you may want to use role-playing or storytelling. Act out the problem with another teacher, or describe the problem as if it was a story in a storybook, beginning with “Once upon a time . . .” If the problem is based on a real conflict between children, be sure to change the names and identities of the characters in the play or story.

For example, if the problem is that the snakes keep getting into the monkey exhibit, one teacher could be a snake and the other could be a zookeeper. The zookeeper could say, “Oh, no! I see a snake in the monkey exhibit. That snake doesn’t belong here.”

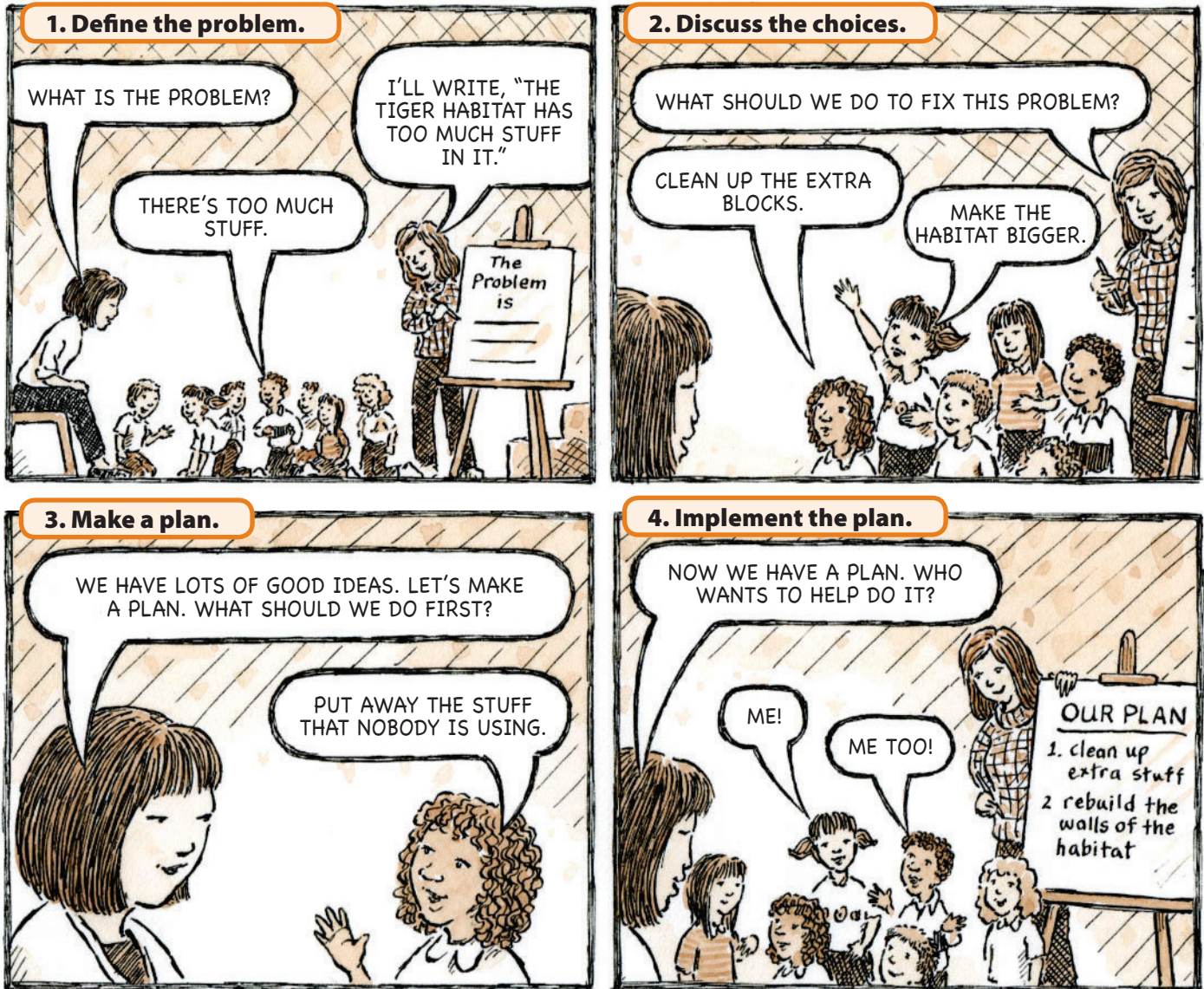
EL When you present the problem through role-playing, your facial expressions and body language help children understand what you are communicating.

Demonstrate “thinking out loud”

As you present the problem and guide the children through the problem-solving process that follows, be sure to “think out loud.” For example, you might invite the children to solve the problem by saying, “This is such a big problem, I don’t think I can solve it by myself. I will need other people to help me.”

DISCUSS AND SOLVE THE PROBLEM

We led the children through a four-step process to solve the problem. We knew this would take some time, so we didn't rush the process.



DISCUSS AND SOLVE THE PROBLEM

Call a meeting

Tell children that you are calling an important meeting to talk about the problem and how to solve it. Use the following steps to structure the discussion:

1. Define the problem. Ask the children, "What is the problem?" Write children's ideas and come up with a sentence that clearly defines the problem, such as "The tiger habitat is crowded."

2. Discuss the choices. Ask the children, "What can we do to fix this problem?" Raise questions to help them think more deeply about the problem. Allow them to disagree but ask them to explain their ideas.

3. Make a plan. Have children think of ways they can solve the problem. Gently guide the discussion so that children can begin to understand that there may be more than one way to solve the problem.

4. Implement the plan. Assign children specific tasks, such as repairing the exhibit wall. You may want to have children work in small groups. Make an effort to give every child an important role in solving the problem.

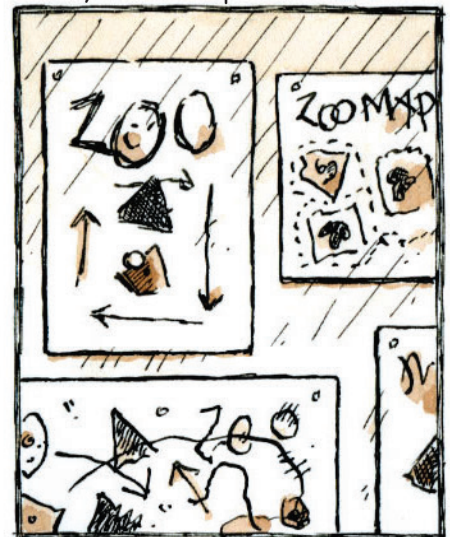
MAKE MAPS, CHARTS, OR GRAPHS (Optional)

The children's conversations about the size of the tiger exhibit seemed like a great opportunity to introduce some measurement tools. So when the children began rebuilding the tiger exhibit, I put out some yard sticks, rulers, and child-safe tape measures.



Measuring the exhibits also reminded me of Marcus's interest in zoo maps. So I invited Marcus to come to the art table to use some "map-making tools," such as a pad of graph paper, a ruler, a protractor, and some shape stencils.

Soon the wall was covered with a variety of zoo maps.



MAKE MAPS, CHARTS, OR GRAPHS

Creating simple charts, graphs, or maps helps children organize information, solve problems, and make comparisons. This process also helps children develop their **visual literacy** skills.

For example, children may enjoy creating simple zoo maps. Show children examples of maps from actual zoos. These maps can be collected on trips to a zoo or can be found online. Children can trace these maps or draw their own maps. Do not be concerned if the maps children create are not accurate. This activity simply begins to expose children to map-making concepts.

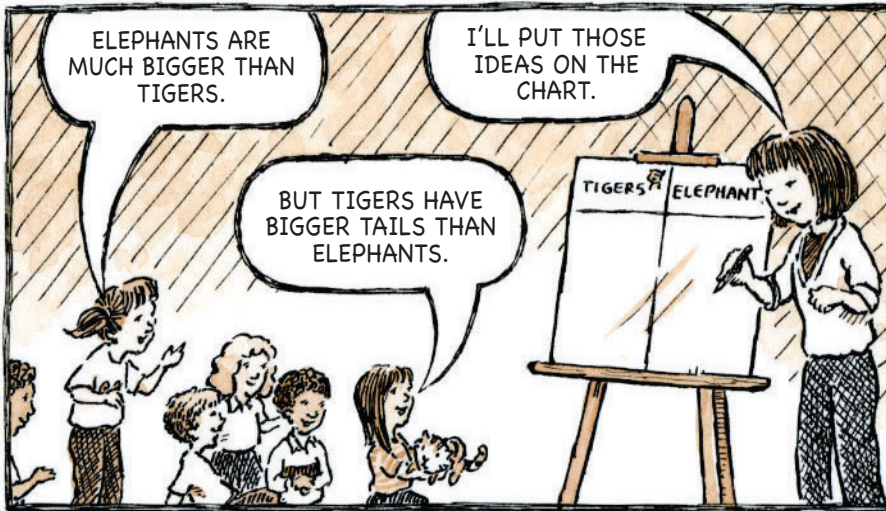
For more information about creating charts, graphs, and maps, read the Teacher Workshop on page 64.

PROFESSIONAL VOCABULARY

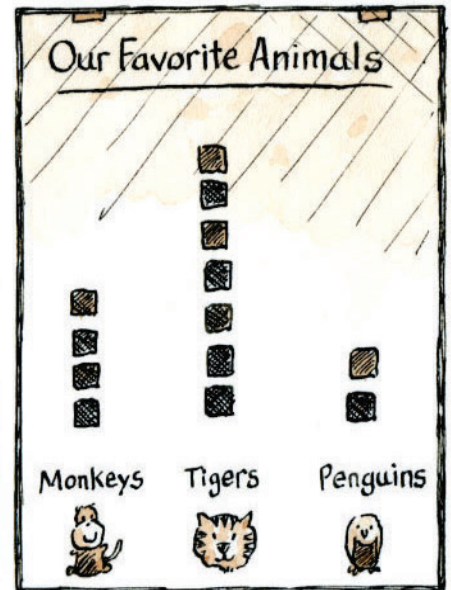
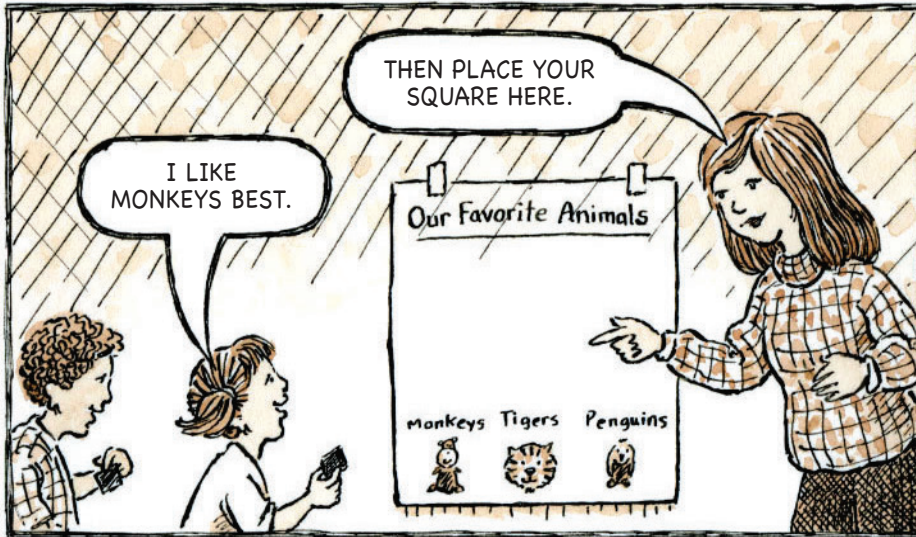
visual literacy *noun* the ability to find meaning in images, such as photos, illustrations, charts, graphs, and maps

MAKE MAPS, CHARTS, OR GRAPHS *continued*

The map making led to some conversations about the differences between the animals in our zoo. So I met with children in small groups and helped them make a two-column chart that represented their ideas.



And Jenny helped the children create a bar graph that showed which zoo animals were their favorites.



Make a two-column chart

When children compare one thing to another, you have an opportunity to create a two-column chart. For example, children can create a chart that compares dogs to cats or compares sea animals to land animals. This process helps reinforce observation skills and the understanding of similarities and differences.

EL Add small pictures, such as a sketch of a dog or a cat, to your chart. These images will help all children understand the chart, but will be especially helpful to children who are English learners.

Make a bar graph

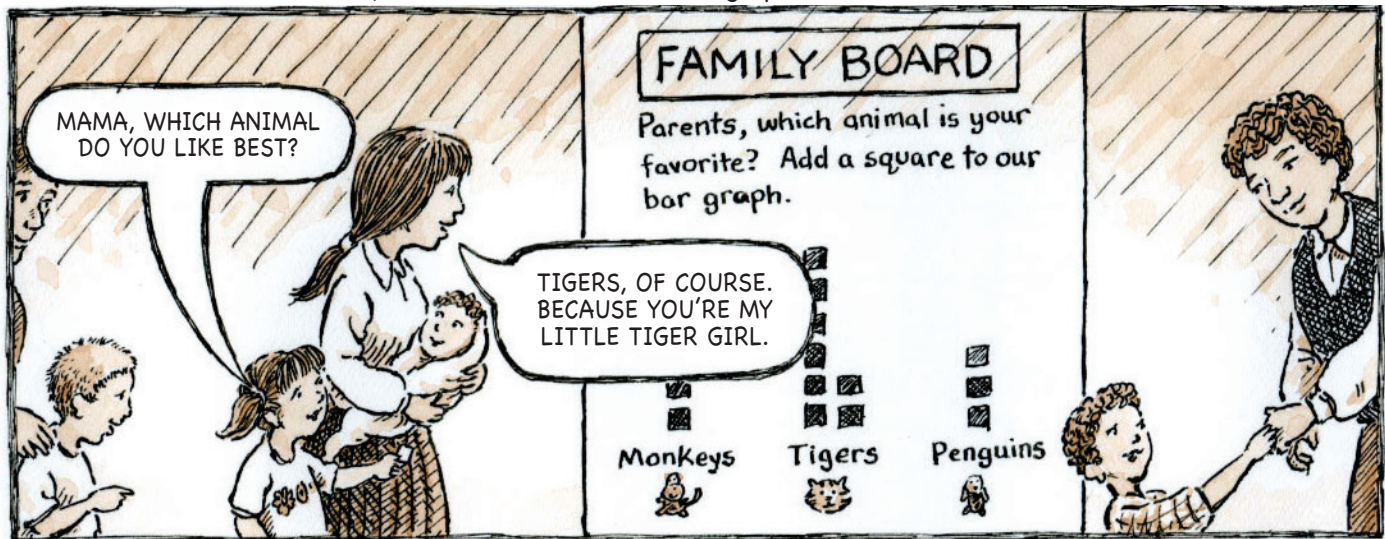
Another way to visually represent information is a bar graph. For example, create a bar graph to help children identify the most popular zoo animals. Ask children, "What is your favorite zoo animal?" Write down the children's answers. Then create a grid with a space for each animal. Create a bar graph by inviting children to glue or tape a square of color above the name of their favorite animal.

ASSESS AND REFLECT

Later, at the writing table, Jenny and I talked with children about their experience solving a problem together. We asked a variety of open-ended questions and wrote down the children's thoughts and ideas.



We displayed the chart, bar graph, and maps where family members could see them at drop-off and pick-up time. We also invited the family members to add to our bar graph.



ASSESS AND REFLECT

Talk about how the problem was solved in a group or individually. Discuss how successful they were at solving the problem. Ask children to dictate words and sentences that answer questions, such as

- What did we do to solve the problem?
- Why is it important that zookeepers know how to solve problems?
- Would you like to be a zookeeper? Why or why not?

ASSESS Assess individual children

Use the *Child Observation Form* to assess individual children's learning. Collect items for children's portfolios, such as

- dictated words and sentences
- copies of the charts, graphs, or maps
- notes from play observations

Connect to families

Display the charts, graphs, and maps where parents and family members can easily view them. Invite parents and family members to contribute their own opinions and ideas to the charts, such as adding squares to the bar graph showing their favorite animals.

FAMILIES VISIT THE ZOO

INTRODUCE THE SPECIAL EVENT

page 45

Children make invitations and plan for families to visit the class zoo.

- Materials**
- Chart paper and markers
 - Copies of invitations and art supplies for decorating the invitations

Schedule Allow approximately 10 minutes in group time; invitations can be prepared at the art table during free play for 1 to 2 days.

PREPARE FOR THE EVENT

page 46

Children prepare for their families to visit the class zoo.

- Materials**
- Ribbon, scissors
 - Large banner for making a sign

Schedule Allow approximately 10 minutes in group time for discussion; the “Grand Opening” sign can be decorated at the art table during free play for 1 to 2 days.

WELCOME FAMILIES

page 47

Children host the families at the zoo.

- Materials**
- Refreshments, such as animal crackers and juice
 - Children’s art and writing on display
 - Optional: camera, *Discussion Posters 1–6*
 - Teaching Master 4, *Family Talk*

Schedule Allow approximately one hour for the event.

ASSESS AND REFLECT

page 49

Children reflect on the experience by engaging in conversations and looking at photos.

- Materials**
- Poster board panels for creating a sequence of photos
 - Colored markers

Schedule Allow approximately 20 minutes for group discussion; sequencing activity and sentence dictation can take place during free play.

EPISODE OBJECTIVES

Social-Emotional Development

- Take turns and share materials.
- Listen to the ideas of others.
- Organize, plan, and make decisions to prepare for the families visit to the classroom.

Language Development

- Contribute to group discussions.
- Use new vocabulary in speech.
- Understand and follow oral directions.

Cognitive Development: Early Literacy

- Communicate ideas and thoughts through dictation and drawing pictures.

Cognitive Development: Social Studies

- Understand that zoos are places where wild animals from different regions of the world are kept, studied, and cared for.
- Understand that zookeepers look after the animals in the zoo.

Cognitive Development: Science

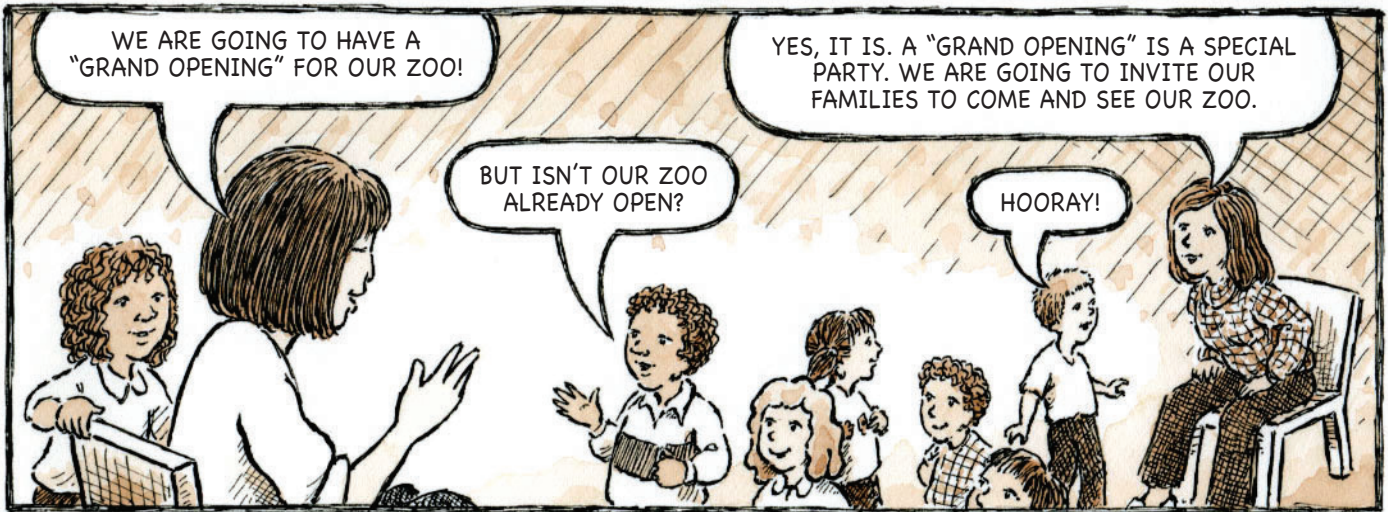
- Describe what animals need for healthy living.
- Observe differences in the natural environment for different animals.

Cognitive Development: Problem Solving

- Organize ideas in new ways.
- Participate in discussions and decision-making.

INTRODUCE THE SPECIAL EVENT

Next, Jenny and I began planning for the family event: the “grand opening” of the zoo. Our main goals for the event were to demonstrate to the parents what the children had learned and to give the children an opportunity to discuss their work.



We had already asked families to save the date of the celebration, but we also helped the children make invitations. The children drew and wrote on copies of a master invitation, which included a list of our goals for the event.



INTRODUCE THE SPECIAL EVENT

Plan for the special event

Inviting families to visit the zoo is a satisfying way to end the unit. This type of event also serves as a demonstration to families of what children have learned and an opportunity for children to describe their work.

The family event was announced in the *Family Letter* distributed in Episode 1. The event could be scheduled at a special time or could simply take place one day at pick-up or drop-off time.

Gather children for group time and make a plan for what activities will take place at the grand opening, such as a ribbon-cutting ceremony.

Make invitations

Discuss why invitations are important. Talk about the kinds of information included on an invitation, such as the date, time, and place. Write a master invitation and make copies. Have children decorate and “sign” their invitations to take home. Explain that the invitations will remind their families to come to the grand opening.

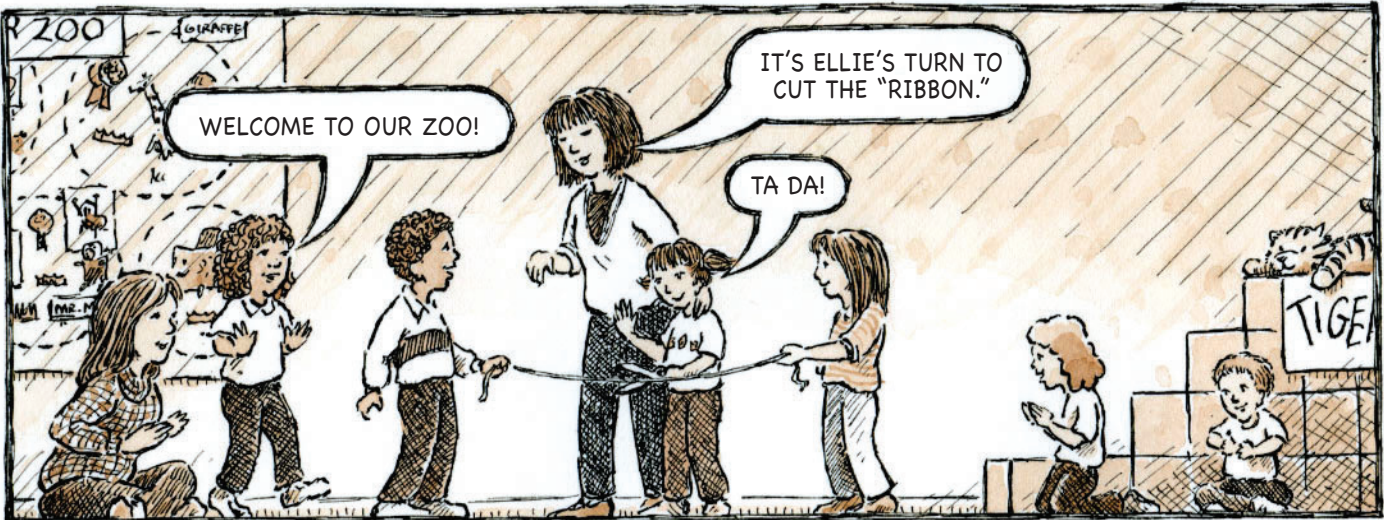
LANGUAGE AND LITERACY

When children make invitations, they

- use emergent writing skills to communicate with others
- understand that different text forms are used for different purposes

PREPARE FOR THE EVENT

Jenny and I thought having a ribbon-cutting ceremony at the grand opening would demonstrate to the children and families how much we value their work. We practiced the ceremony with the children in advance, using yarn instead of ribbon.



We also made a welcome banner.



And I helped Marcus make copies of his map on the school copy machine.



PREPARE FOR THE EVENT

Role-play the grand opening

String a ribbon across the zoo mural or an animal exhibit and then role-play the grand opening ceremony. Give a short speech, such as “Welcome to our zoo! It is a good place to learn about animals.” Use string or yarn and allow each child to have a turn cutting the “ribbon.”

Make a banner

Suggest that a sign is needed to announce the grand opening of the zoo. Invite children to write or trace the words “Grand Opening” on a large banner.

Make zoo maps

Invite children to create zoo maps for the visitors, or make copies of maps children have already made. For more information about creating maps with young children, see Episode 4, pages 41–42.

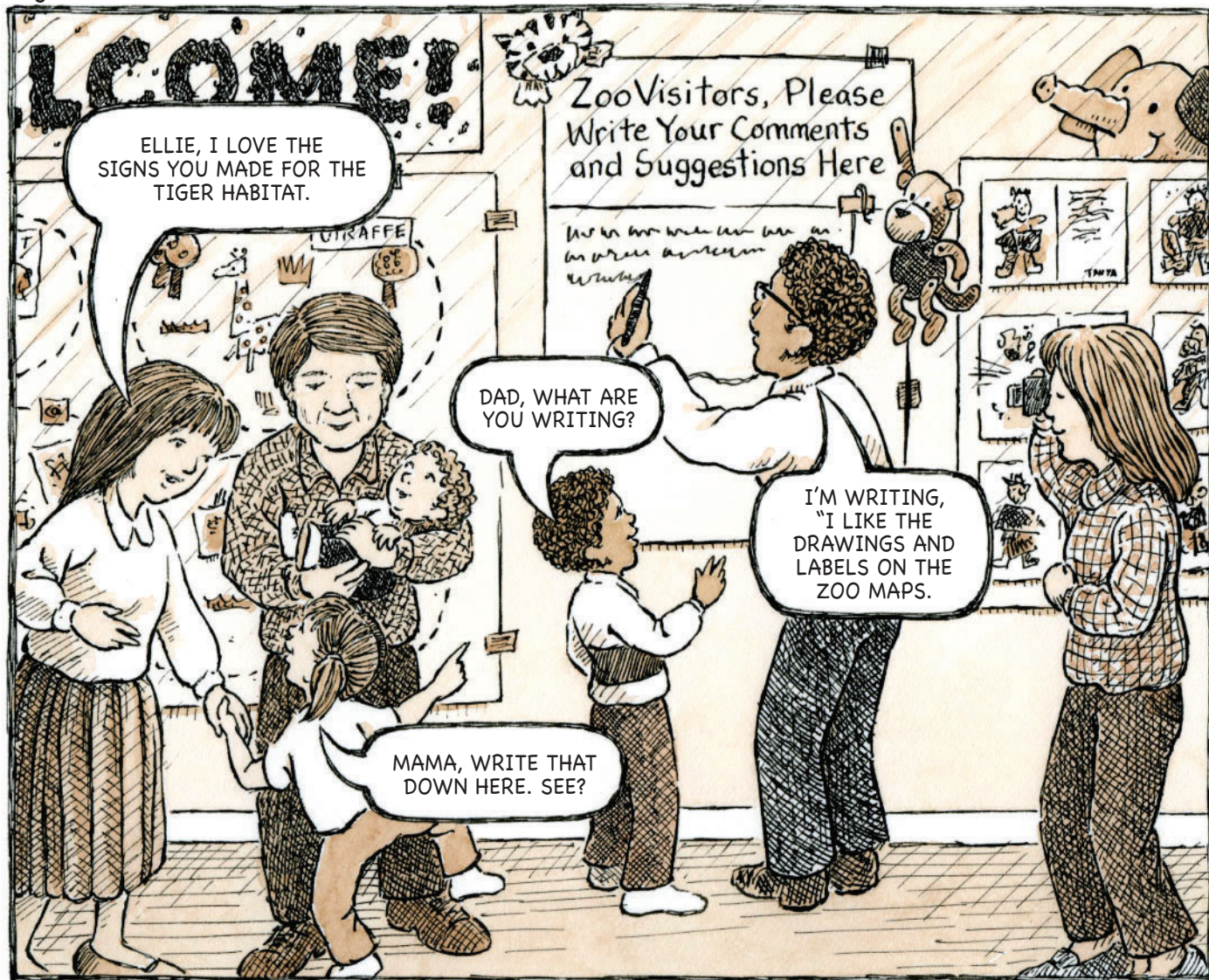
Use anti-bias practices

Follow up on the invitations with each family. Make sure everyone feels welcomed.

(EL) Ask a staff member or volunteer to translate the words on the invitation into each family’s home language.

WELCOME FAMILIES

The children did a great job welcoming their families to the zoo. We had set aside some space on the documentation panel for parents and family members to write their own comments, and the children were very eager to have them do this.



WELCOME FAMILIES

Before the guests arrive, talk with the children about how they will greet the zoo visitors. Model for them how zoo workers might greet a visitor by saying, “Welcome to our zoo. Would you like a map?” Provide opportunities for children to practice greeting each other so language skills and social norms are reinforced.

As families arrive, have children greet their families and show them the documentation panel. Gather families together and conduct the ribbon-cutting ceremony, then serve refreshments. For more information about helping families feel welcome, read the Teacher Workshop on page 69.

ASSESS Create documentation

Take photos of children and families during the event. These photos can be used later to create documentation panels and posters.

Invite parent and family participation

Invite parents and families to contribute their thoughts and ideas to the documentation panel. For example, you could include space for “zoo visitors” to write their comments on a poster or in a guest book.

Next, the families enjoyed some refreshments while I passed around the *Family Talk* forms. These forms, along with the *Discussion Posters*, stimulated conversations about the zoo unit. This was a good way to include families in the assessment process.



The posters helped the children recall details about what they had learned.



Encourage conversations

Distribute *Family Talk*, pages 57 and 58. Explain to families and children that these questions are meant to develop conversations with children. Children can discuss what they have learned about zoos and animals. Collect the pages at the end of the event. Conversations such as these are especially important for English learners.

ASSESS Assess individual children

Add the *Family Talk* pages to children's individual portfolios.

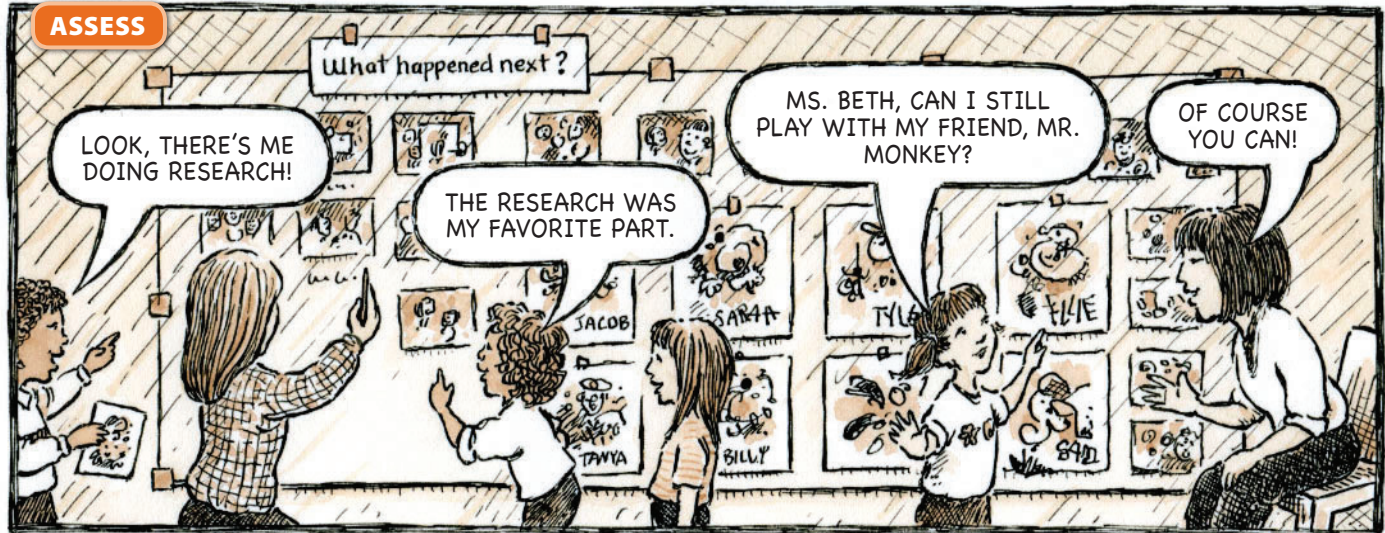
EL Be sensitive to family members who may not feel comfortable reading and writing English in front of their children. If possible, provide a translation of the questions and encourage families to talk with their children in their home language. (A Spanish translation of *Family Talk* is provided on page 58.)

Use *Discussion Posters* to help stimulate conversation

If children have difficulty responding to the questions, use the set of *Discussion Posters* to review the unit with the children and their families. Encourage children to point to the pictures to help them express what they would like to say.

ASSESS AND REFLECT

Over the next few days, Jenny and I created a display that showed the sequence of events from the entire unit. We invited the children to dictate captions for the photos and illustrations.



When Jenny and I sat down to reflect on how the unit had progressed, we both felt pleased that the children had been able to learn and understand such a variety of concepts about zoos and animals.



ASSESS AND REFLECT

Invite children to discuss the experiences they had during the unit. Ask open-ended questions, such as, "What happened at our grand opening?" Write down children's responses and use this documentation to create a display panel.

LANGUAGE AND LITERACY

Learning to sequence (arrange in order, from first to last) is an important cognitive skill. Sequencing also helps children understand and use words such as

- first
- next
- before
- after
- then
- last

Sequence the unit

Discuss with the children each of the events of the unit in sequence. Create simple sketches or use photos you have taken during the unit. Invite the children to put the images in the correct order.

ASSESS Assess individual children

Use the *Child Observation Form* to assess individual children's learning. Collect items for children's portfolios such as

- dictated words and sentences
- photos of the event
- *Family Talk* pages

Develop Children's Reflections and Interests

Use Documentation to Inspire Reflection

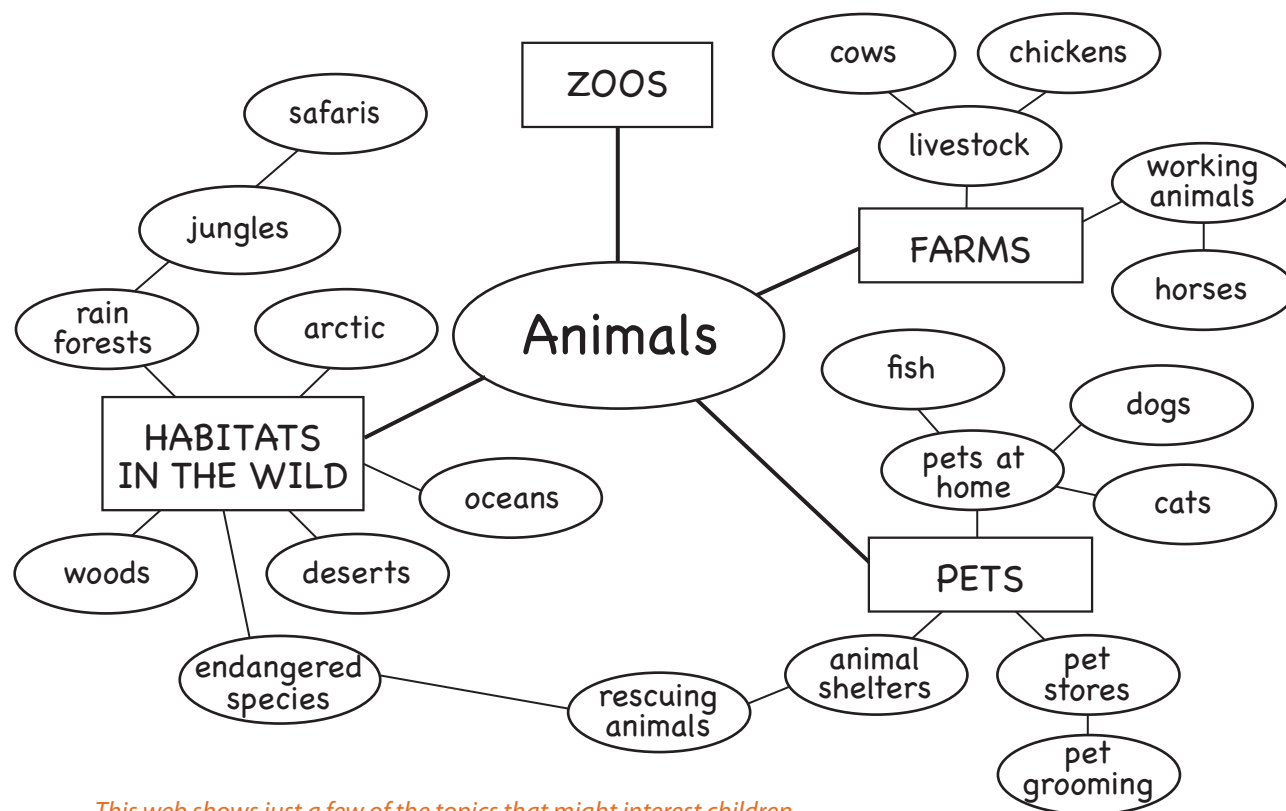
After the unit is over, continue to create opportunities for children to study the documentation panels and talk about what they did and learned. For example, invite a teacher from another classroom to view the panel. Encourage children to use the documentation to explain to their visitor what they did, how they did it, and what they learned. When children make statements such as, "We added a pond to the habitat so the polar bears could go swimming," it shows an awareness of the concepts and reasoning behind their actions.

Write down children's statements that illustrate self-reflection and add them to the panel. In this way, children are encouraged to practice metacognition, to "think about thinking," and continue to deepen their learning.

For more information about documenting children's learning, read the article on page 73.

Discover Other Emergent Interests

Learning about zoos and wild animals may inspire children's interests in many other related topics and themes. Look for clues to these interests in children's dramatic play. Children may begin pretending they are animals in a pet store, on a farm, or in an aquarium. Any of these interests may lead to a new curriculum unit that expands and builds upon what the children have learned during the *Zoo* unit.



This web shows just a few of the topics that might interest children.

Extend Learning through Field Trips

Field Trips

A trip to a zoo, wildlife park, or farm is a great follow-up to this unit, even if children have already visited such places earlier in the year or unit. A field trip at the end of the unit gives children an opportunity to compare the zoo they created with a real zoo or animal habitat. To make the most of the each field trip experience, use the Field Trip Planning Guide below.

FIELD TRIP PLANNING GUIDE: THE ZOO

Before the Trip

When planning a field trip to a zoo, wildlife park, or farm, visit the setting in person ahead of time. For example, if you are visiting a farm that is inexperienced with such field trips, discuss with the farmer the goals for the field trip and what you hope children will learn from the visit. Discuss safety concerns as appropriate and remind the farmer about children's length of attention and the opportunity to have sensory experiences in a safe setting.

During the Trip

Zoos and wildlife parks generally have many exhibits, so it is important to decide in advance the focus for the visit. Learning opportunities are more powerful when they are focused and directly related to the children's experience, so choose a small number of exhibits that most closely match the children's interests and experiences. Organize children into small groups and brief adult supervisors with your goals for learning and suggested questions that will reinforce the learning.

Suggested questions:

- What do you see in the animals' home?
- Why do you think they need _____?
- How does the zookeeper look after the animals?
- Do the animals like to be together or by themselves?
- What are the animals doing?
- Do you think the animals like living in the zoo?
- Point out signs and ask, What do you think the sign says?
Why do you think the zoo has such signs?

If possible, take photos during the trip and take notes about children's interests and questions.

After the Trip

As a class, write a thank you letter. Ask children, "What did you like about our visit to the _____?" Record and post their responses and add them to the letter. Have children decorate the letter with stickers or drawings.

Create documentation of the visit, such as a poster or photo album. Encourage children to dictate sentences and stories about the field trip.

FAMILY LETTER

Dear Family,

Our class has started a unit called *The Zoo*. During this unit, your child will have many valuable learning experiences. Your child will

- work with others to solve problems
- role-play wild animals and zoo workers
- learn about animals and zoos
- develop language and literacy skills

We will be using a teaching method called “Pre-K Storypath.” This method uses children’s natural enthusiasm for pretend play to create important learning opportunities.

SAVE THE DATE! At the conclusion of the unit, we will invite you to visit our pretend zoo. The event will take place on _____ from _____ to _____. We hope to see you there.

Sincerely,

Please complete and return to school by: _____

Child’s name: _____

Does your child have animal allergies? _____

Has your child had the opportunity to visit a zoo, wildlife park, or farm? _____

Do you have pets and does your child help care for the pets? _____

Do you have a pet that would be able to handle a visit to the classroom during the unit? _____

Does anyone in your family work with animals? If so, would that person be willing to visit our class and talk about the job? _____

Thank You!

CARTA A LA FAMILIA

Querida familia:

Nuestra clase ha comenzado una unidad llamada *El zoológico*. En esta unidad, su niño tendrá muchas experiencias valiosas de aprendizaje.

Su niño:

- trabajará con otros niños para resolver problemas
- representará animales salvajes y trabajadores del zoológico
- aprenderá acerca de los animales y de los zoológicos
- desarrollará destrezas de lenguaje y de lectoescritura

Usaremos un método de enseñanza llamado "Pre-K Storypath". Este método usa el entusiasmo natural que los niños tienen por jugar, creando así oportunidades importantes de aprendizaje.

¡TENGA PRESENTE LA FECHA! Al terminar la unidad, los invitamos a asistir a nuestra representación del zoológico. El evento tendrá lugar el _____ de las _____ a las _____. Esperamos verlos.

Sinceramente,

Por favor rellene y devuelva a la escuela a más tardar el día: _____

Nombre del niño: _____

¿Es alérgico su niño a los animales? _____

¿Ha visitado su niño un zoológico, un parque de vida salvaje o una granja?

¿Tiene usted mascotas y ayuda su niño a cuidarlas? _____

¿Tiene alguna mascota que sea lo suficientemente dócil como para llevarla al salón de clases durante la unidad? _____

¿Trabaja alguien de su familia con animales? Si es así, ¿podría esa persona visitar nuestro salón de clases y hablar acerca de su trabajo? _____

¡Gracias!

PLAY OBSERVATION FORM

Make multiple copies of this form and use it for planning purposes and to record themes, problems, and ideas that emerge from children's play.

Date and time of observation: _____

Who participated?	In what role?

Zoo vocabulary used	Interesting quotes

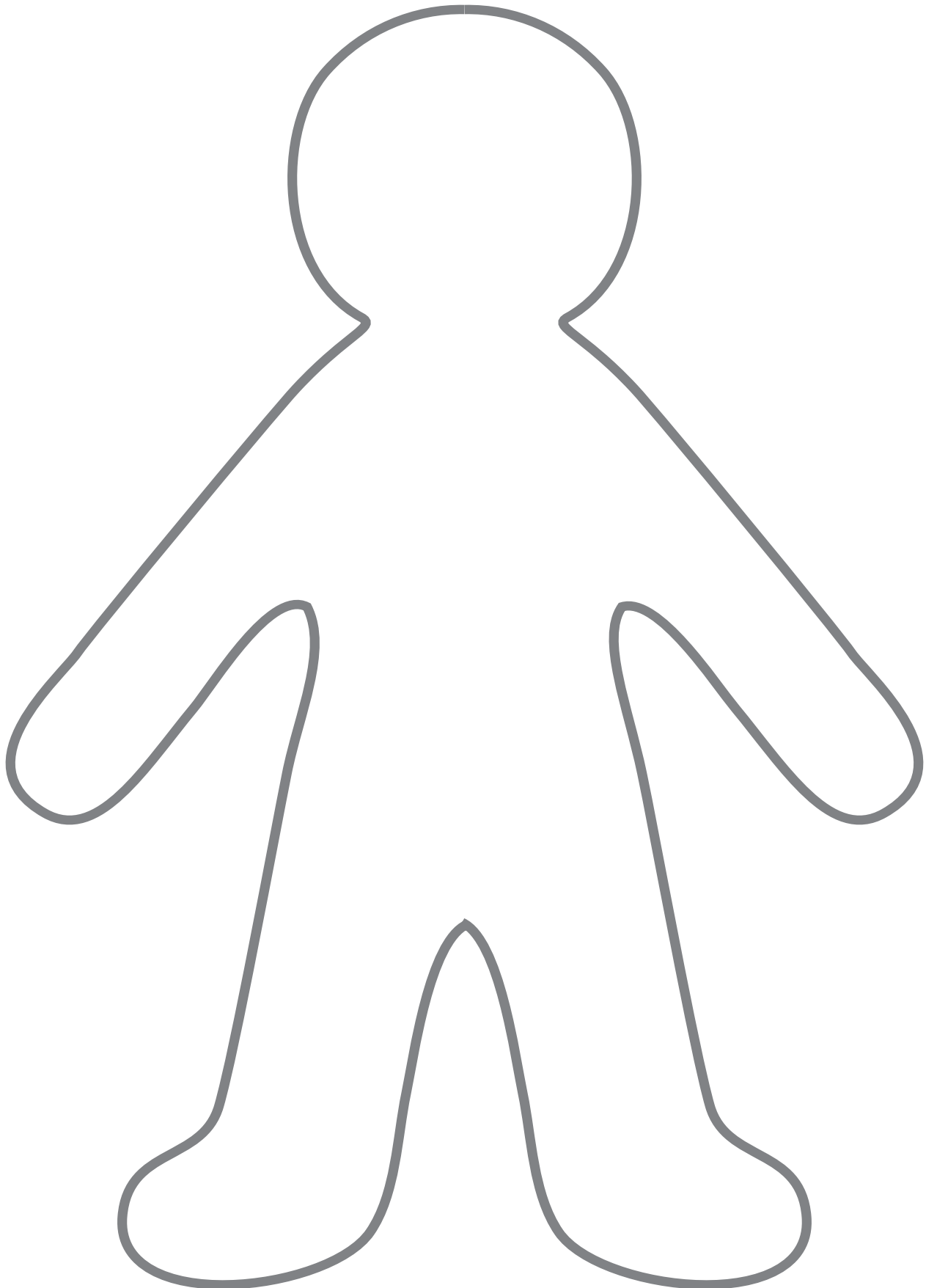
Conflict/problems observed	Resolution?

Roles, ideas, or concepts in which children were especially interested

Gaps in children's knowledge or understanding

Recurring themes or ideas

PAPER FIGURE



FAMILY TALK

Please have a conversation with your child about his or her experience during our zoo unit. Please write your child's answers to the following questions.

Child's name: _____

1. What animal or animals do you like best? Why? _____

2. What did you learn about animals? _____

3. What did you do to learn about animals? _____

4. What do zookeepers do? _____

5. What do veterinarians do? _____

6. What was your favorite part about making your own zoo? _____

CONVERSACIÓN FAMILIAR

Por favor converse con su hijo(a) acerca de su experiencia con la unidad sobre los zoológicos. Escriba las respuestas de su hijo(a) a las siguientes preguntas.

Nombre del niño o de la niña: _____

1. ¿Qué animal o animales te gustan más? ¿Por qué? _____

2. ¿Qué aprendiste sobre los animales? _____

3. ¿Qué hiciste para aprender sobre los animales? _____

4. ¿Qué hacen los cuidadores? _____

5. ¿Qué hacen los veterinarios? _____

6. ¿Qué fue lo que más te gustó de hacer tu propio zoológico? _____

The Importance of Pretend Play

“You be the mommy and I’ll be the baby,” one young child says to another and the pretending begins. Pretend play, also known as “dramatic play” or “fantasy play,” is universal and timeless. All children enjoy pretending.

Pretend play benefits young children in many ways. The process of imagining that one thing can represent another—such as pretending that a bowl is a hat or a spoon is a magic wand—challenges children to think abstractly. The greater the difference between what is imagined and what is real, the more abstract thinking is involved.

Through pretend play, children also gain social skills and confidence. For example, when a child tucks a towel in his collar and pretends he is a caped superhero, that child is able to confront and overcome inhibitions and fears in ways he probably would not be able to achieve without the benefit of pretend play.

“...fantasy play is the glue that binds together all other pursuits, including the teaching of reading and writing skills.”

—Vivian Paley, *A Child’s Work: The Importance of Fantasy Play*

Research shows that pretend play helps prepare children for academic success. As Vivian Paley writes in her book, *A Child’s Work: The Importance of Fantasy Play*, “...fantasy play is the glue that binds together all other pursuits, including the teaching of reading and writing skills.”

“The Case of Brain Science and Guided Play: A Developing Story,” an article by Brenna Hassinger-Das, Kathy Hirsh-Pasek, and Roberta Michnick Golinkoff, presents behavioral research that establishes relationships between children’s play and development in several areas, including language, executive functions, mathematics and spatial skills, scientific thinking, and social-emotional development. One reason that play might be such a valuable pedagogical tool is that it features the precise contexts that facilitate learning.

Young Scientists

Imagine a young scientist carefully examining the contents of a container, studying the texture and colors of his sample. Do you imagine this experiment taking place in a university laboratory filled with expensive equipment? No, this young scientist is a four-year-old sitting in his school's sandbox, examining the contents of his bucket. When young children explore their world, they are questioning, observing, and collecting information in many of the same ways that scientists conduct research in their labs.

We can teach children three basic steps to conducting their own scientific research. These steps are:

1. Asking questions
2. Researching the answers
3. Recording new information

Asking questions may happen spontaneously or can be part of a formal discussion. For example, if children observe a squirrel climbing a tree, they may immediately ask, "How does that squirrel get up that tree so fast?" Or you could gather children in a group and invite them to ask you their questions about squirrels. Write down children's questions so you can refer back to them later.



Photo: Courtesy of Leslie Morrison.

Young children can conduct research through hands-on exploration.

When young children explore their world, they are questioning, observing, and collecting information in many of the same ways that scientists conduct research in their labs.

Young children are able to actively participate in researching the answers to their questions when they are given the opportunity to use their senses through hands-on exploration. Children can use their eyes to observe, their ears to listen, their noses to smell, their hands to touch and, if appropriate, their mouths to taste. For example, if children have questions about squirrels, they can take a walk outdoors, observe the squirrels in the neighborhood, and listen to the sounds the squirrels make as they climb trees. These sensory experiences allow children to become fully engaged in exploring the topics that interest them.

Young children can also actively participate in the process of recording the information they have gathered. Even before they learn to read and write, children can draw or sculpt what they observe, help take photos or make videos of the subjects that interest them, or dictate words and sentences that an adult writes for them.

After children have collected information, provide opportunities for them to reflect on what they have learned. Review their documentation together and discuss whether the information they gathered answers the questions they originally asked. Encourage children to develop new questions that challenge them to think more deeply about the subjects that interest them.

Listening to Children

Teachers are accustomed to thinking carefully about what they say to children. Good communication means using language that young children can fully understand. Equally important is taking time to listen to young children. Being a good listener means giving children our full attention and actively encouraging them to express their feelings and ideas.

Children can sense when you are really listening to them by watching your facial expressions, posture, and body language. When engaging a child in meaningful conversation, sit or kneel at the child's level. Turn toward the child, making eye contact, if appropriate. Lean forward to indicate your interest in hearing what the child has to say.

Being a good listener means giving children our full attention and actively encouraging them to express their feelings and ideas.

If a child seems reluctant to speak, encourage the child by asking an open-ended question about the child's interests, such as, "What is your favorite animal?" After the child speaks, demonstrate that you were listening by repeating or paraphrasing what the child has said. Then follow up with another question, one that invites further discussion. For example, if the child says that she likes penguins, you might say, "So you like penguins. What do you like about them?" or "Why are penguins your favorite?"

Sometimes it's hard to resist the temptation to talk about our own interests and experiences. If a child likes penguins, for example, we may want to tell the child about a time we visited an aquarium or zoo and observed penguins. But think carefully about your goals for the child and your goals for the conversation. If your primary goal is to model for the child the give-and-take of social conversations, then it makes sense for you to share information about your own experiences. But if your primary goal is to gather information about the child's interests, ideas, and feelings, it makes more sense to refrain from telling your own story and, instead, ask additional open-ended questions that will further engage the child.

Asking Open-Ended Questions

A question such as “What color is your hat?” does not encourage learning as much as “Why do people wear hats?” This is because “What color is your hat?” is not an open-ended question. An open-ended question is a question that cannot be answered with just one word, such as “yes,” “no,” or “blue.”

An open-ended question has more than one correct answer. Open-ended questions promote creativity, problem-solving skills, cognitive growth, and seeing things from another point of view.

An open-ended question has more
than one correct answer.

Teachers can use open-ended questions to guide and extend children’s play. They should be used sparingly and timed carefully. If a child is building a tower with blocks and progressing well, there is no need to ask any questions. But if the tower tips over and the child asks for help, the teacher might ask, “Why do you think the tower fell?” and “What could we do to make the tower stronger?”

EXAMPLES OF OPEN-ENDED QUESTIONS:

“What do you think about . . . ?”

“What would happen if . . . ?”

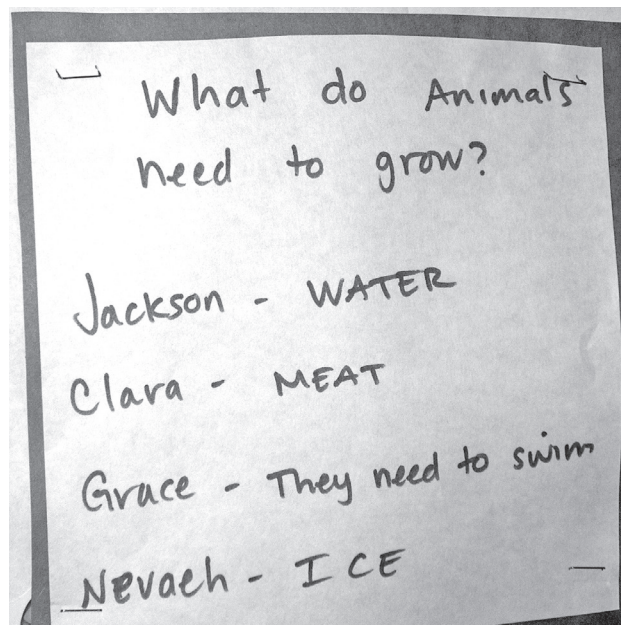
“What else can we try?”

“Why do you think that happened?”

“How did you . . . ?”

“What did you notice about . . . ?”

“What can you tell me about . . . ?”



Children enjoy seeing their words in print.

Photo: Courtesy of Leslie Morrison.

Parents as Classroom Volunteers

“My mommy is here! My mommy is visiting me at school today!”

Few events are more exciting for young children than having one of their parents spend time with them at school. One way to encourage these visits is to invite parents to volunteer as classroom helpers.

When parents volunteer, everyone wins. Parents become better informed about their child’s education. Teachers benefit from the expertise and assistance parents offer. Children gain a deeper sense of security and trust when they see their parents and teachers working together.

Parents may feel reluctant to volunteer if they are not sure what will be expected of them. To encourage parents to become involved, make a written list of specific volunteer roles and tasks, such as reading stories, assisting with snow pants and boots, or filling paint cups. If parents’ work schedules make it difficult to volunteer, make a list of tasks parents can do at home, such as repairing or mending toys.

**Children gain a deeper sense of security
and trust when they see their parents
and teachers working together.**

During a parent’s visit, clear communication between teacher and parent will help create a positive experience. For example, when parents visit their child’s classroom, the child may feel confused about who is in charge: is it the parent or the teacher? Children are usually unable to express their confusion with words, yet they may feel insecure. They might break rules or have a tantrum as a way to find out who is in charge. As a general rule, it helps to explain to parents that the teacher is in charge during formal, large-group activities and the parent is in charge during informal, small-group activities. Establishing this “chain of command” with parent volunteers ahead of time can help make the volunteering experience a success.

EXAMPLES OF PARENT VOLUNTEER ROLES:

- Assist with serving snack
- Read stories to small groups
- Take story dictation
- Assist with field trips
- Organize a holiday party
- Wash or repair toys

Making Maps, Charts, and Graphs

Sometimes words alone are not enough. While listening to directions to a friend's house, we might reach for a scrap of paper and draw a quick map. When assembling a new bike or a child's toy, we might study the diagram in the instructions, to see exactly how the pieces will fit together. Using images or symbols to express or understand a new concept requires visual literacy. Visual literacy is the reading and writing of visual texts, such as maps, charts, and graphs.

Visual messages are everywhere, on street signs, on cereal boxes, and certainly on television and the internet. Even very young children can begin to make meaning of symbols, such as a stop sign. Developing visual literacy skills is an important part of both school success and practical life skills.

Maps

Maps are a part of everyday life. The foundations of map reading can be developed in early childhood in the same way that the foundations of reading print are developed through an early literacy curriculum—through exposure, modeling, and hands-on, meaningful activities. Even very young children can learn and benefit from map skills.

To read and understand a map, a child must visualize an area from a bird's eye view, a perspective that is very difficult for young children to imagine. Young children are better able to grasp the concept of a map when we describe it as “a tiny, flat world.” A globe can be described as “a tiny, round world.”

Expose children to map concepts in the same way you expose children to concepts of print. Have maps and a globe available in the classroom and model how they are used in the context of daily conversations. Include map books in your book corner and place a few road maps in your block area, next to the toy cars and trucks. During a zoo unit, print out illustrated maps from a variety of zoo websites and post these on your classroom wall.

By continuously exposing children to map concepts, children will gradually acquire map skills in the same way that exposure to print concepts helps children acquire early literacy skills.

CHILDREN'S BOOKS ABOUT MAPS AND GRAPHS:

Me on the Map by Joan Sweeny

Mapping Penny's World by Loreen Leedy

Bar Graphs by Vijaya Khisty Bodach

Charts and Graphs

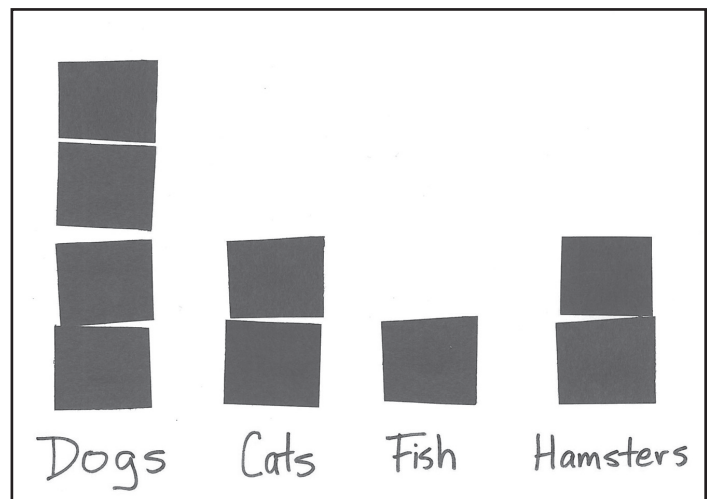
Introducing young children to creating and reading simple charts and graphs is a great way to promote visual literacy. For example, a two-column chart allows children to compare and contrast two things, such as comparing dogs to cats. In small groups, teachers and children can create a chart together as the children dictate words and sentences for the teacher to write on the chart. The chart format works well for very young children because they can see the characteristics of the two animals side by side, and teachers can also add simple sketches that help illustrate the text.

Visual literacy is the reading and writing of visual texts, such as maps, charts, and graphs.

Young children can also participate in the creation and reading of simple graphs, such as a bar graph. A bar graph works well with young children because it requires very little text to convey meaning. For example, a bar graph illustrating the class's favorite animals could include pictures of each animal in addition to or instead of text. Children can create the bars by adding stickers or gluing squares of paper.

To introduce children to the concept of bar graphs, have them create stacks of blocks that represent each bar on a bar graph. For example, if you are creating a favorite animal graph, have each child place a block next to a picture or toy that represents his or her favorite animal. Then stack the blocks in towers to show how the most popular animal has the highest tower.

Both charts and graphs are important tools for collecting and displaying data, tools that children will frequently use in school. Exposing children to these visual literacy experiences at a young age helps prepare them for academic success.



Each child's opinion is represented by one square on the bar graph.

Story Dictation and Dramatization

When a child tells a story and an adult writes down what the child says, this is called “story dictation.” Here are some examples of the kinds of stories children might dictate during a unit about animals.

Koala bear. I saw it on TV. They was feeding it. I want to pet it.

The lion has the big teeth and roars. The loud, loud roar. The lion gets the food and eats it. Then it sleeps on the ground.

My story is about a beautiful swan. It was really a princess. The magic turned her into a swan. She stayed a hundred years and then she broke the spell.

It is important to allow children to follow their own interests, even when their interests go in a direction that is different from the planned curriculum. Some dictation activities can be related to the curriculum unit, such as creating a book that describes a class trip to a zoo. But some story dictation time should remain open-ended, allowing children to create stories purely from their own imagination.

**Allow children to follow their own interests,
even when their interests go in a direction that is
different from the planned curriculum.**

Children become especially engaged in dictating their own stories when they know that their stories are going to be dramatized or “acted out” in a group. Dramatizing stories is a hands-on, active experience that is inclusive, because it allows everyone in the group to participate in some way. The pleasure and excitement of dramatizing stories also inspires children to create additional stories, as they learn how words can create actions and communicate ideas and feelings to others.

The best time for dramatizing stories is usually a large-group gathering near the end of the school day. When everyone is gathered, invite the author of the first story to stand up. You may want to allow the author to choose a role in his or her own story, and then assign the other roles in the story randomly.

Read the story aloud, pausing after each sentence to allow the children “on stage” to act out the events and actions. Invite children to move their bodies to show what is happening in the story.

The About-the-Zoo Story

Once upon a time my mama took me to the zoo and Ella came with me and then we didn't go on the merry-go-round because it wasn't on. The Christmas lights were on. Well, we go seed animals then we drove back home and then we ate dinner and then we went to bed. And the next day it wasn't raining and we went back to the zoo.

The End

(Well, we actually didn't go back to the zoo.)

Observing Children's Play

Observation is an important tool for assessing and understanding young children. By observing children's play, teachers can discover children's interests, learn about children's personalities, assess development, and identify areas that need practice. The challenge is observing children from an objective and unbiased perspective. It's difficult to avoid using our own assumptions, expectations, and feelings to interpret what we are observing.

Use the following questions to help guide your observations.

- What am I seeing?
- What does this child know how to do?
- What does this child find difficult or frustrating?
- What emotions does this child seem to show, through specific actions, language, and facial expressions?
- What does this child seem to want?
- What is this child trying to accomplish?

As you observe, document what you are seeing by writing short, descriptive phrases and sentences. Focus on one child at a time. For example, "the child pulls on the doll's leg" is descriptive and objective. But "the child is mean to the doll" is not. Try to focus only on observable facts. Describe the actions you see. Write down specific words and phrases the child uses.



Photo: Courtesy of Leslie Morrison.

Take a moment to observe children every day.

EXAMPLES OF OBJECTIVE SENTENCES:

"The child places a square block on top of a rectangular block."

"The child says to another child, 'Go away!'"

"The child hits the clay with her fist and frowns."

"The child opens the book in her lap and points her finger at one of the illustrations."

"The child looks up at the teacher's face and smiles."

Open-Ended Props and Playthings

Antoinette Portis's award-winning picture book, *Not a Box*, captures the excitement of playing with an ordinary cardboard box. In this story, a small rabbit uses a box to create a racecar, a mountain, a robot, and a variety of other imaginative ideas. *Not a Box* reminds us that an empty cardboard box is an invitation to pretend.

Open-ended materials, such as cardboard boxes, encourage creativity and problem solving. An “open-ended” object or toy is something that can be used in more than one way. In pretend play, a box may become a boat, a rug may become an island, and a washcloth may become a flag. Pretending with open-ended materials encourages complex and creative thinking because it allows children to imagine their own possibilities and make their own choices.

When children pretend to be zookeepers and play zoo, all that is really needed is a few stuffed animals, some bowls or containers for “food,” and a few cardboard boxes in a variety of sizes. There's no need to purchase toys or other costly items offered in catalogs and stores.



Photo: Courtesy of Leslie Morrison.

Wooden blocks are another example of open-ended materials.

Open-ended materials, such as cardboard boxes,
encourage creativity and problem solving.

If you do have a small budget for classroom materials, look for interesting items at yard sales and thrift stores. For zoo play, some big rubber boots, aprons, garden hoses, and dish pans make great props. These items might spark a child's imagination in new and unusual ways.

Welcoming Families

It feels good to be recognized and greeted by name. Create a welcoming atmosphere in your classroom by greeting children and adults by name each time they arrive. If a child's family speaks a language other than English at home, learn how to greet family members in their home language.

A written invitation is not enough to ensure families are aware of the event and have included it in their plans.

When scheduling a family event at school, choose a day and time that will be most convenient, especially for working families. If possible, survey families ahead of time regarding several different dates and times. Provide a meal and transportation to make your event more convenient. Use more than one method to communicate with families about a school event. A written invitation is not enough to ensure that all families are aware of the event and have included it in their plans. Phone calls and face-to-face conversations are important follow-up measures.

At the event, greet family members and provide name tags. Parents and family members usually feel most comfortable when they are given a specific task or role. Invite parents to look at children's art on display or browse through children's storybooks.



Photo: Courtesy of Leslie Morrison.

A warm greeting helps parents feel welcome in your classroom.

Integrating Science Activities into the Pre-K Curriculum

At the preschool level, science activities help children develop observation and communication skills and gain new knowledge about the world around them. Most young children have a natural sense of curiosity about scientific topics, such as their bodies (biology), animals (zoology), trees and plants (botany), and how things work (physics and engineering).

The best way to build science activities into your curriculum is to focus on the science that already exists in the activities and topics that interest children. For example, if children are interested in baking cookies, use a cooking project as an opportunity to explore the topic of temperature. Invite children to develop a list of questions and predictions about how heat will affect the cookie dough. Conduct research by baking different batches of cookies at different temperatures. Then invite children to draw, write, and talk about what they observed over the course of the experiment.

Another way to develop children's interest in science is to set up a science center in your classroom. Put out materials that will inspire and aid exploration, such as magnifiers, scales, and magnets. Include picture books related to scientific topics as well as writing and drawing materials for children to use to record their ideas and observations. You may also want to create a space on a shelf for a science notebook for each child. Encourage children and their families to contribute items to the science area, such as a bird's nest found on the way to school. Remember to regularly rotate the items in the science area, so there are always new things to spark conversations.

Don't be afraid to challenge children to develop specialized knowledge in the areas that have captured their interest and curiosity. For example, if a child develops a passionate interest in birds, help the child gain knowledge that goes beyond the basic preschool-level understanding of birds. In addition to learning that birds build nests and lay eggs, guide the child to carefully record and observe bird behavior in their neighborhood, exploring the differences between species of birds, their sizes and colors, songs and calls, and even their migratory patterns. Invite experts to visit your classroom, such as an ornithologist, to give a brief presentation on a science topic.

Keep in mind that our goal for young children is to teach them the learning processes that they can use their whole lives. These processes include learning to

- ask questions
- form hypotheses
- make predictions
- observe details
- collect and record information
- evaluate and reflect on new information

Be sure to model these processes yourself. For example, if a child asks you a question and you don't know the answer, demonstrate how you use resources, like books and the internet, to find the answer. When children are exposed to these important research strategies, they take an important step on the path to lifelong learning.

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Intentional Teaching

The word “intentional” means to act with a goal in mind. Intentional teaching is purposeful, carefully planned, and thoughtfully implemented with early learning standards and developmentally appropriate practices in mind.

Intentional teaching happens when teachers

- include children in the planning process, welcoming their ideas and observing their interests
- plan activities that support specific early learning standards
- incorporate play into the daily schedule and use play as an opportunity to extend and support learning
- use a variety of instruction strategies, balancing large group, small group, and individual activities.

Teachers seeking to become more intentional in their teaching practices will benefit from looking closely at both how they plan and prepare curriculum activities and how they interact with children during those activities.

Planning and Preparation

The intentional teacher establishes consistent daily routines that allow for a mix of activities. A predictable routine helps children feel secure and confident because they know what to expect. A consistent routine also provides teachers with a framework for planning that allows them to create a balance between child-directed play and teacher-directed group activities.

The intentional teacher uses early learning standards for planning curriculum. Early learning standards are seen as a tool that can help teachers form developmentally appropriate expectations for young children and provide a framework for authentic assessment.

Interactions Between Teachers and Children

The intentional teacher supports children’s learning by posing thoughtful questions and offering evaluative feedback. Open-ended questions stimulate children to think more deeply about what they know. Evaluative feedback goes beyond praise and affirmation; evaluative feedback is specific and includes observations of what the child has accomplished as well as questions and comments that help the child overcome obstacles.

One of the values of intentional teaching is that it encompasses both developmentally appropriate practices as well as standards-based instruction. In some ways, “intentional teaching” is the best of both worlds, bringing together the valued traditions of the early childhood professional community with accountability and assessment.

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Enhancing Vocabulary Development at Storytime

Research shows that exposure to rich instructional strategies during storybook reading supports preschoolers' vocabulary acquisition and comprehension skills. In particular, a longitudinal study by Molly F. Collins of the Erikson Institute titled "Less is Less: How We Underestimate Preschoolers' Vocabulary and Comprehension Skills," suggests that children benefit most when teachers briefly pre-plan storytime, identifying the big ideas and important vocabulary words in the storybook they are about to read. A few moments of thoughtful planning allow teachers to develop more complex questions that challenge children to think more deeply and acquire new vocabulary.

As they read aloud, teachers should resist the temptation to substitute easier words for more complex ones. Slow down and provide the opportunity for children to hear the new word in context. Use the illustrations to support the meaning of unfamiliar words. For example, if the unfamiliar word is *doffed*, read the line from the story ("The lion doffed his hat.") and point to the lion's hat as you read the word *doffed*.

Collins' research also supports the concept of "tucking in" definitions of words as you read, rather than interrupting the story to teach a word's meaning directly. For example, instead of pausing to ask the children, "Does anyone know what *doff* means?" the teacher briefly mentions, while pointing to the illustration, "*Doff* means to take off something you are wearing." Meaning can also be reinforced by the use of gestures or synonyms.

Afterwards, find opportunities to use the new word in other contexts. For example, the teacher may comment, "When you arrived at school, you doffed your coat and hung it on a hook." Be sure to return to the original storybook multiple times. Depending on children's interests, you may want to explore the book over the course of a week or two.

Vocabulary and comprehension research supports the concept of intentional teaching. When teachers ask themselves, "What do I want children to know?" and approach storytime with specific goals and objectives in mind, their teaching is enhanced.

RESOURCES

Collins, Molly F. *Less is Less: How We Underestimate Preschoolers' Vocabulary and Comprehension Skills*. 2009. <https://www.erikson.edu/research/less-is-less-how-we-underestimate-preschoolers-vocabulary-and-comprehension-skills>.

Goldstein, Peggy A., and Kathleen M. Randolph. "Preschool through Grade 1: Word Play: Promoting Vocabulary in Learning Centers." *Young Children* 72, no. 1 (March 2017): 66–73. <https://www.jstor.org/stable/90001492>.

Hoffman, Jessica L., Molly F. Collins, and Judith A. Schickedanz. "Instructional Challenges in Developing Young Children's Science Concepts: Using Informational Text Read-Alouds." *The Reading Teacher* 68, no. 5 (February 2015): 363–372. <https://doi.org/10.1002/trtr.1325>.

Snell, Emily K., Annemarie H. Hindman, and Barbara A. Wasik. "How Can Book Reading Close the Word Gap? Five Key Practices from Research." *The Reading Teacher* 68, no. 7 (April 2015): 560–571. <https://doi.org/10.1002/trtr.1347>.

Documenting Children's Learning

A casual observer in an early childhood classroom may not immediately notice the differences between a documentation panel and a traditional bulletin board. On closer inspection, the differences are significant.

One of the most important differences between a documentation panel and a bulletin board display is that a documentation panel exhibits the children's work at different stages of completion and learning, while a bulletin board traditionally features only finished work. This difference is significant because a documentation panel communicates to the observer the entire learning process. A documentation panel includes samples of children's work at the beginning of the unit, in the middle, and at the end of the unit or project. The opportunity to examine the entire learning process is especially valuable to children, because it helps them reflect upon their own learning, review important concepts, and participate in making plans for future learning.

Another important difference between a documentation panel and a traditional bulletin board is that a documentation panel usually includes a wide variety of items and many different formats, while a traditional bulletin board usually only includes children's artwork. A documentation panel may also include samples of children's art, but will probably also include

- comments written by teachers explaining the process involved in developing the unit or project
- transcriptions of the children's observations and conversations
- photographs of children engaged in learning activities
- sentences and labels dictated by children
- children's emergent writing samples

The benefits of displaying these items on documentation panels are many. When children view the panel, they are influenced by each other's work and ideas. The result is greater collaboration between children. The documentation panels also demonstrate that the adults in the classroom respect and value children's work and encourage children to take responsibility for their own learning.

Documentation panels benefit teachers by providing a space to collect, organize, and reflect upon children's learning. This process helps teachers plan and make intentional decisions. The documentation panels also support assessment.

One of the most valuable benefits of documentation panels is that parents become deeply aware of their children's experience at school. For many parents, viewing a documentation panel is their first realization that their young child is capable of active learning. This impact is enhanced when parents' comments on their children's work is also incorporated into the panels.

RESOURCES

Ashbrook, Peggy. "The Early Years: Getting Deep with Documentation." *Science and Children* 54, no. 3 (November 2016): 28–29. <https://www.jstor.org/stable/24893796>.

LeeKeenan, Debbie, and Iris Chin Ponte. "Meaningful Assessment and Documentation: How Directors Can Support Teaching and Learning." *Young Children* 73, no. 5 (November 2018).

Katz, Lilian G., and Sylvia C. Chard. "The Contribution of Documentation to the Quality of Early Childhood Education." Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education, 1996.

Teaching Young Children Who Are English Learners

English learners, or EL, is a term that applies to children whose home language is not English. Working with preschool-age children who are English learners requires a different approach than working with older children because preschoolers are still developing their home language. Yet most early childhood teachers do not receive any specialized training that will prepare them for teaching children from linguistically and culturally diverse backgrounds. This article presents a brief summary of best practices for working with young children who are English learners.

Respect and Preserve the Child's Home Language

Young children who are English learners need to develop their home language along with English. The importance of preserving the home language is reflected in the position statement of the National Association for the Education of Young Children (NAEYC), *Advancing Equity in Early Childhood Education: A Position Statement of the National Association for the Education of Young Children*. According to this statement, early childhood programs are responsible for both promoting the acquisition of English and preserving children's home languages. Preserving a child's home language also helps to support and encourage the child's acquisition of English. A child who is developing new language skills and vocabulary in the home language is also building a greater capacity for learning English.

Work Closely with Families

One of the best ways to demonstrate respect for a child's home language is to build a close and supportive partnership with the child's parents and family. Ideally, the teachers and caregivers who work with children who are English learners also speak the child's home language. When this is not possible, the support of bilingual volunteers and family members is needed. Make sure all written materials, such as parent handbooks, are available in the family's home language.

Establish Predictable Routines

Predictable classroom routines are good for all young children, but children who are English learners, in particular, benefit from the repetition of classroom routines and rituals, such as the singing of a clean-

up song at the end of free play. As teachers lead the children through these daily routines, children who are English learners also benefit from the repetition of key words or phrases, such as, "time to eat" or "let's go inside."

Use Gestures and Visual Aids

We know that young children learn best when all their senses are engaged, and this is especially true of children who are English learners. During conversation, use gestures and visual aids, such as picture cards or puppets, to visually demonstrate what you are trying to communicate. Whenever possible, use touch, taste, and smell to help support communication. This is why mealtimes frequently offer excellent opportunities for conversation.

Create an Open and Welcoming Environment

Every time a child tries something new, there is a sense of risk. Children must feel that their mistakes are acceptable. Teachers can help create an open and welcoming environment for children who are English learners by responding to every effort a child makes to communicate with encouragement. An open and welcoming environment is also a place where communication is not rushed. Allow time for conversations to develop.

RESOURCES

www.colorincolorado.org. Colorín Colorado. A website serving educators and families of English learners in Pre-K–12.

Chapman de Sousa, E. Brook. "Five Tips for Engaging Multilingual Children in Conversation." *Young Children* 74, no. 2 (May 2019). <https://www.naeyc.org/resources/pubs/yc/may2019/five-tips-engaging-multilingual-children>.

Morland, Lyn, and Tarima Levine. "Collaborating with Refugee Resettlement Organizations: Providing a Head Start to Young Refugees." *Young Children* 71, no. 4 (September 2016): 69–75. <https://www.jstor.org/stable/ycyoungchildren.71.4.69>.

Murphy, Victoria A., and Maria Evangelou, eds. *Early Childhood Education in English for Speakers of Other Languages*. London: British Council, 2016.

National Academies of Sciences, Engineering, and Medicine. *Promoting the Educational Success of Children and Youth Learning English: Promising Futures*. Washington, DC: The National Academies Press, 2017. <https://doi.org/10.17226/24677>.

Oliva-Olson, Carola, Linda M. Espinosa, Whit Hayslip, and Elizabeth S. Magruder. "Many Languages, One Classroom: Supporting Children in Superdiverse Settings." *Teaching Young Children* 12, no. 2 (December/January 2019). <https://www.naeyc.org/resources/pubs/tyc/dec2018/supporting-children-superdiverse-settings>.

Ramirez, Naja Ferjan, and Patricia Kuhl. "The Brain Science of Bilingualism." *Young Children* 72, no. 2 (May 2017): 38–44.

Building Supportive Partnerships with Parents

An essential part of early childhood education is building strong relationships between teachers and families. The tool for building these relationships is good communication. Many teachers master half of this job: they keep parents and family members well informed about what is happening at school. But good communication goes both ways, and early childhood teachers must be as open to receiving information as they are to giving it.

Parents and family members are valuable resources to teachers because they know more about their children than anyone else. They are the source of important information about their children's routines, schedule, growth, and health. They know about what makes their children smile, laugh, and cry. They know about their family's culture, language, values, and traditions. All of this information can be enormously helpful to teachers. Teachers must earn families' trust before parents and family members will freely share this information.

Establish Trust

To set the stage for building trust and two-way communication, teachers can demonstrate in a variety of ways that they are open to receiving information from parents. Written materials, such as handbooks and newsletters, can emphasize the importance of parent and family communication. Teachers can schedule regular opportunities for home-school communication, such as weekly check-in times, phone calls, home visits, and informal or formal conferences. Teachers also demonstrate respect and understanding for families with their body language and manner during conversations with parents and family members. Taking time to listen without distraction or interruption encourages parents and family members to communicate.

Value Each Family's Cultural Background

Understanding and valuing families' cultural backgrounds is an important part of building strong relationships with families. Understanding culture means looking beyond assumptions and stereotypes. Culture influences almost everything we do. Culture shapes our values, beliefs, language, relationships, and child-rearing practices. Families may share information about culture directly, informing

teachers or school staff about important beliefs and practices. For the most part, teachers will learn about a family's culture through observation and conversation.

Resolve Conflict

Often teachers are not especially aware of a family's culture until there is a conflict between the values or practices at home and the values or practices at school. For example, suppose a child is having difficulty getting to sleep at nap time. The teacher asks the parent to send a teddy bear or soft toy to school to help soothe the child at nap time. The parent refuses.

This teacher may feel surprised, confused, and frustrated because she thinks the parent is not supporting her efforts to help the child fall asleep at school. These feelings of surprise, confusion, or frustration are good indicators that culture may be playing a role in this conflict. At these difficult times, it is more important than ever to remember that communication goes two ways. Rather than expressing her frustration to the parent, this teacher might begin asking some questions of this parent in order to find out more information about how this child functions at home. This family may have some very specific beliefs about how children should be soothed and comforted at nap time. It is likely that good communication will lead to new ideas, shared understanding, and a successful resolution to this conflict.

RESOURCES

Evans-Santiago, Bre, and Miranda Lin. "Preschool through Grade 3: Inclusion with Sensitivity—Teaching Children with LGBTQ Families." *Young Children* 71, no. 2 (May 2016): 56–63. <https://www.jstor.org/stable/ycyoungchildren.71.2.56>.

Head Start, Early Childhood Learning & Knowledge Center. "Community Engagement." <https://eclkc.ohs.acf.hhs.gov/community-engagement>.

Muhs, Mary. *Family Engagement in Early Childhood Settings*. St. Paul, MN: Redleaf Press, 2019.

Nemeth, Karen, Derry Koralek, and Kelly Ramsey. *Families and Educators: Building Great Relationships that Support Young Children*. Washington, DC: National Association for the Education of Young Children, 2019.

Child Assessment

Assessment is an important and valuable part of teaching young children. Child assessment is a process that includes documenting and evaluating the growth and progress of individual children. The assessment challenge in early childhood education is finding an assessment process that is appropriate for young children. Tools like standardized achievement tests are not developmentally appropriate for young children. The assessment of young children must be authentic, which means it must be based on the play and behaviors that spontaneously engage young children. Two important authentic assessment practices are the use of classroom observation and the creation of child portfolios.

Classroom Observation

The word “observation” means something much more than just looking. The observation of a child includes the collection of information, in the form of notes or checklists, that can be used to report on children’s growth and progress. Becoming a good observer takes time and practice, because the most useful information is collected when the observer is able to look objectively at the child and make no judgments or assumptions.

One of the uses of observation is to document the tasks and skills a child has mastered. This is useful information because it helps teachers understand what children can do and then guide children to new challenges. For documenting the mastery of specific skills and tasks, an observation checklist can be very helpful. Teachers may choose from published checklists, such as those contained in the *Child Observation Form*, or they may create one of their own, based on the goals and objectives of their curriculum.

Another use of observation is to collect brief descriptions or anecdotes of children’s play, explorations, and interactions. Because anecdotes are more detailed than checklists, these descriptions can help bring a child’s learning experiences to life.

Child Portfolios

A portfolio is a collection of documents that illustrate a child’s learning. Ideally, a portfolio is more than just a file folder full of drawings. The process of building a child’s portfolio reveals

important information that can be used to monitor a child’s growth over time.

One significant feature of portfolio assessment is that it must be ongoing. If document collection occurs regularly over a long period of time, the child’s progress becomes visible. For example, a child’s self-portrait in the spring of the school year, compared to a self-portrait collected in the fall, may reveal significant improvements in the child’s fine motor skills as well as self-concept.

In addition to artwork, portfolios may contain

- anecdotal records
- samples of children’s conversations
- dictated sentences and stories
- photos or notes documenting a child’s experience using manipulatives such as puzzles or pattern blocks
- children’s writing samples
- photos of children engaged in dramatic play or outdoor play

Portfolios can also be created electronically.

Paper documents can be scanned and turned into PDFs. Creating electronic portfolios opens up the possibility of creating audio and video samples to document children’s learning. Storing portfolios electronically also solves storage problems and, in some cases, creates more opportunities for sharing children’s work with parents.

RESOURCES

Bohart, Holly, and Rossella Procopio. *Spotlight on Young Children: Observation and Assessment*. Washington, DC: National Association for the Education of Young Children, 2018.

Gronlund, Gaye, and Bev Engel. *Focused Portfolios: A Complete Assessment for the Young Child*. 2nd ed. St. Paul, MN: Redleaf, 2019.

LeeKeenan, Debbie, and Iris Chin Ponte. “Meaningful Assessment and Documentation: How Directors Can Support Teaching and Learning.” *Young Children* 73, no. 5 (November 2018).

ADDITIONAL RESOURCES

Picture Books about Zoos

Beaumont, Karen. *Wild About Us!* Boston: Houghton Mifflin Harcourt, 2015. Examining self-acceptance, no matter what we look like.

Bleiman, Andrew. *ZooBorns! Zoo Babies from Around the World*. New York: Beach Lane Books, 2010. Full-color photographs of baby animals. Nonfiction.

Carle, Eric. *1, 2, 3 to the Zoo*. New York: Philomel, 1987. A zoo-themed counting book. Nonfiction.

Campbell, Rod. *Dear Zoo*. New York: Little Simon, 2007. A zoo-themed lift-the-flap book. Fiction.

LeBoutillier, Nate. *A Day in the Life of a Zookeeper*. Mankato, MN: Capstone, 2005. Simple text and photographs show the daily life of a zookeeper. Nonfiction.

Lee, Suzy. *The Zoo*. La Jolla, CA: Kane/Miller, 2007. A little girl visits an imaginary zoo. Fiction.

Lieberman, Dan. *I Want to Be a Zookeeper*. Buffalo, NY: Firefly, 2003. Full-page pictures show what zookeepers do. Nonfiction.

Munari, Bruno. *Bruno Munari's Zoo*. Cleveland: World Publishing, 1963. Bold illustrations accompany descriptions of a quirky zoo. Fiction.

Paxton, Tom. *Going to the Zoo*. New York: HarperCollins, 1996. Fun illustrations accompany the lyrics to the classic song. Fiction.

Rex, Adam. *Pssst!* Orlando, FL: Harcourt, 2007. Animals at a zoo keep asking a child for favors. Fiction.

Richardson, Justin, and Peter Parnell. *And Tango Makes Three*. New York: Little Simon, 2005. Two male penguins love each other. Based on true events in New York's Central Park Zoo.

Tieck, Sarah. *Zookeepers*. Edina, MN: ABDO, 2012. Text and photographs show the different duties of zookeepers. Nonfiction.

Wallace, Karen. *A Trip to the Zoo*. New York: Dorling Kindersley, 2003. A boy goes on a trip to the zoo. Fiction.

Wild Animal Resources

Jenkins, Steve. *Actual Size*. Boston: Houghton Mifflin, 2011. Illustrations show the actual size of different animals' body parts. Nonfiction.

Jenkins, Steve. *Never Smile at a Monkey*. New York: Houghton Mifflin, 2009. Illustrations show how dangerous wild animals can be. Nonfiction.

Jenkins, Steve. *What Do You Do with a Tail Like This?* New York: Houghton Mifflin, 2003. Illustrations show how animals use their body parts. Nonfiction.

Spelman, Lucy. *Animal Encyclopedia*. Washington, DC: National Geographic, 2012. Nonfiction.

Picture Books that Present a Problem to Solve (For Episode 4)

Pinkney, Jerry. *The Lion and the Mouse*. New York: Little, Brown, 2009. Illustration of Aesop's fable. Fiction.

Rathman, Peggy. *Good Night, Gorilla* and in Spanish, *Buenas Noches, Gorilla*. New York: Putnam, 2000. A mischievous gorilla doesn't want to sleep. Fiction.

Stead, Philip. *A Sick Day for Amos McGee*. New York: Roaring Brook, 2010. A zookeeper calls out sick. Fiction.

Wilson, Karma. *Animal Strike at the Zoo*. New York: HarperCollins, 2006. Fiction.

Professional Resources

www.naeyc.org/
National Association for the Education of Young Children. Online resources include position statements and articles.

<https://ny.pbslearningmedia.org/grades/prek>. PBS Learning Media.

Anders, Yvonne, Ilonca Hardy, Sabina Pauen, Jörg Ramseger, Beate Sodian, and Mirjam Steffensky. *Early Science Education—Goals and Process-Related Quality Criteria for Science Teaching 5*, no. 1 (2018). <https://www.jstor.org/stable/j.ctvbkjw1w>.

Campbell, Coral, Wendy Jobling, and Christine Howitt, eds. *Science in Early Childhood*. 3rd ed. New York: Cambridge University Press, 2015. A comprehensive guidebook for teaching science to young children based on current research.

Center on the Developing Child at Harvard University. *From Best Practices to Breakthrough Impacts: A Science-Based Approach to Building a More Promising Future for Young Children and Families*. May 2016. www.developingchild.harvard.edu/resources/from-best-practices-to-breakthrough-impacts.

Gadzickowski, Ann. *Story Dictation: A Guide for Early Childhood Professionals*. St. Paul, MN: Redleaf, 2007. Practical information for teachers about including story dictation in classroom routines and curriculum.

Paley, Vivian. *A Child's Work: The Importance of Fantasy Play*. Chicago: University of Chicago Press, 2005. Explores the value of children's dramatic play and how it helps children construct meaning.

Pelo, Ann, and Margie Carter. *From Teaching to Thinking: A Pedagogy for Reimagining Our Work*. St. Paul, MN: Redleaf Press, 2019. Support and guidance for developing children's capacity as thinkers and researchers.

Schmidt, Christine A. *Developing Social Competency in Young Children*. St. Paul, MN: Redleaf, 2019. Practical suggestions for supporting social-emotional learning.

Selly, Patty Born. *Connecting Animals and Children in Early Childhood*. St. Paul, MN: Redleaf, 2014. Examines the qualities that make animals appealing to children, along with ideas for making meaningful connections.

EARLY LEARNING GOALS AND STANDARDS

Each *Pre-K Storypath* unit provides opportunities for children to develop skills and knowledge across all domains of early learning. The following chart shows the major early learning goals of the *Zoo* unit. These goals are based on state and national standards.

	Episode 1	Episode 2	Episode 3	Episode 4	Episode 5
Social-Emotional Development					
Demonstrate progress in expressing feelings, needs, and opinions.	•	•	•	•	•
Increase ability to interact with peers by helping, sharing, and discussing.	•	•	•	•	•
Participate in a variety of dramatic play activities that become more extended and complex.	•	•	•	•	•
Language Development					
Demonstrate an increasing ability to listen to and understand conversations and stories.	•	•	•	•	•
Understand and use an increasingly complex and varied vocabulary.	•	•	•	•	•
Develop increasing abilities to understand and use language.	•	•	•	•	•
Cognitive Development: Early Literacy					
Develop an increasing awareness of print and its different forms and functions.	•	•	•	•	•
Show increasing ability to discriminate and identify sounds in spoken language. (Phonological Awareness)	•	•	•		•
Show a growing interest in books and a variety of print material. (Book Appreciation)	•	•	•	•	•
Begin to represent ideas, stories, and experiences through pictures, dictation, play, and scribbles. (Early Writing)	•	•	•	•	•
Develop an understanding that words are made up of letters, each with a unique name, shape, and sound. (Alphabet Knowledge)	•	•	•	•	•
Cognitive Development: Science					
Develop an understanding of key content related to animal habitats.		•	•	•	•
Collect data to represent and document findings (e.g., through drawing or graphing).			•		•
Develop increasing ability to think, question, and reason about observed and inferred phenomena related to animals and their habitats.			•	•	•
Cognitive Development: Social Studies					
Explore social roles in the workplace through play.			•	•	
Explore how people affect the environment in positive and negative ways.			•		
Cognitive Development: Mathematics					
Demonstrate increasing awareness of numbers and counting as a means of solving problems and determining quantity.			•		
Cognitive Development: Problem Solving					
Participate in discussions about fairness, friendship, responsibility, and differences.	•	•	•	•	
Organize ideas in new ways.	•	•	•	•	•
Participate in problem-solving discussions and decision-making.	•	•	•	•	•

CHILD OBSERVATION FORM

How to Use This Form

Use this form to track the progress of individual children over the course of the Zoo unit. After each of the five episodes, select a number from the Rating Key that best describes the child's progress for each of the objectives. This form does not include every objective from the unit. Instead, a representative sample of the most significant objectives has been selected for each episode.

The checklist is followed by space for you to record notes and anecdotes for each episode. This form can be included in a child's individual portfolio. It can also be used to collect and communicate assessment information during parent conferences.

You may also want to use the *Group Assessment Summary* to tally the progress of the whole class.

Child's name _____

Teacher _____

Group/Classroom _____

Child's birthdate _____

Unit start date _____

Unit end date _____

Child's age at start of unit _____

Child's name _____

Rating Key

1 = not observed

2 = there is evidence that this skill/concept is **emerging**

3 = there is evidence that this skill/concept is **mastered**

Episode 1: Begin Creating the Zoo	Rating
Social-Emotional Development Listens to the ideas of others	
Language Development Contributes to the group discussion	
Cognitive Development: Early Literacy Listens attentively to a reading of a picture book	
Cognitive Development: Social Studies Understands that zoos are places where wild animals are cared for and studied	

Episode 2: Research Animals	Rating
Social-Emotional Development Uses language to communicate needs and ideas	
Language Development Uses new vocabulary in speech	
Cognitive Development: Early Literacy Understands that print conveys meaning	
Cognitive Development: Science Observes and describes animals	

Episode 3: Create Zoo Workers	Rating
Language Development Uses new vocabulary in speech	
Cognitive Development: Early Literacy Dictates sentences about animals, zoos, or zoo workers	
Cognitive Development: Social Studies Understands that zookeepers feed and care for animals in a zoo	
Cognitive Development: Problem Solving Uses ideas from the class discussion to create zoo workers	

Episode 4: Solve a Problem	Rating
Social-Emotional Development Suggests solutions for problems	
Language Development Contributes to group discussions	
Cognitive Development: Early Literacy Shows an interest in print in the environment	
Cognitive Development: Problem Solving Uses ideas from the class discussion to create zoo workers	
Episode 5: Families Visit the Zoo	Rating
Social-Emotional Development Participates in the preparations for the family visit	
Language Development Responds to questions about zoos	
Cognitive Development: Early Literacy Communicates ideas through dictation	
Cognitive Development: Social Studies Describes what animals need to stay healthy and safe	

Child's name _____

Notes

Episode 1: Begin Creating the Zoo

Episode 2: Research Animals

Episode 3: Create Zoo Workers

Episode 4: Solve a Problem

Episode 5: Families Visit the Zoo

GROUP ASSESSMENT SUMMARY

Rating Key

1 = not observed

2 = there is evidence that this skill/concept is **emerging**

3 = there is evidence that this skill/concept is **mastered**

The Zoo

Learning about Animals

Child's Name

Episode 1: Begin Creating the Zoo

Social-Emotional Development

Listens to the ideas of others

Language Development

Contributes to the group discussion

Cognitive Development: Early Literacy

Listens attentively to a reading of a picture book

Cognitive Development: Social Studies

Understands that zoos are places where wild animals are cared for and studied

Episode 2: Research Animals

Social-Emotional Development

Uses language to communicate needs and ideas

Language Development

Uses new vocabulary in speech

Cognitive Development: Early Literacy

Understands that print conveys meaning

Cognitive Development: Science

Observes and describes animals

Episode 3: Create Zoo Workers

Language Development

Uses new vocabulary in speech

Cognitive Development: Early Literacy

Dictates sentences about animals, zoos, or zoo workers

Cognitive Development: Social Studies

Understands that zookeepers feed and care for animals in a zoo

Cognitive Development: Problem Solving

Uses ideas from the class discussion to create zoo workers

Rating Key

1 = not observed

2 = there is evidence that this skill/concept is **emerging**3 = there is evidence that this skill/concept is **mastered**

The Zoo

Learning about Animals

Child's Name

Episode 4: Solve a Problem**Social-Emotional Development**

Suggests solutions for problems

Language Development

Contributes to group discussions

Cognitive Development: Early Literacy

Shows an interest in print in the environment

Cognitive Development: Social Studies

Participates in defining, discussing, and solving a problem

Episode 5: Families Visit the Zoo**Social-Emotional Development**

Participates in the preparations for the family visit

Language Development

Responds to questions about zoos

Cognitive Development: Early Literacy

Communicates ideas through dictation

Cognitive Development: Social Studies

Describes what animals need to stay healthy and safe

FAMILY POSTER

Dear Families,

When your children participate in the *Pre-K Storypath* curriculum unit called *The Zoo*, they will imagine and create their own zoo. When children pretend, they gain a broad range of language, literacy, social, and cognitive skills.

Children will:	They will learn to:
pretend to be animals	<ul style="list-style-type: none">• recognize the characteristics of different kinds of animals• think deeply about how animals behave and interact
create an animal habitat	<ul style="list-style-type: none">• recognize the basic needs of animals• understand that different kinds of plants, soil, and other features are part of an animal's habitat• use a variety of materials to represent what they know
listen to and discuss books about animals and zoos	<ul style="list-style-type: none">• contribute to group discussions• make connections between written and spoken language• remember details
pretend to be zoo workers	<ul style="list-style-type: none">• recall what they know about zoo workers• understand job roles and rules• show compassion and concern for other living things
make paper figures of zoo workers	<ul style="list-style-type: none">• cut with scissors• draw lines and shapes• think deeply about the equipment, clothes, and tools needed to work in a zoo
create maps and charts	<ul style="list-style-type: none">• express what they know in a visual format• use shapes, patterns, and symbols to represent abstract ideas• compare and contrast animals, places, and concepts
discuss and solve problems that arise during play	<ul style="list-style-type: none">• listen to the ideas of others• participate cooperatively in a group• suggest solutions to a problem
dictate and dramatize stories	<ul style="list-style-type: none">• express feelings and ideas with words• experiment with language• use new vocabulary words
give tours of their zoo	<ul style="list-style-type: none">• reflect on their own work and accomplishments

