How Caregivers and Teachers Support Background Knowledge

Introduction

As children grow and have meaningful interactions with people and their environments, they gather more and more knowledge. Over time even very young children understand the routines of their lives and the words people say to them and in the languages used. They learn how to eat, play, walk, run. They learn how people interact with one another, what people wear, and what different objects are used for. They learn their family’s way of doing things—routines, cultural beliefs, values, rules, and expectation—in different settings, such as stores, homes, restaurants, places of worship. And they begin to make connections between what they see and hear and themselves. Young children gain background knowledge as they:

- Connect new information to knowledge they already have in memory
- Gain new knowledge and information through observations, interactions, and instruction
- Use their developing reasoning skills to solve problems; for example, figuring out how objects work
- Offer to show things to others or share what they know
- Ask and answer questions about topics of interest
- Acquire and use new concept and vocabulary knowledge
- Reflect on what they know

Talking, reading, and exploring the world with the guidance of caregivers and teachers provides opportunities for young children to build background knowledge. The more children understand about their world, the easier it will be for them to acquire new knowledge.
Babies begin to learn about the world around them even before they are born! With every interaction that babies and young children have with their environments and the people in them, they gather new information about how things work, how people respond, and what it feels like to be hungry or full, wet or dry, sleepy or alert. Babies develop background knowledge primarily from their varied experiences in their world and by interacting with adults who will help them make sense of those experiences.

**Babies develop Background Knowledge when caregivers and teachers:**

- Notice when babies are alert and interested and take advantage of these moments to interact by, for example, describing to them what they see and hear and talking to them about their routines (Rosenkoetter & Wanless, 2006)
- Talk to babies about their daily routines and activities, such as feeding, diapering, swaddling, and tummy time, using their home language (Stockall & Dennis, 2012)
- Understand the culture of the infant’s family and build on this knowledge (Notari-Syverson, 2006)
- Offer safe toys and/or objects—things like balls, spoons, cups—that have different textures, such as smooth, bumpy, or soft (Bakeman & Adamson, 1984)
- Talk to babies as they explore and intentionally label textures, shapes, sounds, and actions (Barton, & Brophy-Herb, 2006; Notari-Syverson, 2006)
- Engage babies in “conversations” by responding with different facial expressions, gestures, and/or words each time a baby babbles and coos (Fernald & Weisleder, 2011)
- Take babies out into the community to such places as grocery stores, parks, forests, and places of worship and talk to them about sights, sounds, and smells (Volk & Long, 2005)
Some ways caregivers and teachers support babies’ Background Knowledge

At the Early Head Start Center

Clara notices that 4-month-old Jennie is staring at a stuffed cat in her crib. Clara picks up the toy and moves it closer to Jennie’s face. “Cat,” she says as she gently shakes the cat. Jennie follows the cat’s movement with her eyes. “Do you want to hold the cat?” Clara asks. “Here! You hold it,” she says as she puts it in Jennie’s hands. Jennie brings the cat to her mouth and begins to chew on it. “Oh, does that cat taste good?” Clara asks.

In the Community

Mai takes 11-month-old Hong for a walk to the store in her stroller. When they stop at a busy intersection, Mai says, “Look at the red stop sign. That means we have to stop before we cross the street so we can be careful and safe. Cars have to stop, too.” When she sees it is safe to cross, Mai says, “The cars stopped—so we can cross the street now. Let’s make sure we stay in the crosswalk!” They cross to the other side and continue to the store. On their way home, Mai repeats her talk about traffic, street signs, and safety and even uses again the new word, “crosswalk,” so that Hong can learn more about these words and concepts.
Supporting toddlers to develop Background Knowledge

Toddlers develop background knowledge through their interactions with others and with guided opportunities to safely explore the world. Caregivers and teachers help toddlers develop background knowledge by providing them with lots of meaningful, hands-on experiences and telling them what they see, hear, smell, and touch and why they do—and do not do—certain things. Toddlers learn the words in the languages that they hear, so it is important that they hear lots of language(s) during this exciting period of development.

**Toddlers develop Background Knowledge when caregivers and teachers:**

- Explain daily routines and activities (e.g., “First, we have to go to the grocery store, and then we will go visit your abuelita.”) (Stockall, & Dennis, 2012)
- Help them safely explore the world by doing things like turning over rocks to look at insects, feeding the birds, looking for pictures in the clouds, drawing pictures in the dirt with sticks, collecting interesting rocks (or seashells or leaves or acorns), and rolling down a grassy hill
- Talk about what children see (e.g., “Look at those ants carry those big crumbs! Let’s watch and see where they are taking them.”) (Zero to Three, n.d.)
- Teach them new and interesting words and concepts—such as day and night, the changing seasons, types of weather, how things grow (e.g., “That is a coconut! It is the biggest seed in the world!”) (Collins, 2010, 2012)
- Visit different places, such as grocery stores, parks, forests, churches, and talk about what they see and hear (e.g., “Can you smell fish? This is the fish market. Let’s see if there are lobsters to look at.”) (Corrow, Cowell, Doebel, & Koenig, 2012)
- Know what toddlers know and stretch that knowledge (e.g., “Remember when we saw the ducks swimming with their webbed feet? Well, frogs have webbed feet, too. Those flaps of skin between their toes help them swim fast!”) (Corrow, Cowell, Doebel, & Koenig, 2012; Rosenkoetter & Wanless, 2006)
- Respond to their questions (e.g., “That’s a good question. Let’s think about how we can find out the answer.”) (Robson, 2012)
- Provide feedback that helps them learn more about the world (e.g., “Well, yes, it looks like a duck, but it’s a swan. See how it has a long neck . . . ”) (Pianta, La Paro, & Hamre, 2008)
- Talk about items and their categories (e.g., “Here is a knife, a fork, and a spoon. They are all silverware.”) (Liu, Golinkoff, & Sak, 2001)
- Encourage and support imaginary play (e.g., “Look at this box! We can pretend it is a boat or a rocket ship or a fire truck . . . ”) (Dickinson & Tabors, 2001)
- Encourage them to show what they know through painting, drawing, and “writing” (Notari-Syverson, 2006), and talk with them about their creations (Schickedanz & Collins, 2013)
Some ways caregivers and teachers support toddlers’ Background Knowledge

In the Community

Two-year-old Soledad is at the market with her abuela. Soledad sits in the shopping cart as they go to each section. “Let’s get some corn,” says her abuela, as she looks at her shopping list. “Corn is a type of vegetable. Look! There are beans and squash and tomatoes right next to the corn. They are all vegetables, too!” Soledad’s abuela is helping her learn that vegetables are a category of food and that corn, beans, and tomatoes are part of that category. Soledad is also learning about the market and shopping lists while she has fun spending time with her abuela, who loves her a lot.

At the Early Head Start Center

Mr. Nguyen reads a short story about a butterfly with a small group of toddlers. He points to the photographs that show the butterfly landing on flowers. One of the children points to the butterfly’s wings. Mr. Nguyen asks what the butterfly does with its wings, and the children respond: “Fly!” “Yes,” says Mr. Nguyen, “butterflies fly to different kinds of flowers and then land on them so they can eat the nectar.” He shows the children some toy butterflies and some imitation flowers in a pot he has brought to class. “What would the butterflies do if they saw these flowers?” he asks. “They would fly,” says Lea. “Can you show us how they would fly and land on a flower, Lea?” Lea demonstrates. “Yes. Like that, Lea!” Mr. Nguyen sets up a small area with the toy butterflies and flowers and the children go there when they want to help the butterflies land on the flowers.
Supporting preschoolers to develop Background Knowledge

Children have background knowledge and their own ways of thinking about the world (i.e., “funds of knowledge”) that are developed through their experiences with their family and within their culture using their home language(s). The more opportunities they have to engage in conversations and experiences with others, the more they will develop these “funds of knowledge.” In addition, their background knowledge and experiences are a rich source of content for classroom conversations.

Preschoolers develop Background Knowledge when teachers:

- Show children their own interest and curiosity in the world (e.g., “This book says that crabs and ants have exoskeletons. I've never heard that word! Let's keep reading and see if we can find out what an exoskeleton is!”) (Zero to Three, n.d.)
- Use conceptually rich talk that builds children's knowledge of words and concepts (e.g., “A bat is nocturnal. That means they are active only at night.”) (Paratore, Cassano, & Schickedanz, 2011)
- Develop thematic units that provide opportunities for meaningful exploration of fun and interesting topics, such as buildings, trees, plants, water, and space
- Engage children in concrete, meaning-making activities, such as planting a garden, and include opportunities to learn new vocabulary—such words as “seed,” “plantlet,” “cutting,” “bulb,” “tuber”—and concepts in meaningful ways (e.g., “We need to water the garden today because it has not rained and plants need water to grow—just like you do!”) (Dickinson & Tabors, 2001; Wasik, Bond, & Hindman, 2006)
- Connect new knowledge to what children already know (e.g., “Remember how we saw those chickens sitting on their eggs to hatch them. . . . Frogs are different! Frogs lays their eggs in water and then they swim away!”) (Rosenkoetter & Wanless, 2006)
- Ask questions that encourage thinking and reasoning about everyday experiences (e.g., “Why do you think a police siren makes such a loud noise?”) and the natural world (e.g., “How does camouflage keep animals safe?”) (Epstein, 2003)
- Provide gentle feedback to when a child is confused or misunderstands something (“That is called the banana peel, not the banana skin.”) (Planta, La Paro, & Hamre, 2008)
- Have daily conversations about topics of interests (Corrow, Cowell, Doebel, & Koenig, 2012); explain unfamiliar words and concepts (e.g., “That window is transparent. ‘Transparent’ means something is clear and you can see right through it!”) (Elley, 1989)
- Talk about items and their categories (e.g., “This is a chameleon. It is a kind of lizard—just like your poodle is a kind of dog.”)
- Share age-appropriate informational (nonfiction) and narrative (fiction) texts. Read parts or all of the text, depending on children’s interest (Schickedanz & Collins, 2013); briefly pause to explain unfamiliar words and concepts during reading (e.g., “He was curious—he wanted to learn about everything—curious.”) (Collins, 2010, 2012)
Some ways teachers support preschoolers’ Background Knowledge

Between Home and School

During dinner, 4-year-old Carlitos tells his parents and brother about something that happened at school that day. “Today, Chiara’s uncle brought his backhoe to school to show us. His mother asks, “What did he tell you?” “His name was Miguel,” explains Carlitos. “Miguel told us about how he works for a contractor that helps build houses and stores.” “That sounds interesting!” his father says. Carlitos continues, “He says that everybody had different jobs at a construction site, but that they all have to work together. If they didn’t, it would be dangerous.” Carlitos’ brother asks, “Did you get to sit in the backhoe?” Carlitos smiles, “Yes! And I got to touch the controls. Miguel also drives an excavator. My teacher asked if he could bring it to school. That was so funny!” “Why was that funny?” Carlitos’ brother asks? “Because,” Carlito explains, “Miguel can’t drive his excavator to school. It has crawler tracks—not wheels!” After dinner, Carlitos shows his family pictures of backhoes and excavators in his favorite book, pointing out crawler tracks and a trailer Miguel could use to bring the excavator to school.

At the Head Start Center

Nikki, the Head Start teacher, is reading a book about animals. “This part of the book is about oviparous animals. I had to look that word up. ‘Oviparous’ means ‘animals that lay eggs.’” She then asks the children to tell her what animals they might see in this part of the book. The children call out, “A bird! A frog! A whale!” Nikki says, “Well, yes. Birds lay eggs, and so do frogs, but a whale is a mammal. Mammal babies are born live. Mammals don’t lay eggs, so they are not oviparous.” Eli adds, “My sister’s favorite animal is a platypus. Is a platypus ovi-ovi . . . ” his voice trails off. “Is it oviparous?” Nikki asks. “Well, yes it is. And a platypus is a mammal. What else do you know about the platypus?” After Eli tells them what he knows, Nikki returns to the book. As she reads, she notices that Eli is smiling. He is excited to share his new knowledge and his new word with his sister.
Some teachers support preschoolers’ Background Knowledge

At the Head Start Center

It is early summer and Marianna’s preschoolers have been learning about how plants and trees grow. Today they are observing the small pear tree that was planted in the corner of the playground. They have been observing the changes in their tree all year as they learned about the seasons and weather, but now Marianna is encouraging the children to connect all the different things they have been learning about trees.

“What are parts of the tree that we know?” “Roots, branches, leaves,” the children call out. Pointing to the trunk, Marianna asks, “What is the special name for this part of the tree?” “The trunk,” the children call out. “Like an elephant!” another calls. “Hmmm,” Marianna says, pausing to think. “You know, that is really interesting! It is the same word, isn’t it? How is this trunk [she points to tree] different from an elephant’s trunk?” she asks. When the children have finished making the comparisons, discussing the parts of the tree and how it is growing, Marianna passes out paper, clipboards, and pencils. “I want you to observe the tree—just check it out. As you observe it, I want you to draw what you see.” When the children return with their drawings, Marianna tells them this is the kind of work that scientists do—observing nature and making notes.

At the Head Start Center

With the help of their teacher, Fatima and four of her friends are making a list of community helpers to post in the room. “Policeman!” one child says. “Police officer!” responds Fatima. Their teacher says, “Fatima has said something that we need to think about. The police officer who visited our school was a man—but Fatima, remind the class about your cousin.” Fatima says, “My cousin is going to police school. She’s a girl, so she can’t be a policeman.” The teacher nods and says, “That’s right. She is going to the police academy so she can train and learn how to become a police officer. So if we are talking about the men and women who work for the police department, we should say ‘police officer.’” As the teacher turns to write “police officer” on the class list, she notices that a child looks confused. “Daniel. What are you thinking about?” Daniel asks, “How do you say ‘girl fireman’?”
Resources for Background Knowledge

Resources for Background Knowledge


