

7 Remember (1)

Understand (2)

4

5

How you change

Create

6

create

Can you make the same thing you did yesterday?

How can we solve this problem?

Can you make something that holds pencils? Pulls cars? Stops the animals from escaping? etc

Moving Beyond *Who, What, When, Where, and Why*

Using Bloom's Taxonomy Questioning to Extend Preschoolers' Thinking

Lisa Mufson and Janis Strasser

Chicka Chicka Boom Boom is a favorite story with this class of 4-year-olds. Mr. Benson lays the book open on the carpet in the center of a small group of children. He reads it once and then says to the preschoolers, "That story was exciting! Let's think about it. How did the tree change from the beginning to the end?" Page by page, he flips through the book several times, prompting the children to respond by looking at the illustrations. He asks, "What could have been done differently so that the tree didn't fall over?" The children share their ideas, discussing the height of the tree, the size of the letters, and the number of letters in the tree. At the end of the activity Mr. Benson suggests, "Maybe during choice time a few of you can come up with a way to make a tree that would be strong enough to hold all the letters." They close the book, and several children move excitedly to the art center and begin designing their own *Chicka Chicka Boom Boom* tree.

After reading about this activity you may wonder, "Do I ask the preschoolers I teach enough questions?" If the answer is yes, you might consider what kinds of questions you ask them. Varying the types of questions you ask is an important strategy to support thinking and learning. If the answer is no then you've made the first step toward improving your questioning techniques. You can now begin to explore some of the ways you can ask children questions throughout the day.

Asking basic recall questions such as "What color is this?," "How many are there?," and "What is this?" serves a purpose. Remembering information is the foundation children need to be able to answer higher-order questions such as "If four children are eating lunch, how many plates do we need?" Children need to remember information before they can understand it; they must understand it before they can apply it.



COURTESY OF THE AUTHOR

Creating a solid base of content knowledge is important, but preschoolers' learning can be deeper and more complex. Asking children more complicated questions helps them become self-directed thinkers.

Bloom's Taxonomy includes six levels of questioning: remembering, understanding, applying, analyzing, synthesizing, and evaluating. Benjamin Bloom, an educational psychologist, created the taxonomy in 1956 as a way for teachers to measure and organize what they want to teach (Bloom 1956). Soon teachers started using the questioning techniques to design curriculum and assessment tools.

The taxonomy was revised in the 1990s. This taxonomy—now called the Revised Bloom’s Taxonomy—made it more relevant to 21st-century learners. The team also added a new level of questioning—creating—and deleted a level of questioning—synthesizing (Anderson & Krathwohl 2000).

At each level, the questions become more difficult and require deeper thinking before a child can respond. Asking higher-level questions allows children to expand their thinking and perspective on a subject.

Most 3-year-olds are primarily concrete thinkers. This means that their speech and thinking are quite literal—often focusing on what is physically in front of them. Some 3-year-olds might not be able to answer the more complicated questions that older children can. Children begin moving into more abstract ways of thinking at age 4. For example, a group of 4-year-olds might engage in more advanced dramatic play, pretending that a stick they found outside is a fork or spoon.

When applying Bloom’s levels of questioning, many 4-year-olds and some 3-year-olds will understand the abstract concepts comprising the higher levels of questioning, such as analyzing, evaluating, and creating. Even though not all preschoolers will understand these concepts, teachers can still use Bloom’s Taxonomy to ask preschoolers higher-level questions. Children develop at different rates and may surprise you with their answers.

Through ongoing observation and assessment, effective teachers keep track of each child’s activities and skills. They plan their questions to match a child’s current level and encourage him to make progress. **TYC**

Record Children’s Progress

At the beginning of each year, I ask children higher-level questions and document how they answer them. For example, while joining a child in the block center I might ask, “Why did your strategy work? What could have happened if you had used a differently shaped block?” I record her answer in a journal and take a photo of her work.

At the end of the year, I ask children the same questions and think about my growth as well as theirs. I ask myself, “What opportunities have I provided throughout the year to encourage preschoolers to use high-level thinking?” This helps me to reflect on children’s growth while considering how I have changed and grown as a teacher since the year began. Through this type of high-level thinking, I can see myself as a teacher researcher!

To help remind yourself to use questions that foster higher-level thinking, you can

- Write questions on index cards, several for each level. Color-code each level for easy reference. Then attach the cards to a key ring to keep in different learning centers or in your pocket.
- Choose several of the children’s favorite stories and create questions using Bloom’s levels of questioning as a guide for each book. Write them on an index card, and tape or staple to the book for easy reference.

In future issues of *TYC*, we will share ideas for asking high-level questions during whole group, small group, transition times and story time and while teaching children in learning centers.

References

- Anderson, L.W., & D.R. Krathwohl, eds. 2000. *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom’s Taxonomy of Educational Objectives*. Boston: Pearson.
- Bloom, B., ed. 1956. *Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook I: Cognitive Domain*. White Plains, NY: Longman.

Step Up Your Questioning Techniques!

2 Understand
“How are these two animals the same? How are they different?”

Remember

“What animal is this?”

Children will

- Identify
- Name
- Count
- Repeat

Children will

- Compare
- Explain
- Summarize

3 Apply
“Where else have you seen this animal?”

Children will

- Explain why
- Dramatize
- Identify with/ relate to

4 Analyze
“What can you tell me about this animal by looking at this picture?”

Children will

- Recognize change
- Experiment
- Infer

5 Evaluate
“What are some reasons why this animal would/wouldn't make a good pet?”

Children will

- Express opinion
- Judge
- Defend/ criticize

6 Create
“What kind of animal can you make that no one else has ever seen before?”

Children will

- Make
- Construct
- Design

Supporting dual language learners

It's important to ask preschoolers interesting questions, but it can be hard to do in classrooms with dual language learners. Ask families to help you learn a few questions, such as “What do you think will happen next?” and “How did your strategy work?” in each child's home language. Use a smartphone or tablet to record the child's responses. Save the recording and ask for help translating it to track how the child's responses develop over time.