AGENDA

Beyond Open/Closed Questions:
Developing Language, Creativity and Thinking
(Local Information, Your Name, Date)

Participant Objectives

In this workshop participants will:

- Develop an understanding of different ways teachers talk to children and the types of questions teachers ask
- Reflect on one’s teaching practice in relation to ways to support language development and encourage creative thinking through adult/child interactions.
- Acquire strategies for asking questions to support creativity and higher level thinking
- Examine additional ways to promote children’s language and cognitive development through good children’s literature

1. Opening Activity: Interesting Questions
2. Welcome and Logistics
3. Introducing the Topic: Beyond Open/Closed Questions: Developing Language, Creativity, & Thinking
4. Activity: Group Storytelling
5. Presentation of Taxonomy and Activity: Six Major Cognitive Operations
6. Creative Questioning
7. Activity: Creating Prompts for Centers
8. Discussion
9. Closure

If 5 hours, add:
10. Selecting and Using Children’s Books
11. Activity: Questions to Ask
12. Discussion
13. Closure
BLOOM’S TAXONOMY OF EDUCATIONAL OBJECTIVES

Knowledge
Does the child remember what he has seen or read?
Examples: 1. What did the Polar Bear See?
           2. What was the Teddy Bear’s name?

Comprehension
Can the child organize what he knows?
Examples: 1. Tell me what happened to Max in the story.
           2. What is a Wild Thing?

Application
Can the child apply techniques and rules to solve problems that have correct answers?
Examples: 1. What can you find in our room that is the shape of a circle?
           2. Show me how to build a tower so it doesn’t fall down.

Analysis
Can the child identify motives and causes, make inferences, and find examples to support generalizations?
Examples: 1. What did you do to make your block building square?
            2. Why did the caterpillar eat so much food?

Synthesis
Can the child make predictions, solve problems, or produce original communications, such as plays, stories, and posters?
Examples: 1. Make a design for the pattern you’d like to follow for making a bead necklace.
           2. What can the man do to get his caps back from the monkeys?

Evaluation
Can the child give opinions about issues, judge the validity of ideas, judge the merit of solutions to problems, or judge the quality of art and other products?
Examples: 1. Was little Red Riding Hood’s mother right in letting her go off into the woods?
           2. There are 6 children who want to ride bikes and only 4 bikes. What is a fair way to decide who should get to ride?
CREATIVE QUESTIONING

Ask open-ended questions: Show the child a picture, then ask questions to stimulate and create a thinking atmosphere. For example: What are the people in the picture doing? What are the people saying? What would happen if…?

Ask children to use their senses: Young children may often have their creative thinking stretched by asking them to use their senses in an unusual way.

- Have children close their eyes and then guess what you have placed in their hands – a piece of foam rubber, a small rock, etc.
- Have children close their eyes and guess at what they hear – use such sounds as shuffling cards, jingling coins, rubbing sandpaper, ripping paper, etc.

Ask children about changes: One way to help children think more creatively is to ask them to change things to make them the way they would like them to be. For example:
What would taste better if it were sweeter? What would be nicer if it were smaller? What would be more fun if it were faster? What would be better if it were quieter?

Ask question with many answers: Anytime you ask a child a question which requires a variety of answers, you are aiding creative thinking skills. Here are some examples using the concept of water: What are some of the uses of water? What floats in water? How does water help us? What always stays underwater? Why is cold water cold?

Ask “What would happen if…” questions: These questions are fun to ask and allow the children to really use their imaginations and higher-order thinking skills.

- What would happen if all the trees in the world were blue?
- What would happen if all the cars were gone?
- What would happen if everybody wore the same clothes?
- What would happen if you could fly?

Ask “In how many different ways…” questions: These questions also extend a child’s creative thinking. In how many different ways could a spoon be used? In how many different ways could a button be used? In how many different ways could a string be used?

Comments and Questions
That Help to Learn About and Extend Children's Thinking

1. To initiate an interaction with a child you might say, “I notice that...” or “I see that...”
   For example:

   - I notice that your building is really tall.
   - I see that you worked at the easel for a long time. Would you like to tell me about your work?
   - I see a problem here. Can someone tell me what you think is happening?
   - When you poured water through the top of the water wheel, I see that the wheel turned around. Why do you think that might have happened?
   - I noticed that you put the blocks into two groups. I was wondering how you decided to group the blocks this way.

2. When posing a question, it is best to try to phrase it in a way that invites many responses.
   For example, asking the question, “What do you notice about the guinea pig?” is very different from asking, “Did you notice the guinea pig's legs?” or “Can you point to the guinea pig's nose?”

Examples of open-ended questions are:

   - What do you think might happen next in the story?
   - What do you remember about the story?
   - What do you know about caterpillars?
   - What do you wonder about caterpillars?
   - What do you think might happen if we mixed the blue paint with the red paint?
   - What do think happened to the water that was in the puddle?
   - What do you think we'll need in order to make the brownies? Why do you think so?

3. Some questions are used to gather specific information. Questions such as, “What color is this truck?” or “What shape is this?” are informational questions. They are also referred to as “closed questions” because they typically have one answer. Questions that begin with who, what, when, and where are typically closed questions.
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<th>APPLYING BLOOM’S TAXONOMY</th>
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<td>Goldilocks and the Three Bears</td>
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<tr>
<th>Knowledge</th>
<th>* List the characters in the story.</th>
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<td>* What were the bears eating?</td>
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<th>Comprehension</th>
<th>* Retell the story in your own words.</th>
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<td>* Why did Goldilocks like the Baby Bear’s chair best?</td>
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<th>Application</th>
<th>* If Goldilocks came into your house, what are some of the things she would have used?</th>
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<td>* Relate the story from the view of Baby Bear.</td>
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<th>Analysis</th>
<th>* What parts of the story could not have happened?</th>
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<td>* Compare Goldilocks’ experience with that of Little Red Riding Hood.</td>
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<th>Synthesis</th>
<th>* Combine art and drama to make up a new ending for the story.</th>
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<td>* How might the story have been different if Goldilocks had visited three fishes?</td>
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<th>Evaluation</th>
<th>* Do you think Goldilocks was good or bad? Why?</th>
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<td>* Judge whether Goldilocks made a good decision by running away from the bears. Explain.</td>
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Individual Activity: *SIX MAJOR COGNITIVE OPERATIONS*

Using the story discussed, brainstorm questions for each category.

**LOWER LEVELS**

L-1 **Knowledge** – Information gathering; Remembering
These are questions that check the basic facts about people, places or things.

L-2 **Comprehension** – Confirming; Understanding
These are questions that check grasping the meaning of the material.

**HIGHER ORDER THINKING PROCESSES**

L-3 **Application** – Illuminating; Using
These questions build ability to use knowledge in a problem-solving, practical manner.

L-4 **Analysis** – Pulling apart the pieces
These are questions in which we select, examine, and break apart information into its smaller, separate parts

L-5 **Synthesis** – Creating; Putting together
Synthesis questions are those in which you utilize the basic information in a new, original, or unique way.

L-6 **Evaluation** – Judging, predicting
These are questions which help us decide on the value of our information. They enable us to make judgments and express opinions about the information.
Small Group Activity: Questions to Ask

Read the children’s book selected by your group.

WHY is this a good book?

Using this book, as a group, brainstorm questions for each category that children could be asked after hearing this story. Then brainstorm an appropriate extension activity.

LOWER LEVELS

HIGHER ORDER THINKING PROCESSES

EXTENSION ACTIVITY FOR THIS BOOK