Beyond Open/Closed Questions:
Developing Language, Creativity and Thinking

Time: 3 hour workshop: 5 hour option.

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

This workshop supports participants’ understanding of:
Preschool Expectation 1. Child listens with understanding to environmental sounds, directions, and conversations.
Preschool Expectation 2. Child converses effectively in home language, English, or sign language for a variety of purposes relating to real experiences and different audiences.
Preschool Expectation 3b. Child demonstrates knowledge and enjoyment of books.
Kindergarten Standard 7. Child speaks in clear, concise, organized language that varies in content and form for different audiences and purposes.
Kindergarten Standard 8. Child listens actively to information from a variety of sources in a variety of situations.

Materials Required
- L5 Overheads #1 - 4 or PowerPoint L5
- Chart pad, markers, tape
- 3” x 5” file cards or post it notes for opening activity
- Copies of L5 Handout “Individual Activity: Six Major Cognitive Operations”
- Several sheets of 12” x 18” construction paper multiple light colors, enough for 5-6 sheets per participant
- Assorted color markers for each table/group

For 5 hour option:
- Several children’s books from the recommended list. This is also an opportunity to introduce teachers to some new quality books. See Children’s Literature List in the Trainer’s Manual for suggestions. Each table group will need two books.
- L5 Overhead 5 and 6 or L5 PowerPoint slide 8 and 9.
- Additional copies of L5 Handout “Small Group Activity: Questions to Ask”
Additional Materials
Sugar packets for each participant to serve as a mnemonic after the session

Handout List
L5 Agenda
Applying Bloom’s Taxonomy
Creative Questioning
Bloom’s Taxonomy of Educational Objectives
Individual Activity
Comments and Questions That Help to Learn About and Extend Children's Thinking
Small Group Activity (if 5 hour session)

Essential Messages
- An important part of early childhood classroom practice is extending children’s language and thinking throughout the day.
- Children’s language reveals their thinking.
- Questions should be used to stimulate child’s language and thinking.
- Ask questions to help children contemplate, describe and be more aware of their thought processes.

Trainers’ Agenda
1. Opening Activity: Interesting Questions (10 - 15 minutes)

Begin by saying:

“Many young children are inquisitive by nature. As adults, we sometimes lose that exploratory nature and focus on what is or isn’t. I’m going to give you a few minutes to think of a question that YOU have pondered about. For example, I have always wondered about where all the snow goes after they plow on the GSP.”

Pass out file cards or post-its and ask each person to write down their question. Allow a few minutes for each person to write down their question.

After all have finished, ask for a volunteer to share their question. Invite others to give answers. Invite several others to share their question and others to give possible answers.

Then ask: “How did that make you feel? Were you stimulated? You didn’t think of a simply recall question did you? What types of questions did you think about?” Pause after each question to solicit responses from the group. Provide 5 – 7 minutes for sharing and discussion.

As you make the transition to the formal introduction of the workshop, say:

“Most of your questions were open-ended questions. While there may actually be a right or wrong answer to some of them, you were very creative in coming up with responses to other
people’s questions. Did you notice how the more open-ended the question, the more discussion it stimulated? Today’s session focuses on the ways teachers talk to children and the type of questions we ask children.”

2. Welcome and Logistics (5 minutes)
Use Handout L5 “Agenda” to review agenda and session objectives.

3. Introducing the Topic (15 minutes)
Using L5 Overhead 1 or L5 PowerPoint slide 1-2 to introduce this topic.

Introduce the L5 Overhead 1 by saying, “Teachers talk to children in a variety of ways. Researchers¹ have identified 4 general areas of teacher talk.”

Show the overhead and extend with the examples below. Invite teachers to add examples.

Procedural is giving directions and managing behavior. Much of what comes out of teacher’s mouths is procedural. Examples: Come to the circle and sit on your bottom. It’s time to clean up. Use your inside voice.

Informational is stating facts and answering questions. This is when teachers tell children things. Examples: Today is Jordan’s birthday. The title of the book is Bread, Bread, Bread. The author is the person who writes the book. I see you have new shoes on today.

Praise or reprimand is acknowledging children’s actions. This is when teachers talk is in response to children’s behavior and encompasses both positive talk and reprimands. Examples: Good job! Sit down! Thank you for helping Jamal clean up the blocks. Laura, keep your hands in your lap. What a beautiful picture you made.

Questions are inviting children to talk. There are two broad categories of questions, open and closed. Teachers ask children many questions throughout the day, but not nearly as many questions as they make statements. Many of these questions are closed questions or lower level questions. We tend to ask children low level questions – what color, and those with a right or wrong orientation; in fact we are very good at doing that. We don’t need to learn about how to ask closed questions.

Closed questions ask for information. Examples: What color is the truck? Is that your hat?

Open-ended questions stimulate thinking. Examples: What do you remember about the story? What do you know 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?

Summarize by saying, “Both open and closed questions have their place, but we want to make sure we ask a variety of different types of questions if we want to extend the language, creativity, and thinking skills of children.”

4. **Activity: Group Storytelling.** (10 minutes). Ask for about 10 volunteers who know the story of *The Three Little Pigs* to come forward. Arrange them in a standing row in front of the group. If your group is around 15 or less, then entire group can participate by starting with one person and going around the group. Say “Because there are many versions of this story, we will do a group storytelling, so that we all can have one version to work from.”

Instruct the first person to begin the story with an opening sentence. Each person will add a sentence in sequence of what happened next, repeating through the 10 again as necessary.

*Trainer’s note: It does not matter if the story is the ‘correct’ version or a totally new version of the story. The intention is to have a joint story, all now will have heard, to work with.*

Once the group storytelling is finished, refresh everyone’s memory of this story just heard, by recapping the story in sequence of how told.

5. **Presentation of Taxonomy and Activity: Six Major Cognitive Operations** (45 minutes)

Use L5 Overheads 2-4 or L5 PowerPoint slides 3-5.

Introduce overhead by saying, “Benjamin Bloom developed a Taxonomy for examining the thinking process. It is hierarchical, from lower level thinking to higher level thinking.”

Show overheads 2-4 in order and extend with the following points.

**LOWER LEVELS**

**L-1 Knowledge – Information gathering**

These are questions that check the basic facts about people, places or things. Knowledge is basic recall; it tests memory; the child recalls or recognizes information. Lowest level of learning. Does the child remember what he has seen, heard or read?

- List the characters in the story.
- What did Brown Bear see?

**L-2 Comprehension – Confirming**

These are questions that check your understanding and memory of facts. Comprehension is understanding or confirming; the child process information and remembers. Child changes information and makes meaning. Can the child organize the facts or what he knows?

- Tell me what happened to the little bird in the story.
- Why did the straw house fall down?
- Why did Goldilocks like the Baby Bear’s chair best?

**HIGHER ORDER THINKING PROCESSES**

**L-3 Application – Illuminating**

Application questions test your ability to use your knowledge in a problem-solving, practical manner. In Application, the child uses knowledge to solve problem or is able to make generalizations. Child discovers relationships among facts, generalizations, definitions, values or skills and applies that knowledge to solve problems. Can the child apply techniques and rules to solve problems that have correct answers?

- If you were the hungry caterpillar, what would you have eaten?
• If Goldilocks came into your house, what are some of the things she would have used?

**L-4 Analysis – Pulling apart of pieces**

These are questions in which we select, examine, and break apart information into its smaller, separate parts.

Analysis is pulling apart the pieces. The child solves a problem and can discuss his reasoning & thinking. Can the child identify motives and causes, make inferences, and find examples to support generalizations?

- What parts of the story could not have happened?
- How are Goldilocks and Little Red Riding Hood the same?

**L-5 Synthesis – Creating**

Synthesis questions are those in which you utilize the basic information in a new, original, or unique way.

Synthesis is creating, or putting it together. The child solves problems that require creative thinking. Can the child make predictions, solve problems, or produce original communications, such as plays, stories, and posters?

- Make a picture to make up a new ending for the story.
- How might the story have been different if the wolf had visited three fishes?

**L-6 Evaluation – Judging, predicting**

These are questions which help us decide on the value of our information. They enable us to make judgments about the information.

Evaluation is about judging, predicting, and opinions; Child makes a judgment of good or bad, right or wrong, according to standards set by the child. 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?

- Judge whether the wolf in the 3 pigs was worse or the wolf in red riding hood.
- Do you think Goldilocks made a good decision by running away from the bears? Explain.

**Activity:** Distribute copies of L5 Handout Individual Activity and L5 Handout Bloom’s Taxonomy of Educational Objectives.

Instructions: Using the 3 little pig story that was told by the group earlier, develop at least one question for each category. You may work in pairs. Allow about 10 minutes for the pairs to work.

When most seem to have finished, reuse L5 Overhead 2-4, pausing after each level to allow participants to share examples of questions they wrote for that level. Allow several participants to share their questions to provide multiple examples of questions for that category.

After all categories are completed, discuss how easy it was to come up with lower level questions, and much harder to come up with higher level questions.

Make the point that it is always useful, to create one or two questions to ask children about stories. Suggest they may want to write questions in the back inside cover of different books to have them readily available.
Distribute L5 Handout Applying Bloom’s Taxonomy

6. Creative Questioning (15-20 minutes)
Use L5 Overhead 5 or L5 PowerPoint slide 6
Begin this portion by saying, “While it’s useful to use Bloom to ensure we challenge varying cognitive processes in children, what is most important is that we ask higher level questions. Higher level questions promote creative and critical thinking skills in children. They learn to think not just know. They learn to do not just recall. They learn to make meaning not just remember.”

Show L5 Overhead 5 and extend as noted below. Throughout ask participants to provide examples.

Ask open-ended questions: Show the child a picture, and 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?

Distribute L5 Handout Comments and Questions That Help to Learn About and Extend Children's Thinking. Provide a few minutes for the individuals to review. Ask for comments or questions.
7. **Activity:** Creating Prompts for Centers (10-15 minutes)

Instructions: Divide the group into groups of 5-6 people. Give each group a sheet of chart paper. Assign each group a different learning center. If the group is large, you can also assign a routine such as lunch, clean-up, snack, morning arrival, etc. or assign two groups to the same center. Have each group brainstorm and record, questions or opening phrases that would be appropriate to use in that center or routine. Allow 10-15 minutes for groups to chart their ideas.

8. **Discussion** (15-20 minutes)

Ask each group to present their questions or opening phrases. Post them on the walls.

Ask questions such as the following: Were some centers harder to develop questions for? Which centers were easier? What do you notice in common about the questions or statements?

Make the following points:
- Teachers need to ask questions responsively, not a string of questions.
- Questions should be used to stimulate child’s dialog and thinking.
- Ask questions to help children contemplate, describe and be more aware of their thought processes.
- Questions should relate directly to what the child is doing.
- Ask questions about the child’s thought processes. “How many eyes does the fish have?” demands a factual answer. “How can you tell?” in response to the child’s observation that the fish has one eye encourages child to describe how they arrived at the conclusion. Only the child has the answer so it is worth asking.
- Other Examples: How do you know that? What do you think made that happen? How did you get the ball to…? What do you think would happen if?
- Statements and expansions instead of questions can also effectively facilitate children’s language development. “I wonder how you could get that block to balance.”

Highlight the importance of one-on-one conversations with children. Point out that numerous studies show that there is limited one-on-one interaction between young children and their teachers. (For your information, some citations for this research include: Whitebrook, Howes, & Phillips, 1990; Culkin, 1994, 2000; Bowman, Donovan, & Burns, 2000; Frede, 1995; Barnett, 1998).

9. **Closure** (20-25 minutes)

Distribute several pieces of construction paper to each table along with markers. Each person should be able to have 5-6 sheets. Instruct participants to review the charts on the wall, and to pick out 5 or 6 of their favorite questions or opening phrases. They should print these out in large letters on the paper provided, with one phrase or question on each piece of paper. These are for them to bring back to their classrooms, to post up high on their classroom walls, so they can see them from varying locations in the room, to serve as prompts for them to remember to ask creative high level questions.

(Once the group has finished, break and skip to next activity if using the five hour option)
Summarize the session: Today, we looked at the different types of questions we ask children and how to use this strategy to encourage language development and foster creative thinking.

Ask, “What are some ways you can use these strategies to learn about children? How can children’s responses inform about their development? Invite responses and rephrase.

Ask, “What are some ways you can use these strategies in your data collection?” Invite responses and extend. For example, in discussing a child’s work sample, ask a higher level question such as how did you get your block building to stay so straight? After reading The Grouchy Ladybug to a child and discuss the story with the child, ask a thinking question such as “What is something that makes you grouchy?” noting what you did and what the child said and did on a literacy prompt form. Or write an anecdote about a child’s response to your interaction in their dramatic play when you asked, “What would happen if there was no food to feed the baby? What could you do?”

“Reflect on the expectations or standards we focused on in today’s workshop (for preschool, 1, 2, and 3b and for K, 4, 7, and 8). What new ideas do you have as a result of today’s workshop to help you foster children’s learning in these areas? Jot down one idea for each (expectation or standard).”

Provide some time for them to think and write. Hear some aloud. Leave them with this closing.

**In closing,** say, “We started earlier today with the story of the 3 pigs; now I am going to share with you Scieszka’s The True Story of the 3 Little Pigs! by A. Wolfe.” Read the story aloud to the group, modeling good story reading skills (speak clearly; project; vary your phrasing, pace and volume for effect; read with feeling; hold book toward the audience so all can see; identify author and illustrator, etc.) . At the end, note that you wanted to share the story with them because you hope they will encourage language development and creative thinking in their children, as this author must have had encouraged in him. Distribute a sugar packet to each teacher, hang on their classroom wall or place on their desk, to remind them of this story when they see it, and to remember to extend children’s language through asking open questions.

**Additional Activity for 5 Hour Session**

10. **Selecting and Using Children’s Books** (30 minutes)

   Use L5 Overhead 6 or L5 PowerPoint slide 7.

   Begin this section by asking each person to identify their favorite book to read to their class. Chart responses on a sheet of chart paper.

   Invite responses to why they liked the books identified for their classroom. Typical responses to these questions include liking the pictures or the art work; children relating to the story (ask why?); favorite character (ask why?); it’s a good story to act out; the book addresses an emotion, etc.

   Use L5 Overhead 6 to share these facts.

   The Horn Book Magazine reviews approximately 4,000 new hardcover books for children each year.

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The single most important influence on children’s reading motivation and achievement is the opportunity to enjoy high-quality literature. Children who engage in daily discussions about what they read are more likely to become critical readers and learners. The single most important activity for building those understandings and skills essential for reading success appear to be reading aloud to children.

Ask, “Why is this information important for teachers? How will you use this information as a teacher?” Invite responses.

Ask, “How is this information relevant to using books with children?” Invite responses.

Lead into a group discussion of using good children’s books. Say, “Teachers have always tried to choose books that would interest their children. But selecting good children’s literature is more than selecting books children might be interested in.” “What are some ways that you use children’s books in your class?”

11. Activity: Questions to Ask (15 -20 minutes)
Use L5 Handout Small Group Activity – Questions to Ask
Have selection of good children’s books available. You will need to have about 2-3 books for every 6 people. This is a good opportunity to introduce children to some newer good books that they might not yet know or have. The Resource List provides some examples. If you do not have access to any newer books, select books from the recommended book list which provides common classroom books or ask each teacher to bring in one book from the list to this session.

Divide into groups of 5-6 individuals. Distribute 2-3 books to each group and the L5 Handout Small Group Activity – Questions to Ask. Review the instructions on the handout. Allow 15 minutes for groups to read their book and complete the handout.

12. Discussion (30 minutes)
Use L5 Overhead 7 or PowerPoint slide 8.
Debrief by asking each table to give a brief synopsis of their book and one reason why the book is good. Summarize the comments after all groups responded. Then ask each table to share one of their higher level questions. Lastly ask each group to share their book extension ideas.

Make these points using L5 Overhead 7:

Quality children’s books:

Begin with enjoyment. They use language in surprising and satisfying ways and teach children to associate pleasure with literacy events.

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Provide support for emergent reading. When you share a book with a child, you model book handling skills, and reading in action.

Increase vocabulary, comprehension, and thinking skills. Introduce new words in meaningful contexts and give them the opportunity to ask questions and explore answers.

Develop insight. Through literature, children gain a glimpse of the characters minds and gain perspective on feelings and motives.

Build self-image and transmit social values. Good books support ethnic pride, foster multicultural awareness, and feature cultural characters that children can identify with.

Summarize by asking:

“What are some insights they are taking away from this activity?” Hear a few ideas.

Activity Extensions (if time available):

Ask each table to pass their books to another table. Have a different person read the story to their group. Suggest that the group give feedback to the reader on their style. Ask the group to brainstorm an extension for that activity for a different domain. If the prior extension shared for that book was an art activity, they must select a dramatic play, music, gross motor, science, math, etc. activity instead.

This can be repeated several times to allow for exposure to different books, practice and feedback on story reading technique, and experience developing story extensions to compliment different areas of learning.

13. Closure

Use closing description for 3 hour option noted earlier.