

AIAN Teacher Webinar Series: April 2014

Marci Maki: I want to say good morning or good afternoon, wherever you are in this great land of ours, and welcome to another webinar for AIAN teachers working in American Indian and Alaska Native Head Start programs. I'm so thankful that you made time to join us today on this webinar. We know that you're very busy, and I really appreciate you taking time to be with us today. I want to introduce myself. I'm a tribal liaison working at NCQTL, and I've had the pleasure of working this year with Head Start programs in the great states of North Dakota, Nebraska, Nevada, Oklahoma, Arizona, Utah, and I just got Montana. So, good morning, and thank you again for joining us. Behind the scenes, we have our webinar team. Would you women -- ladies -- please introduce yourselves?

Dawn Williams: Hi, that's a picture of me. This is Dawn. You heard me at the beginning, and those are my two little girls.

Susan Stewart: And I'm Susan there on the right, and let me know in general chat if you have any difficulties with the technology, and I'll see what I can do to help you out.

Marci: Thank you. And thank you for working behind the scenes. And it's going to be a great morning today. At the National Center for Quality Teaching and Learning, we use what's called the NCQTL Framework for Effective Practice. Many of you have been on a few other webinars, and you're very familiar with the house, but for people that may be new to Head Start, may be new to a Head Start classroom, I want to again review what the NCQTL framework is all about. The house structure represents supporting school readiness for all children. The foundation, which is the blue rectangle at the bottom of the page, represents effective and engaging interactions and environments. The pillars represent research-based curricula and teaching practices and ongoing child assessment. Those are in orange and sort of a mustard color. And the roof represents highly individualized teaching and learning. All of these components interact with each other and are essential for everyday practices for Head Start children.

This presentation that we're going to be doing today is part of the foundation of the house. It's part of engaging interactions. Interactions are classroom processes that are important for children's social and academic development. When teachers create positive emotional relationships, organize their learning environments, and focus on cognitive and language development, children make greater gains that help them succeed in school. Part of the objectives that we're going to be focusing on today is to provide a definition of fostering children's thinking skills.

We'll also give examples and strategies for how teachers can foster children's thinking skills in the classroom. We're going to connect fostering children's thinking skills to the Head Start Child Development and Early Learning Framework. And the last objective for the webinar today is to provide suggestions for teachers on how to improve their ability to foster children's thinking skills.

Teachers can create classroom environments where children feel safe to explore and experiment and are encouraged to express their thoughts and ideas. Classroom interactions that support children's thinking focus on big ideas and deepen children's knowledge of their surroundings. Teachers help children become aware of their own thought process and encourage children to think in new and different ways. Would you take a moment to read this about young minds? Again, today we're going to be looking at fostering children's thinking skills. You may remember back to our January webinar where we talked about the scientific method.

Teachers use the scientific method when they help children ask questions. This is one of the first parts of using the scientific method, and children will go back and forth. They'll question; they'll also observe; they're also going to predict during activities, and we want to create opportunities for children to experiment and allow children to discuss the results of their experiments. These steps don't necessarily always go in this order. It's not always question, observe, predict, experiment, discuss.

Children will observe and ask lots of questions and predict. All of this is part of the scientific method. Fostering children's thinking skills also talks about problem-solving. Not just giving children the answers, but instead helping them to explore and discover answers on their own. It's also applying knowledge. It's about supporting children to use previous experience and learning in new situations.

There are some things that fostering children's thinking skills does not look like. Again, we know that there are lots of things that you can do, but there are things that are not part of fostering children's thinking skills. You'll see that big red X. It's not drilling children on facts or skills. There's definitely a time when direct teaching is needed when we talk about fostering children's thinking skills, but it's not about creating activities for children to recall information. It's not -- it is about supporting children to use their natural curiosity to explore new information and to develop questions to investigate. It's about encouraging them to be problem-solvers and encourage them to be young scientists.

You'll see pictured here the Head Start Child Development and Early Learning Framework. And some of the examples that the scientific method incorporates that relates to the Head Start Child Development and Early Learning Framework are these: Logic and reasoning, literacy knowledge and skills, mathematical knowledge and skills, social and emotional development, and science knowledge and skills. You can see that fostering children's thinking skills really is an important part of the daily activities, and it really relates to the framework. Scientific method refers to a set of procedures for acquiring new knowledge. It involves asking questions, making observations, predicting, experimenting, and discussing connections between new and previous knowledge.

Teachers can use the scientific method to foster children's thinking skills by doing several things. One of those is to encourage children to ask questions and express their ideas and thoughts; to provide tasks where children can observe, predict, and experiment; and helping children discuss results and how they relate to what children already know.

We're going to watch a video that shows a teacher talking with a child during a classroom experiment with blubber. I want you to look during this video, if you would, please, to look for examples of how the teacher encourages children to predict and connect ideas.

Here is the video.

[Video begins]

Teacher: Ariana, this is -- inside here is shortening. It's kind of like the blubber on the polar bear. If a polar bear is in ice water and if your hand's in here, covered with the blubber, what do you predict will happen? What do you think will happen? Do you think your hand will be cold, or will it be warm?

Ariana: Warm.

Teacher: Warm? Let's try and see.

Girl: My hand was cold!

Teacher: Let's try and see. Ariana predicted that it would be warm, her hand will be warm. And make sure we cover it, because we want to make sure to protect it. Are you ready? Put your hand in there.

Girl: Is it cold?

Teacher: Let's put your other hand on the other side, so you can feel without the blubber and with the blubber.

Girl: Cold?

Teacher: Which hand feels colder?

Ariana: This one.

Teacher: That hand. How come that hand feels colder?

Ariana: It doesn't have the blubber.

Teacher: You're right! It doesn't have the blubber, right. So, is -- if this was a polar bear right here, would he be warm?

Ariana: Yes.

Teacher: If that was a polar bear there without blubber, would he be warm?

Ariana: No.

Teacher: Then he couldn't survive in the cold, could he? This one could, right?

Ariana: Yes.

Teacher: Good job. So, what you predicted is that your hand will be warm, and it was, right?

[Video ends]

Marci: I love watching that video. I can watch that video time and time again. You'll notice in the video that there is many instances of the teacher engaging in instructionally supportive interactions with the children. Could you take a moment to chat and let us know in what ways does the teacher support the children's thinking skills? One of the examples might be the teacher uses -- by asking the children if the hand with the blubber or without the blubber will get cold when you put it in ice water. Tell me what else you see in this video -- that you saw in the video that really talks about the teacher supporting the child's thinking skills.

Thank you, so much for using the chat box. We've got some great responses from several of our participants today. We have people talk about allowing the child time to think and express their feelings, giving the children opportunity to explore, and somebody talked about open-ended questions. Thank you again for participating in the chat today.

Another way to foster children's thinking skills is to help children apply new knowledge in what they already know. The teacher can build upon children's natural curiosity, by drawing upon their everyday experiences and helping children connect to new concepts to previous knowledge. One of the examples that I always think about is sort of a senses kind of activity that teachers oftentimes use in the classroom. They will bring in what they title mystery objects, and they might put in, oh, sliced oranges and flowers and toothpaste, and then when the children are sitting in a circle, she asks the children to close their eyes and guess which object she has passed around by using their sense of smell. In this lesson, the teacher builds upon the children's natural curiosity and relates their sense of smell to things that they know in everyday life.

It's important for teachers to carefully observe what is interesting to children. By building on what children are already interested in and curious about, teachers support children's learning in a way that is relevant and meaningful to children's everyday experiences. By integrating new information with what children already know, teachers help children gain deeper understanding. We now have the opportunity to watch another video. And in this video, I'm wondering -- the question that I'm going to pose is how, again, does a teacher foster the thinking of the children?

[Video begins]

Teacher: Right now, he's got all his winter fur. You guys see all this fur underneath? All this fuzzy-looking fur? That's his big winter coat.

Girl: I can smell him.

Teacher: You can smell him? Yeah, he's pretty stinky. So, right now he's got his big winter coat to stay nice and warm when he's outside. You guys see his big bushy tail?

Boy: Yeah!

Teacher: What do you think he uses his tail for?

Girl: For winter!

Teacher: For winter, but what in winter? Do you think it helps him stay warm?

Children: Yes.

Teacher: Yeah. Do you guys wear scarves?

Girl: Yes.

Teacher: Yeah, do you wrap the scarf around your neck and around your face and it keeps you warm?

Girl: I do!

Teacher: Yeah, well, he uses his tail just like you guys would use a scarf. So, he's able to curl up in a ball and wrap that tail around his face to keep him nice and warm. So, that big bushy tail helps keep him warm. This big fur coat helps keep him warm as well. And then he actually loses this big fur coat in the spring, so that he's nice and cool. If you guys wore your winter jacket in the summer and the spring, do you think you'd be hot?

Boy: Yes.

Teacher: Yeah, so he's got to lose his winter jacket, too. You guys want to see his teeth? You want to see his teeth?

Children: Whoa!

Teacher: Yeah, you see those sharp teeth? Those are called his canine teeth. Do we have canine teeth in our mouth?

Girl: I do!

Teacher: Yeah, yeah! See those pointy ones? You know those pointy ones in your mouth?

Girl: Jai has some.

Girl: Me too!

Teacher: Yes. Yeah, you do have canine teeth, too. Yeah, so those are our canine teeth, and you know what those help us do? Those help us eat meat. And since he loves to eat meat, he's got really big canine teeth.

[Video ends]

Marci: I love that video. I always giggle when they're talking about the teeth. The teacher in this video fosters children's thinking skills when she asks the children to brainstorm about the uses of a fox's tail and fur by asking "what" questions. Can you use general chat again and answer this question: how does this teacher foster the thinking skills of the children? Thank you, again for sharing your thoughts about how the teacher is fostering thinking skills of the children. We've got several answers. I love the one about the scarf or the tail keeping them warm and about, of course, teeth and fur coats. Thank you again for sharing in the general chat and participating in the webinar today.

One final strategy to foster children's thinking skills involves helping children to problem-solve by providing opportunities for children to brainstorm, plan, and solve problems. An example that I'm thinking about is a teacher may read a book about the importance of recycling, and then she asks the children to brainstorm about things in the classroom or at home that they typically throw in the trash that might be recycled instead. She asks each child to pick an object, such as cereal boxes or newspaper, scraps of paper from the art center, and then she asks them to think about alternate ways that the object might be used.

For example, using -- produce containers could be used for organizing baskets in the classroom. So, really children are developing problem-solving skills in the Head Start classroom. Teachers also can create experiments on how things move -- things that slide and things that roll -- that build on children's explorations during block construction activities. Teachers can help children brainstorm and problem-solve when children role-play familiar scripts such as if the dramatic play area is a grocery store or going to the doctor. That's a great way for them to learn how to problem-solve. Teachers also can introduce print concepts and phonological awareness skills in the context of familiar stories and picture books.

I'd like you to take a minute and think of the activities that you've planned for your children on Monday. Could you name one or two ways that you add interactions that will foster their thinking? For example, you may want to encourage children to experiment with how things move -- things that slide and things that roll -- by modeling how to build ramps of different heights in the block area. If you take a moment then to think about Monday that will be here before we know it, and ways that you are going to... add something in the classroom and the different center areas to foster children's thinking skills. I'll be quiet and give you a moment to use the general chat again. Thank you, so much for your input on that question.

And I note that someone reminded us that we're going to be getting ready to celebrate Earth Day. Some classrooms will be doing that next week. I love the idea of cars going through tubes and children measuring. That really gets everyone involved. And then we had a comment about dinosaurs. The dinosaur unit is always popular. And I was out at a grantee a couple weeks ago, and that's what they were studying, and I sure had a grand time. Anyway, back to the webinar at hand. Here is a takeaway tool for you, and we will put this link in chat, so that you can put this in your planning binder.

Next, I'm going to talk with you about MESS. And I want to know out there with our participants if you've used MESS, Marvelous Explorations Through Science and Stories. Have you heard about MESS? Are you using MESS? Marvelous Explorations Through Science and Stories. 100 percent! Oh, here we go. It's like a horse race. Twenty percent of people have used it. Oh, it's changing again. I better be quiet. The results are not in. It's like a horse race. Well, I'm going to spend a little bit of time this morning, or this afternoon, depending on what part of the country you're in, to talk about MESS, as I said. Thank you. I -- the final chat looks like about 75 percent of you haven't heard about MESS.

So, MESS is Marvelous Explorations Through Science and Stories, or MESS. It's an early childhood curriculum enhancement designed to help teachers and parents support children's early science experiments. There's a guide to the MESS, and there's also -- each guide provides background information, descriptions of learning experiences for the classroom and at home, and recommendations for books. It was developed by the Florida Museum of Natural History at the University of Florida in partnership with local Head Start programs and public libraries. It was funded by ACF back in 2004. And the guides and supporting materials are available, as a free resource on ECLKC.

MESS is, again, organized around a series of topical guides, and they're listed here. My Body/My Senses, Animals: Insects and Spiders, Prehistoric Life -- there's lots of different guides available for MESS. Each unit contains ideas for teachers, new vocabulary to introduce to children. It also has suggested materials lists, also learning activities and suggested book lists. This is all part of every guide that is available for MESS on the ECLKC website.

I'm also going to show you an example of just one page in the Exploring Nature teacher's guide. It shares how to prepare and guide an exploration of soil. So, you'll notice it also talks about the science concepts, and the purpose -- and the focus of the activity is stated. It says, if you can read that print, in this example, the natural world includes plants and animals, soil, rocks, water, and air. The materials also for this learning exploration are listed. You'll see that circled in red. Several types of soil and sand, a colander.

We also have books that are available and listed for every guide, and especially for exploring soil; you'll notice that in the red arrow. And vocabulary words. There's a list of words to help teachers start thinking of new words to introduce to children through the activity. And you'll likely think of lots more words that you'd like to add. There's also an approach. It's a description of the activity. And those are all outlined in the guides that are available, again, on ECLKC. This resource is full of wonderful ideas that can support children's emerging thinking skills. The guide includes a crosswalk of how each activity is related to the Head Start Child Development and Early Learning Framework.

For example, the soil exploration supports children to increase ability to observe and discuss common properties, differences, and comparisons among objects and materials; to participate in simple investigations; to test observations, discuss, and draw conclusions, and form generalizations; to grow abilities to collect, to describe, and record information with a variety of means, including discussion, drawing maps and charts; and another way is to describe and discuss predictions, explanations, and generalizations based on past experiences.

We really hope that you'll check out this resource. The link will be available at the end of the webinar. I'd also like to highlight some different ways for you to improve your daily practice in your classroom.

Let me share three tried and true ways for you to improve your practice. The first, of course, is to video record and review your own teaching. I know many of you have been doing that for some time. That is an excellent way to improve your practice. The second way is to practice with a peer. Find someone that you really trust and that will give you some honest feedback. You'll only get better the more you practice and the more honest feedback that you hear from a trusted peer. And finally, watch a master teacher in action. There are teachers that have just different skills, and I think that we can always learn from each other when you practice with a peer, but you really can also learn by watching a master teacher in action. Find a mentor and really improve your practices in the classroom.

So, in summary, today we've talked about how you can foster children's thinking skills. First of all, by using the scientific method: Providing tasks where children can observe, predict, and experiment. We also talked about problem-solving: Creating opportunities for children to brainstorm, plan, and solve problems. And finally, teachers can foster children's thinking skills by applying knowledge: building on children's natural curiosity by drawing upon their everyday experiences and connecting to previous knowledge.

Thanks, everyone!