CORE SKILL: THINK

Inquiry

What You Need to Know

Toddlers are naturally curious, active learners who love to explore their environment. As you may remember from a previous Core Skill focus, there are many things that you can do to promote their Active Exploration. This week, we will focus on supporting Inquiry skills - that is, going beyond wondering and free exploration to asking questions and using a hands-on approach to answer or explore those questions (e.g., solve problems and discover how things work). Children use their inquiry skills when they observe, experiment, and analyze something in order to better understand it.

Things to Consider

The <u>scientific method</u> is the process of observing, hypothesizing/predicting, experimenting, recording, and sharing conclusions that is used by researchers, scientists, doctors, and many others. Toddlers can engage in these tried and true steps as well with your support! By doing so, they become primed to investigate as a way of learning.

Some children may feel pressure when asked lots of questions. Consider the temperaments of the children in your classroom when engaging in inquiry activities. Will some children engage more in small group settings? Limit the number of questions you ask children by using guiding comments (e.g., instead of, "What is it doing?" try, "I think you're wondering what is happening.").

Development of Inquiry Skills

| Between 9 and 18 months, children may: | Between 16 and 36 months, children may: |
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| Actively explore people and objects to understand self, others, and objects, such as trying to get an adult to do something or trying different ways to reach a toy under a table. | Observe and experiment with how things work, seek information from others, or experiment with different behaviors to see how people and objects will react. |
| Engage in purposeful actions to cause things to happen such as making splashes in a puddle or rolling a ball to knock over a tower. | Identify the cause of an observed outcome, such as the tower falling because it was built too high. |
| Use reasoning and planning ahead to solve problems – try different solutions to everyday problems until discovering one that works. May try the same strategy multiple times even if it is not working. | Predict outcomes of actions or events (e.g., turning the faucet will make water come out). |
| | Problem-solve and experiment to figure out solutions to everyday problems, including social situations, such as when two children who both want to fit into a small car agree to take turns. |

Setting the Stage

Activities and materials that support the development of inquiry skills:

- Explore nature and/or living things inside (e.g., class pets or water table) and outside the classroom (e.g., nature hunts, animal or weather observations).
- Simple science experiments or investigations: ask questions, make predictions, and go explore to find answers!
- Involve collecting data (e.g., write down how many items you collected on a nature hunt in a journal or chart, make and analyze a simple chart and model recording children's preferences).
- Hands-on: set-up opportunities for children to feel, smell, see, explore, and even get messy!
- Exploring with ramps, lights, magnifying glasses, water, and sand.





Intentional Teaching Practices to Support Inquiry Skills

| | OBSERVE |
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| OBSERVE | Take time to notice what sparks children's interests and whether they follow up on those interests. Do some children seem interested or have questions about things but give up and move on before becoming fully engaged? Who would benefit from extra support? |
| | Narrate and Encourage In-the-Moment Observations |
| FOCUS | Observing means truly seeing what is happening in front of you. • Model specific observations (say exactly what you see/observe in the moment): "I see the bird reaching in and taking food. Now it is flapping its wings." • Encourage child observations: If verbal toddlers make statements, encourage them to describe, "how they know that," or, "what they see," or repeat and extend adding that information yourself. |
| | Promote Predictions |
| SCAFFOLD I | Prompt children to make thoughtful predictions. "Do you think it will roll down the ramp if you drop it? Give me a thumbs up or a nod if you think 'yes!' Let's find out!" Model using what you already know or your past experiences to make a thoughtful, educated prediction (not a wild guess). "Hmmm, the other ball rolled and this one is the same shape, so I think this one will roll too." |
| | Prompt Children to Compare, Contrast, and Categorize |
| SCAFFOLD II | Prompt children to: Compare: "Do these two cups look the same? What happens when we put water in this one? Uh-oh, it flows right through. But on this one, the water stays." Contrast: "How is this leaf different from this one?" Categorize: "Let's put all of the leaves in this pile and the acorns in that one." Patterns and relationships: "Why do you think the squirrels like that tree?" |
| KEEP IT GOING | Consider what you learned from observing children as well as their reaction to your Focus and Scaffolds. Find ways to build the activities in the Setting the Stage into your regular routines. |