

CORE SKILL: THINK

Problem-Solving with Tasks



What You Need to Know

Previously, you focused on supporting children as they solved problems occurring with their **peers**. This week, you will focus on problem-solving related to **tasks** (e.g., activities or regular routines).

Effective problem-solvers analyze problems, come up with a variety of creative solutions, and try out strategies until they are successful. They are simultaneously willing to take risks, experiment, and accept and learn from the choices they made. In preschool, this may look like a child figuring out how to build a bridge with blocks, put together a tricky puzzle, or even just figuring out where the toys are supposed to go or how to cover every inch of a paper with paint. You can help preschoolers develop problem-solving skills by encouraging them to think deeply, to create freely, to discuss their ideas openly, and by providing intentional, but minimal, support so they can solve problems as independently as possible.

Things to Consider

It's natural (and necessary) that children see adults as a resource (e.g., someone to turn to for help when they have a problem). But it can be easy for adults to help children a little too much. Sometimes adults are too quick to solve children's problems because adults want to "speed things up" or to relieve a child's distress. But when adults are too quick to fix the problem, children miss the opportunity to build their *own* skills and confidence. A little frustration and uneasiness can actually be motivating! It's best to observe closely and provide encouragement and support while letting children figure things out on their own as much as possible (even if that means they struggle a bit). It is the adult's responsibility to know when to step in.

Problem-solving with tasks also requires cognitive flexibility for children to be able to cope with tasks that may not go as planned (see *Regulate: Cognitive Flexibility* and *Regulate: Managing Emotions*). Some children may need support to be flexible thinkers. Be sure to know children's frustration tolerance so you can provide scaffolds before participation and engagement in the task is lost.

Development of Problem-Solving with Tasks

Between 36 and 48 months, children may:	Between 48 and 60 months, children may:
Tries several strategies with the assistance and modeling of an adult.	Tries different strategies to complete work or solve problems including with other children.
With adult assistance, analyzes and interprets data. Draws conclusions and provides simple descriptions of results.	Analyzes and interprets data and summarizes results and solutions independently.

Setting the Stage

Activities and materials that support the development of problem-solving skills:

- ◆ **Naturally challenging materials:** provide materials and activities that are difficult (within their zone of proximal development) for the children in your classroom. Observe and increase the challenge as needed.
- ◆ **Brainstorming activities:** brainstorm possible solutions to real or pretend scenarios (e.g., "The child in the book is sad. What are some things they could do to feel better?") but also generate ideas *unrelated* to a problem to build creative thinking skills (e.g., "How many ways can we...?", "What are all the ways we like to...?", "The child in the book is going to the beach. What do you think they're going to find?").
- ◆ **Challenge/problem-solving group activities:** set up problems for children to solve collaboratively (e.g., ways to modify a spoon so it can carry a large ball, ways to move a car across the room without touching the ground, picture cards of structures that children have to follow/recreate with real blocks).
- ◆ For additional support, **provide visuals** of possible choices/options of solutions to cue children. You can also verbally offer choices of two to indirectly model solutions (e.g., "The block tower keeps falling down. Maybe you can try building it on the table or the tile floor instead of the rug. What do you think you'll try?").



Intentional Teaching Practices to Encourage Problem-Solving with Tasks

OBSERVE	OBSERVE Observe children to see how they handle problems. Do they think of solutions and new strategies when things don't work the first time? Do they persist through challenges? Do they easily become frustrated or unable to cope and give up by walking away or asking for help too quickly/often? Maybe they don't use you as a resource at all and don't ask for help, even when appropriate. Who could benefit from extra support?
FOCUS	Acknowledge Effort Focus on the <i>effort</i> that children show rather than praising the results. Praising effort (rather than the result) encourages persistence. Great problem-solvers must accept and learn from mistakes. Focusing on effort builds the confidence that children need to take risks and come up with and try out different solutions. <ul style="list-style-type: none">◆ “Wow, you are really trying hard to figure out where to put that piece. I see you keep turning it,” instead of, “You are so smart! You knew just what to do! You solved the problem!”◆ “Well, it didn't work to put the block on top of there. But it was a good try and now we know we need something light to go on top.”
SCAFFOLD I	Promote Child Autonomy Provide support instead of solving problems <i>for</i> children. Watch closely so that you can provide hints or clues or support their thinking in ways that help children come up with or carry out solutions on their own as much as possible. <ul style="list-style-type: none">◆ A child is struggling to complete a puzzle, you say, “Hmm, have you tried turning it in a new way?”◆ Prompt them to talk through their thought process and challenges. “Tell me all the ways you've tried so far. (<i>After each</i>) Why do you think that one didn't work (<i>repeat for each</i>)? Does that tell you anything about what works or doesn't? What haven't you tried?” Child autonomy can also include communicating when they need help. Provide children with visuals to prompt them to request for help, or model, “I need help,” for the child to imitate. Then provide the appropriate supports to guide the child through problem-solving. Keep visuals available to support non-verbal children to communicate or guide those who need additional support to determine possible solutions.
SCAFFOLD II	Ask Open-Ended Questions Ask open-ended questions (e.g., questions that require more than a short or single-word answer): <ul style="list-style-type: none">◆ To help children find their own solutions: “Hmmm, I wonder how we can get this out. What do you think we should do?”◆ That promote brainstorming and flexible thinking. The ability to generate multiple ideas and the flexibility to look at problems in many different ways are critical for problem-solving.<ul style="list-style-type: none">○ “What do you think is in the ocean (<i>while pointing to, and providing access to, visuals of ocean vocabulary</i>)? What are all the things you'd do if you were at the ocean?”○ “Uh-oh, the child in our story is upset because they want to make a fire truck but they're out of red paint. What else could they use? Are there other ways to make it?”○ “How many ways to sort these can you think of?”
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.