

CORE SKILL: REGULATE

Cognitive Flexibility



What You Need to Know

Cognitive flexibility is being able to adjust one’s own thinking to meet the demands of the environment. Children use cognitive flexibility to adjust to a change, approach a new task, or take what they know and apply it to something new. Have you ever been driving to work only to find your road is blocked? It takes just a moment for you to use your cognitive flexibility to shift your plan and find a new way to work. Toddlers are **just beginning** to develop their cognitive flexibility. It’s very hard for toddlers to shift their mindset about rules, routines, people, etc. Young children struggle when things don’t go as planned. You can help by giving children the extra time and support that they need to “shift gears” and get ready for the next part of their day.

Things to Consider

Here are few examples to highlight how cognitive flexibility (or lack thereof) affects toddler behavior:

- ◆ (Child) is excited to play outside. But now it’s raining and they have to play indoors. They throw a temper tantrum – weeping, kicking, and insisting they go outside. (Child)’s cognitive flexibility is not developed enough for them to shift their mindset to consider all the fun they can potentially have in the classroom. Knowing this, their teacher helps them calm down, acknowledges their feelings, assures them that ‘all fun is not lost’ and helps them reengage.
- ◆ (Child) is a dual language learner. When their mother comes to visit the classroom, their cognitive flexibility allows them to shift back and forth between languages when they’re talking with their classmates or with their mother.
- ◆ (Child) is trying to make a basket fit on a shelf. They repeatedly shove it in the same way. (Child) doesn’t have the cognitive flexibility to try new approaches to solve a problem (e.g., turn the basket, try a new shelf).

Development of Cognitive Flexibility

Between 9 and 18 months, children may:	Between 16 and 36 months, children may:
Show ability to shift focus in order to attend to something else, participate in a new activity, or try a new approach to solving a problem.	Modify actions or behavior in social situations, daily routines, and problem solving.
	Adjust to changes in routines or usual activities when informed ahead of time by adults.
	Make common, everyday transitions that are part of a daily schedule.
	Show flexibility in problem-solving by trying more than one approach.

Setting the Stage

Materials and activities that support the development of cognitive flexibility:

- ◆ Games that prompt children to shift their focus and attention (e.g., freeze tag where children run from you and have to “freeze” when you touch them, or searching for an item, then switching to find another).
- ◆ Songs/dancing with rules: play songs and have children dance a certain move, then shift to a new action and repeat.
- ◆ Pretend play: shift roles or play scenarios (e.g., while crawling/barking as dogs, say, “Now let’s be birds and fly!”).
- ◆ Effective transitions: many children struggle with the flexibility of transitioning, so make yours effective by...
 - Providing warnings/reminders (e.g., “It’s almost time to clean!”).
 - Setting visual timers so children can prepare for transitions.
 - Giving clear, simple directions one at a time (e.g., when it’s time to clean say, “Put those blocks in this basket (*wait for completion*). Now go get your coat,” rather than, “Clean up, then get ready to go outside.”).
 - Discussing why a routine may be changing (e.g., you typically transition to the gym after snack, but you explain that children will play in the gym after the assembly is over) and why it will be okay (e.g., they will have more time to finish reading a book).
- ◆ Sorting activities (e.g., put all of the yellow bears together, then put all of the mommy bears together).



Intentional Teaching Practices to Support Cognitive Flexibility

Monday OBSERVE	OBSERVE Take time to observe children’s cognitive flexibility. When are children flexing their mental muscles to approach a task or solve a problem in a new way? At what times of the day do children have trouble “shifting gears?” Where do individual children differ in their skills to adapt to a change in the classroom? How do children’s emotional states affect their cognitive flexibility (intense emotions reduce children’s capacities to be flexible in their thinking)?
Tuesday FOCUS	Narrate Cognitive Flexibility Narrate children’s experiences with cognitive flexibility. <ul style="list-style-type: none">♦ “I see you are upset that we can’t go outside. I think you are worried that we won’t have any fun.”♦ “You are trying to figure out what to do next.” Also, model and narrate your <i>own</i> cognitive flexibility. <ul style="list-style-type: none">♦ “Hmm, well I thought I would put this basket here, but it won’t fit. I’m going to think of a new place to put it.”
Wednesday SCAFFOLD I	Prompt Children to Shift Their Thinking As children work or encounter difficulty, encourage them to think of things in a new or different way: <ul style="list-style-type: none">♦ “What do you think will happen if you...”♦ “Have you tried turning it this way?”♦ “Can we try this?”
Thursday SCAFFOLD II	Adapt the Activity to Encourage Cognitive Flexibility While being careful not to interrupt or take over, look for natural opportunities to modify an activity in a way that requires children to shift their thinking: <ul style="list-style-type: none">♦ While playing a game where they dance like animals, tell children to shift their motions (e.g., eat a banana instead of swing arms like a monkey).♦ During pretend play: “Oh no! My dog is sick. Let’s take them to the doctor.” Cognitive flexibility can be especially difficult for children who prefer rigid and consistent routines. Make subtle changes throughout your classroom environment that allow children to benefit from structure but be successfully flexible with small adjustments. For example, cycle out toys in centers so children have the opportunity to flexibly enjoy new toys, or change the color of crayons that you have available in the writing center.
Friday KEEP IT GOING	Consider what you learned from observing children on Monday as well as their reaction to your Focus and Scaffolds. Find ways to build the activities from Setting the Stage into your regular routines.