

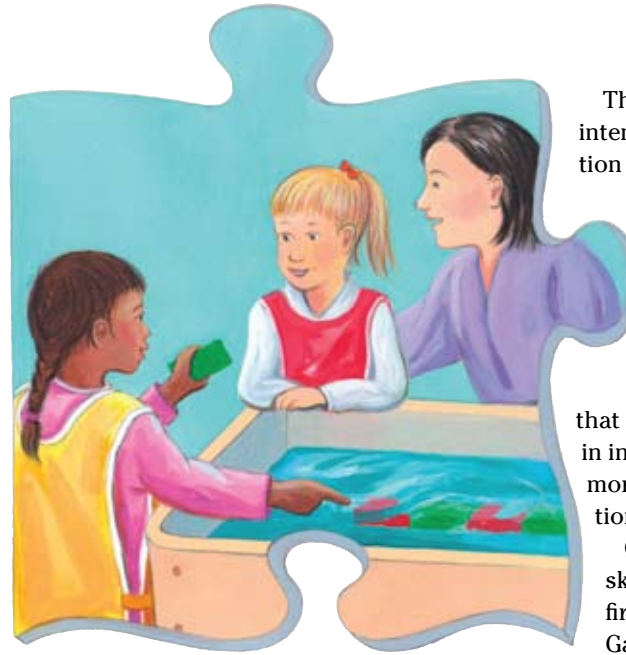
# Developing Young Children's Self-Regulation through Everyday Experiences

Ida Rose Florez

**As university faculty,** I often collaborate with teachers when young children experience learning or behavior challenges. Every child is different. Some have difficulty expressing their ideas verbally. Some struggle to get along with peers or follow classroom routines. In each case, however, one thing is the same: improved learning and behavior requires strong self-regulation skills.

According to Ellen Galinsky, president and co-founder of the Families and Work Institute and author of *Mind in the Making*, regulating one's thinking, emotions, and behavior is critical for success in school, work, and life (2010). A child who stops playing and begins cleaning up when asked or spontaneously shares a toy with a classmate, has regulated thoughts, emotions, and behavior (Bronson 2000).

From infancy, humans automatically look in the direction of a new or loud sound. Many other regulatory functions become automatic, but only after a period of intentional use. On the other hand, intentional practice is required to learn how to regulate and coordinate the balance and motor movements needed to ride a bike. Typically, once one learns, the skill becomes automatic.



The process of moving from intentional to automatic regulation is called *internalization*. Some regulated functions, such as greeting others appropriately or following a sequence to solve a math problem, always require intentional effort. It is not surprising then that research has found that young children who engage in intentional self-regulation learn more and go further in their education (Blair & Diamond 2008).

Children develop foundational skills for self-regulation in the first five years of life (Blair 2002; Galinsky 2010), which means early childhood teachers play an important role in helping young children regulate thinking and behavior. Fortunately, teaching self-regulation does not require a separate curriculum. The most powerful way teachers can help children learn self-regulation is by modeling and scaffolding it during ordinary activities. In this article I define self-regulation and discuss how it develops. I then describe an interaction I observed in a kindergarten classroom and explain how the teacher used an everyday experience to strengthen children's self-regulation.

## What is self-regulation?

Self-regulation refers to several complicated processes that allow children to appropriately respond to their environment (Bronson 2000). In many ways, human self-regulation is like a thermostat. A thermostat senses and measures temperature, and compares its reading to a preset threshold (Derryberry & Reed 1996). When the reading passes the threshold, the thermostat turns either a heating or cooling system on or off. Similarly, children must learn to evaluate what they see, hear, touch, taste, and smell, and compare

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it to what they already know. Children must also learn to then use self-regulation to communicate with any number of systems (such as motor or language systems) to choose and carry out a response.

Self-regulation is clearly not an isolated skill. Children must translate what they experience into information they can use to regulate thoughts, emotions, and behaviors (Blair & Diamond 2008). Infants translate the feel of soothing touch and the sound of soft voices into cues that help them develop self-calming skills. Toddlers and preschoolers begin to translate cues from adults, such as “Your turn is next,” into regulation that helps them inhibit urges to grab food or toys. They begin to learn how long they must usually wait to be served food or to have a turn playing with a desired toy, which helps them regulate emotional tension.

Because self-regulation involves different domains, regulation of one domain affects other areas of development. Emotional and cognitive self-regulation are not separate, distinct skills. Rather, thinking affects emotions and emotions affect cognitive development (Blair & Diamond 2008). Children who cannot effectively regulate anxiety or discouragement tend to move away from, rather than engage in, challenging learning activities. Conversely, when children regulate uncomfortable emotions, they can relax and focus on learning cognitive skills. Similarly, children experience better emotional regulation when they replace thoughts like “I’m not good at this” with thoughts like “This is difficult, but I can do it if I keep trying.” Regulating anxiety and thinking helps children persist in challenging activities, which increases their opportunities to practice the skills required for an activity.

Self-regulation is also like using a thermostat because both are active, intentional processes. Setting a thermostat requires an intentional decision and the device actively monitors environmental temperature. Similarly, self-regulation requires intentional decisions (“I will not hit Andrew!”) and active processes (sitting on one’s hands so they are



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unavailable for hitting). Although children’s behavior is regulated by many processes that function outside their awareness, researchers have found children’s intentional self-regulation predicts school success (Zimmerman 1994). When provided with appropriate opportunities, young children can and do learn intentional self-regulation. Researchers Elena Bodrova and Deborah Leong, for example, taught preschoolers to plan their play activities and found planning helped children develop stronger self-regulation skills (Bodrova & Leong 2007). Planning is an important part of self-regulation. Teachers might suggest that children sit on their hands to remind themselves to not hit or touch another child. To use this practice, children must think about potential future actions and then imagine and enact alternative behaviors.

Finally, just as a thermostat monitors conditions to maintain optimal temperature, self-regulation monitors conditions to maintain optimal arousal for a given task (Blair & Diamond 2008). Everyone experiences peaks and lows in levels of attention, emotion, and motivation. As children develop, they learn that some activities require them to pay attention more (that is, the activities require increased *attentional arousal*). For example, children need more attentional arousal to watch a play than to chase a friend. The same is true for motivational arousal. Children need to “wake up” motivation more to stick with a challenging task

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than to open a gift. Learning to persist in complex learning tasks that stretch children's skills is one of the most important outcomes of healthy self-regulation. To regulate various arousal levels, children must recognize when arousal is not optimal and take steps to modify it. Children often do this by squirming or looking away (such as out a window or at other children's activity) to arouse fading attention, or by withdrawing from others to reduce high physical or emotional arousal.

### How does self-regulation develop?

As children develop, their regulatory skills become more sophisticated (Kopp 1982; Blair & Diamond 2008). Infants begin to regulate arousal and sensory-motor responses even before birth. An infant may suck her thumb after hearing a loud sound, indicating that she is regulating her responses to the environment. Toddlers start to inhibit responses and comply with adult caregivers. By age 4, children begin to exhibit more complex forms of self-regulation, such as anticipating appropriate responses and modifying their responses when circumstances are subtly different. For example, clapping is appropriate after someone speaks during sharing time at school, but not while a teacher is giving directions.

Self-regulation skills develop gradually, so it is important that adults hold developmentally appropriate expectations for children's behavior. Vygotsky called the range of developmentally appropriate expectations the zone of proximal development (ZPD) (John-Steiner & Mahn 1996). The ZPD is the "growing edge of competence" (Bronson 2000, 20) and represents those skills a child is ready to learn. Expecting children to demonstrate skills outside the ZPD is ineffective and often detrimental. Punishing young children when they fail to sustain attention longer than a few minutes or fail to calm themselves quickly when frustrated does nothing to help them learn self-regulation. Likewise, failing to provide challenging opportunities for children to advance their skills can hinder their growth.

As they develop, most children begin to use self-regulation skills without prompting or assistance. They develop strategies to manage incoming information, choose appropriate responses, and maintain levels of arousal that allow them to actively participate in learning. When children routinely self-regulate without adult assistance, they have

internalized self-regulation (Bronson 2000). Vygotsky ([1934]1986) described internalization as a process in which children progress from co-regulating behavior with an adult to doing so independently. Thus, to develop self-regulation skills, children need many opportunities to experience and practice with adults and capable peers.

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### Supporting self-regulation in a kindergarten classroom

In the following vignette, I describe an interaction I observed between Melissa, a kindergarten teacher, and two children, Lucy and Tricia, as they explored the science center. Melissa used this everyday interaction to help the children practice and strengthen self-regulation skills.

**I sit quietly in a corner, observing Lucy, a kindergartner with a moderate speech and language delay. The children experiment with clay and rocks, water and blocks, and dirt and seeds. Their teacher, Melissa, moves among them, using her presence, words, and actions to direct the children's attention and help**

**them stay motivated and engaged. Melissa makes her way to the water table where 5-year-old Tricia constructs intricate waterways with plastic blocks. Lucy leans on the table, watching silently.**

**"What are you doing, Tricia?" Melissa says as she pulls up a chair and sits next to the table.**

**Tricia focuses intently as she repositions a block then straightens and looks at Melissa, "I'm making the water go fast!"**

**Putting her hand in the water, Melissa smiles, "Wow, it is moving fast! May I play?"**

**"Sure!" Tricia nods.**

**Melissa turns to Lucy, "Want to play with us?" Lucy nods and Melissa hands her a block, "Where do you want to put it?" Lucy looks down and shrugs.**

**"Lucy, try putting it here." Tricia points to the next hole in the path.**

**Lucy hesitates but takes the block. She tries putting the block in an empty space, but it doesn't fit. Lucy rests the block on the side of the water table and looks down. Gently rubbing Lucy's back, Melissa asks, "Do you need help?" Lucy nods. Melissa leans in and whispers, "Tricia's been doing this a lot; why don't you ask her how to do it? I bet she could show you."**

**Lucy looks up at Tricia, "Can you help me?"**

**"Sure!" Tricia takes Lucy's hand and positions it over the next space in the path. "Okay, push hard." Lucy leans on the block, pushing, but it does not go in. Tricia moves closer to Lucy. "Push really, really hard. You can do it!" Lucy, lips tight and determined, pushes the block hard into the hole. Water swirls around it as a smile spreads across her face.**

Melissa stands up and gives Lucy's shoulder a gentle squeeze. "Lucy, you did it! I knew you could! Tricia, thank you!" Melissa moves toward another center. "You girls have fun. I'll be at the next station if you need me."

As she walks away, Melissa hears Lucy say, "Thank you, Tricia!"

"No problem," Tricia replies. "Where should we put the next block?"

Melissa turns around just in time to see Lucy grab a block, shove it in place, and say, "There!"

## Providing scaffolding to help children develop self-regulation

Helping children develop self-regulation skills is similar to helping children learn to read, count, or ride a bike. Effective teachers use a variety of strategies to bridge the developmental space between what children already know and can do and more complex skills and knowledge. Three teaching strategies are critical for scaffolding children's development of self-regulation: modeling, using hints and cues, and gradually withdrawing adult support. Melissa used all three in her interactions with Lucy and Tricia.

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## Modeling

By demonstrating appropriate behavior, teachers show children how to accomplish a task and use the self-regulation needed to complete it.

For Lucy, Melissa modeled important language and social skills: she indicated her intention to join the activity by

pulling up a chair. She then asked Tricia a question about her activity, waited for an answer, and responded positively. For Tricia, Melissa modeled how to invite a reluctant observer to play: she turned her attention to Lucy, offered a play invitation, handed her an object, and asked her to make a play decision. When Lucy shrugged, Tricia followed Melissa's lead and suggested a way Lucy could participate.

All these behaviors required self-regulation. To take conversational turns, children must recognize when their turn has ended, then listen and wait until it is their turn

again. They must then choose an appropriate response from unlimited possibilities. To ask a playmate about her play, a child must inhibit talking about her own play and listen to someone else. Asking to play requires an anxious child to regulate emotion, inhibit passive behavior, increase arousal, and engage despite potential discomfort.

Of all the self-regulation Melissa modeled, perhaps the most important scaffold was calling attention to the opportunity for Lucy to join Tricia. To actively engage in learning opportunities, children must attend to and recognize that a situation offers the potential for interesting interactions and things to do. Adults can help children develop this regulatory skill in a variety of ways, beginning with



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very young children. When adults hold infants or toddlers on their laps and point to objects or letters in a book while using their voices to indicate excitement, they help children focus their attention on images that are most important for learning. By getting the ball rolling, Melissa not only helped Lucy actively participate, but allowed Tricia to talk about her science activity and demonstrate to others how to replicate her experiment.

## Using hints and cues

When teachers use simple directions, gestures, and touch, they provide young children with valuable cues about how and when to regulate their emotions, attention, and behavior. Teachers can help children regulate attention by pointing to or commenting on important or interesting aspects of a picture, word, or pattern. They can gently touch a child's back to cue a child to relax (but keep in mind that for some children, touch may increase tension).

Sometimes, children need hints and cues in addition to modeling. Lucy did not consistently engage. She nodded, indicating her desire to play, but looked down and shrugged when handed a block. She started to play, but gave up quickly when she encountered difficulty. Lucy needed direct support. Melissa gently rubbed Lucy's back, cuing her to remain calm and directing her attention away from feeling frustrated and toward solving the problem. Learning to recognize when one needs help and to identify good sources of



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help are critical self-regulation skills. By leaning in and quietly suggesting that Lucy ask Tricia, Melissa hinted about where to get help and continued to cue Lucy to remain calm. Melissa also modeled for Tricia how to give appropriate hints and cues. Tricia then imitated Melissa's behavior, and coached Lucy to success.

Younger children may need more explicit hints and cues. Cuing children to hold their hands or put them in their pockets helps them regulate impulses to touch, grab, or

hit. Key phrases such as "look here," "look at me," or "look where I am pointing" are explicit cues teachers can use to help young children focus their attention. Beginning in infancy, teachers can help children recognize and name their emotions by calmly saying to frustrated or angry babies and toddlers, "You sound angry" or "I wonder if you're frustrated," and then cuing them to start self-calming by using gentle touch and saying, "Let's relax" or "I'm here to help you." As children begin to use language, adults can provide cues about when and how to ask for help, when to take a break, or when to try a different strategy.

## Gradually withdrawing adult support

At the heart of scaffolding is teachers' careful attention to timing the withdrawal of their support. As children increasingly direct their attention appropriately, persist in challenging tasks, and use language to engage others or seek help, they increase their ability to act independently. As they do, teachers turn over more of the regulating responsibilities to the children's control, while monitoring their progress and intervening when necessary to provide appropriate support.

Scaffolding children's learning requires skillful removal of adult assistance. According to Salonen, Vauras, and Efklides (2005, 2) teachers must pay careful attention to "the learner's moment-by-moment changing independent functioning." After observing a successful exchange between Tricia and Lucy, Melissa withdrew, but she stayed close. She encouraged the children to ask for help should they need it, let them know where to find her, and monitored their interaction.

Withdrawing adult support from infants, toddlers, and preschoolers requires continual monitoring by adults. The younger the child, the more inconsistent self-regulation skills will be. This inconsistency means adults need to be even more careful about how quickly they withdraw support and pay careful attention to determine whether it is appropriate to intervene again. When an infant takes her first toddling walk across a room, she is not ready to walk independently without adult supervision. Similarly, infants and toddlers who have learned to routinely self-calm need



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increased adult support when they are ill or in unfamiliar surroundings. At every age, learning self-regulation happens within children's everyday experiences with trusted adults who regulate their own thinking, attention, emotion, behavior, and motivation.

## Intentionality and teaching self-regulation in everyday interactions

Teaching young children self-regulation first requires strong teacher self-regulation. Children learn to regulate thoughts, feelings, behavior, and emotion by watching and responding to adults' self-regulation. Referring to motivational regulation, Galinsky notes, "Adults foster children's motivation by being motivated themselves" (2010, 11). Lucy and Tricia's interaction at the water table presented a perfect occasion to strengthen their self-regulation skills. Melissa recognized the opportunity because she was prepared to support self-regulation through her teaching practices. She intentionally reflected on the children's needs and planned in advance the types of modeling, hints, and cues she would use to scaffold their self-regulation. Melissa planned to help Lucy regulate emotions, motivation, language, and social skills so she could initiate interactions with her classmates. Melissa regulated her own attention, deliberately looking for opportunities to scaffold Lucy's skills. Melissa knew Lucy's skills were at the point where she needed only a little nudge to engage. When the opportunity presented itself, Melissa regulated her own interactions, being careful to model behavior rather than direct Lucy.

During the interaction, Melissa monitored Lucy's responses, mentally comparing them to her knowledge of Lucy's skills. She considered the types of support she had previously decided Lucy needed. Melissa recognized when Lucy needed hints and cues. Knowing gentle touch often helped Lucy regulate anxiety, Melissa rubbed Lucy's back to soothe her, kept her voice low when offering suggestions, and refrained from solving the problem for her. Melissa intentionally removed direct adult support and regulated her attention so she was aware of the girls' continued interaction even as she moved away to engage with other children. Melissa's self-regulated teaching practice created an environment that allowed her to scaffold the children's self-regulation through an everyday classroom experience.

## Children learn to regulate thoughts, feelings, behavior, and emotion by watching and responding to adults' self-regulation.

## Conclusion

Teachers of young children play a vital role in helping children develop foundational self-regulation skills. Fortunately, young children's everyday experiences offer abundant opportunities for developing self-regulation. Teachers can take advantage of these opportunities by

- identifying each child's self-regulation zone of proximal development and planning the kinds of modeling, hints, and cues the child needs to continue his or her development,
- watching for opportunities in everyday classroom experiences to scaffold self-regulation,
- withdrawing direct support as children begin to demonstrate new skills, and
- monitoring children's activities to ensure they are successful.

When teachers deliberately teach self-regulation as part of everyday experiences, they help children become actively engaged learners, laying the foundation for years of future success in school and life.

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