Regulation as the Foundation for Learning

"When awareness is brought to an emotion, power is brought to your life."

—Tara Meyer Robson

Jane was an active, curious, and full-of-life first grader at a public school in a large city. She was eager to engage and play with other students but had difficulty sitting still, listening to the teacher's directions, and following along with classroom expectations. At times, she got up in the middle of the teacher's lesson to dance the "floss" or point out the window and exclaim, "Look! There's a peacock!" Some students laughed and engaged with Jane, while others became frustrated that she was interrupting the teacher, Ms. Sperry. This was often disruptive to the whole class and bothersome to her teacher. At other times when she was completing written work, she became frustrated and fell down on the floor or threatened to hit others. Some of the school staff commented that Jane was just trying to get attention, while others felt that she was being manipulative and attempting to get out of completing her schoolwork.

Ms. Sperry initially responded to Jane by focusing purely on her behavior, telling her she was being disruptive or inappropriate, and commenting that she should sit down and listen like the other students. Ms. Sperry had a large class with over 20 students and she was often triggered, becoming frustrated, and overwhelmed by Jane's behavior, often not knowing how to respond. Every day Ms. Sperry moved Jane's "behavior clothespin" down the behavior chart, which resulted in Jane's behavior pin being in the "parent contact zone" on most days. However, this didn't seem to resolve the problem—the next day Jane was back at it again. Jane began to feel as if she was bad, and her behavior became increasingly worse. Jane began to hate school and make comments that no one liked her. This resulted in a difficult cycle with Ms. Sperry as well as Jane feeling unsuccessful and disconnected. It was, quite frankly, exhausting for Ms. Sperry.

When we simply focus on the surface behaviors, we miss an amazing opportunity to look underneath the surface to figure out what might be causing those behaviors. When we take time and use the tools outlined in this book to search for the "why," we can better know how to support students' success moving forward. When Ms. Sperry looked a little bit deeper into Jane's story, she found out that Jane had been adopted at the age of 5 and spent her early years in foster care. Jane struggled overall with knowing how to connect and build relationships, which often resulted in her engaging in silly or inappropriate behaviors as a way to get others to like her. Jane wanted to learn and complete the given schoolwork, but she was unable to do so in an environment where she didn't feel safe or regulated.

When we look at behaviors as a form of communication, we can then take a few moments to figure out what the behaviors are trying to tell us. Over time, Ms. Sperry connected with Jane in a positive way, helped her to feel safe, and removed the behavior chart clothespins, which was causing Jane to feel a sense of shame. She reframed Jane's behaviors as an attempt to connect, and she provided opportunities for Jane to build a positive relationship with her during recess and breaks. While this took additional time, it was far more rewarding and far less exhausting for Ms. Sperry. This teacher-student connection increased Jane's sense of emotional and relational safety, decreased her fear, and improved her behavior, which ultimately increased Jane's ability to learn.

This chapter will look closely at the importance of building positive relationships in the classroom setting, and how the *relationship* in and of itself can serve as a way to increase a student's regulation and ultimately improve learning.² A teacher may feel overwhelmed with a large class of students who all bring their own histories, strengths,

challenges, and needs. It may seem almost impossible to know the individual needs of every student in the class. Through the framework of interpersonal neurobiology (IPNB),³ and other brain-based relational models we can understand that there are some basic regulation and relationship-building skills that every teacher can use in class that work to build protective relationships with all students. These strategies also serve to increase students' and teachers' sense of safety, overall regulation, and feelings of contentment and success in the classroom setting.

WHAT IS "REGULATION"?

Regulation is a term thrown around a lot in today's vernacular. Since we will be using the term quite a bit in this book, it will be helpful for us to identify what we mean by regulation and how to identify different states of regulation in ourselves and in our students. Regulation can be defined in many ways—from nervous system arousal and regulation, to emotional regulation, to body-based regulation, to co-regulation between and within a dyad such as the teacher-student or parent-child dyad. Regulation is also defined as "behavioral organization," defined as achieving an optimal arousal level in order to effectively handle the demands placed on us. Regulation is actually a very broad term, but we will use it to describe an individual's ability to manage his or her internal emotional and physical state in order to stay calm enough to communicate, solve problems, learn, connect with others, sit and focus, follow directions, complete school assignments, and make decisions. This fundamental regulation is necessary if any teaching or learning is going to occur.^{2,3}

Regulation of the body is when we feel at ease in our bodies.⁴ More specifically, it is when the sympathetic and parasympathetic branches of the nervous system stay relatively in balance. Some activation of the sympathetic and parasympathetic nervous system is good and protective, but when either branch is activated too much it can result in maladaptive responses.

• The *sympathetic nervous system* helps activate us and arouse us into a state of action. If the sympathetic nervous system is too engaged, then we can get easily overaroused, anxious, hyperactive, or angry. If something happens to trigger a fight or flight response, the sympathetic nervous system is activated. This is when a child experiences something as

Regulation: an individual's ability to manage his or her internal emotional and physical state in order to stay calm enough to communicate, solve problems, learn, connect with others, sit and focus, follow directions, complete school assignments, and make decisions.

- threatening, and she may yell, scream, fight her way out of it, or run away.⁴ For example, Jane is feeling frustrated and "on edge" about completing her writing assignments. Her teacher tells the class it is time to pull out their workbooks and complete the sentences. Jane looks at the workbook and becomes overwhelmed, not knowing where to start. Because her sympathetic nervous system is overly activated, she yells, "I hate this!" throws her workbook on the ground, and threatens to hit the student sitting next to her.
- The *parasympathetic nervous system* helps slow us down and prepares us for rest. If the parasympathetic nervous system is too engaged, then we can get easily underaroused, depressed, sluggish, or passive. The freeze response can be triggered by something that is perceived as threatening, but it is activated by the parasympathetic nervous system. This is when a child wants to shut down, hide under a desk, or not talk.⁴ If, in the example above, Jane's parasympathetic nervous system was overly activated, then the same writing assignment may trigger her to clam up, hide in the hallway, or cry in the bathroom. Jane could also say she's too tired or bored to complete the assignment.

When the autonomic nervous system is out of balance, we tend to become either more rigid or chaotic, as we talked about in Chapter 1. There are many things that can trigger one of these responses, such as challenging new academic tasks, certain uneasy social situations, or particular tones of voice. Overwhelming sensory information can also trigger such a nervous system response. Sometimes students with learning and attention challenges are triggered by reading or writing. Students with an autism spectrum disorder, attention deficit disorder, or slower processing speeds may be triggered by certain social interactions. We will explore each of these nervous system triggers in subsequent chapters.

It will be important for us to learn how to recognize different "states of regulation" and what they look like in our students and ourselves.⁵ Various research models talk about regulation in different ways: the idea of "green zone" regulation used in *The Whole Brain Child*, the "just right zone" of the How Does Your Engine Run? program, Dr. Dan Siegel's "window of tolerance," or the "Goldilocks zone." Whichever you decide to use, the idea is that our brains need to be in the "just right" zone of regulation in order to focus, attend, learn, and complete work. It is therefore very important for teachers to know how to

recognize when their students are in this "just right" zone, when they are not, and what to do to get their students back into the "just right" zone before trying to teach new or challenging concepts.

When the sympathetic nervous systems take over too much, then we can go into a "red zone" or fight or flight state of arousal. This is when we become angry, fearful, outwardly anxious, or overly excited. On the way to the "red zone" we pass through the "yellow zone," which

Supportive Diagram

Understanding the "states of regulation" can help you determine which state you or a student might be in at any particular time and help you better understand his behavior. It is important for teachers to know how to recognize when their students are in a "just right" zone, when they are not, and what to do to get their students back into the "just right" zone before teaching a new or challenging concept. It is also important for teachers to recognize when they are moving through different states of regulation themselves so that they can help themselves get back into the "just right" zone for teaching.

 Sympathetic nervous system takes over and causes fight or flight response. Red Zone Emotions: Angry, fearful, outwardly anxious, overly excited, stressed. Heighted sympathetic nervous system response that has not yet reached fight or flight. ellow Zone Emotions: Frustrated, somewhat stressed, somewhat nervous, silly. Balance between the sympathetic and parasympathetic nervous system that allows for "Just Right" social interaction and higher cognitive engagement. **Green Zone** Emotions: Happy, calm, engaged, focused, social. Parasympathetic nervous system takes over and causes a freeze response. • Emotions: Sad, disengaged, bored, tired. Sometimes feeling mad or angry can also result in a blue zone response.

is a heightened state of arousal that is usually more manageable than the "red zone." This might be when we become frustrated, somewhat stressed, a little nervous, or silly. On the flip side, when the parasympathetic nervous system takes over too much, then we can go into a "blue zone" or "freeze" state of arousal. This is when we become sad, disengaged, bored, or tired. It is notable that some people will actually go into a "blue zone" when they are angry or overwhelmed. For this reason, it is important not only to pay attention to disruptive behaviors but also to students who are disengaged, shut down, or oddly not disruptive at all.

Emotional regulation comes with greater brain integration; this allows us to keep our feelings from going to extremes—or to help us remain regulated and feel "just right." When we feel ourselves getting dysregulated, we can activate our sympathetic or parasympathetic nervous systems, respectively, to stay regulated. If our sympathetic ("fight or flight") nervous system is activated, we need to engage in an activity that feels safe, quiet, calm, repetitive, and regulating. It often helps to decrease the sensory input in the room (e.g., turn off the lights and remove loud noises) to create a sense of safety. If the parasympathetic ("freeze" or "rest") nervous system is activated, we may need to engage in something that gets our body moving such as jumping jacks, stretching, going for a walk, or getting a glass of water. As this capacity to engage in regulating activities strengthens, emotional responses more quickly reflect a return to a balanced automatic nervous system, even in the face of stress. This takes practice and requires establishing positive patterns.

Throughout the day, children *and* adults move through different states of regulation. We may be calm, relaxed, happy, and ready to focus at one moment, or stressed, angry, and frustrated at another. We often have strategies to move back into a state of calm when we get dysregulated. For example, a student may be focused on completing a math worksheet until another student comes over and knocks the pencil box off her desk. While this is frustrating and may result in an exchange of words, she can calm down by taking a deep breath, picking up her pencils, and re-engaging with the math worksheet. If teachers are not in a calm, regulated state, students will pick up on that and it will be very difficult to teach them because they will sense that something is "off." If students are not in a regulated state, they will not be able to focus, sit still, attend, or learn. Likewise, if we as adults are not in a calm, regulated state, it will be much harder for us to focus on our jobs and complete our work to the best of our ability.

Interactive Scenario

Considering the following narrative of Lilliana's school day, plot on the chart how her regulation fluctuates throughout the day. Take note of how these fluctuations may impact her ability to learn.

Lilliana sluggishly enters class and typically lies on the floor during morning meeting. She often does not raise her hand to participate in math class and seems bored with the material. When Lilliana comes in from recess, she seems engaged and eager to learn in social studies. By the end of social studies, she is clearly ready for a break. You frequently get reports that Lilliana does not eat her lunch and has a difficult time remaining seated in the cafeteria. When she comes back from recess she, again, seems engaged in learning and is eager to start language arts class. Her music teacher reports that Lilliana is disruptive and has difficulty following directions. By the time she returns from recess to get ready for home Lilliana is again sluggish and needs more reminders than other students to write her assignments down and pack her bag.

Red Zone Yellow Zone Green Zone Blue Zone Blue Zone Lilliana's Regulation During the Day Apace Strong Library Comments of the Comment o

 $\verb+Blue+\to \verb+Blue+\to \verb+Green+\to \verb+Green+\to \verb+Green+\to \verb+Red+\to \verb+Blue+\to \verb+Green+\to \verb+Green+\to \verb+Red+\to \verb+Blue+\to \verb+Green+\to \verb+$

As a note, it seems that movement (i.e., recess) is regulating to Lilliana, and loud noises (i.e., the cafeteria and music class) can cause her to become dysregulated.

In the introductory vignette, when Jane became dysregulated, she engaged in silly, disruptive, or "attention-seeking" behaviors. She did this because learning, connecting, and engaging with others was threatening to her due to early childhood traumatic experiences. She felt unsafe in relationships—one of the important pieces for an integrated brain that we will explore in Chapter 3. She fluctuated between sympathetic nervous system and parasympathetic nervous system responses, at times threatening to hit others and at other times hiding under her desk. She was rarely in the "just right" zone where

Reflective Activity

Think back over the events of your day today. Can you recall moments when you were in the "just right" zone? What was happening in that moment? What interactions were occurring between your students and yourself? What was going on in the environment? Use the tools below to think back over your day and identify when you were "just right," when you felt yourself move into the "fight or flight" zone, and when you might have felt yourself fall into the "freeze zone." Can you recall a situation in which you were "co-regulated" with a student you were working with?

Fight or Flight Zone Moments

Co-Regulation Moments

Freeze Moments

Freeze Moments

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Available for download at resources.corwin.com/ClassroomBehaviors

she was able to connect, learn, attend, and engage with others. Over time, as she realized she was no longer going to get in trouble for her dysregulation, she slowly started to build a safe, protective relationship with her teacher, Ms. Sperry. Little by little this sense of safety in relationships changed the neural pathways in her brain and helped her associate relationships with safety. With safety, consistency, and regulation being modeled to her on a daily basis, over time she was able to begin to use the same skills.

REFRAMING THE DEVELOPMENTAL EXPECTATIONS OF REGULATION

Before we dive into strategies to promote regulation in the classroom, it is important to recognize and reframe the developmental stages of regulation. It is easy for us as adults to stretch our expectations of children, especially as society is pushing for children to mature more quickly. If we take a step back to ask ourselves if our expectations match what is developmentally appropriate, then we can better come alongside the student. It is also important to acknowledge that even if a child "should" have certain self-regulation skills, he or she may still require some degree of guidance from a trusting adult figure in order to calm down or solve problems. At certain times children may "regress" in their ability to regulate, especially if a child has gone through a traumatic or stressful life event.⁶ As the demands in our environment increase, our ability to remain regulated often decreases—such as when introducing new learning concepts.⁷ This is because the brain is funneling resources to different parts of the brain in order to facilitate motor, language, or cognitive development.

Emotional regulation tends to develop in a stepwise manner that includes identification, integration, building coping skills, and practice.^{8,9}

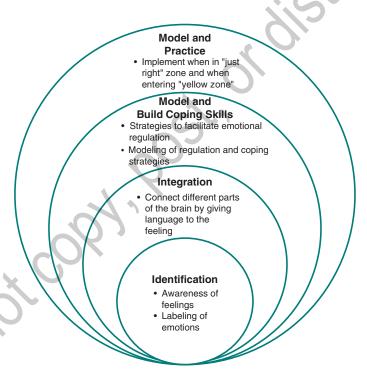
1. *Identification* includes building an awareness of what the feeling is and how to identify it. Pre-K students will need more assistance in identifying their emotions than a third grader. However, that does not mean that a third grader will not need assistance at certain times or under certain circumstances. After you have helped a student identify a particular felt emotion, you can move into the integration phase.

- *Integration* as we discussed in the introduction helps connect the language and logical processing parts of the brain to the emotional and intuitive parts of the brain. You start to hear 2- and 3-year-olds exclaim, "I'm mad" or "I'm sad," which is a good indication that they are beginning to integrate their internal felt sense of the emotion with a logical, language-based understanding of what it is that they are experiencing. This becomes more complex as children get older. For example, 4- and 5-year-olds have the capacity to understand that when we get mad, our muscles become tight or our hearts start to race. And 6- to 7-year-olds can better understand the connection between thoughts, feelings, and behaviors. For example, "When I get mad, my muscles get tight, and I think that I hate the world," but "When I'm happy, I feel like dancing and singing, and I think that I can do anything."
- 3. Building coping skills involves the teaching of strategies to facilitate improved "emotional regulation." It is important to realize that you cannot actually "teach" self-regulation. It's a process that we all move through as we develop and mature. However, you can equip children with tools and provide modeling so when they are ready, they have resources available. Know that teaching regulating coping skills will be more effective after you have achieved the identification and integration phases, even though our inclination is to jump right to "fixing" the problem as soon as possible.
- 4. Practice, practice, practice! Be aware that these coping skills take a lot of practice and modeling in order to reinforce and make into an automatic pathway (similar to the example of tying shoes in the introduction). It is also important to know that students need to practice these skills when they are in a regulated "just right" state. Just as learning any new skills, if we are not in a regulated state, we will not be able to learn or practice such skills. If we wait to tell a student to take a deep breath when they are already in the red zone, they will likely yell, "No, that never works! I'm never breathing again."

While emotional regulation develops over time and we progress through different stages of development as we grow, it is important to remember that our brains do not always develop in a stepwise or linear fashion. ¹⁰ There will be occasions when we see a child achieve a certain developmental milestone, complete a task well, or demonstrate

Supportive Diagram

Emotional regulation typically occurs in a stepwise manner that is reliant on modeling from adults and consistent co-regulation. It is not possible to "teach" self-regulation, but it is possible to equip students with the foundational skills to flex their emotional regulation muscles through the following process. The adult's ability to monitor and maintain their own state of regulation and model a regulated state is very important in the development of regulation skills in children. Remember that setbacks for all of us will occur and are an indication that the brain is changing!



self-regulation one day, and the next day they may have difficulty with the same activity or situation. This does not represent a failure. It only suggests that the brain is continuing to work toward integrating the new developmental skill.

Think of Jane's story above, for example. One day after working with her teacher on modeling appropriate expression of emotional

identification and regulation, she was able to express herself when she became angry, saying, "This writing is too hard. I'm getting frustrated and I need help." Her teacher was proud and excited that Jane was able to communicate her emotional state and her needs at the same time. By Jane's communicating in this way, her teacher was able to provide her with the right support to get her back into a regulated state and to determine how to teach her the writing skill that the class was working on. The next day, however, when the class was asked to fill in words to complete certain sentences, Jane became overwhelmed, threw all of her pencils on the floor, and raised her fist in an attempt to hit her desk mate. Ms. Sperry felt discouraged and as though all of the work they had been doing together was not working. She wondered, "Why was Jane able to identify her emotions, express herself, and ask for help yesterday, and today she reverted back to her 'red zone' state of dysregulation?"

These setbacks can often feel disheartening and discouraging. It may seem as though all the work you are doing with the student is not working or may not even be worth it. Know that this is a typical part of brain development. It takes time to grow new neural connections and even longer for those connections to solidify. As long as you are seeing progress, even if it is only tiny glimpses on certain days, then you know the connections are beginning to form. While there are certain developmental expectations for students to achieve when it comes to regulation, it is up to us, as the adults in their lives, to create a safe, predictable, structured, and consistent environment. Your understanding of each student's individual needs will help them to reach an optimal state of regulation. This takes time, patience, and understanding.

DEVELOPMENTAL MILESTONES IN REGULATION

Our ability to regulate and calm ourselves *ideally* grows in capacity as we develop over time. As mentioned in the introduction, regulation is dependent on our relationships, brain and body functions, and mind processes. Some children and adults develop better regulation strategies than others, and some develop regulation strategies more quickly than others. With proper support, guidance, safe environments, and opportunities, students can thrive in their ability to regulate. When thinking about regulation, it is also important to think about how different cultures view the concept of regulation. Western cultures tend to emphasize the notion of "self-regulation," whereas other cultures

often discuss the importance of being in community. With this in mind, it can be helpful to view regulation within the context of being in relationship with others. This is often called co-regulation, rather than self-regulation, which we defined in Chapter 1 and will expand on in Chapter 3. We will also explore how to integrate various cultural conceptions of regulation and utilize more "community-based" co-regulation constructs to help students build their regulation skills over time within the classroom community.

In *infancy*, ¹⁰⁻¹² we often rely on sensorimotor strategies to soothe, such as swaddling, rocking, swinging, sucking on a pacifier, or listening to soothing music. Infants rely heavily on their caregivers to provide them with consistent, calming strategies to help with regulation. Infants who do not receive this attuned, responsive co-regulation tend to be more anxious and reactive. As infants grow, they begin to turn to familiar voices when they hear them, recognizing the sound of safe, consistent caregivers. They then begin to reach out to their caregivers for regulation: crying, raising their arms, communicating a desire to be held and soothed. Regulation happens through the combination of predictable and attuned caregiving that sends messages to the child that they are safe and can be soothed.

Early childhood^{11,12} is a period of rapid brain growth and development that also serves as a foundation for emerging emotional regulation skills. When children develop language skills in preschool, they can better communicate their emotions, which helps them to adjust their arousal level and feel more regulated. Rather than cry or scream when they want something, like an infant, they can request something or express their opinion. However, even like adults, preschoolers have moments when they find themselves in a red or blue zone state and need help to get back to their "just right" zone again. Self-talk, or inner speech, also starts to blossom at this age, helping children form a running monologue of their emotions, build confidence, and ultimately, develop self-regulation.

Preschoolers^{11,12} still need a large degree of co-regulation in order to help them work through their emotions, understand expectations, control their impulses, and develop empathy. They need someone to help put labels to their emotions and integrate those emotions with logic. Just as infants need consistent responses from caregivers, preschoolers need this as well. Providing children this age with an appropriate level of external structure helps them navigate their emotions without the added pressure of managing their routines. Preschoolers

are adept at learning from the adults around them. They watch us as we regulate our own emotions and take note of those strategies. When preschools have positive role models who demonstrate healthy self-regulation, such as frustration tolerance, flexibility of thought, and controlled emotional expression, preschoolers too can learn how to better self-regulate.

By *kindergarten*,^{11,12} many children have the capacity to identify different feeling states—sad, happy, or angry—and communicate them with feeling identification words. Many kindergarteners still need assistance in communicating these feelings "in the moment," particularly in challenging or frustrating situations. At this age, children gain more understanding of cultural expectations and social norms, have more ability to control their impulses, and typically realize that the world does not revolve around them. This allows them to follow along with classroom expectations that may conflict with their desires at times, although they may need reminders of those expectations.

As demands begin to increase in first and second grade, 11,12 children are better able to take on these challenges as they develop a sense of personal pride and a higher degree of social- and self-motivation. A higher level of integration is building within the brain, allowing students to better understand their internal emotional states, what may trigger a dysregulated state, and how to cope with these big emotions. Children of this age are beginning to expand their social world and experience a desire to have more independence. It is often around this time that a higher level of social-emotional connectedness and regulation becomes more relevant as children start to navigate more complex social situations. First and second graders need guidance in knowing what is best in certain social situations (particularly those that are unstructured like lunch and recess), how to flex their emotional tolerance muscles, and how to adapt to various social circumstances. In this way, social situations may become more triggering or overwhelming, which can impact self-esteem and a feeling of social connectedness. For example, Jane wanted to connect with peers but did not know how, which resulted in her disruptive and at times aggressive behaviors. One of the main skills we can teach during this time, which will be discussed further, is how to support students in developing an appropriate (or collaborative) way to communicate their emotional states and needs, so that they can adjust to varying social situations and learn how to navigate them without becoming dysregulated. This is a challenging social-emotional developmental

task, one that many adults continue to struggle with—communicating in a way that is not too passive but also not too aggressive.

By the third, fourth, and fifth grades, 12,13 children can hold the duality of emotions that sometimes conflict. "I was happy I got first place in the spelling bee but sad that my best friend did not win." This stage marks the use of situational cues to determine someone else's feelings, even if the situation does not match the facial expression. When this first starts to occur, children can get confused about this mismatch and require guidance in interpreting what someone actually meant. Given the level of social-emotional growth that occurs at this stage, it is important for children to have adults with whom they can process conflicts of emotions, complex social-emotional experiences, and reconcile unjust social circumstances. At this age, children care more about the way they are perceived by peers, which results in a quick learning curve on regulating their emotions. Rather than cry in front of the class when reprimanded for not having their homework, they must fight back tears to save face with their group of friends. By fifth grade, most children have strategies to help with self-regulation, such as problem-solving, seeking advice from friends, internal reflection, and use of distractions (e.g., playing basketball, using the iPad or tablet, drawing). It is at this age that many children feel a sense of emotional self-efficacy—the ability to effectively manage their own emotions.

During these later childhood years, children are faced with more complex social situations and interactions. Effective ability to regulate their emotions and navigate social communication becomes even more important. Teaching third-, fourth-, and fifth-grade students about different types of communication and providing them with information about assertive and collaborative communication tools can protect students against bullying, prevent bullying all together, and support students in developing more rewarding, and long-lasting friendships.

As mentioned previously, with the right adult support, modeling, and teaching, children tend to progress through a certain set of steps to develop regulation skills. Adults often need support with emotional regulation as well; we can use the same steps with ourselves to practice and model appropriate emotional regulation and reach the next level of "emotional intelligence." Again, while these steps tend to progress in a linear fashion, development itself is not linear. We can see this in ourselves as adults: one day we express ourselves better than we do the next day. We need to offer the same grace and leniency with students

Supportive Diagram

Our ability to regulate and calm ourselves ideally grows in capacity as we develop over time; some students develop better regulation strategies than others. At different developmental levels, regulation will look different, but no matter what, regulation is in part dependent on our relationships.

Infancy

- Rely on sensorimotor strategies for regulation
- Rely on caregiver to provide consistent, attuned co-regulation

Early Childhood

- Emerging language skills allow for identification of wants, needs, and emotions
- Use self-talk to assist with regulation during new and challenging tasks
- Continue to rely on caregivers to provide consistent, attuned co-regulation

Preschool

- Rely on external structure and consistency to navigate their emotions
- Look to caregivers as models for regulation
- Continue to rely on caregivers to provide consistent, attuned co-regulation

Kindergarten

- More consistent identification and expression of emotions
- Improved awareness of cultural norms, impulse control, and awareness of others' needs allows for better regulation
- Continue to rely on caregivers to provide co-regulation, albeit less frequently

1st and 2nd Grade

- Self-motivation increases the capacity to take on more demands with less external structure
- Improved integration of the brain allows for better awareness of emotions and ability to implement coping strategies
- Rely on caregivers to navigate challenging and unstructured social settings that may cause dysregulation

3rd, 4th, and 5th

- Use situational cues to infer what someone else may be feeling
- Increased ability to implement self-regulation strategies and feel emotional self-efficacy
- Rely on caregivers to process conflicts of emotions, complex social-emotional experiences, and reconcile unjust social circumstances

who are juggling a wide variety of internal and external demands. The best thing we can do for ourselves and for students is to be patient, knowing that with time, repetition, and practice, we will begin to see change.

There are many reasons why you may see children continuing to struggle with regulation throughout childhood. In Jane's case, for example, her early childhood attachment trauma and neglect impacted her brain's ability to develop a sense of safety, connection, predictability, and regulation. Other children may exhibit difficulty with regulation because they are not getting enough sleep or not eating enough before school starts in the morning. Others may have processing speed deficits, academic disabilities, sensory processing disorders, attention deficit hyperactivity disorder, or other attention deficits that make learning as well as academic environments overwhelming for them. This can impact their brains' ability to access appropriate regulation skills. As teachers, it is important to understand what is underlying the behavior, and how regulation impacts a student's ability to behave appropriately at school. If you can identify what might be impacting a student's regulation and help integrate different areas of his brain, you can then best support him moving forward. This starts with asking "why" a student might be acting a certain way.

Additionally, it is important to note that many students, particularly those who are identified as gifted, demonstrate **asynchronous development**. While they may be advanced in certain academic or cognitive areas, their social and emotional development may be delayed. Asynchronous development can be confusing for teachers, parents, and students themselves. Often times when we see students excel in certain areas, we expect that they should excel in all areas.

Asynchronous development: the idea that not all areas of development are progressing at the same rate, causing a gap in abilities.

Reflective Activity

Think about the students in your class in regard to their level of development of emotional regulation. Can you identify which stage of development they may be in (particularly those who may be struggling)? Take notes on how you can help support each student in their development of emotional regulation. What extra supports might he/she need?

(Continued)

Name of Student	Stage of Development	How Does This Impact Learning?	Extra Support Needed
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PROMOTING REGULATION IN THE CLASSROOM

In this chapter, we will discuss three strategies that teachers can use in the moment when facing a red or blue zone state of regulation. Not only will these strategies help decrease the child's dysregulation in the moment, but they will also continue to build the protective relationship, support regulation, and begin to build and maintain the teacher-student dyad that we discuss in Chapter 3. By engaging in these strategies, regulation will be enhanced, which will ultimately improve learning for all students.

Before implementing these strategies, it is important that you consider the basic needs of your students, such as when they last ate, how much sleep they got, and if they need to use the bathroom. If a student does not have any of these needs met then it will be very difficult for them to remain emotionally regulated. Offer a snack, a drink of water, or a bathroom break; these simple acts may help your student get back to a state of regulation to better engage in learning. While you cannot necessarily influence how much sleep they received, it may help you better understand why a particular activity is challenging or why they may be demonstrating more challenging behaviors that day. Such basic needs target the lower part of the brain. As we've mentioned, if the lower part of the brain is not regulated, it will be very difficult for the student to access the higher-level thinking in the upper part of the brain that they need in order to learn.

As noted, modeling from adults is especially important for children to build emotional regulation skills. There are many different ways to engage in emotional regulation. Each person, and each student, is going to find different strategies that are regulating. Before you can help a student become regulated, you first need to start with yourself: what is something that you find calming, healing, regulating, or relaxing? For some, it could be going on a hike and getting back to nature. For others, it could be getting a massage, engaging in mindfulness activities, practicing deep breathing, going to the gym, eating healthy foods, taking a bath, reading a book, or listening to music. Again, think about strategies that target the lower part of the brain, that will be regulating to you. Such activities tend to include movement and sensory-based activities.

Popular culture in the United States often idealizes independence, being able to take care of yourself, and doing it on your own. Many other cultures prioritize the community, taking care of others, and working together to complete common goals. We hope to expand on the notion of self-care and self-regulation to *community care* and *community regulation* and discuss how that can be applied to a classroom setting. Within the classroom setting, this may look more like fostering an environment where students are able to take care of each other,

Reflective Activity

Modeling regulation is a critical part of helping your students emotionally regulate themselves. Your regulation is also critical for co-regulating with students who are easily dysregulated. Thus, finding ways you can engage in regulating activities, both in and out of the school environment, is important. Think about activities that are regulating to the lower part of your brain.

What is regulating to you?
•
•
•
What do you find healing, calming, or rejuvenating?
•
•
•
What activities do you already engage in that help with regulation?
•
•
•
What activities can you intentionally engage in to help with regulation?
•
•

support each other in developing a sense of safety and regulation, and be a "safe base" for each other as a classroom as a whole. In Chapter 3, we will be expanding more on these concepts and strategies and discuss how the principles of regulation can be applied on a more "classroom community" level.

As we will discuss in Chapters 4 and 5, it is also necessary to pay attention to sensory input and understand how overall sensory integration impacts regulation. There are many sensory experiences that can be regulating, including certain smells, tastes, and sounds. However, many sensory inputs can also be dysregulating. These regulating and dysregulating sensory inputs can vary greatly depending on the

individual. Once you have an awareness of what activities and sensory inputs are regulating and dysregulating to you, you can then help the students you work with begin the process of regulation.

Strategy I: Breathe, Body, Begin

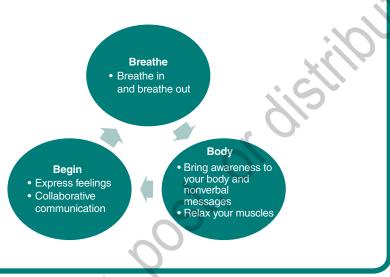
There are many wonderful mindfulness resources available. ^{15,16} We have integrated a few in this chapter that we feel would be helpful for teachers. A basic set of steps helps children develop regulation and emotional expression skills. These steps include helping them stop, breathe, use their words to express how they are feeling, and figure out how to solve the problem. We call this the "Breathe, Body, Begin" cycle. You can do this at certain points in the day as a whole class, even when students may not seem dysregulated. Morning meeting and after lunch are two great times to have students engage in emotional regulation skill-building activities. Using this strategy one-on-one with a student "in the moment" will also be effective. Once you know your class better, you can get a better sense of when they might need this strategy throughout the day. The more practice children get with this, the more integrated their brain will be and the better they can access this coping strategy when needed.

Keep in mind that you, as a teacher, can also benefit from implementing this strategy yourself throughout the day. There may be times of the day when you feel yourself getting more dysregulated than others. Or there may be situations where you need to stop, engage in this strategy to get yourself more regulated, and then respond to the student. Remember that your regulation is key to the regulation of your students.

1. Breathe: Begin by teaching your students the power of their breath. Children as young as 18 months to 3 years old can begin to learn how to take deep breaths. Teach your students to "breathe in through your nose as if you are smelling a rose" and "breathe out through your mouth as if you are blowing out a candle." You can practice breathing while blowing bubbles and experiment with long, slow breaths and short, fast breaths while watching the different types of bubbles that emerge. Make this a playful and fun way to explore different ways to breathe. As students are breathing in and out, have them place one hand over their heart and one hand on their stomach to feel the changes in their body. Explain that breathing is a superpower that

Supportive Diagram

The "Breathe, Body, Begin" cycle is a strategy you can use to help promote regulation in yourself and your students. Morning meeting and after lunch are two great times to have students engage in emotional regulation skill-building activities.



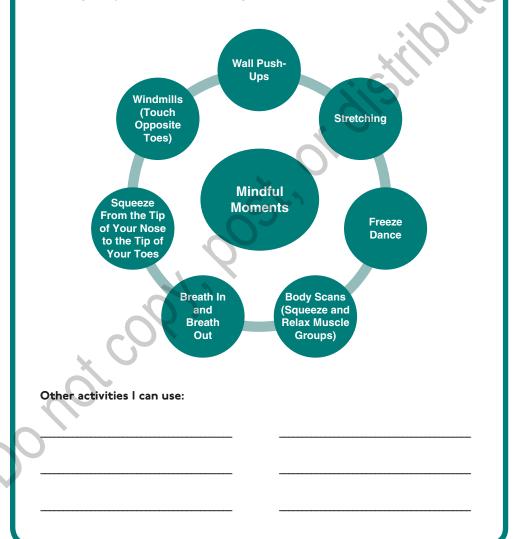
helps calm our heart rate and helps our brain be better able to solve problems.

Body: Next, help your students build an awareness of how our feelings impact our bodies. For example, when we are sad, mad, scared, or even overly excited, our muscles might get really tight, our heart might start beating quickly, or we might squeeze our fists. You can help students create a "body map" to identify where in their body they feel certain emotions, as well as what is triggering for them. Sometimes we might get stomachaches, headaches, or our breathing might speed up. You can also use "mindful moments"17 to increase students' awareness of their bodies. For example, teach the students to relax their muscles, including the heart muscle, by engaging in an activity called progressive muscle relaxation. You can prompt them to squeeze all of their muscles from "your toes to your nose" as tight as they can, and then release, prompting them to relax their muscles. This helps students better learn what their bodies are communicating to them.

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Supportive Diagram

Using the chart below, identify which activities you can use as "mindful moments" throughout the day to help increase students' awareness of their bodies. In the space provided, think about other "mindful moment" activities that may be specific to the needs of your students.



3. <u>Begin</u>: Once the students have taken some deep breaths and relaxed their bodies, they will be more prepared physiologically to express how they are feeling and what they need. This tool is very important, not only in the

classroom, but also at recess or during more unstructured social activities that may be difficult to navigate. As mentioned above, as children get older, social situations become more complex, and striking the balance between passive and aggressive communication becomes more complex. As teachers, or as the adults in their lives, you can help your students by giving them the language they need to solve the problem. This is called "collaborative communication" and "collaborative problem-solving."

For example, when Jane was dancing or out of her seat, the teacher could lead the whole class in a "mindful moment" by dimming the lights, having them breathe together as a class, encouraging them to engage in a muscle relaxation activity, and asking them to stretch. Ms. Sperry could then have the students sit back down and comment on how she understands that sometimes sitting for long periods of time can be difficult, so taking time to breathe and move our bodies helps our brains get ready to learn. Introducing a "mindful moment" activity to the classroom every day can help foster emotional development and build positive self-regulation skills.

Then, later in the day at recess, Isabella became upset at Jane because Jane was standing too close, giving Isabella hugs and pulling on her shirt in an attempt to initiate play. Because knowing how to initiate social contact with peers was hard for Jane, she tended to engage in behaviors that were frustrating to other students. Not knowing how to handle the situation or what to say, Isabella kept running away from Jane. Jane and Isabella became upset with each other, and Jane ended up hitting Isabella. This can be viewed as a behavioral problem resulting in Jane receiving a consequence such as losing recess time, or it can be interpreted as an opportunity to provide both Jane and Isabella with the necessary skills to develop new neural connections in their brains by using the skills discussed in this chapter. After taking some deep breaths and relaxing their bodies, Ms. Sperry can use the "begin" step with Jane and Isabella to build skills around how to communicate with each other by stating how they feel, and what the problem is.8 With the help of a teacher, Jane might say, "I feel sad because Isabella won't play with me. The problem is that I want to play with Isabella, but she keeps running away from me." The teacher or recess staff may then help Isabella say, "I feel frustrated because Jane is tugging on me and hugging me. The problem is that I want to swing, and I don't want to be hugged."

Once they are both in a more regulated state, they can access the prefrontal cortex part of their brain and be better able to engage in collaborative communication. The teacher can then reframe the situation and help them with collaborative problem-solving by presenting them with options, such as asking Jane to work on keeping her hands to herself while they swing together or take a break by finding another friend to play with.

Strategy 2: Check Your Nonverbals

Nonverbals are any form of communication not given through words. Children who have been in stressful or traumatic events or environments are often hypersensitive to nonverbal communication. When we are regulated, for example, our facial muscles relax, allowing us to smile. Our vocal cords relax, allowing us to have a calm voice. Our bodies relax, allowing us to have an open posture. We are fully invested in the relationship, not distracted by internal or external stressors. This type of nonverbal communication and body language presents as safe, calm, regulated, nontriggering, and approachable. However, when we are dysregulated, our facial muscles tighten, which communicates anger or frustration. Our vocal cords and jaws tighten, creating a stern voice. Our bodies tighten, creating a closed posture. We become distracted relationally by our internal cues of stress. This posture and nonverbal stance may often be interpreted as threatening and uninviting to others.

Children who endure stressful and traumatic events interpret non-verbal communication in different ways that may not always be accurate. For example, Jane experienced attachment trauma at an early age, and her nervous system was always on edge, waiting for the next bad thing to happen. This often caused her to misinterpret facial expressions and social cues to be more threatening than they were intended. This ultimately caused her to react in a way that often seemed out of proportion to the trigger. This is because her brain was trying to keep her safe, based on her view of the world. Students who have not necessarily experienced significant stress or trauma, but who have slower processing speeds or learning and/or attention challenges, may also have difficulty understanding and interpreting nonverbal cues. This can impact their ability to build relationships, understand social situations, and feel safe and regulated at school when social cues are passed around a mile a minute.

When we encounter students who are exhibiting symptoms of dysregulation or fight, flight, or freeze nervous system responses, it is important to pay attention to the messages we send them with our nonverbal communication. We want to make sure that our nonverbal messages are demonstrating safety and are nonthreatening. If students interpret our nonverbal communication as threatening in any way, this will trigger their nervous system to fall further into a state of dysregulation.

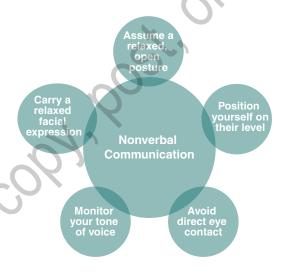
Nonverbal messages can communicate to the lower part of the brain whether or not someone is safe. The lower part of the brain, and in particular the amygdala, houses the threat response. Teachers, you can use your nonverbal communication to decrease students' threat responses and increase an overall sense of safety and regulation in the classroom setting. Some nonverbal communication strategies you can both do "in the moment" and practice regularly to prevent dysregulation include:

- Approach the student in a nonthreatening way. Having
 a relaxed, open posture with your arms at your side
 communicates that you are willing to engage in a positive
 conversation. Crossing your arms, tensing your muscles,
 and closing your posture communicates that you are
 already upset and may throw the student into a more
 dysregulated state.
- Position yourself on the same level as the student ("get small"). To do this, you can kneel down or sit down at his or her level. This creates a feeling of trust, mutual attention, and equal footing in the conversation.
- Become aware of your eye contact. Eye contact is not always best; sometimes too much eye contact can be overwhelming or triggering for some students when they are dysregulated. When students are in a high-pressure situation, in an anxiety-producing situation, or in a situation that is challenging to them, eye contact should not be demanded. Once you help the student balance her nervous system in order to become more regulated, then she will be in a position to engage socially and feel equipped to make eye contact more consistently.
- Monitor your tone of voice. Slow down, speak clearly, use
 a soft voice, and be consistent with your cadence. All of
 these help to foster a sense of warmth, understanding, and
 regulation.
- Be mindful of your facial expressions. As our tone of voice changes so do our facial expressions. If you use a calm,

quiet voice, your face relaxes and communicates empathy to the student. If you use a loud, frustrated voice, your face tightens, your eyebrows furrow, and your lips become pursed—all of which communicate fear and nervousness to the student.

Supportive Diagram

Nonverbal communication and body language can help teachers present themselves as safe, calm, regulated, nontriggering, and approachable to their students. When students are exhibiting symptoms of dysregulation, or "fight, flight, or freeze" nervous system arousal, it is important to pay attention to the messages we send them with our nonverbal communication.



These are all different forms of communication that sometimes happen when you do not realize it, often in unconscious microsecond moments. ¹⁹ A student will pick up on these nonverbals and interpret them in different ways, which may also trigger the student to become more dysregulated. If you can monitor your nonverbal communication and adapt it to demonstrate a safe and unthreatening posture, you will create a safe environment for your students and will also help students who are in a dysregulated state to regulate faster. However, this can only happen if you are regulated and activating your social engagement system as well. ¹⁹

Strategy 3: Attuned Listening

Active, **attuned listening** is a strategy that teachers can use "in the moment" to try to diffuse or de-escalate any situation and help a student get back to the "just right" zone for learning. Active listening is a communication skill that can build the protective relationship and continue to foster a positive teacher-student interaction. It includes not just hearing what the child is saying but also how it is being said, attending to body language, voice inflection, overall attitude, facial expressions, and the meaning of what children are saying so that they can be truly heard, understood, and validated. Professor of law and South African activist Thuli Madonsela said it best: "I need to listen well so that I hear what is not said." Active listening is a powerful tool that should be used and taught in all classroom settings and includes the nonverbal strategies we talked about above. Not only is it helpful for teachers to use with students, but it is also important for students to learn how to use these strategies with each other. In fact, teachers can even model attuned listening with each other. A classroom environment that fosters attuned listening will be an environment that encourages respect, connectedness, and acceptance.

Attuned listening includes re-framing back to the student what they have said, validating their internal emotional state, and helping them develop a resilient or adaptive outcome to the problem. 19 For example, when Jane became upset about completing the writing assignment and threatened to hit the student next to her, instead of moving Jane's behavior chart pin to the bottom, her teacher could say, "Jane, your body is telling me that you are feeling overwhelmed right now. I see that you are so upset that you feel like hitting someone. That must feel really scary or uncomfortable." While the teacher is kneeling down, checking her own nonverbals, and presenting herself in a nonthreatening way, she can continue to say, "I wonder if doing this writing assignment right now feels really hard? Maybe we can work together to figure out how to solve the problem?"

The success of attuned communication relies on our capacity to accurately sense someone else's state and communicate verbally, and most importantly nonverbally, our felt understanding of their emotional experience.¹⁹ The goal with this type of "listening" is to help the child feel heard, understood, and validated, when she may not even understand herself what is going on inside of her brain and body. It is our job as adults and professionals in our students' lives to see each of these moments as an opportunity to grow their brain and provide them with an experience that is different from what they are used to,

Attuned listening:

a communication skill that includes hearing not just what the person is saying, but also how it is being said; attending to body language, voice inflection, overall attitude, facial expressions, and the meaning of what the person is saying.

so that they can start making new neuronal connections. Over time, with consistent experiences such as these, the new neuronal connections in their brain will solidify, their sense of safety will increase, their behavior will improve, their associations with school and learning will change, and their brain's ability to learn will come online.

There are many instances when a student is frustrated, angry, or upset, and we do not yet know why. In a classroom setting, everything moves at a fast pace. Students are vying for the teacher's attention, and each student has his or her own individual social, emotional, behavioral, and learning needs. We imagine that as a teacher this can feel overwhelming at times. We also imagine that there are times when something happens, or a student responds a certain way, and you do not know what to do in that moment. Oftentimes not knowing what to do or how to handle a situation can be a trigger for us as adults and send us into a dysregulated

Reflective Activity

Active, attuned listening involves attending to the other person's body language, voice inflection, overall attitude, and facial expressions, in order to determine the actual meaning of what the person is saying. It is an important part of building a protective relationship and establishing co-regulation.

Think about a time when you were upset about something and talked with a friend, confidant, partner, spouse, or family member about the situation.

What do you remember was helpful about how he/she responded to you?

What do you remember was *not* helpful about how he/she responded to you?

What ways did they use attuned listening in order to respond to what you were communicating?

state. *It is okay to not know*—we all find ourselves in that position. Our brains are constantly working toward integration, and there is no shame in deficits in our knowledge. It is important to continue to ask "why," continuously exploring reasons for the student's dysregulation. It is possible to do this in a way that fosters a positive teacher-student relationship, rather than just wanting to know the answer.

One tool that one of the authors, Ashley, has found especially helpful, both at home with her kids as well as professionally is to describe. **When in doubt, describe!** When you do not know what to do, simply describe what you are seeing, thinking, feeling, or what you think others are seeing, thinking, and feeling. This is another way in which you are using attuned listening. For example, Jane's teacher might say, "Wow, Jane, I see that you are hiding under the table right now. I wonder if hiding under the table helps you feel safe? It does look cozy and safe down there. I feel curious to know what happened that made you feel unsafe."

Not only does describing help the other person better understand what is happening in the moment, but it also helps the student feel seen and heard. Not to mention, it buys you some time to figure out how to solve the problem by allowing your brain to get back into a regulated state before acting. Describing provides you some time to figure out what to do next. Describing techniques also help you connect with your students through integration of the brain. You connect language, logic, and more linear thinking as you describe the "felt sense" of the situation. When we think about the classroom community in the vignette, Ms. Sperry could go on to say,

I think the other students are also curious as to why Jane is hiding under the table, and I wonder what we can all do to help her to feel safe and ready to come up and join us? Let's give her some more time to feel safe, and my guess is that she will come out when she is ready. If she doesn't, then I'll come back to check on her soon.

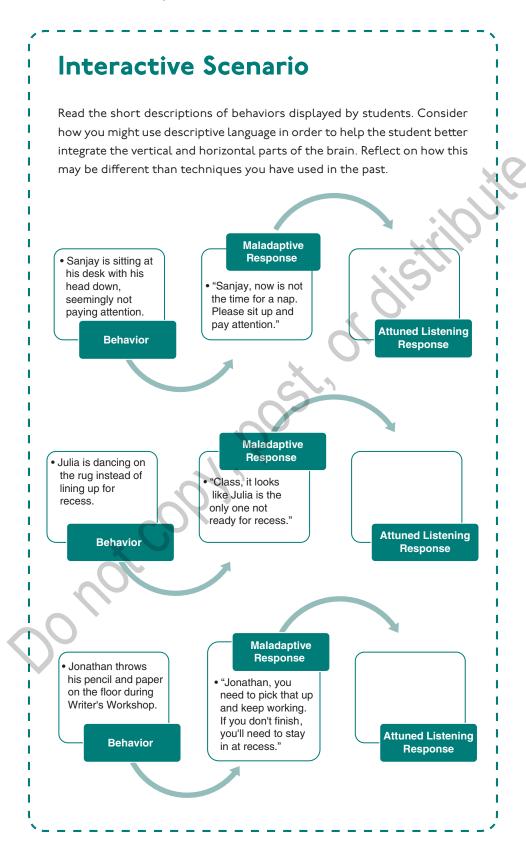
Here is a list of attuned listening phrases that use descriptive language you can begin to use with your students, and that your students can learn to use with each other. These phrases can help students better integrate the different areas of the brain in order to achieve regulation, as well as decrease the threat response in their lower brain so that they can access the higher-level problem-solving functions in their upper brain. It is important to use these techniques both during moments of regulation to *highlight positive interactions* in the classroom, as well as during moments of frustration or distress.

- It looks like you're frustrated and that probably feels uncomfortable. Let's figure out the first step together.
- I wonder if this assignment feels confusing; we can work together to figure out a different way.
- I can see your body is moving around a lot; I wonder if it would help to get up and stretch? Let's take a movement break.
- You got really sad when you needed to clean up. It's hard to do things we don't want to do. Is there something we can do differently when it's time to clean up again?
- I see that you're hiding under the table right now. I know you were just working on your math assignment. I'm curious to know what happened.
- Some students are talking in loud voices right now, so I'm having a hard time concentrating. Sometimes when things are loud, I have a hard time focusing.
- I see Jane and Tom are working hard to figure out the problem even though it's difficult! It makes me happy when I see teamwork.
- Everyone really cleaned up quickly; that was wonderful.
 Now we will have more time to focus on our art project.

Supportive Diagram

Sometimes it's helpful to have some "go-to" phrases in your back pocket to use with students who are dysregulated. This can help to provide them with a degree of co-regulation but also avoid triggering them from becoming more upset.

Try	Avoid	
"It looks like this is hard. Let's figure it out together."	"You're giving me a hard time. You need to do what I tell you."	
"I see this writing assignment is really overwhelming; let's take a quick break."	"You need to finish this before recess or you will have to stay in until it is done."	
"It looks like James is bothering you because he is sitting so close to you. Do you want to tell him that you need some space right now?"	"James, stop moving around so much; you need to sit still and leave your friends alone."	
"Go use the bathroom quickly and come back to finish your work. You will be able to concentrate better."	"You need to finish your work before you can use the bathroom."	



- For Jonathan, you might say: "Jonathan, oh, I see that you threw your pencil and paper on the floor. I wonder if you might be feeling frustrated. Sometimes writing can feel really hard. Let's take a break and see how we can solve this problem together."
- For Julia, you might say: "Class I can see that most of you lined up beautifully and are ready to go outside! It looks like a few of our friends are having a hard time calming their bodies enough to line up."
- For Sanjay, you might say: "Sanjay, your head is on the table, and you look tired. I'm curious as to why you have your head down. I wonder if there is something we can do to help you feel more alert?"

Now that you understand the importance of regulation as the foundation for learning and you better understand the early developmental stages of emotional regulation, you can be more aware of your own internal states of regulation and model the regulation process for students of all ages. In the next chapter, we will dive deeper into the importance of co-regulation and how the idea of the teacher-student dyad leads to increased regulation and ultimately improved learning for all students. We will also focus on cultural concepts of regulation and how to apply the idea of the classroom community to support connection, safety, regulation, and well-being for all students in the class.