

3 This Is Your Brain on Culture

Understanding How Culture Programs The Brain

Culture is the widening of the mind and of the spirit.

—Jawaharlal Nehru, first Prime Minister of India

In the last chapter, I introduced you to the three levels of culture with a focus on the deepest level of values, norms, and beliefs rather than the surface elements, such as food, dress, music, and holidays. We looked at two important *cultural archetypes*—individualism and collectivism—as a way to organize culture in our minds at a macro level. And last, I talked about how implicit bias influences structural racialization and the larger sociopolitical context. In this chapter, we continue to explore the Practice Area of Awareness in the Ready for Rigor framework as we build important background knowledge about how the brain uses culture at all three levels to make sense of the world. We will also look at how our cultural programming contributes to implicit bias.

If we want to use culturally responsive teaching to support the cognitive development of dependent learners, we have to know how the brain uses culture to make sense of the world. When we know this, we can easily piggyback on the brain's natural systems to activate its unique ability to grow itself.

I want to give you a heads up about this chapter. We are going to take a quick, deep dive into the brain's physical structures. It can feel a

bit technical, but it's necessary in order to establish a foundation for culturally responsive teaching. Here's an image to hold on to that might help. Think of the physical structures we are about to examine as the brain's hardware and culture as the software that programs it. Just like our computers, all brains come with a default setting that acts as its prime directive regardless of race, class, language, or culture: *Avoid threats to safety at all costs and seek well-being at every opportunity.* Neuroscientists have long known that our brains are wired to keep us alive at all costs. Our deep cultural values program our brain on how to interpret the world around us—what a real threat looks like and what will bring a sense of security.

THE PHYSICAL STRUCTURES OF THE BRAIN

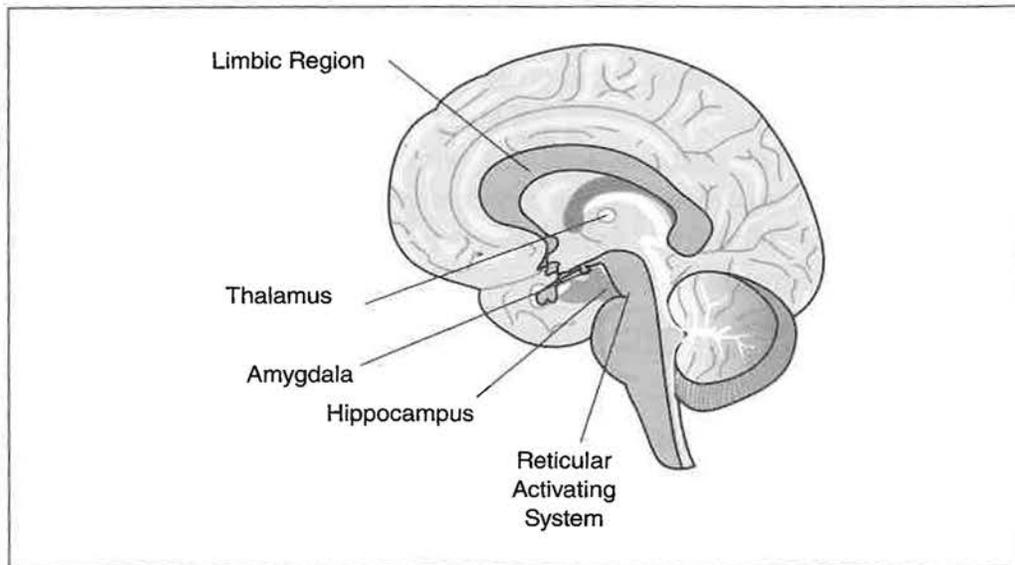
Let's begin with an overview of the brain's "hardware," namely its physical structures. These basic structures are important to understand before we look at culture and the brain. From the time our human ancestor was trying to avoid lions on the savanna and foraging for edible plants, the brain continued to evolve into a complex learning machine, recording and cataloguing information through experience and then changing itself so that it knew which situations to avoid and which ones to seek out quickly.

The complex architecture of our brains developed in three layers, from the bottom up, like the floors of a house. Each one is layered on top of the other, with the first layer being the oldest. Each is powerful in its own unique way. Keep in mind that these three parts of the brain do not operate independently of one another. Instead, they do a synchronized dance. They communicate by sending electromagnetic and chemical messages back and forth. In addition to their own dance, they work in unison with the body's nervous system.

The Reptilian Region

The first brain layer is the reptilian region. It is 500 million years old. It's nicknamed the "lizard brain" because it's made up of the same two structures found in the entire reptilian brain: the brainstem and the cerebellum. It doesn't think. It only reacts. It is always on, even when we are sleeping. The lizard brain allows you to smell smoke or hear a loud suspicious noise when you are asleep. It is what wakes you up. The brain stem is the structure that connects the brain to the spinal cord. Its

Figure 3.1 Cross Section of Brain with Labels



primary function is to keep our body alive. It controls automatic functions, such as breathing, heartbeat, body temperature, digestion, blood pressure, and balance. It is able to increase heartbeat, blood flow, and other automatic body functions if it gets signals that danger is near, or it can slow down responses if we are just chilling out with friends. It also houses the **reticular activating system** (RAS), a critical brain feature that's responsible for alertness and attention. Using the RAS, the brain scans our surroundings 24/7 for any *novelty* that signals important changes in the environment, any *relevant* event or information connected to one's social status, physical survival, or strong *emotions* that might signal a potential threat or reward. Getting the RAS to pay attention is critical in culturally responsive teaching. It directs the learner's attention at the beginning of a task.

The Limbic Region

Stacked right on top of the reptilian region is the limbic layer. This layer is only present in mammals. It is also called the emotional brain. This region links emotions, behavior, and cognition together (Zull, 2002). Its primary roles are to help us learn from experience, manage our emotions, and remember. The limbic brain records memories of experiences and behaviors that produced positive and negative results in the past, so a person knows what threats to avoid or what rewards to pursue. It creates our internal schema that acts as our background knowledge.

Figure 3.2 Three Critical Limbic Brain Functions

The Watcher
(Reticular Activating System)

The RAS scans our environment 24/7 for possible threats (bodily harm or humiliation) or rewards (food or friendship). It sends reports over to the amygdala.



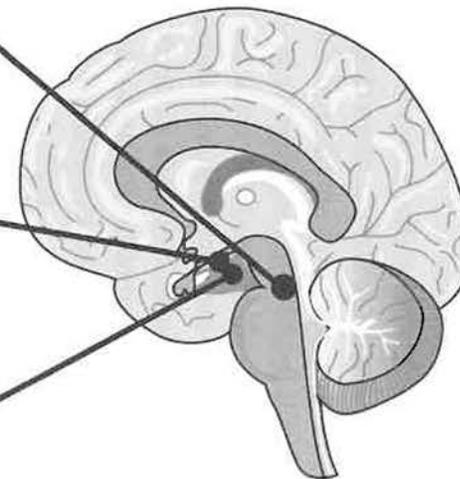
The Guard Dog
(Amygdala)

The amygdala acts as our guard dog trained to prepare the body for fight, flight, freeze, or appease when anything threatens our physical or social safety. It can act on its own if it believes we are in imminent danger.



The Wikipedia Pages
(Hippocampus)

The hippocampus is our personal Wikipedia. Here is where our background knowledge is stored. It is also the site of working memory, where information processing happens. Working memory shrinks when the amygdala is triggered.



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There are three specific structures of the limbic brain that help it manage memories and emotions. Each is a key player in effective learning:

- *Thalamus*. It acts as the brain's communication dispatch hub. All incoming sensory information that the RAS lets in passes through the thalamus (except smell) and then is directed to other parts of the brain for additional processing.
- *Hippocampus*. It acts as the brain's background knowledge data bank. It houses the memory system—**short-term memory**, which holds information for as little as 5–20 seconds and the **working memory** that holds information for up to 20 minutes. Working memory is where the brain “works” to connect new information to old knowledge in order to turn facts, figures, dates, concepts, or skills into something that has meaning and relevance to the learner (Bransford, Brown, & Cocking, 2000; Sousa, 2001). This is where active learning takes place. **Long-term memory** is where our background knowledge is stored. Think of long-term memory as our own personal Wikipedia pages, always open for reference in order to help us make sense of what's going on around us.
- *Amygdala*. It acts as the brain's guard dog. The amygdala is an almond-shaped structure deep inside the limbic layer of the brain. It is the seat of our fear system that is involved in emotional processing. It is designed to react in less than a second at the very hint of a social or physical threat. It has the “authority” to bypass the brain's communication dispatch hub in the thalamus and send distress signals directly to the lizard brain in the form of the stress hormone **cortisol**. We call this bypass an **amygdala hijack**. When the amygdala sounds its alarm with cortisol, all other cognitive functions such as learning, problem solving, or creative thinking stop. An amygdala hijack leads to our natural “fight, flight, freeze, or appease” responses.

The Neocortex Region

The newest brain layer of the brain is only 3–4 million years old. Compared to the reptilian region, it is slow in processing information but really, really smart. It is home to our *executive function*. Executive function is the command center of the brain. It oversees our thinking and manages our working memory. It controls planning, abstract thinking, organization, and self-regulation. It also houses our imagination.

In addition to executive function, the neocortex has an almost endless capacity to learn and rewire itself. For example, an infant's brain is

born capable of speaking over 3,000 human languages, but it is not born proficient in any of them. When the baby begins to hear his new home language, his brain begins to catalogue the sounds of that particular language. Over a short period of time, the baby's brain begins to hardwire itself so that it selectively strengthens the language networks that reproduce the specific sounds and grammatical patterns he hears his parents using. At the same time, his brain begins to prune the nerve connections for sounds and grammatical patterns that aren't used in his home language (Sylwester, 1995).

It is here in the neocortex that we have the chance to build our brain power, also called our intellectual capacity. The challenge is getting past the lower brain's two emotional gatekeepers: the reticular activating system (RAS) and the amygdala.

PAUSE TO PROCESS

Let's pause here for a minute to process what we learned about the brain's physical structures so far.

First, consider these questions:

- What did you read that squared with your understanding?
- What questions are going around in your head about how the brain structures interact?
- What three points stood out for you? Why?

Next, for a little practice, try describing in your own words how the three parts of the limbic brain interact or try explaining the relationship of the amygdala to the RAS. Imagine you have to explain these processes to a fifth grader. How would you describe them?

Cellular Structures

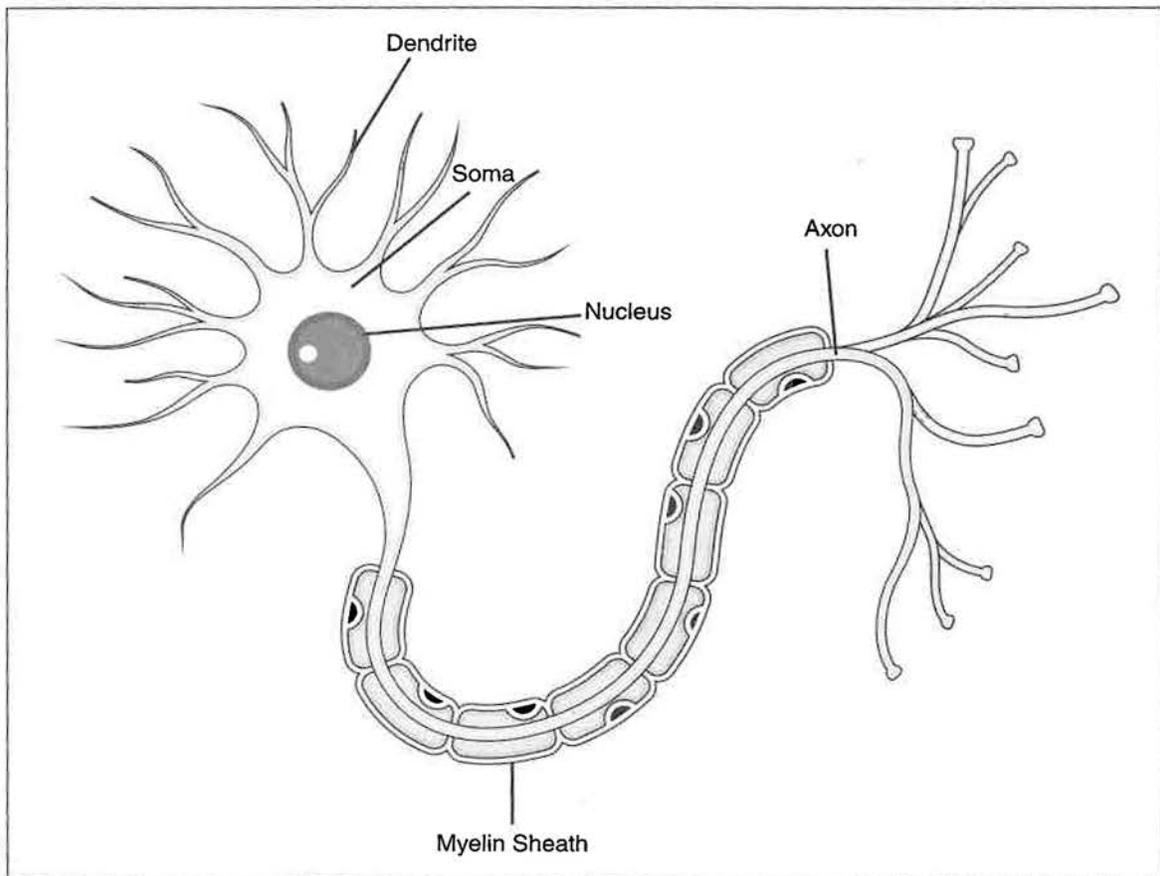
The next brain structures that are important for us to know are too small to see with the naked eye but are critical to building intellectual capacity. The cellular structures are made up of special nerves called **neurons** that are the brain's building blocks. Neurons are so small that 30,000 neurons can fit on a pinhead. Neurons are the messengers that carry information back and forth across each region of the brain. The brain contains tens of billions of neurons. They are that stuff we call **gray matter** in the brain. Here's a fun fact. There is not a fixed amount of gray matter in the brain like the 1.5 gallons of blood we have running through

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our bodies. Because of **neuroplasticity**, the brain is able to grow an unlimited amount of gray matter in response to our continuous learning. That's why the brain appears all wrinkled and folded into itself. Those folds and wrinkles represent a person's capacity to do complex thinking and problem solving. It's the only place on the body where wrinkles are a good thing.

Learning happens as the neurons communicate with each other much like runners in a relay race. Think of the information being learned as the baton that the relay runners pass along to each other. Within the neuron, the baton takes the form of electrical impulses and chemical interactions. We call this process "firing." These impulses travel along the long *axon*, which is an extension of the neuron until it connects with another neuron. They exchange information through the short, fingerlike extensions called **dendrites**. The dendrites contain receptors that extend out beyond the body of the neuron to pick up messages from other neurons. The more dendrites we have, the more information that the neurons can pick up and

Figure 3.3 Picture of Neuron with Axon and Dendrites





pass along. The brain signals the neurons to grow more dendrites in response to new cognitive challenges, novel problem solving, and increased physical activity so it can do more complex information processing.

When the brain is learning something new it clusters neurons together to create a *neural pathway*, similar to a footpath through a forest. Neural pathways are important because when we go back and forth along this pathway when thinking or problem solving, it helps drive new learning deeper into long-term memory until it becomes automatic or deeply understood. When neurons in different regions of the brain “fire” together during a learning task, the pathways are linked and strengthened, leading to stronger and deeper learning. The saying among neuroscientists is that “neurons that fire together, wire together.” This is an important point we will come back to again in Chapter 8 when we look at information processing.

The brain helps neurons talk to each other faster along these neural pathways through the process of **myelination**, where it wraps the body of the neuron with layers of a fatty substance called **myelin**. Myelination makes it easier for the brain to do more complex work because the fat allows the chemical and electrical impulses to travel across the neuron faster. Repetition or deliberate practice of a specific move, such as practicing free throws from the three-point line, perfecting a challenging finger position on the violin, memorizing important content, doing a complex puzzle, or reciting a poem over and over to commit it to memory, triggers the release of myelin, and initiates the wrapping process. Think of myelination as the difference between having a high speed broadband wireless internet connection and a slow dial-up connection (Coyle, 2009). We all know what that’s like.

Conversely, when we don’t practice or use new dendrites shortly after a learning episode, our brain prunes them by starving them and then reabsorbing them. It assumes that if you didn’t revisit the activity that grew the dendrites that information wasn’t important to keep. The footpath gets overgrown and disappears, making it hard to find your way back to stored knowledge and skills.

PAUSE TO PROCESS

When we talk about neuroplasticity that grows a student’s intellectual capacity, we are talking about this process of growing dendrites, creating neural pathways, and initiating myelination.

What analogies or metaphors might you use to describe the process of growing neurons and dendrites?



The Nervous System

The last brain structure to understand is the nervous system. Most of us have this image of the brain as a superprocessing machine. We are always impressed with its computerlike functions when we talk about how fast it can multitask—pumping blood, checking blood pressure, digesting food, all the while walking, noticing the beautiful sunset, and keeping an eye on the dog we just let off the leash.

Despite its impressive technical capabilities, the brain is a social organ, meaning it works best when it has the opportunity to connect and interact with others (Hanson, 2013; Zull, 2002). That is where the body's nervous system comes in. The nervous system is just an extension of the other brain structures. It is constantly picking up information from our environment and sending it back to the brain for interpretation and action.

With signals consistently coming from our RAS in our lizard brain and the amygdala in the **limbic region**, our body and brain are at work 24/7 scanning the environment for clues and cues to determine whether or not we are safe. In social settings, this ongoing process of trying to sniff out danger has been called **neuroception**, our unconscious **safety-threat detection system** (Porges, 2011). This safety-threat detection system (Figure 3.4) works mainly through the body's **autonomic nervous system's** three major branches:

- *The parasympathetic nervous system.* It is focused on keeping us relaxed and seeks well-being by satisfying our needs for food, shelter, social relationships, and sex. It manages our relaxation response through easy breathing, a steady heartbeat, and the release of natural opioids such as **dopamine**, serotonin, and other endorphins.
- *The sympathetic nervous system.* This system is focused on keeping us alert and ready to react to avoid danger by fight, flight, or freeze. It prepares us for quick action by releasing adrenaline and cortisol to raise our heartbeat and prepare our muscles for a quick sprint.
- *The polyvagal nervous system.* It is our “social engagement system” and is focused on keeping us connected to others. Gopnik, Meltzoff, and Kuhl (2000) discovered that these nerves trigger our “contact urge,” our desire to be with other people. All human beings have an innate contact urge. Collectivist cultural practices have reinforced this natural tendency and deepened the brain's hardwiring for relationships. This system encourages social bonding through the release of hormones such as **oxytocin** when we are in the presence of others. Social activities such as laughing, talking, and even hugging release oxytocin, the bonding hormone. When we feel safe in



the presence of another, our breath comes easily, our heartbeat is regulated, we don't sweat nervously, our thinking is clear, and we feel open, expansive, and in sync. Oxytocin is the brain's "stand down" signal to the amygdala.

In the previous section, we looked at how intellectual capacity or brain-power is physically grown through the cellular structures in the brain. In this section, an important takeaway is that it's through the nervous system that individuals build the physical foundation for positive, receptive relationships. Relationships are not just emotional; they have a physical component. Relationships exist at the intersection of mind-body. They are the precursor to learning. When anyone experiences others in an environment like a classroom that is inattentive or hostile, the body picks up that information through the autonomic nervous system and sends it up to the RAS and amygdala. There the amygdala gets the information that it's not socially, emotionally, or intellectually safe and sends out a distress signal to the body. The body starts to produce stress hormones that make learning nearly impossible. Even if the environment isn't hostile but simply unwelcoming, the brain doesn't produce enough oxytocin and begins to experience anxiety. This anxiety triggers the sympathetic nervous system, making one think he is in danger because the brain doesn't experience a sense of community.

When we look at the stress some students experience in the classroom because they belong to marginalized communities because of race, class, language, or gender, we have to understand their safety-threat detection system is already cued to be on the alert for social and psychological threats based on past experience. It becomes imperative to understand how to build positive social relationships that signal to the brain a sense of physical, psychological, and social safety so that learning is possible.

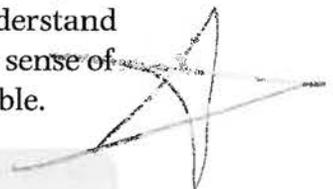


Figure 3.4 Features of The Brain's Safety-Threat System

Systems	Avoiding	Approaching	Attaching
Purpose	Detect threats to physical, social, and psychological safety	Seek out well-being and reward despite obstacles	Connect with others in order to increase protection and connection
Brain Structures	Reticular Activating System (RAS), the amygdala, and the sympathetic nervous system	RAS, the thalamus, and the neocortex, and the parasympathetic nervous system	RAS and the polyvagal nervous system

(Continued)

Figure 3.4 (Continued)

Motto	Move Away From Pain	Move Toward Pleasure	Connect to Protect
Focus	Focused on assessing risk and threat in the environment based on deep culture and past experiences in sociopolitical context	Focus on increasing motivation to seek out those things that make one feel good physically, socially, and psychologically If something doesn't lead to reward, well-being or feeling good, the brain will not pursue it	Focus on finding a tribe to help share chores, find food, provide community so one can focus on learning, making art, reflection, exploration, and innovation
Physical Reactions	Release of cortisol, adrenaline to prepare for defense or escape when triggered Shrinks working memory	Release of dopamine to reward the effort of seeking well-being Motivates us to want to do it again	Release of oxytocin to encourage bonding with others The presence of oxytocin puts the safety-threat detection system in the amygdala on pause
Social Implications	Trust or lack of trust Self-protection over rapport	Engagement/disengagement High or low self-motivation Growth or fixed mindset	Feeling included or marginalized Openness for connection or post traumatic stress Compassion or self-preservation

Source: Inspired by Hanson, R. (2013). *Hardwiring happiness: The new brain science of contentment, calm, and confidence*. New York: Harmony Books.

CULTURALLY RESPONSIVE BRAIN RULES

So, what do we do with all this information about the brain and how it works? I have integrated the most important information from the first three chapters into six core design principles to make it easier to remember and reference. When you understand these brain rules, it becomes easier to understand how the brain uses culture to interpret threats and opportunities. I have highlighted the implication each principle has on culturally responsive teaching.

Remember that no single principle stands alone. They all work together, but I've tried to tease them apart in order to highlight the unique qualities of each one. You will see these principles in later chapters along with details about how to operationalize them. The order of the principles isn't important, except for Number 1. It is always first.

1. *The brain seeks to minimize social threats and maximize opportunities to connect with others in community.*

The brain's two prime directives are to stay safe and be happy. The brain takes its social needs very seriously and is fierce in protecting an individual's sense of well-being, self-determination, and self-worth along with its connection to community. We cannot downplay students' need to feel safe and valued in the classroom. The brain will not seek to connect with others if it perceives them to be threatening to its social or psychological well-being based on what they say and do. It's important to point out that what a teacher may regard as an innocent gesture may be interpreted by the student as threatening. As a result, the amygdala stays on alert, trying to detect other **microaggressions**. Microaggressions are the subtle, everyday verbal and nonverbal slights, snubs, or insults which communicate hostile, derogatory, or negative messages to people of color based solely on their marginalized group membership. In many cases, these covert messages serve to invalidate positive group identity or trivialize their experiences. They are designed to demean them on a personal or group level, communicate they are lesser human beings, suggest they do not belong with the majority group, threaten and intimidate, or relegate them to inferior status and treatment (Sue et al., 2007).

As a culturally responsive teacher you have to familiarize yourself with common actions or conditions that make students feel unsafe, even if they cannot articulate this sense of threat. Your definition of what feels threatening or welcoming may be different from the students' definition. It is important to act according to students' definitions not your own.

In the end, dependent learners who don't feel supported are especially vulnerable to feeling threatened. This is our process of neuroception, the unconscious safety-threat detection system at work. They will avoid the perceived threat of public humiliation, going into fight, flight, or freeze mode.

It is not enough to have a classroom free of psychological and social threats. The brain needs to be part of a caring social community to maximize its sense of well-being. Marginalized students need to feel affirmed and included as valued members of a learning community.

2. *Positive relationships keep our safety-threat detection system in check.*

There is a reason that collectivist cultures focus on relationships. The brain is wired to scan continuously for social and physical threats, except when we are in positive relationships. The oxytocin positive relationships trigger helps the amygdala stay calm so the prefrontal cortex can focus on higher order thinking and learning. Just as you want to identify and remove things that create an emotionally unsafe environment, you have to also focus on building positive relationships that students recognize based on their cultural schema.

3. *Culture guides how we process information.*

Cultures with a strong oral tradition rely heavily on the brain's memory and social engagement systems to process new learning. Learning will be more effective if processed using the common cultural learning aids—stories, music, and repetition. These elements help build neural pathways and activate myelination. They help neurons fire and wire together in ways that make learning “sticky.” Collectivist cultures use social interactions such as conversation and storytelling as learning aids. Because of society's history of segregation and unequal educational opportunities, many communities of color continue to use the natural learning modalities in the home and community. As a result, their neural pathways are primed to learn using story, art, movement, and music.

4. *Attention drives learning.*

Neuroscience reminds us that before we can be motivated to learn what is in front of us, we must pay attention to it. Every brain's RAS is tuned to novelty, relevance, and emotion, but each person interprets these three elements through his particular cultural lens. Cultures based on an oral tradition rely heavily on the RAS to activate learning, using music, call and response, and other attention grabbing strategies to signal something important. Learning isn't a passive event but a dynamic action. It requires focused attention, active engagement, and conscious processing by the learner. The hallmark of an independent learner is his ability to direct his attention toward his own learning.

5. *All new information must be coupled with existing funds of knowledge in order to be learned.*

Our limbic brain creates schema that operate as background knowledge. These internal scripts help us make sense of our external

experiences. All learners have to connect new content to what they already know. What we already know is organized according to our cultural experiences, values, and concepts. For example, in Brazil, Paulo Freire taught reading skills by organizing his reading material around villagers' funds of knowledge. If they were farmers, he selected words and texts related to tools and processes related to farming. They already had deep neural pathways and complex schema around farming to connect the new written words to. Freire capitalized on the fact that their neurons around farming concepts, visual images, and now written words would all fire and wire together, strengthening their automaticity with decoding written words. So, to learn new content or skills, the brain figures out where to make connections to what we already know so that we "get it." To make learning stick, we have to determine what students already know and understand how they have organized it in their schema. From there we must construct culturally based connections or "scaffolds" between the existing schema and the new content.

6. *The brain physically grows through challenge and stretch, expanding its ability to do more complex thinking and learning.*

The brain's main purpose is to get smarter at surviving and thriving in life. Brain growth is stimulated when we have to figure out something new, engage in a complex task, or complete a puzzle. The brain's response is to literally grow more capacity in the form of neurons, dendrites, and synapses, topping it all off with a thick coat of myelin to increase speed. When we look at the educational experiences of many groups marginalized by race, language, or socioeconomic status, we see that they often get a "watered down" curriculum that doesn't require higher order thinking. Consequently, they don't build the capacity to do higher order thinking on their own. To empower dependent learners and help them become independent learners, the brain needs to be challenged and stretched beyond its comfort zone with cognitive routines and strategy.

Culturally responsive teaching is also about empowerment and interrupting teaching practices that keep certain students dependent learners. We have to create the right instructional conditions that stimulate neuron growth and myelination by giving students work that is relevant and focused on problem solving. Just turning up the rigor of instruction or increasing the complexity of content will not stimulate brain growth. Instead, challenge and stretch come with learning the moves to do more strategic thinking and information processing.

IMPLICATIONS FOR SUPPORTING DEPENDENT LEARNERS AND BUILDING INTELLECTIVE CAPACITY

Dependent learners experience a great deal of stress and anxiety in the classroom as they struggle with certain learning tasks. This anxiety is amplified when they feel marginalized or unsupported because of their race, gender, or language. It is our responsibility to create the right conditions for optimum learning. We can only do that when we understand how the brain responds to threats—real or perceived. Our goal is to help culturally and linguistically diverse students easily reach a state of relaxed alertness—that combination of excitement and anticipation we call engagement—every day. As you design instruction and create classroom environments to authentically engage culturally and linguistically diverse students, keep in mind the brain rules. Authentic engagement begins with remembering that we are wired to connect with one another. In communal cultures, it is at the center of daily living and learning.

CHAPTER SUMMARY

- Building awareness as a culturally responsive teacher includes learning about how the brain physically works and its influence on our social-emotional state.
- The brain is guided by two interconnected prime directives: minimize threats and maximize well-being. Our culture and experiences within the sociopolitical context program our brains regarding how it interprets what is threatening and what is an opportunity for authentic connection with others.
- The first two layers of the brain play important roles in helping to detect and minimize social and physical threats, especially the amygdala. The third and newest layer, the neocortex, is where neuroplasticity takes place.
- We are hardwired to connect with others. Our nervous system is designed to guide us toward avoiding threats, approaching rewards and things that will make us feel good, and attaching to others for safety and companionship.
- Our challenge as culturally responsive teachers is knowing how to create an environment that the brain perceives as safe and nurturing so it can relax, let go of any stress, and turn its attention to learning.

Optimum Learning Environment

INVITATION TO INQUIRY

- How do principles of neuroscience influence your teaching?
- What “brain rules” guide your lesson design?

GOING DEEPER

- *How the Brain Learns* (2011) by David A. Sousa
- *Soft-Wired: How the New Science of Brain Plasticity Can Change Your Life* (2013) by Dr. Michael Merzenich, PhD

4 Preparing to Be a Culturally Responsive Practitioner

The real voyage of discovery consists not in seeking new landscapes, but in having new eyes.

—Marcel Proust

When I dare to be powerful—to use my strength in the service of my vision, it becomes less and less important whether I am afraid.

—Audre Lorde, African American Poet

Up to this point our focus has been on understanding culture and brain structures as critical background knowledge. While we are still in the Awareness quadrant of the Ready for Rigor frame, I want to shift from thinking about the physical aspects of the brain and culture to a focus on emotional intelligence and implicit bias.

As I said earlier, culturally responsive teaching isn't a set of engagement strategies you use on students. Instead, think of it as a mindset, a way of looking at the world. Too often, we focus on only doing something to culturally and linguistically diverse students without changing ourselves, especially when our students are dependent learners who are not able to access their full academic potential on their own. Instead, culturally responsive teaching is about being a different type of teacher who is in relationship with students and the content in a different way. We will

look at that new type of student-teacher relationship in the next chapter. In this chapter, we will explore how we can prepare ourselves to show up differently in our relationships with students.

Being responsive to diverse students' needs asks teachers to be mindful and present. That requires reflection. Engaging in reflection helps culturally responsive teachers recognize the beliefs, behaviors, and practices that get in the way of their ability to respond constructively and positively to students. The true power of culturally responsive teaching comes from being comfortable in your own skin because you are not a neutral party in the process. You can never take yourself out of the equation. Instead, you must commit to the journey. This means we each must do the "inside-out" work required: developing the right mindset, engaging in self-reflection, checking our implicit biases, practicing social-emotional awareness, and holding an inquiry stance regarding the impact of our interactions on students.

As a student, I had the privilege of having two highly skilled culturally responsive teachers. One was Mr. Ruane in tenth grade. He was a White teacher who coached football and taught African American literature. What I remember most about him was how comfortable he was talking about issues of race, culture, and society in a room full of African American kids who took his elective class at the height of the Black Power movement. He wasn't scared or overwhelmed by our teenaged outrage at "the Man" and bold self-expression with giant Afros and raised fists. It never seemed to make him nervous. Instead, he was able to harness that energy in service of teaching us analytical literacy skills and the love of poetry as a form of self-expression. In retrospect, I can see how he used the poetry to cultivate our academic mindset. I can still remember the class discussion around Paul Laurence Dunbar's (1997) poem, *We Wear the Mask*, that he offered up as a life compass and opportunity to shape our own identities as learners. Some of my greatest life lessons came from what I learned in his classroom. And it wasn't just his instructional technique. He made me feel seen, heard, and cared for as a learner. I believe Mr. Ruane was able to support us because he was comfortable in his own cultural skin. He didn't try to be hip or "down" with us. Whatever his implicit biases might have been, he managed them internally and didn't allow them to direct how he responded to us.

As we walk through this chapter, I want to offer strategies and tools for preparing yourself to be an emotionally conscious culturally responsive educator. Before you can leverage diversity as an asset in the classroom, you must reflect on the challenges that can interfere with open acceptance of students who are different from you in background, race, class, language, or gender.

how are we holding ourselves? how are we showing up?

yes - not impressive when someone is transparent / does a thing a hard

UNPACKING OUR IMPLICIT BIAS

The philosopher Lao Tzu said that the journey of a thousand miles begins with the first step, and becoming an effective culturally responsive teacher is a long journey. One challenge is learning how to access and shift your implicit biases. As we do, we have to learn to navigate around the lizards in the road. I am not referring to actual lizards but instead to that internal gatekeeper known as our lizard brain that we talked about in Chapter 3. As you begin your own inside-out work in this area, your lizard brain will start to freak out. It's afraid that you will have to talk about sensitive issues such as race, racism, classism, sexism, or any other kind of "-ism." It is afraid that this conversation will make you vulnerable and open to some type of emotional or physical attack. But this fear is not real. It is just your amygdala's ploy to get you to stay in your comfort zone.

Remember, the lizard brain ruled by the amygdala and reticular activating system (RAS), is designed to keep us safe. It thinks that the safest place for us is deep in the center of our comfort zone surrounded by the moat of our unconscious, implicit biases. When we venture too close to the edges of our comfort zone, it sounds an alarm designed to remind us of the dangers that exist outside. Your lizard brain will try a variety of scare tactics. Physically, it will flood your brain with stress hormones such as cortisol and adrenaline to short circuit your more rational thought processes as you step outside your comfort zone or it will put you in freeze, fight, or flight mode. It will try to keep you in check with narratives such as "you need to be color-blind, not calling attention to racial, cultural, or language differences" or "we are all the same inside. Skin color doesn't matter anymore." You might experience impatience with the process as your lizard brain tells you, "This isn't for me. I am a person of color so I already know this" or "this is for White folks." It might even tell you lies such as "I don't have a culture so this is just a waste of time," "They are going to call you a racist if you bring this stuff up," or "This is just touchy-feely crap."

Take a step back and recognize what is going on. This is why understanding social neuroscience—how the brain responds and interacts with others—is critical to a culturally responsive practitioner. There is no way to dismantle implicit bias without controlling this first stage of the process. Instead, accept the challenge of venturing into the unknown with an open mind and heart. Our lizard brain doesn't respond to rationality or language. It is wired only for pure emotion and feeling. Neuropsychologist Rick Hanson, author of *Hardwiring Happiness* says that the key strategy to calming the lizard brain is to practice relaxation and mindfulness. So, start a meditation practice, take up yoga, or join a drumming circle. Spend time in nature. Research in neurobiology proves that these techniques

reduce the fight or flight hormones that get released when our brains feel a physical or social threat. This might seem like an odd suggestion in a book about culturally responsive teaching but it is actually in keeping with the cultural practices of collectivist cultures—spending time in nature keeps us grounded and centered during challenging times. It is part of our resilience strategy.

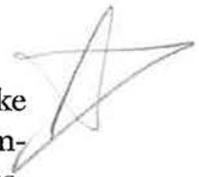
Begin With an Intention

Intention is the starting point for preparing yourself for improving your culturally responsive teaching practice. The act of committing to the process primes your brain and activates your will. The commitment to be an effective educator of culturally diverse dependent learners builds the stamina and courage to persevere when the process gets challenging. To make the path feel less uncharted, find real and virtual mentors who have already walked the path. Find someone of a similar racial, cultural or class background so that you can see how she developed her practice. Read about the journey of White writing teacher and social justice advocate, Linda Christensen, woven throughout her books *Reading, Writing, and Rising Up* (2000) or *Teaching for Joy and Justice* (2009). Seek out Tim Wise, author of *White Like Me: Reflections on Race from a Privileged Son* (2011) or African American educator, bell hooks (1994) in her collection of essays in *Teaching to Transgress*. Math educator Bob Moses, founder of the Algebra Project, shares some of his journey in *Radical Equations* (2002). Read about the lessons learned from the year-long, cross-cultural teaching inquiry conducted by Jennifer Obidah and Karen Teel in *Because of the Kids: Facing Racial and Cultural Differences in Schools* (2001).

Self-Examination: Making the Familiar Strange

The next stage is to examine your own cultural identity. Culture is like the air we breathe, permeating all we do. And the hardest culture to examine is often our own, because it shapes our actions in ways that seem invisible and normal. What feels “normal,” Small (1998) reminds us, is molded by deeply ingrained social habits and ways of valuing and evaluating what we are scarcely aware of. This is what implicit bias is in a nutshell.

Learning about one’s own culture—or “making the familiar strange” as anthropologist George Spindler calls it—is far more challenging than learning about the culture of others (“making the strange familiar”) (Spindler & Spindler, 1982). A critical first step for teachers is to understand how their own cultural values shape their expectations in the classroom—from how they expect children to behave socially, take turns



during discussions, or even pass out classroom materials. A student's different way of being or doing can be perceived as a deviation from the norm and therefore problematic if we don't recognize that it is just different. This might not be an issue in our day-to-day lives, but when we are the authority figure in the classroom, we have the power to penalize those students who seem to be acting in ways that are inconsistent with our cultural view.

Culturally responsive teaching calls for teachers to take the "emotional risk" to examine the deeply held beliefs that influence how they respond to students. This inward reflection means being willing to listen and change in order to respond positively and constructively to the student who may be culturally different in some way. We have to confront our discomfort through self-reflection and analysis of our underlying assumptions in order to become aware of the unconscious biases that influence our teaching.

Here are three internal tasks every teacher has to work through to uncover implicit bias and prepare to work with culturally and linguistically diverse students. We will look at each in depth:



1. Identify your cultural frame of reference
2. Widen your cultural aperture
3. Identify your key triggers

Identify Your Cultural Frames of Reference

The first step in making the familiar strange is to take an inquiry stance toward the examination of your cultural identity. We usually ask teachers to investigate aspects of their cultural identity *after* they have encountered cultural conflict in the classroom, which is often too late (Delpit, 1995). In reality, if teachers want to be successful in their work with culturally diverse students, they must first accept and understand themselves as cultural beings (Marshall, 2002). This self-knowledge acts as a set of reference points that shape our mental models about teaching, learning, and dependent learners of color.

Map Your Cultural Reference Points

Create time and space to work your way through aspects of surface, shallow, and deep culture for clues about your own culture. Think of it as a treasure hunt or an archeological dig. Set time aside to journal and do inquiry around key questions. Don't try to answer these questions in one sitting. Instead, plan to sit with the questions before trying to answer

them. This gives your brain time to sift through memories. Pull out some old photo albums or diaries as a trigger. If you can, do some interviews about family cultural practices or views.

Think about your surface culture:

- How did your family identify ethnically or racially?
- Where did you live—urban, suburban, or rural community?
- What is the story of your family in America? Has your family been here for generations, a few decades, or just a few years?
- How would you describe your family's economic status—middle class, upper class, working class, or low income? What did that mean in terms of quality of life?
- Were you the first in your family to attend college? If not, who did—your parents, grandparents, or great-grandparents?
- What family folklore or stories did you regularly hear growing up?
- What are some of your family traditions—holidays, foods, or rituals?
- Who were the heroes celebrated in your family and/or community? Why? Who were the antiheroes? Who were the “bad guys”?

Spend some time sifting through your shallow cultural beliefs and experiences with these questions:

- What metaphors, analogies, parables, or “witty” sayings do you remember hearing from parents, grandparents, aunts, and uncles?
- What family stories are regularly told or referenced? What message do they communicate about core values?
- Review primary messages from your upbringing: What did your parents, neighbors, and other authority figures tell you respect looked like? Disrespect?
- How were you trained to respond to different emotional displays—crying, anger, and happiness?
- What physical, social, or cultural attributes were praised in your community? Which ones were you taught to avoid?
- How were you expected to interact with authority figures? Was authority of teachers and other elders assumed or did it have to be earned?
- As a child, did you call adults by their first name?
- What got you shunned or shamed in your family?
- What earned you praise as a child?
- Were you allowed to question, or talk back to, adults? Was it okay to call adults by their first name?
- What's your family/community's relationship with time?

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Now, do a similar reflection on your deep cultural values related to communication, “doing school,” self-motivation, and effort. List those learning behaviors you believe every student should exhibit—talk and discourse patterns, volume of interaction, time on task, collaboration or individual work, seat time versus interaction. Ask yourself how did you come to believe this? What messages did you get about why other racial or ethnic groups succeeded or not? What did your culture teach you about intelligence? Did you grow up believing it was set at birth? Did you believe it was genetic? Did you believe some groups were smarter than others?

As you develop a greater sense of your cultural frames of reference, you should begin to have a clearer picture of your cultural self—what drives you, what shapes your worldview, and what influences your teaching. You will begin to get a glimpse of your implicit biases throughout the process.

Widen Your Interpretation Aperture

We all operate from a set of cultural frames of reference. The challenge is that if we routinely interpret other people’s actions solely through our personal cultural frames, we run the risk of misinterpreting their actions or intentions.

When I am talking with teachers about this idea of interpreting other’s behavior through our own cultural frame of reference, I use the example of an exchange between an African American student and a White teacher that Lisa Delpit highlights in her seminal piece, “The Silenced Dialogue” (1988). The student was up and out of his seat sharpening his pencil along with other students as the teacher was about to begin the lesson. She got his attention and said, “James, would you like to take your seat?” James said no and continued to sharpen his pencil. The teacher became outraged and sent James to the principal’s office for being defiant. James was surprised and didn’t understand why he was being sent to the office. When asked what happened, he said the teacher asked him a question and he answered her question.

This exchange highlights classic cross-cultural miscommunication (Dray & Wisneski, 2011). In reality, the teacher was not asking James a question or giving him a choice. Indirect directives are a feature of White middle class cultural communication style. At home and in his community, James recognized someone-giving him a directive because it was direct—“James, take your seat, please” rather than posed as a question with choices. The teacher assumed that James knew she was giving him a directive, and he was consciously refusing to obey it. She interpreted his response as evidence of his intention to be defiant and oppositional.

Create Space for Alternative Explanations

Many teachers don't always think about the cultural lens that influences their interpretations of student actions, parent responses, or their own instructional styles. Instead, we fall back on our default programming, which leads often to deficit thinking.

Figure 4.1 What Is the Deficit Thinking Paradigm?

When operating from a deficit thinking paradigm, educators and policymakers believe that culturally and linguistically diverse students fail in school because of their own deficiencies or because their families don't value education, not because of social inequities, unfair school policies, or differential treatment in the classroom. There is an ill-informed belief that a student's failures are attributable to the student's lack of intellectual ability, linguistic inferiority, or family dysfunction. This deficit perspective suggests that efforts to improve academic achievement should be focused on "fixing" students (i.e., improving test-taking skills) rather than shifting the school culture to support intellectual capacity building and identity-safe classrooms so that students can access their academic potential. As a result, teachers' deficit-oriented attributions of student performance influence their instructional decision making, resulting in giving students less opportunity for engaging curricula, interesting tasks, and culturally congruent ways of learning.

The solution is to broaden our body of explanations and interpretations of student actions. We usually talk about sharpening our "cultural lens" as culturally responsive teachers. Rather than using the metaphor of a lens, I want to offer the metaphor of an aperture. An aperture is a hole or an opening through which light travels. The word aperture shows up in both optics and photography. Our natural aperture is found in our eyes. The pupil, our eye's aperture, opens and closes to let in more light so that we are able to see more clearly under certain conditions. In photography, the camera's aperture lets in more or less light so that the picture comes out clear and bright enough. In a similar way, we have to let in more alternative explanations for students' learning behaviors and social interactions that look different from our own. Otherwise, we run the risk of misinterpreting students' learning behaviors as intellectual deficits.

So we have to develop a process that allows us to expand our ability to recognize the different ways things are done in other cultures. Cross-cultural communication experts, Gudykunst and Kim (2003) offer a three-part process for widening our interpretative aperture that can serve as an internal protocol—*description, interpretation, and evaluation*. Let's

imagine we are watching two fourth-grade Latina girls doing an assignment at their desks, which are organized in quads. You look over and see them talking back and forth, not in loud, disruptive voices, but low murmuring. One of the girls begins to write on her paper. Then they begin talking again. What is going on?

Practice
w/ observation
interpretation

Description—The first step is to simply describe what you see. The girls are talking. Then they are writing and then resume talking. Leave out any interpretation or judgment of the action. Just include observable phenomenon. What did the person say or do? How did the event unfold? Our own implicit biases will want to jump in to interpret or judge the behavior or interaction.

Interpretation—The next step involves interpreting what is going on. To interpret something, you have to give it meaning. So let's go back to our two girls. They are talking and then writing when each is supposed to be doing her own work. You may interpret their talking as cheating. Or you might consider another interpretation of their behavior. You can see it as a culturally grounded collaborative learning behavior. You see it as instructional conversation that is helping them each process the task and come to their own conclusions. Each interpretation carries with it implications for being or not being culturally responsive.

- **Evaluation**—The last step in the process involves assigning positive or negative significance to the action based on our initial interpretation. If we interpreted their talking and writing as cheating, then we judge them as untrustworthy, not smart because they couldn't do the work on their own, or lazy. Our interaction with those two girls would be negative based on how we chose to interpret and judge their behavior. If we decided to interpret it as collaboration and instructional conversation, we might judge them as resourceful, acting like they belong to a community of learners.

The first part of the process, description, is inherently neutral in terms of meaning. Think of what you would see if a video camera recorded an event or interaction. Usually, given the fast pace of the classroom, as teachers we have a tendency to move quickly through description into interpretation. Even then we usually offer only one interpretation of the student's behavior or motivations and that's often from our own perspective. Most culturally responsive teachers recognize the need to develop their observation skills so they can effectively describe what is happening during an interaction with a student or when watching a scenario play out between students and not jump to conclusions. This allows the time

and space to entertain alternative explanations. Over time, your interpretation aperture expands.

There's a word of caution here. When students are behaving badly, hurting themselves or others, or disrupting the learning environment, we cannot ignore that and chalk it up to "that's how they do it in their culture." Professor and culturally responsive pedagogy expert Sharroky Hollie reminds us that we also have to recognize "situational appropriateness," meaning that a student's actions may represent positive cultural behavior but may not be appropriate for the situation. A student's behavior might not even be acceptable in his own culture. I always check by asking, "*Do you do that in front of your grandmother?*" As our interpretation aperture expands, we can help students consciously select culturally different ways of speaking or interacting that are still appropriate to the situation.

Here are tips to help you use the Mindful Reflection protocol as a reflection tool:

1. ***Spend some time viewing the replay in your mind.*** Try to review what happened without judgment. Describe it almost like stage directions. For example, here's what we see when we review the replay of the interaction with James. James walked to the pencil sharpener. Seven other children were up and out of their seats. The teacher moved to the front of the room. She spoke to two other students before she spoke to James. She asked James a question. James responded to the question in a neutral tone of voice and continued to sharpen his pencil. Once he finished, he turned to return to his seat. As he walked to his seat, the teacher told him to go to the principal's office.
2. ***Make a list of your assumptions, reactions, and interpretations of behaviors as the scenario replays.*** What specific thing did you react to? How did you interpret it? Based on what belief or assumption?

In the James scenario, the teacher reacted to James' answer to her question. Her assumption was that James knew that even though she was stating her request as a question with choices, she was actually giving him a direct order. She interpreted his answer as being intentionally defiant. She evaluated his behavior as negative.

3. ***Try on alternative explanations.*** Select one or two student reactions or interactions (what he said or did) and try to offer alternative explanations for the student's behavior based on what you are learning about his deep cultural beliefs, norms, or practices. In the

James scenario, the teacher might revisit James' response to her directive since that is what she reacted to. She might reflect on what she is learning about cultural communication patterns (part of one's shallow culture). She might start with doing some inquiry around communication styles. In James' home culture, how are directives given? What is considered an appropriate or inappropriate response? These would be the questions she pays attention to as she continues her virtual immersion in James' culture.

4. **Check your explanations.** Share your alternative explanations with other culturally responsive teachers in your professional learning community or those in your own personal learning circle. Talk with cultural informants who can give you insight into the positive expression of cultural beliefs and norms. James' teacher could write this interaction up as a critical incident and share it with others to get more input and insight.
5. **Build your cross-cultural background knowledge.** Recognize that understanding alternative explanations for student behavior is an ongoing process. There is no list to study or Wikipedia page to search online. To be a culturally responsive teacher means committing to being a lifelong learner. Widen your interpretation aperture by exposing yourself to other cultural experiences similar to those of the students you serve so you can experience alternative ways of doing and being.
6. **Leverage technology and watch positive movies or television series that will allow you to virtually step into another cultural experience.** Ask for recommendations. There are movies, documentaries, and television series about a variety of cultural experiences—racial, geographical, gender, or language. Watch (don't judge) and study communication styles, nonverbal communication cues and gestures, or how core values are expressed in daily life. Begin to see the patterns that cut across the cultural archetypes of individualism and collectivism as explained in Chapter 2, also look for variations within a particular archetype that cut across race and class. For example, both African American and Latino cultures are very communal, but each culture situates individual recognition and standing out differently.

Identify Your Triggers

Communicating across cultures opens up the potential for miscommunication and unintended conflict. When we try to manage and

Figure 4.2 Mindful Reflection Protocol by Dray & Wisneski

<p>Step 1:</p>	<p>Explain the attributions that you have about the student.</p> <ul style="list-style-type: none"> a. Describe what you and the student said and did. b. How did the student react to your actions or comments? c. Collect notes on multiple days and at different times of the day.
<p>Step 2:</p>	<p>Write out or reflect on your feelings and thoughts when working with the student. Take into account the potential for misinterpretations resulting from deficit thinking, prejudice, and overgeneralizations.</p> <ul style="list-style-type: none"> a. How does this student make you feel? What are your worries or fears? b. What are your assumptions? Why do you find the student problematic? c. Have you evaluated, interpreted, or described the behavior? d. Try to rewrite the examples in descriptive terms.
<p>Step 3:</p>	<p>Consider alternative explanations by reviewing your documentation and reflections.</p> <ul style="list-style-type: none"> a. Review the explanations and reflect on why the student may be doing what he or she does. Look for patterns in your behavior and the student's behavior. b. What are your expectations for the situation? How is the student not meeting your expectations? In what way is the behavior interfering with learning? c. List alternative explanations or interpretations of the student's behavior. d. What external factors and/or personal factors could be influencing the student's behavior? What recent changes have occurred in the student's life, disability, acculturation, and so forth?
<p>Step 4:</p>	<p>Check your assumptions. Share your reflections with a colleague, parents, and/or community members. Meet with parents to learn more about expected and observed behaviors in the home.</p> <ul style="list-style-type: none"> a. Share your list of alternative explanations or interpretations of the student's behavior with a colleague, parents, and/or community members. b. Meet with the family to learn more about their perspective in understanding the behavior. Do they notice the same behavior at home? Do they find it problematic? How do they interact with the student at home? Have there been any major changes or upsets in the home? c. Be open and responsive to the family's ideas and perspectives. Seek to understand rather than to judge.

(Continued)

Figure 4.2 (Continued)

Step 5:	<p>Make a plan.</p> <ul style="list-style-type: none"> a. How will you change or respond differently? b. Brainstorm ideas on how to change the environment, your actions, and/or expectations for this student. c. Experiment with responding differently. Note what happens. Reflect on your feelings as well as the student's response. d. Frequently communicate with the family. Ask whether family members have noticed a difference. What have they been trying that works? e. Consult with colleagues, parents, and/or community members while you experiment to check your assumptions and interpretations.
Step 6:	<p>Continuously revisit this process to reassess your attributions and your progress with the student.</p> <ul style="list-style-type: none"> a. Notice when you are overgeneralizing, attributing behavior within a deficit perspective, or behaving in prejudiced ways toward certain students. b. Remember that this process is a continuous one, so revisit the steps periodically to continue your growth and understanding of students.

Source: B. Dray & D. Wisneski in *Mindful Reflection as a Process for Developing Culturally Responsive Practices*. *TEACHING Exceptional Children*, Sept-Oct 2011.

navigate across cultural differences, our brain is on the lookout for signs of danger or signs of well-being based on our cultural frames of reference. When we feel a threat of any sort—including threats to our belief systems—we are vulnerable to an amygdala hijack. Remember your RAS acts like the brain's emotional "smoke detector," always scanning for things that might cause social embarrassment or emotional pain when we are communicating cross-culturally, ready to sound the alarm that jolts us into fight and flight mode. *When our brain's alarm system gets triggered, we become culturally reactive in an effort to protect ourselves rather than culturally responsive to the other person we are interacting with.*

We all get hijacked at times, but culturally responsive teachers know themselves well enough to anticipate situations that might trigger them. They have tools and techniques to avoid or short-circuit an amygdala overreaction. A key readiness skill or capacity the culturally responsive teacher develops is the ability to manage her emotions and reframe potential threats. To reduce the possibility of getting hijacked, it is important to practice mental strategies and physical tools to prevent or de-escalate the

amygdala’s reaction. The culturally responsive teacher’s ability to manage her emotions is paramount because she is the “emotional thermostat” of the classroom and can influence students’ mood and productivity.

→ *Recognizing Common Triggers*

An important part of identifying your triggers is recognizing universal triggers that are hardwired into the brain. The field of social neuroscience has identified some of the high alert categories that have been hardwired into our amygdala. Think of it as preloaded software that every person comes with as a result of human development over time. Research has shown that humans have a fundamental need to belong, are incredibly sensitive to their social context, and are strongly motivated to remain in good standing with their social group to avoid social exclusion (Rock, 2009).

There are five elements of social interaction that activate strong threats and rewards in the brain, thus influencing how we react in given situations: *standing, certainty, connection, control, and equity* (Figure 4.3). They have a strong influence on our implicit bias and cultural frames of reference. Do some reflection and think about which ones trigger you.

Figure 4.3 Social Interaction Elements That Activate Threats in the Brain

Element	Description	What’s the Threat
Standing	Standing refers to one’s sense of importance relative to others in one’s social network or organizational hierarchy (e.g., peers, coworkers, friends, supervisors). It also relates to how one believes others in the group perceive him—negative or positive, competent or incompetent.	The fear that one would be expelled from the “tribe” (such as being fired from a job, evaluated poorly by the principal, ostracized by peers because of doing things differently).
Certainty	Certainty refers to one’s need for clarity and predictability in a social situation in order to make accurate social moves. It also relates to one’s ability to predict what will happen (e.g., routines, cause and effect, action and reaction).	The fear of possibly embarrassing oneself or being unable to know what to do in a given situation. The feelings of being out of control or unable to be safe because of venturing into the unknown with new teaching practices and unfamiliar ways of organizing the classroom.

(Continued)

Figure 4.3 (Continued)

Element	Description	What's the Threat
Control	Control speaks to one's sense of control over his life and the perception that one's behavior can have a positive effect on the outcome of a situation (e.g., getting a promotion, finding a partner) rather than something out of his control having more influence (e.g., class, race, language, or gender).	The fear of someone telling you what to do, where to go, and how to behave that is inconsistent with your values (such as with English only laws or Jim Crow laws).
Connection	Relatedness focuses on one's sense of connection to and security with another person, one's family, or one's peer group. It also is concerned with whether new people one interacts with are friend or foe.	The fear of being an outsider and excluded. We fear losing important connection with others. People do not want to be out of relationship with others, especially an important peer group.
Equity	Equity refers to having a sense of fair, just, and nonbiased exchange between people (e.g., equal opportunity, equivalent pay for equivalent work, the elimination of unearned advantage and disadvantage).	The threat can come when one feels he or his group (class, geographic, linguistic) is being subjected to unearned disadvantage or someone is receiving unearned advantage. It may also be associated with <u>distancing oneself from unearned advantage</u> .

Practicing Emotional Self-Management

Self-management involves being aware of one's feelings and the ability to use this awareness as information to manage and adjust one's emotional state. For a culturally responsive teacher who is working to empower dependent learners who may be resistant out of fear, this practice is critical.

From neuroscience, we know emotions are contagious, so if one person in the classroom gets emotionally hijacked, it's likely others will be infected with anxiety, resistance, or disengagement. So just as we take precautions not to spread physical viruses, we want to avoid spreading toxic emotions that make everyone reactive rather than responsive. Remember that the brain has a **negativity bias**, meaning that the brain is more than 20 times more focused on negative experiences than on positive ones. Think Velcro versus Teflon. There are steps you can take to calm your amygdala.

Stop
Observe
Detach
Awaken

Identify what sets you off. Think about which of the five areas of social threat make you defensive—class issues, geographic/regional differences, racial differences? Sometimes we know in advance that we’re going to be in a conversation or a situation that is likely to set us off. In those cases, it’s a good idea to take some time in advance to ask yourself: “What am I trying to do in this situation and how do I need to show up to make that outcome likely? How do I want to respond when that person does something that pushes my anger button?” By thinking it through in advance you’re using your prefrontal cortex and are programming it to help keep your amygdala in check.

Label your feelings when they come up. For decades, psychologists, counselors, priests, and educators have been helping people identify or label their feelings. Now we know from new research using functional MRI imaging of the brain that labeling these feelings helps reduce their intensity and return some of the activity back to the prefrontal cortex along with more cognitive control. They call it “affect labeling.” This process helps you cognitively reappraise or reframe negative feelings, thereby reducing their impact.

Begin by stating what’s happening: If you can either say out loud or to yourself, “I’m getting angry here,” ~~you put yourself in the role of observer rather than actor.~~ It is easier to make thoughtful choices about what to do next if you can ~~decouple yourself from being the actor.~~

Create an “early warning system.” Knowing what causes an amygdala hijack can help you head it off. By paying attention to signs and emotions you can take action early rather than allowing the amygdala to completely take over. *Notice your physical reaction.* When threatened or angered, most people have physical cues that they’re headed down that path. It could be a tightening of your jaw, a flush feeling in your face, your vocal cords tightening up or something else. If you notice that, it’s a cue to step back and regroup.

The S.O.D.A. Strategy

Here S.O.D.A. is not a carbonated drink, but a strategy for gaining control of our emotions when we feel triggered or our buttons have been pushed. S.O.D.A. is an acronym that stands for Stop, Observe, Detach and Awaken. The strategy is based on neuroscience findings that tell us that if we are able to put as little as 10 seconds in-between the time we get triggered and our reaction, we can preempt an amygdala hijack and avoid responding negatively. The following box gives an overview of the S.O.D.A. strategy.

Stop. This first step simply asks you to stop and pause rather than react in habitual ways. When you enter an interaction that feels challenging, work hard to stay open-minded. Open-mindedness means being open to other points of view, other ways of doing things, and staying open to changing your own view point. This might mean not allowing a certain cultural display such as a student's animated verbal exchange trigger you.

Observe. In the second step, check yourself. Don't react to what is going on. Instead, take a breath. Use the 10-second rule. When the brain gets triggered, it takes stress hormones approximately 10 seconds to move through the body to the prefrontal cortex. In the pre-hijack stage, the biochemicals cortisol and adrenaline are just beginning to kick in. There is still some "wiggle room" to listen to your wiser self and begin using stress management techniques to interrupt the amygdala takeover effectively. Try to describe to yourself what is happening in neutral terms. It is during this step that you can recognize that what was originally perceived as a threat isn't really.

Detach. Sometimes when we get triggered, we get personally invested in being right or exercising our power over others. Deliberately shift your consciousness to more pleasant or inspirational images. If those techniques fail, go get a drink of water, literally take a few steps back to shake yourself up a bit. When we can detach from the goal of being right or defending ourselves, we can redirect our energy toward being more responsive rather than reactive.

Awaken. When our amygdala reacts, it's because we are trying to protect ourselves. Shifting focus from yourself to the other person in front of you helps you "wake up" or become present in the moment. Try to see the other person as someone with his own feelings. He might be scared and reacting out of fear. Ask yourself a few questions about the other person. What are they thinking? How are they feeling in this moment? Shifting over to their perspective will get you out of your own reactive mode and will put you in a better position to have a positive interaction.

IMPLICATIONS FOR SUPPORTING DEPENDENT LEARNERS AND BUILDING INTELLECTIVE CAPACITY

In this chapter, we looked at three key areas of prep work to get yourself ready to be a culturally responsive teacher or to take your practice to the next level. Think about how you will organize yourself to move the work forward. Don't be overwhelmed by thinking you have to master each area before you can consider yourself competent. Find one or two

high-leverage activities in each area and work on them for a specific time period. Structure life so that you have protected time for the type of internal excavation this requires. For example, use the six-week grading period to focus exclusively on doing inquiry around widening your interpretation of student behaviors. Maybe a few hours every Sunday can be devoted toward the more personal cultural identity work. Find other colleagues for accountability and support.

The old adage we usually hear is that “practice makes perfect.” Based on what we know about neuroplasticity and deliberate practice, we should rephrase that to read, “practice makes permanent.” As you organize yourself for this self-reflective prep work, remember that it is not about being perfect but about creating new neural pathways that shift your default cultural programming as you grow in awareness and skill.

CHAPTER SUMMARY

- Culturally responsive teachers have to understand their own cultural reference points to be effective.
- They must practice self-management to maintain their emotional intelligence and grow their cultural I.Q.
- Culturally responsive teachers learn to expand their interpretations of student behavior to include different cultural displays of learning and social interaction.

INVITATION TO INQUIRY

- What are your current cultural frames of reference?
- What processes have you engaged in to examine your own deep culture?
- What student social and learning behaviors trigger you in the classroom?
- What bias or assumptions might be behind your triggers?
- How do you manage your emotional intelligence in cross-cultural interactions?

GOING DEEPER

- *Because of the Kids: Facing Racial and Cultural Differences in Schools* (2001) by Jennifer Obidah and Karen Teel
- *Everyday Anti-Racism: Getting Real About Race in School* (2008) edited by Mica Pollack
- *Colormute: Race Talk Dilemmas in an American School* (2005) by Mica Pollack