

1 Climbing Out of the Gap

Supporting Dependent Learners to Become Independent Thinkers

Education either functions as an instrument which is used to facilitate integration of the younger generation into the logic of the present system and bring about conformity or it becomes the practice of freedom, the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world.

—Paulo Freire, *Pedagogy of the Oppressed*

The chronic achievement gap in most American schools has created an epidemic of dependent learners unprepared to do the higher order thinking, creative problem solving and analytical reading and writing called for in the new Common Core State Standards. One of the goals of education is not simply to fill students with facts and information but to help them learn how to learn. Classroom studies document the fact that underserved English learners, poor students, and students of color routinely receive less instruction in higher order skills development than other students (Allington and McGill-Franzen, 1989; Darling-Hammond, 2001; Oakes, 2005). Their curriculum is less challenging and more repetitive. Their instruction is more focused on skills low on Bloom's taxonomy. This type of instruction denies students the opportunity to engage in what neuroscientists call **productive struggle** that actually grows our

brainpower (Means & Knapp, 1991; Ritchhart, 2002). As a result, a disproportionate number of culturally and linguistically diverse students are dependent learners.

Here is the problem. On his own, a dependent learner is not able to do complex, school-oriented learning tasks such as synthesizing and analyzing informational text without continuous support. Let's not misunderstand the point—dependent doesn't mean deficit. As children enter school, we expect that they are dependent learners. One of our key jobs in the early school years is to help students become independent learners. We expect students to be well on their way to becoming independent learners by third grade, but we still find a good number of students who struggle with rigorous content well into high school, mostly students of color.

The closest we usually come to talking about this situation is the popular “Read by Third Grade” campaigns. We say children are *learning to read* up until third grade then shift to *reading to learn*. The same is true with cognition. In the early grades, we teach children habits of mind and help them build cognitive processes and structures so that as they move through school they are able to do complex thinking and independent learning.

For culturally and linguistically diverse students, their opportunities to develop habits of mind and cognitive capacities are limited or non-existent because of educational inequity. The result is their cognitive growth is stunted, leaving them dependent learners, unable to work to their full potential. In the *New Jim Crow: Mass Incarceration in the Age of Colorblindness*, Michelle Alexander (2012) suggests that this dependency is the first leg of the “school-to-prison pipeline” for many students of color. According to the Southern Poverty Law Center, the school-to-prison is a set of seemingly unconnected school policies and teacher instructional decisions that over time result in students of color not receiving adequate literacy and content instruction while being disproportionately disciplined for nonspecific, subjective offenses such as “defiance.” Students of color, especially African American and Latino boys, end up spending valuable instructional time in the office rather than in the classroom. Consequently, they fall further and further behind in reading achievement just as reading is becoming the primary tool they will need for taking in new content. Student frustration and shame at being labeled “a slow reader” and having low comprehension leads to more off-task behavior, which the teacher responds to by sending the student out of the classroom. Over time, many students of color are pushed out of school because they cannot keep up academically because of poor reading skills and a lack of social-emotional support to deal with their increasing frustration.

14 • Building Awareness and Knowledge

Figure 1.1

Many culturally and linguistically diverse students are “dependent learners” who don’t get adequate support to facilitate their cognitive growth. Consequently, they are not able to activate their own neuroplasticity.

The Dependent Learner	The Independent Learner
<ul style="list-style-type: none">• Is dependent on the teacher to carry most of the cognitive load of a task always• Is unsure of how to tackle a new task• Cannot complete a task without scaffolds• Will sit passively and wait if stuck until teacher intervenes• Doesn’t retain information well or “doesn’t get it”	<ul style="list-style-type: none">• Relies on the teacher to carry some of the cognitive load temporarily• Utilizes strategies and processes for tackling a new task• Regularly attempts new tasks without scaffolds• Has cognitive strategies for getting unstuck• Has learned how to retrieve information from long-term memory

Dependent Learner Characteristics vs. Independent Learner

In recent years, there’s been a lot of talk about the reasons behind the low performance of many students of color, English learners, and poor students. Rather than examine school policies and teacher practices, some attribute it to a “culture of poverty” or different community values toward education. The reality is that they struggle not because of their race, language, or poverty. They struggle because we don’t offer them sufficient opportunities in the classroom to develop the cognitive skills and habits of mind that would prepare them to take on more advanced academic tasks (Jackson, 2011; Boykin and Noguera, 2011). That’s the achievement gap in action. The reasons they are not offered more opportunities for rigor are rooted in the education system’s legacy of “separate and unequal” (Kozol, 2006; Oakes, 2005).

School practices that emphasize lecture and rote memorization are part of what Martin Haberman (1991) calls a “pedagogy of poverty” that sets students up to leave high school with outdated skills and shallow knowledge. They are able to regurgitate facts and concepts but have difficulty applying this knowledge in new and practical ways. To be able to direct their own lives and define success for themselves, they must be able to think critically and creatively.

As educators, we have to recognize that we help maintain the achievement gap when we don’t teach advance cognitive skills to students we label as “disadvantaged” because of their language, gender, race, or socio-economic status. Many children start school with small learning gaps, but as they progress through school, the gap between African American and

Latino and White students grows because we don't teach them how to be independent learners. Based on these labels, we usually do the following (Mean & Knapp, 1991):

- Underestimate what disadvantaged students are intellectually capable of doing
- As a result, we postpone more challenging and interesting work until we believe they have mastered “the basics”
- By focusing only on low-level basics, we deprive students of a meaningful or motivating context for learning and practicing higher order thinking processes

Just increasing standards and instructional rigor won't reverse this epidemic. Dependent learners cannot become independent learners by sheer willpower. It is not just a matter of grit or **mindset**. Grit and mindset are necessary but not sufficient by themselves. We have to help dependent students develop new cognitive skills and habits of mind that will actually increase their brainpower. Students with increased brainpower can accelerate their own learning, meaning they know how to learn new content and improve their weak skills on their own.

While the achievement gap has created the epidemic of dependent learners, **culturally responsive teaching** (CRT) is one of our most powerful tools for helping students find their way out of the gap. A systematic approach to culturally responsive teaching is the perfect catalyst to stimulate the brain's neuroplasticity so that it grows new brain cells that help students think in more sophisticated ways.

I define culturally responsive teaching simply as . . .

An educator's ability to recognize students' cultural displays of learning and meaning making and respond positively and constructively with teaching moves that use cultural knowledge as a scaffold to connect what the student knows to new concepts and content in order to promote effective **information processing**. All the while, the educator understands the importance of being in relationship and having a social-emotional connection to the student in order to create a safe space for learning.

Numerous studies have demonstrated that culturally responsive education can strengthen student connectedness with school and enhance learning (Kalyanpur, 2012; Tatum, 2009).

There has been a lot written about cultural responsiveness as part of the current reform agenda. As a teacher educator, I see teacher

16 • Building Awareness and Knowledge

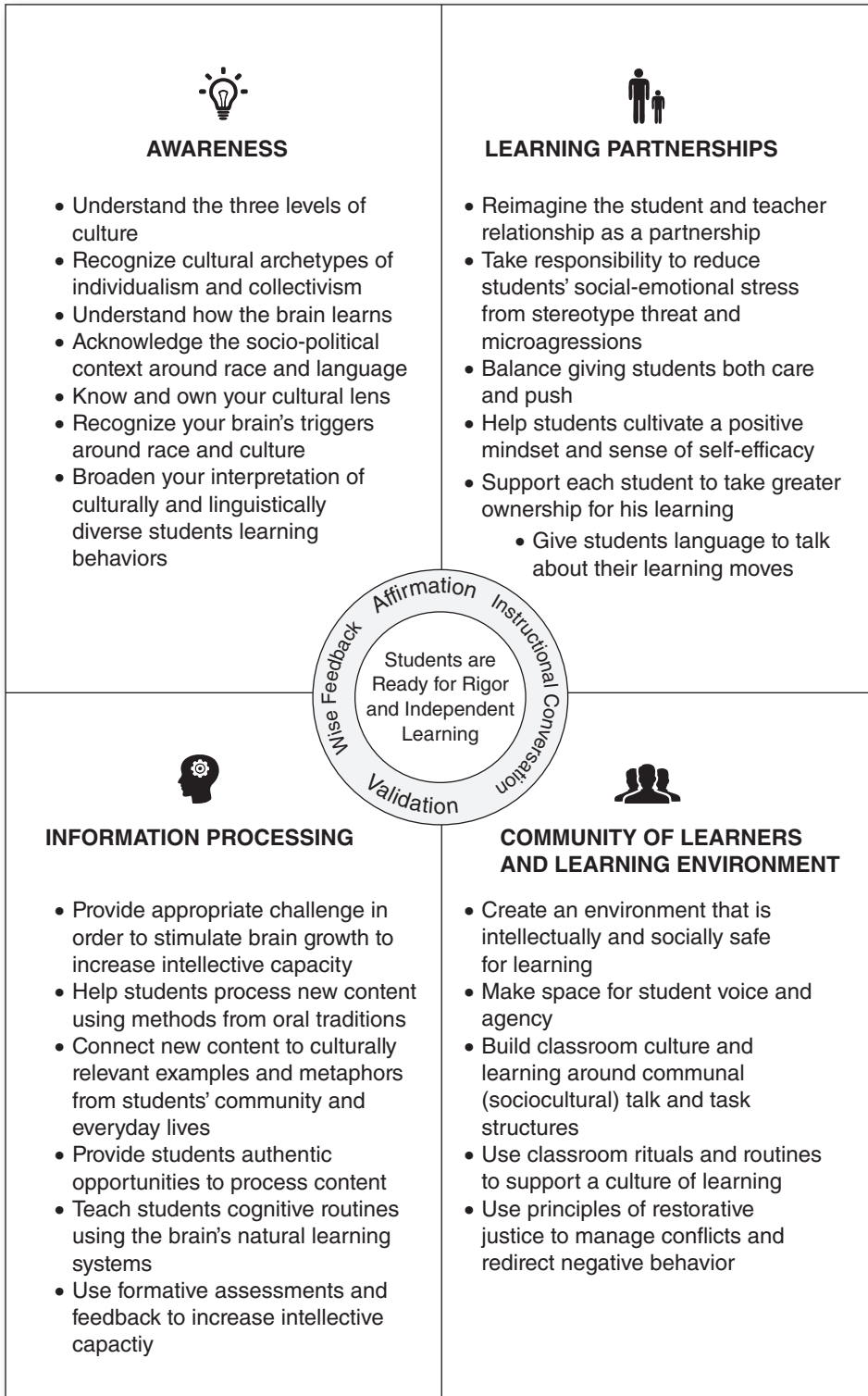
education programs pushing to include cultural responsiveness in their list of competencies for beginning teachers. Many states require teachers to have some type of cross-cultural, language, and academic development (CLAD) certification. Teacher induction programs that support new teachers in their first years in the classroom try to cover the topic in their beginning teacher mentoring programs. Most school districts only offer teachers one-shot professional development “trainings” with little or no continued support. Too often, culturally responsive teaching is promoted as a way to reduce behavior problems or motivate students, while downplaying or ignoring its ability to support rigorous cognitive development.

THE MARRIAGE OF NEUROPLASTICITY AND CULTURALLY RESPONSIVE TEACHING

I can't tell you the number of times someone has asked me for the culturally responsive “cheat sheet” for working with African American, Latino, or even Middle Eastern students. A good number of teachers who have asked me about cultural responsiveness think of it as a “bag of tricks.” Far from being a bag of tricks, culturally responsive teaching is a pedagogical approach firmly rooted in learning theory and cognitive science. When used effectively, culturally responsive pedagogy has the ability to help students build **intellective capacity**, also called *fluid intelligence* (Ritchhart, 2002) and *intellective competence* (Gordon, 2001; National Study Group for the Affirmative Development of Academic Ability, 2004). Intellective capacity is the increased power the brain creates to process complex information more effectively. Neuroscience tells us that culture plays a critical role in this process. That's why it is so important for culturally responsive teachers to be well-versed in brain science and cultural understanding.

Beyond knowing the brain science, the biggest challenge I see teachers struggling with is how to operationalize culturally responsive pedagogical principles into culturally responsive teaching practices. It means understanding the basic concepts of culturally responsive pedagogy (Hernandez-Sheets, 2009; Nieto, 2009; Villegas and Lucas, 2002) and then learning the instructional moves associated with them. The Ready for Rigor framework is designed to help teachers do just that with the aid of neuroscience to deepen your understanding (Figure 1.2). This simple framework organizes key areas of teacher capacity building that set the stage for helping students move from being dependent learners to self-directed, independent learners.

Figure 1.2 Ready for Rigor Framework



THE FOUR PRACTICE AREAS OF CULTURALLY RESPONSIVE TEACHING

Learning to put culturally responsive teaching into operation is like learning to rub your head and pat your stomach at the same time. This move feels a bit awkward at first because you have to get your hands to perform two different movements in unison. The trick is to get each movement going independently then synchronizing them into one rhythmic motion. Learning to operationalize culturally responsive teaching is much like rubbing your head and patting your stomach at the same time. The practices are only effective when done together. In unison they create a synergistic effect. The Ready for Rigor framework lays out four separate practice areas that are interdependent. When the tools and strategies of each area are blended together, they create the social, emotional and cognitive conditions that allow students to more actively engage and take ownership of their learning process.

The framework is divided into four core areas. The individual components are connected through the principles of brain-based learning:

Practice Area I: Awareness

Successfully teaching students from culturally and linguistically diverse backgrounds—especially students from historically marginalized groups—involves more than just applying specialized teaching techniques. It means placing instruction within the larger sociopolitical context. In this first practice area, we explore the development of our sociopolitical lens. Every culturally responsive teacher develops a sociopolitical consciousness, an understanding that we live in a racialized society that gives unearned privilege to some while others experience unearned disadvantage because of race, gender, class, or language. They are aware of the role that schools play in both perpetuating and challenging those inequities. They are also aware of the impact of their own cultural lens on interpreting and evaluating students' individual or collective behavior that might lead to low expectations or undervaluing the knowledge and skills they bring to school. Mastering this practice area helps teachers

- Locate and acknowledge their own sociopolitical position
- Sharpen and tune their cultural lens
- Learn to manage their own social-emotional response to student diversity

Practice Area II: Learning Partnerships

The second practice area focuses on building trust with students across differences so that the teacher is able to create a social-emotional partnership for deeper learning. Culturally responsive teachers take advantage of the fact that our brains are wired for connection. As they move through the work in this area, teachers build capacity to

- Establish an authentic connection with students that builds mutual trust and respect
- Leverage the trust bond to help students rise to higher expectations
- Give feedback in emotionally intelligent ways so students are able to take it in and act on it
- Hold students to high standards while offering them new intellectual challenges

Practice Area III: Information Processing

The third practice area focuses on knowing how to strengthen and expand students' intellectual capacity so that they can engage in deeper, more complex learning. The culturally responsive teacher is the conduit that helps students process what they are learning. They mediate student learning based on what they know about how the brain learns and students' cultural models. This practice area outlines the process, strategies, tactics, and tools for engaging students in high-leverage social and instructional activities that over time build higher order thinking skills. Moving through this area, teachers learn how to

- Understand how culture impacts the brain's information processing
- Orchestrate learning so it builds student's brain power in culturally congruent ways
- Use brain-based information processing strategies common to oral cultures

Practice Area IV: Community Building

In the fourth practice area, we focus on creating an environment that feels socially and intellectually safe for dependent learners to stretch themselves and take risks. Too often, we think of the physical set up of our classroom as being culturally "neutral" when in reality it is often an extension of the teacher's worldview or the dominant culture. The culturally responsive teacher tries to create an environment that communicates

20 • Building Awareness and Knowledge

care, support, and belonging in ways that students recognize. As they move through this practice area, teachers understand how to

- Integrate universal cultural elements and themes into the classroom
- Use cultural practices and orientations to create a socially and intellectually safe space
- Set up rituals and routines that reinforce self-directed learning and academic identity

CHAPTER SUMMARY

- The achievement gap has denied underserved students of color and English learners opportunities to develop the cognitive skills and processes that help them become independent learners.
- Culturally responsive teaching is a powerful tool to help dependent learners develop the cognitive skills for higher order thinking.
- Culturally responsive teaching uses the brain principles from neuroscience to mediate learning effectively.
- The Ready for Rigor framework helps us operationalize culturally responsive teaching.

INVITATION TO INQUIRY

- How is your school addressing the needs of low-performing students of color?
- How do you support struggling students to become independent learners?
- How have you and your colleagues operationalized the principles of culturally responsive teaching?

GOING DEEPER

To deepen your knowledge, here are some books, reports, and articles I would recommend:

- *All Students Reaching the Top: Strategies for Closing Academic Achievement Gaps* by the National Study Group for the Affirmative Development of Academic Ability.
- *The Flat World and Education: How America's Commitment to Equity Will Determine Our Future* by Linda Darling-Hammond.