

## Chapter 2

# Culturally Relevant and Meeting Academic Standards at the Same Time: Teaching Math to African American Students as a Matter of Social Justice

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### ABSTRACT

*Over the last two decades, American students have been scoring higher on national math assessments. With that said, still problematic is the belief that African American students cannot excel in math do to various issues, including language deficits. Thus, in this chapter, through an on-going study, the authors argue for the utilization of culturally relevant pedagogy (CRP) and its significance in teaching math to African American students.*

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## **INTRODUCTION**

“Dr. Abdulalim Shabazz is responsible directly or indirectly for teaching over half of all the Africans who hold a Ph.D. in mathematics in the United States. Men and women who were taught by Shabazz continue to demonstrate that they know how to reach the so-called unteachable. Shabazz once challenged his faculty at Clark Atlanta University in Atlanta, who doubted the intellectual capacities of their students: “Give me your worst ones and I will teach them.” His success at doing this is now legendary.” (Perry, Steele, & Hilliard, 2003)

The above quote provides the arguments and issues that the authors raise in this chapter. Specifically, the authors unpack the ways in which charter school teachers navigate through the unforeseen consequences of neoliberal reforms to make sense of and use Culturally Relevant Pedagogy (CRP) to support students’ overall experiences, identities, and achievement in mathematics. While American students have been scoring higher on national math assessments over the last two decades (Pew Research Center, 2015), the incremental progress of African American students scores do not match those of their White and Asian peers. Still problematic is the belief that African American students cannot excel in math due to racial stereotypes about ability and language in addition to the persistent reality of poverty (Orr, 1987; & Stiff & Harvey, 1988).

CRP is described as a tool of cultural knowledge whereby students are viewed as holistic embodiments of knowledge and taught through a universal form of empowerment in which their understandings, dexterities, and mindsets are influenced by cultural references made known to their background (Ladson-Billings, 1994). CRP practices are characterized by other researchers as methods of instruction suitable to meeting the academic and social needs of culturally diverse learners (Gay, 2000; Howard, 2001; Ladson-Billings, 1994; Shade, Kelly, & Oberg, 1997). Gay (2000) explains that tapping into prior experiences of students helps to frame references on how teachers perform culturally relevant pedagogies to culturally diverse students. CRP and pedagogical practices used among teachers tap into the strengths of their students instead of focusing on their weaknesses (Gay, 2000). Additionally, CRP and practices used effectively by teachers produce a culture of learning whereby the students feel a sense of validation and affirmation, according to Gay (2000). Howard (2003) adds that a goal of CRP is to validate the experiences of culturally diverse students in order to increase their academic achievement.

The authors view the inequities in math or any academic subject as a social justice issue (Dantley & Green, 2015). The significance of an ongoing study by the authors may provide evidence about the capacity of CRP to connect to students’ deep cultural wealth as an impetus for engaging in math. Additionally, this study contributes to empirical data that transcend deficit perspectives and increase strengths-based approaches to high quality math instruction and heightened achievement, especially among lower income African American and Hispanic students in urban schools.

The author’s main argument in this chapter is twofold.

## **Theoretical Framework**

This chapter focuses on how CRP may disrupt the “education debt” (Ladson-Billings, 2006) that is, in actuality, a social injustice. In improving math education, the authors argue, African American students can excel in math and other science, technology, engineering, and math (STEM) fields, especially when educators employ anti-deficit culturally appropriate pedagogical approaches. Second, the authors argue that the problematizing of African American students in urban schools is a matter of radical social

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