# Learning Mathematics While Black in Rural Appalachia

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## Background/Theoretical Framework
- **Race in Appalachia**  
  "Rural normatively white population" (Anglin, 2002, p. 566)  
  White economic issues make race invisible in the region
- **Critical Race Theory** (Ladson-Billings & Tate, 1995)  
  Racism is endemic, property rights, experiential knowledge
- **Martin's (2013) Learning Mathematics While Black**  
  mathematics learning affected by macro-, meso-, and micro-level interactions
- **Mathematics identity**  
  "dispositions and deeply held beliefs that individuals develop about their ability to participate and perform effectively in mathematical contexts" (Martin, 2012, p. 19)
- **Mathematics Socialization**  
  "process and experiences by which individuals and collective mathematics identities are shaped" (Martin, 2000, p. 19)

## Research Questions
- **How do Black students construct racialized mathematics identities in rural Appalachia?**
- **How are Black students socialized into mathematics in rural Appalachia?**
- **How does this influence their experiences as learners and doers of mathematics?**
- **What would an ideal mathematics education be for Black learners in rural Appalachia?**

## Methodology
- **CRT** can provide a "methodological instrument for collecting and understanding the perspectives of marginalized groups" (Morris & Parker, 2019, p. 25).
- **Narrative inquiry** is the study of human lived experiences in the form of stories (Clandinin, 2013).
- **This study uses critical race counterstories because "in CRT, narrative is counter-storytelling"** (Berry & Cook, 2019, p. 88).

## References

## Preliminary Findings/Further Plans
LaMarcus attends Hilltop High School which is in a combined building with the middle school of the same name. He refers to Hilltop as a normal high school in West Virginia because he believes it is seen as a "black closed" by surrounding schools because of the relatively large proportion of Black students at the school. This has led to racist comments that end in scuffles in athletic competitions. LaMarcus says that he hears the occasional "N word" at school but that it is not too often. There are occasional fights between Black and White students around racial stereotyping, racism, and racist comments, but "it's not like every month."

LaMarcus’ mathematics identity has been consistently defined by his self-professed struggles with the subject which has led to a dislike. He says, "Learning math in elementary and middle school was difficult for me. For most of it I didn’t like any of it." It seems that many of his negative feelings towards mathematics come from an embarrassment that has come from being asked to publicly solve procedural problems with speed. He states that, "You had to worry about other people making fun of you for not knowing something." He also cites a mathematics relay race causing anxiety that contributed to his early negative feelings towards the subject.

Data will continue to be collected to further understand students' experiences in various Appalachian contexts. Follow-up interviews will further explore successes and reasons for it. Analysis will focus on what makes the experiences uniquely Appalachian and the relationships between context, race, and mathematics.