
What brought you to this work?

Robertson: This project matters to me because in my experience teaching math in Philadelphia Public Schools and now Pittsburgh Public Schools, African-American students perform well below their white peers. I would like to affect change by adding research-based methodology to my pedagogy in order to improve test scores.

Scott: In this challenging time in the United States of America, I would like to do my part to help our children reach their full potential. Pittsburgh has a long history of educational disparity between African American and White students. I have a strong interest in understanding students’ educational experiences, improving their academic performance, and strengthening their confidence in their ability to perform well in STEM and other quantitative analysis courses.

Research questions

1) Would African American students benefit from a culturally oriented math class that introduces math concepts from a practical perspective, even before teaching math concepts? For example, if chapters one or two chapters of a math textbook presented the "Story of African Mathematics" whereby students would learn how the pyramids were built and math concepts employed to accomplish this feat.

2) What are the pedogeological differences between African American versus White math instructors who teach classes with predominantly Black students?

3) What are the pedogeological differences between African American instructors?

4) What role, if any, has social media and gaming played in the enhancement or detriment of a student’s math skills? Is there a disproportionate effect on African American students compared to other students?

Research plan

We will complete a literature review to find applicable methods to add to John's pedagogy in order to improve math outcomes for K-8 African-American students.