

Finding a New Lens: How Culturally Relevant Pedagogy Shifted My Practice

by Stephanie Bailey, Science teacher, Airport High School, Lexington County School District Two

An atom is an atom. A cell is a cell. The tides follow the path of the moon. Gravity pulls objects toward the earth. There's no culture involved. Right? Well, maybe.

Let me set the scene. Fall of 2017, there I was, 40 years old, 18 years of teaching high school science under my belt, and in my first semester of the doctoral program in Teaching and Learning at UofSC. I saw a flyer for a symposium topic that I didn't know much about, but I thought it would provide a chance to network with others.

Little did I know that this experience that would set the path for my doctoral program and change how I viewed the world.

I sat down and Dr. Gloria Boutte introduced Dr. Lamar Johnson, a professor from Michigan State University. Dr. Johnson started presenting about the responsibility of teachers to ensure that Black students have the chance to connect with their culture and be seen and heard within the context of their learning. I listened to all the creativity the other participants shared.

Everything sounded amazing. The possibilities seemed endless for ELA, social studies, and the arts — but science? I mean, it doesn't matter what culture someone is from, an atom is still an atom, and a cell is still a cell, right?

So, with complete confidence I declared, "But I teach science. It's facts and objective observations. This doesn't fit in my class."

With care and tact, Dr. Johnson asked me, "But *who* does the research? Who gets the funding? And for what reason?" Also, he asked did I know that race isn't even biological?

The symposium continued with other people sharing and asking questions, but I'm not sure I heard much after that. I said my goodbyes, thanked Dr. Johnson, and walked to the parking lot. I got in my car and headed home. My mind was reeling; I had so much to think about. I was buzzing with possibilities and feeling disoriented. How had I missed this? How did I not recognize that everything we teach is pretty much from only one perspective? This short, twohour encounter would create a crack in my awareness that I would seek to break wide open over the next several years. It would ultimately be the greatest influence impacting my classroom instruction and set the path for my dissertation work. This encounter completely changed not only how I view the classroom, but the world.

Monday morning after the symposium I walked into my school, and although it was the same classroom it had been for years, with the same students I had known for months, it felt different. I looked at the faces looking back at me. I had always prided myself on knowing my students and on being compassionate and understanding. But could I truly know them if I didn't understand their experiences? Could I truly understand who they were if I didn't know the first thing about their culture?

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Dr. Johnson's voice sat on my shoulder (just like in the cartoons), nagging at me as I taught. I heard inner doubts nudging me to consider what I



presented and question whether it was the best way or the only way. I heard suggestions to consider other scientists and perspectives worthy of study. As registration for the next semester approached, I signed up for courses on Educating African American Students and Critical Race Theory. And I started seeing the underlying presence of race in almost every aspect of American life.

I was hooked!

I was also confused as to why, after 18 years in the classroom, I had never heard anything about culturally relevant pedagogy (CRP).

Enter CEEAAS: The Center for Education and Equity of African American Students.

The annual conference for Equity in Education was my first opportunity to network and learn what other teachers were doing in their classrooms surrounding CRP. What could I do as a science teacher? My mission became clear: teach science framed around social justice.

I started adjusting my lessons, adding perspectives, and paying more attention. I included the usual references to Black and Latinx scientific contributions, but we went further and deeper. My students studied not only the coastal ecosystems but how they would be managed from an Indigenous perspective had colonization not stolen their lands. We studied genetic inheritance and critically analyzed the use of traits like skin color and hair color as signifiers of race. And my students? They responded with variations of, "We never talk about stuff like this in other classes." Kids who were quiet started perking up. They started bringing examples from their lives, past experiences, and personal observations to science class.

Now, I approach my classes from a place of learning as well as teaching. I ask my students who they are and learn about their experiences. I ask their parents who their children are to get to know them better. I tailor my lessons around the people who are in the room. By tapping into the experiences and expertise of my students — as well as the people who aren't in the This shift has given purpose to my doctoral research: how do students connect science to issues of social justice? And it's given me a relevant and inclusive focus for my classroom instruction.

room — we acknowledge the voices and perspectives of others. I also relinquish control where possible to follow their lead. When a student asked why people with fatal disorders continue to have children, we did a study of eugenics in the United States from the perspective of inheritance traits.

Instead of just studying the molecules within our food, we connect the nutritional values to *food deserts*. Rather than studying the development along beaches, we study the cultures who depend on them: like the *Gullah* peoples of the Southeast. Instead of learning that James Watson is one half of the duo credited with discovering the structure of DNA, we critically analyze not only his nefarious theft of the work of *Rosalind Franklin* but also his blatantly *racist public comments*. When studying and modeling how DNA samples can be compared, we connect this content to the important work of the *Innocence Project*.

This shift has given purpose to my doctoral research: how do students connect science to issues of social justice? And it's given me a relevant and inclusive focus for my classroom instruction.

- And what about you, fellow teacher? Has your district offered PD in culturally relevant teaching? What perspectives are taught in your class?
- Whose culture is represented? Whose is missing?

Need a place to get started or ready to learn more? Check out the resources at *Learning for Justice* where you can find lesson plans for all subjects and grade levels.

What will you do?



Stephanie Bailey has taught secondary science for 21 years. She was a 2017 Presidential Awards for Excellence in Mathematics and Science Teaching finalist for South Carolina. She is currently working on her dissertation focused on using social justice issues to frame scientific instruction with high school students. You can follow her on Twitter @SBaileyinSC.