**2023 SABER Speaker Series Unanswered Questions:**

1. Thank you so much for sharing your experience with us in this talk today! You mentioned that you did science in your Black family that wouldn’t be considered acceptable in mainstream STEM. Could you share details about how your science approach at home was different than mainstream STEM?

**It is important to recognize the devaluing and erasure of Afrocentric STEM innovation and the contributions of Black people to scientific knowledge. Scientific inquiry and knowledge construction is heavily integrated in the daily practices that occur within the Black community, yet these practices are considered unscientific. For example, conversations around the chemistry behind mixing relaxers and protein denaturation is not widely considered as an appropriate pedagogical decision in science contexts. Additionally, placing fatback meat or “pee”/urine on pimples, drinking flour water to resolve diarrhea, mixing Koolaid, and using aluminum foil on our tv antennas to increase the antenna’s conductivity and surface area. Mainstream science does not connect the cultural realities of Black people to STEM but perpetuates ideologies and practices that upholds white empiricism.**

1. I teach at Durham Technical Community College in Durham, NC. One of the things I’ve noticed with my students is that some of my Black female students wear long acrylic nails. No other group of students do this. It can be problematic in lab when we wear gloves. I don’t want to suggest that the cultural norm of wearing long acrylic nails is wrong, but I don’t know what to do when we need to wear gloves in lab. Do you have a suggestion for how I can approach this issue?

**I recommend approaching this situation completely from a safety angle versus indicating it is not acceptable to wear acrylic nails in science lab contexts. However, I also encourage you to learn more about WHY they love long acrylic nails, as this will provide you with more insight and ensure the laboratory environment does not threaten their identity development. Based on your observation that “No other group of students do this”, one must consider the minoritization of Black female students within the laboratory space as a reflection of how the culture of whiteness attempts to control how they engage in STEM and construct their procedural knowledge. Asking the question in a genuine caring and understanding way helps you to understand how the students have constructed and display their Black Racial Identity along with their gender identity while simultaneously sending a message to the student that her intersectional identities are valued (i.e. they are an asset instead of a barrier to their success). The key is to reshape the STEM lab environment in a way that the students do not have to fully relinquish important aspects of their racial identity to adopt a science identity or fit into the STEM community. Maintaining a Black racial identity within the context of STEM can be very complicated due to STEM norms, rules, and practices. Bear in mind that Black students will engage in science spaces according to how they perceive their Blackness is viewed, challenged, or supported within these spaces. This also provides an opportunity for innovation and ingenuity, as there are viable options to the normalized and “acceptable” approach to engaging in laboratory exercises that would be more inclusive.**

1. In science courses at our minority-serving community college, we have many black women. Our work suggests these women are in our science courses, but they choose health care instead? What is “special” about health care sciences?

**There is a social responsibility to the community, and specifically to the Black community, that they readily see in health care over science courses. It is important for them to invest their knowledge and talent to the Black community, but science courses do not always intentionally demonstrate how they can use their scientific knowledge to solve problems that impact the Black community. Many may perceive science as individualistic and self-centered which contrast Afrocentric values of community and servitude.**

1. Many of your observations were made from a lens within an HBCU. Can you speak about whether some of your observations be consistent for a black female in a predominately white institution or at an MSI where there might be greater diversity?

**These results would not have differed by too much as the face of STEM in HBCUs with regards to faculty/science instructors and pedagogical practices look very similar to the faculty composition and practices in a PWI or MSI. Many of the faculty members in STEM at HBCUs are white or Asian, and many of the experiential learning spaces (i.e. internships, REUs, or shadowing experiences) black female students engage in beyond the boundary lines of their HBCU are predominantly white. For this reason, the propensity to assimilate or accommodate Eurocentric STEM-norms is common across both contexts; however, it would be higher at a PWI or MSI because there isn’t a critical mass of Black peers to moderate this effect. For the most part, the exact same textbooks, learning platforms, and ways of doing science are used across both contexts; therefore, the lack of representation and connectivity between the context and their dual composition impacts how they construct their knowledge and identity as scientists.**

1. You emphasized the importance of ensuring that we consider the views of Black women in our classrooms and programs. What are some specific ways that we, as educators or administrators, can make sure to account for their views and experiences?

**The most effective starting point to consider their views and experiences is to engage in authentic conversations to learn directly from them. This practice is aligned with a central tenet of Critical Race Theory, Counter-narratives or Counter-Storytelling, which amplifies the lived experiences of Black women in an attempt to deconstruct narratives generated by dominant groups. This can be accomplished through focus groups or 1-on-1 interviews/conversations. Another approach is to include them in development process as co-constructors, which positions them as a transformative intellectual who can cultivate and integrate her knowledge into a process that promotes a more equitable learning experience for other Black women in science. Creating space within learning experiences for Black women to share an experience that would contextualize the subject matter or problem or recognizing when they may use a cultural or experiential reference to solve a problem as opposed to those who use normalized STEM resources or methods. Research and integrate STEM content that connects to the needs and experiences of Black women in ways that are meaningful and relevant to them. For example, the high Black maternal mortality rate in the US or the breast cancer disparities experienced by Black women (i.e. incidence rate and death rate). Another approach is to look at the messaging sent to**

1. How do you think these results may have differed from institutions that are not HBCUs? How would your recommendations for educators who are trying to make their classrooms inclusive of Black women differ based on their institution type?

**See the responses to questions 4 and 5.**

1. You said you are using Black and African American “semi-interchangeably” but they are distinct. Can you elaborate on the way that these two terms are distinct?

**Often times, Black and African American are used interchangeably but there are important distinctions between the two. African American is nation-specific, in that it identifies black individuals who were born in the United States of America. It signifies one’s African heritage while simultaneous acknowledge birth in American. The term “Black” refers to dark-skinned people of African descent, regardless of their nationality. Therefore, those from Africa, the Caribbean, and Europe are appropriately referred to as Black because they were not born in America. African Americans can be referred to a Black because the term is all encompassing, while those born outside of the United States cannot be referred to as African American.**

1. How do these suggestions about engaging unique identities instead of just broadly targeting "minorities" fit in with considering the broader gender spectrum?

**First and foremost, it is critical to understand that the lived experiences and oppressions faced by minoritized groups are not all the same, thus all “minorities” will never fit into the same category and should not be considered as the same. There are some shared struggles with power structures, systems, and racialization but the distinctions of each groups’ histories and cultures should be acknowledged. Race and gender operate as intersecting systems of power that define and structure exposure to various forms of violence and vulnerability. Each identity axis has its own degree of privilege, discrimination, bias, advantage, and disadvantage. The specific biases and stereotypes individual women of color must navigate is heavily contingent upon the cultural stereotypes held about the social group to which they belong. As one takes this information into account considering intersectionality, there are experiences unique to Black/African American women due to embodying two disadvantaged social categories. Black/African American women are doubly burdened by stereotypes of being both an ethnic minority and female gendered individual, with each aspect of their identity possessing their own negative impact on intelligence, work ethic, emotional intelligence, preparation, and physical perceptions. There are certain privileges conferred upon and positive assumptions made about certain racial minority groups that cause the lived experiences with power dynamics to be different even though they may be the same gender. Additionally, the cultural roles for woman vary across ethnoracial groups, which contribute to how they participate in science and identify as scientists.**