





Programa de Pós-Graduação em Divulgação Científica e Cultural Prova de Inglês – Proficiência em Leitura 2023

O editorial "Dismantle racism in science" foi publicado pela pesquisadora Ebony Omotola McGee em 2022 na prestigiada revista Science. O texto marca um movimento importante de revisão das práticas científicas que está sendo feito mundialmente. Leia atentamente o texto apresentado em anexo e responda livremente às seguintes questões, em Português.

Questões:

- A autora cita uma referência histórica da ciência mundial, apontando práticas e premissas em sua atuação. Descreva este exemplo e, em suas palavras, faça um resumo do tema principal abordado no texto.
- A autora dá dois exemplos de estruturas de desigualdade que perpetuam as tendências de discriminação contra pesquisadores negros, no cotidiano científico. Cite e desenvolva pelo menos um deles.
- 3) De acordo com o texto, quais soluções são necessárias para mudar essa situação?
- 4) Você acredita que os problemas e soluções apresentadas pela autora correspondem aos desafios que temos no Brasil? Destaque uma iniciativa de mudança apresentada no texto que você considere urgente de ser implementada também nas universidades brasileiras.

EDITORIAL

Dismantle racism in science

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illiam Shockley Jr. of Stanford University was an American physicist who jointly won the 1956 Nobel Prize in Physics for his role in inventing the transistor. Modern computing and communications would have been unthinkable without Shockley's work. But the Nobel laureate was also a proponent of eugenics and firmly committed to the racial inferiority of Black people. Shockley was not just a physicist who held racist views. He was part of a wider academic system that then, and now, perpetuates racial inequality. The persistence of this biased ecosystem means that dismantling it will require unrelenting tenacity by all of academia.

I've spent years studying how racism operates in science, technology, engineering, and mathematics (STEM) fields, especially in higher education institutions in the United States. Structural inequities perpetuate tendencies that discriminate against STEM faculty

of color and stifle their progress. For example, institutions often expect these faculty to lead the charge when it comes to anti-racist efforts. They are approached to mentor students of color, to serve on diversity committees, and to speak on panels about diversity—activities that are tangential to their research. Although many people of color in STEM have a fervent desire to make their field and workplace more equitable, pressure to perform duties unrelated to their research creates a service burden that many of their white colleagues do not

bear. By contrast, white faculty are busy advancing their research, thereby earning grants, joining collaborations, and publishing papers that bolster their careers. This imbalance disadvantages faculty of color in tenure and promotion decisions. People of color who do "make it" in STEM disciplines often do so while taking on a superhuman workload that is unfair and unsustainable.

Moreover, to function in the present biased ecosystem, underrepresented people of color are pressured to conform to a predominantly white male culture and are discouraged from bringing their authentic selves into the workplace. For example, STEM faculty of color are encouraged to remove any language about racial justice, including diversity, equity, and inclusion, in their grant proposals. Additionally, some alter their appearance, demeanor, and speech to assimilate into—and survive in—the mainstream STEM culture. This stress is a burden and humiliation that can take a psychological toll. Because there are fewer people of color in university leadership positions, there are fewer leaders who are cognizant of these impediments. As a result, the barriers for people of color in STEM are rarely addressed because leaders' priorities are elsewhere.

To change the situation, the dominant culture needs to assume the burden of providing remedies. In the field of physics, for example, people of color are called upon to figure out how to "create change," rather than those who benefit from the status quo. STEM ecosystems need to distribute this responsibility to everyone, especially to those faculty who hold the power and privilege to implement compelling and sustainable changes. Doing this involves the most influential people in efforts to innovate and restructure spaces in ways that support STEM equity.

Faculty of color across academia often take on students of color who are outside of their departments but

who desperately need mentorship. Institutions need to recognize when faculty of color are functioning as de facto university leaders and reward these staff with the titles, compensation, and resources appropriate to the responsibilities they have assumed.

Higher education must also recruit more faculty of color. This is the most powerful way STEM departments can demonstrate that racial equity and diversity are a priority.

Students, faculty, and administrators who are women of color experience both raced and gendered forms

of abuse in academia. Hostile environments span from negative comments about their abilities, qualifications, and performance to sexual harassment. In my research, I have found that Black women have great difficulties convincing their professors and colleagues that they are worthy of belonging in STEM. Instead of creating programs to "fix" students, how about coaching STEM faculty and administrators on the toxicity associated with racially unwelcoming conditions and the particular effects it has on women of color? Having more women of color leadership in STEM academia would be a strong start.

Anti-racism work is hard work, but unless actions move beyond simply tossing about diversity and equity buzzwords, people of color will remain underrepresented in STEM fields. And the United States will continue to miss out on the STEM talent and innovation that exist within communities of color.

-Ebony Omotola McGee

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