



RACIAL DIVERSITY, EQUITY, AND INCLUSION IN SCIENCE EDUCATION

LabXchange is committed to creating equitable opportunities for success in science. In this project, we will create content that supports educators and guides learners. This new content will show how to apply critical thinking skills to identify and transform structures that sustain racial inequity in healthcare, education, and STEM fields in the US.

CLUSTER 1: RACISM AS A PUBLIC HEALTH CRISIS

This cluster explores why and how racism is considered a public health crisis in the US. It also teaches foundational concepts needed to build critical thinking skills for understanding and rectifying structural racism. Topics include explorations into the historical formations of race, as well as the role of science, medicine, and health. It also contains case studies of various health disparities.

LEARNING PATHWAYS:



**Race and Racism:
History and Biology**



**Frameworks for
Understanding Racism**



**Race, Genetics,
and Disease**



How Science has Influenced Racism



Racism and the History of Science



Health Equity, Inequity, and Health Disparities



The Environmental Determinants of Health



The Social Determinants of Health



Medical Racism and Reasons for Health isparities



How We Can Reduce Racial Disparities in Healthcare



Healthcare Activism



Health Disparity Case Study: Diabetes



Health Disparity Case Study: HIV/AIDS



Health Disparity Case Study: COVID-19



Health Disparity Case Study: Mental Health

CLUSTER 2: INCLUSIVE AND ANTIRACIST TEACHING STRATEGIES

Across STEM fields, the legacy of racism can be seen in the disproportionate underrepresentation of racialized groups such as Black Americans. To increase diversity in science and diverse leadership in science, science teachers must be equipped with inclusive teaching strategies. This cluster contains evidence-based practices to help educators increase Black students' sense of belonging, identity, and success in science.

LEARNING PATHWAYS:



How Racism Informs the Image of the Ideal Scientist



How to Create an Anticolonial Curriculum



How to Support Black STEM Students Through College



How to Encourage Science Identity and Self-Efficacy in Students



Culturally Relevant Teaching



Stereotype Threat, Microaggressions and Systemic Bias in the Classroom



How to Support Diversity and Representation in the STEM Community



Allyship in the Classroom and Inclusive Teaching Practices



How to Create a Classroom to Cultivate a Student's Growth Mindset

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