



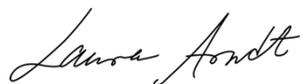
Global GreenSTEM's Commitment to Racial J.E.D.I. (Justice, Equity, Diversity, Inclusion)

The mission of Global GreenSTEM has always been to inspire and empower learners of all races, cultures, genders, and sexual orientations to change the world. The work we do with educators to collaboratively create culturally relevant STEM experiences is to set young people up to identify local problems they care about and use STEM knowledge and practices to solve them. However, the fact remains that STEM disciplines, and academia more broadly, have been and continue to be dominated by a singular race and gender-- white men. Many learners of marginalized groups are confronted with barriers that keep them from participating in STEM and environmental opportunities and breaking into STEM careers. It is the responsibility of Global GreenSTEM to intensify our efforts to break down barriers that limit who can participate and benefit from STEM opportunities. In addition, our work will redefine STEM to acknowledge other ways of knowing (e.g., Indigenous and Traditional Ecological Knowledge -TEK) as equally relevant to western science and engineering knowledge and practices.

Global GreenSTEM believes that young people of all races, cultures, and genders have the vision, compassion, and tenacity to solve problems deemed impossible by other generations. This is evident from the 2020 revolution to end systemic racism, and the simultaneous and interconnected crises of climate change and environmental injustice. Youth of every race and gender are taking on leadership roles by researching and learning independently, and teaching others about racial, environmental, and social inequities and the need for justice. Constructive dialogue about [racism](#), [anti-racism](#), [BIPOC](#), [intersectionality](#), [white privilege](#), and [white supremacy](#) has become a part of personal, national, and global conversations.

More than ever before, Global GreenSTEM is committed to be an active part of the conversation and solutions. [Our education system uniquely disempowers BIPOC students](#) and encourages conformity to "whiteness." This repression of diversity resulting in suppression of learning cannot be tolerated in our education system. Recognizing this, Global GreenSTEM will act as both an ally and an [accomplice](#) to amplify the voices and issues of black, brown, Indigenous, and other racially marginalized people, as well as those marginalized by identities other than race. Collaborating with educators, students, and community members, we will sharpen our focus to help create and provide purposeful STEM experiences that honor race, culture, and gender and attend to racial, environmental, and social justice issues relevant to those we work with. We will humbly commit to self-reflection around white privilege in environmental and STEM education, and call out inequity and injustice whenever we see it. Finally, we will actively work to inspire racially diverse educators to empower marginalized young scientists and engineers with the tools and knowledge to change the world.

Respectfully and humbly,

 (Laura Sanders Arndt)

Resources

- p. 2: Educator Resources: Respectfully Teaching for Racial J.E.D.I. (Justice, Equity, Diversity, Inclusion)
- p. 3-4: For Students: STEM Activities and Inspiration by and about BIPOC Scientists and Engineers

Educator Resources: Respectfully teaching for Racial J.E.D.I. (Justice, Equity, Diversity, Inclusion)

[A Guide to Equity and Antiracism for Educators.](#) (Edutopia, June 5, 2020) Teachers shaken by recent events and wondering how to work for change in our society and schools can start with these lesson plans, videos, and other resources.”

[A Look at Implicit Bias and Microaggressions](#) [in schools]. (Edutopia, March 25, 2019) “A primer on the impact of implicit biases in schools and how they can be expressed by students and faculty.” Provides clear definitions of terms.

[Confronting Inequity: Who Has the Privilege to Be Empowered?](#) (ASCD, March 2020) “Despite the pedigree and academic preparation boarding school offered me, it was clear that I was not empowered—or safe—to be Black. Later, as an educator, I would come to understand that the world is uniquely disempowering for Black children.”

[Don't Just Be an Ally to the Black Community—Be an Accomplice.](#) (Popsugar.living, June 19, 2020) “... I've been seeing a lot of allies (people who are all talk) fall short of being accomplices (people who walk the walk). The sad truth is that sincere concern has not fixed and will not fix our problems.”

[Expanding access and inclusion through culturally responsive family engagement.](#) (STEM Next Opportunity Fund) “... it is critical that all youth be included and have access to STEM and computer science, especially for girls and youth of color who are underrepresented in these fields.”

For White Folks Who Teach in the Hood, and the Rest of Y'll Too: Reality Pedagogy and Urban Education, (book,). [Christopher Emdin, Teach Teachers How to Create Magic](#) (TEDTalk)

[Honor Native Land: Guide and Call to Acknowledgement.](#) (USDAC.org) “We call on all individuals and organizations to open all public events and gatherings with acknowledgment of the traditional Native inhabitants of the land.” An act of respect for schools and organizations to consider.

[Race Equity and Inclusion Action Guide.](#) (The Annie E. Casey Foundation) “7 steps to embed race equity and inclusion within your organization” [or school]

[Saying 'I Don't See Color' Denies the Racial Identity of Students.](#) (Education Week Teacher) “I would say that those who ‘do not see race’ or claim to be colorblind are denying the racial identity of their students.”

[Tools for Anti-Racist Teaching.](#) (PBS Teachers Lounge) In this four-part series, we will explore tools for anti-racist teaching and will consider the ways in which we can use media and media literacy to deepen our understanding of systemic racism.

[The Urgency of Intersectionality, Kimberly Crenshaw](#) (TEDtalk). A look at how race and gender bias can combine (intersectionality) to create even more harmful prejudice.

[What does BIPOC Stand For?](#) (Video and written text). Trevor Noah interview with Jason Reynolds and Ibram X. Kendi.

[What is systemic racism? \(Videos\).](#) “An 8-part video series that shows how racism shows up in our lives across institutions and society: Wealth Gap, Employment, Housing Discrimination, Government Surveillance, Incarceration, Drug Arrests, Immigration Arrests, Infant Mortality... yes, systemic racism is really a thing.”

[White Privilege: Unpacking the Invisible Knapsack.](#) (article, Peggy McIntosh) “I was taught to see racism only in individual acts of meanness, not in invisible systems conferring dominance on my group.”

For Students: STEM Activities and Inspiration by and about BIPOC Scientists and Engineers (BIPOC: Black, Indigenous, People of Color)

<p>Video Shows of science activities</p> <ul style="list-style-type: none"> • The Fab Lab with Crazy Aunt Lindsey “Educational videos and DIY science projects for kids.” • Hip Hop Science Show. Black scientist bridges “the gap between music/ entertainment and science by introducing scientific elements to everyday pop culture. • Molly of Denali (PBS Kids videos, game, activities, podcast) 	<p>Night Sky activities</p> <ul style="list-style-type: none"> • Neil deGrasse Tyson shows and interviews include StarTalk (YouTube and free podcast), The Universe (free), COSMOS, NOVA Science NOW, The Inexplicable Universe: Unsolved Mysteries • Blackfoot and Crow Star Stories (lesson plan and videos) • How did Polynesian Wayfinders Navigate the Pacific? More at Hokulea. (TEDEd video lesson) • Navajo: Story of the Stars (video, 13:29 min) • Relearning the Star Stories of Indigenous Peoples. Audio interviews: “Ways of Knowing, Written in the Stars.” Elder story: The Story of Grandmother Spider and Star Woman. (PBS Science Friday)
<p>Kitchen Science activities</p> <ul style="list-style-type: none"> • The BOW Girls (videos) Two young Black girls teach cooking and other activities. • Interview: Kids Around the World Photographed Surrounded by their Weekly Diet. Photo essay of children with their cultural foods. 	<p>Climate Change Action activities</p> <ul style="list-style-type: none"> • 12 Female Activists Who are Saving the Planet. (short biographies with videos) • Let’s Talk Science: Indigenous Perspectives on Climate. (Teacher’s guide) • What Indigenous Communities are Teaching the Rest of Us about Climate Change. (PBS video) • What does Climate Change Mean to Children From Around the World? (video)
<p>Coding activities</p> <ul style="list-style-type: none"> • Black Girls Code “Devoted to showing the world that black girls can code, and do so much more.” • Code.org “Dedicated to expanding access to computer science in schools and increasing participation by women and underrepresented.” 	<p>Weather and Clouds activities</p> <ul style="list-style-type: none"> • Indigenous Knowledge and Cultural Weather Perspectives (Saskatchewan) • Weather vs Climate Change: Cosmos: A Spacetime Odyssey (Neil deGrasse Tyson)
<p>Wonders of Water activities</p> <ul style="list-style-type: none"> • Water the give of Life: Investigating Environmental Impacts (Ontario Aboriginal perspectives on nature) 	<p>Exploring Nature activities</p> <ul style="list-style-type: none"> • Culture Shapes How Children View the Natural World (article) • The Land You Live On (Education Guide by Native Land). Interactive map of Native Land



Website Collections of Lesson Plans and Teaching Resources

(STEAM, environmental and social justice, and other content areas)

- [Courageous Conversations](#). a protocol for having difficult conversations about race in our lives and institutions.
- [EmbraceRace.org](#) “Let’s Raise a Generation of Children Who Are Thoughtful, Informed, and Brave About Race.”
- [Everyday Native](#). A teacher resource (Grades 4-12) for non-Natives and Native Americans.
- [Infusing Indigenous perspectives into K-12 teaching \(U. of Toronto\)](#) . Lessons and resources that focus on First Nations, Métis, and Inuit worldviews, experiences and knowledges for teaching in the K-12 classroom.
- [National Underground Railroad Freedom Center](#) Lessons and resources of “freedom’s heroes, from the era of the Underground Railroad to contemporary times, challenging and inspiring everyone to take courageous steps of freedom today.”
- [Rethinking Columbus: The Next 500 Years](#) Teaching guide of history the Indigenous experience.
- [Rethinking Schools](#). Lessons for all grade levels and subjects.
- [Teaching Tolerance](#). Classroom resources.
- [Zinn Education Project: Teaching People’s History](#). Lessons for all grade levels and subjects.

Identity & Diversity Inspiration in STEM

- [10 LGBT Scientists Who Made History to Celebrate LGBT-STEM Day](#) (Pink News)
- [10 Game-Changing Hispanic Scientists You Did Not Learn About in School](#) (Mental Floss)
- [17 Notable Latinos Pushing Science Forward Today](#) (MITU)
- [19 Black Scientists and Engineers to Learn More About](#) (Science Buddies)
- [500 Queer Scientists](#) (500QS) “An organization with a goal to ensure the next STEM generation has LGBTQ+ role models.”
- [Just 18 Awesome Native Folks in STEM](#). (Medium: Women of Silicon Valley)
- [Native American Scientists and Inventors](#). (imDiversity)