

Science and Math Social Justice Teaching Organization and Ideas

Ideas / Links

- Link to [SJ Math and Science Resources](#) Dr. Kari Kokka
- Abolitionist Science [Website](#) (great podcast to subscribe to)
 - The latest podcast series is about [critical ethnic studies](#)
- [STEM Teaching Tools](#) (they are from the University of Washington) use to pushback on admin who are trying to say what you're doing isn't lined up with good science ed). Specific focus for us on [equity tools](#)
 - For our Multilingual Learners: [27](#), [33](#),
 - For Indigenous Learners/ Indigenous Science: [10](#), [11](#),
 - For our Students Receiving Special Education Services: [59](#)
 - Plugging into the Community / Place Based: [31](#), [53](#), [57](#), [61](#)
- [NGSS Frameworks](#) call out Equity and Diversity in science education in particular
- [Decolonizing Science](#) Reading List
- Princeton's Programs Quest: <https://teacherprep.princeton.edu/quest2021> and [Princeton PD Opportunities](#)
- [IndigeneSTEAM](#) - Indigenous perspectives in STEM and STEAM
- Rethinking Schools
- <https://www.learningforjustice.org/> - you can search for resources, they have a good lesson cycle on environmental justice that can be adapted for upper grade levels
- [Underrepresentation Curriculum](#) (originally focused on Physics)- see [writeup](#) in Rethinking Schools.
- [Black Lives Matter in STEM](#) has some great links to science technology education and math
- [Math and Social Justice Curriculum Resources](#) (some links are broken)
- [California Mathematics Council Equity and Excellence Page](#) has some statements specifically about math and Math Education
- [Radical Math Educators](#) - Help empower math teachers to use issues of social justice in math

Links to Curriculum / Already Made (Please add more)

- Biology / Life Science
 - Fred Hutchinson Cancer Research Center has a lot of great [curriculum resources](#) that are tied in with NGSS and also very good and classroom tested (made by teachers), but in particular the [Race, Racism and Genetics](#) one is fantastic
 - [Gender Inclusive Biology](#) - Some lessons and talking points
 - Examples of action projects in Biology
 - Food Justice: [Food Justice Rubric](#), [Letter to Gov't Official Template](#), [Interview Template](#), [Food Organization Template](#)
 - Basilica Bio in Seattle has some [great curriculum](#) focused on Food Justice and Environmental Racism (you'll have to email to get them)
- Chemistry

- [POGIL](#) is a good resource (student centered, focus on student development of knowledge, not explicitly justice focused)
- Physics
 - American Institute of Physics [lessons](#) based on history of Physics
- Elementary Science (for the Littles)
 - [Learning in Places](#) (Centering Indigenous Wisdom in Science - I've adapted some for secondary) - link to [curriculum section](#)

Books with Connections to Science

- Biology / Health
 - [A Terrible Thing to Waste: Environmental Racism and the Assault on the American Mind](#) by Harriet Washington
 - [Medical Apartheid: The Dark History of Medical Experimentation on Black Americans from Colonial Times to the Present](#) by Harriet Washington
 - [Superior - the Return of Race Science](#) by Angela Saini
 - [Social Life of DNA: Race, Reparations, and a Return to Race Science](#) - Alondra Nelson
 - [Under the Skin: The Hidden Toll of Racism on American Lives and the Health of our Nation](#) - Linda Villarosa
- Physics
 - [The Disordered Cosmos: A Journey into Dark Matter, Spacetime, & Dreams Deferred](#) by Dr. Chandra Pescod-Weinstein
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Lifting up Representative Scientists

- Highlighting Stories of Scientists who match our [Heritage Months](#)
- For my Cancer Unit, which coincided with Black History Month, I highlighted the [Black In Cancer](#) organization and scientists using the hashtag [#Black in Cancer Week](#)
- [500 Queer Scientists](#) allows you to highlight scientists that match whatever you're studying (you can search by discipline)
- I found some indigenous scientists using Twitter tags [Indigenous Stem](#), and Our Stories section of [AISES](#)