

*Anti-Racism Interactive Science Education (ARISE)*

Funded by the Hewlett Foundation

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*Anti-Racism Interactive Science Education (ARISE)*, funded by the Hewlett Foundation, explores how open educational resources (OERs), combined with research-tested pedagogical patterns, can be used in teacher workshops to customize interactive science units to promote anti-racism while enhancing student agency. The ARISE partnership includes teachers from culturally varied Bay Area schools, learning sciences researchers, science discipline experts, software designers, and advisors who are leaders in anti-racism. The ARISE partnership identifies OERs with the potential to advance anti-racism and studies how these OERs, when used by teachers to customize technology-rich interactive science units, can strengthen science understanding, build student agency, and promote racial equity. We investigate how incorporating anti-racism OERs can promote equity by connecting understanding of science with the commitment to oppose racism.

Participating researchers have advanced anti-racism in their own teaching (Kelly Billings, Allison Bradford, Korah Wiley). ARISE will be advised by leaders in promoting anti-racism among preservice teachers (Tessa [Sengupta-Irving](#), UC Berkeley) and in designing instructional materials to promote racial equity and social justice (Erika Tate, [bluknowledge](#)).

The ARISE partnership will build a library of promising OERs and incorporate them into the POWERED customization environment where they can be used in teacher workshops to combine with instructional patterns that promote integrated understanding and anti-racism. As a starting point, we have identified four categories of OERs with the potential to promote anti-racism. ARISE will use design research methods to: test the customization environment in an exploratory workshop; investigate how teachers incorporate OERs into interactive science units; and observe how the customizations work to promote integrated science understanding and racial equity in classrooms.

ARISE will reflect on the design research findings to refine the OER categories, the library, the instructional patterns, and the workshop. ARISE has the goal of proposing design guidelines for identifying anti-racism OERs along with patterns that enable them to succeed in science instruction. After a second workshop where we examine student work and refine the OERs, curriculum materials, and workshop design, ARISE will develop a prototype workshop model that includes online activities that can be customized in future investigations. This work will contribute insights into how OERs with the potential to promote anti-racism incorporated into science instruction can set students on a path towards increased racial equity and agency.