

Our Equity Commitment

Oregon MESA was founded in 1985 on the belief that access to a STEM education and exposure to successful role models can irrevocably change the course of a student's life. Born out of the civil rights movement and founded by leaders of color in Portland, Oregon MESA is an organization that is committed to advancing equity. Students who have been **historically underrepresented in STEM**, especially **BIPOC women**, deserve access to high quality learning to achieve their highest potential. MESA works to ensure this by removing barriers, increasing access, and deconstructing systems of oppression.

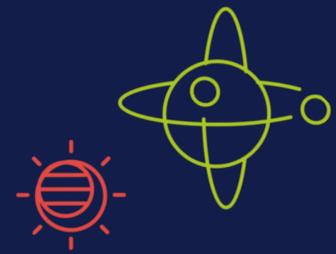
We recognize that **deep, systemic racism** exists within the STEM fields. The system of STEM education and preparation is set up on a model that is grounded in implicit bias about who is fit to be a STEM student. It perpetuates that bias with **the myth of meritocracy** by sorting and weeding students out at every stage along their development. According to this myth, we live in a fair society where success can be achieved by anyone, regardless of background, as long as they work hard enough. This ignores the institutionalized racism that exists in education and especially in STEM. The system is set up to prevent and not support progress.

To achieve diversity in STEM career fields, we must first acknowledge the contributions of the cultural traditions of **BIPOC communities** to STEM Innovation. BIPOC communities founded STEM innovation for centuries, although this history has been ignored and exploited. We must **decolonize** and de-weaponize STEM against the very communities who founded it:

- **We must honor the achievements of BIPOC individuals to STEM professions that have gone uncredited.**
- **We must eliminate gate-keepers to STEM and create pathways for people who have been traditionally excluded from STEM.**
- **We must acknowledge that science has been weaponized against BIPOC communities through unethical scientific testing and studying communities without permission.**
- **We must name and call out toxic, dominant cultures that exist in our classrooms and that suppress and isolate BIPOC students, women, and other students historically underrepresented in STEM.**

We recognize that change is not instantaneous and deserves time and care. This is not a linear task and will require revisiting and revising our own systems and programs. We are dedicated to the long process of reviewing, listening, and implementing changes, continuously to better serve our community.





This is how we will live out our equity commitment here at MESA:

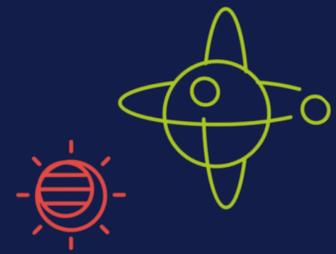
We recognize the contributions of BIPOC communities frequently and first by:

- Crediting students for their creativity and for the ownership of their work and intellectual property.
- Deferring to the lived experience of students, their families, and our communities, as they bring natural talent, wells of knowledge, and rich background that cannot be replicated by others, including those with more technical “experience”.
- Amplifying the voices and issues of our community by utilizing the privileges and platforms we have access to.

We nurture, instead of restrict, pathways in STEM by:

- Not gatekeeping what is or is not STEM. The acronym of Science, Technology, Engineering and Mathematics was created after MESA (Mathematics, Engineering, Science Achievement) was founded 50 years ago. We support Arts being part of STEM/STEAM, we support Computer Science, we support design, and, most importantly, we support the indigenous and cultural ways that folks have been advancing science knowledge and technology innovation for generations.
- Challenging “Grit” or “Weed-Out” Culture which directly restricts access. Perseverance and hard-work are important but grit culture assumes that the individual needs to overcome personal obstacles to success versus acknowledging that systems need to be changed to reduce obstacles.
- Working to create more equitable competition and assessment that supports learning and confidence growth. This includes re-imagining our own competitions to ensure that students are receiving equitable support and resources.
- Advocating for greater access to STEM education and STEM teaching for all students through our [Advocacy Priorities](#).
- Increasing access through automatic enrollment of students into competitions and events, with an opportunity to “opt-out” instead of an “opt in,” changing our application form to an enrollment form, and promoting opportunities for students to enroll in college, such as PSU’s [Instant Viking](#) program.





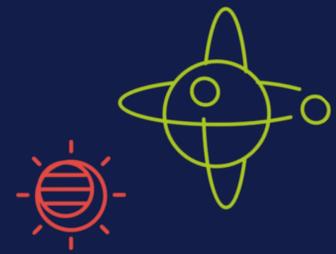
We will not shy away from the hard conversations that unearth how science and technology have been weaponized against BIPOC communities. We will work to stop the perpetuation of these practices by:

- Having open and honest conversations through [MESA Talks](#) and listening to the lived experiences of folks in our communities. We must name and call out how toxic dominant cultures that exist throughout STEM fields.
- Focusing on equitable and inclusive decision making processes for our programs. This involves:
 - Taking in community feedback and not making decisions unless impacted parties and affected groups have been consulted, especially MESA Students/Families, teachers, and our Regional Equity Committees.
 - Providing due time/consideration for decisions with complex impacts, to ensure impacts are fully considered and key stakeholders have an opportunity to be involved in decision making.
 - Using both qualitative and quantitative data to make decisions and disclosing data that is used to make decisions.

We will create supportive environments in the classroom and in our organization that celebrate and center historically underrepresented folks in STEM especially those who are Black, Indigenous, people of color, and women by:

- Continuing to demonstrate our commitment to diversity through transparent and equitable recruitment, hiring, and retention practices of staff, volunteers, teachers, and students.
- Prioritizing the creation of meaningful, equitable relationships that are not transactional. This applies to all relationships in the MESA community including students, teachers, partners, staff, donors, and volunteers.
- Using a **human centered design** approach in teaching and in our program design. This means iterating our programs to serve the wide variety, and changing needs, of communities in our network, especially those most marginalized in each community.





Ongoing Work

MESA Talks

MESA Talks is a series of events that bring together our teachers, students, volunteers, alumni, community partners, and corporate sponsors to have hard conversations and tie it back to what we do at MESA. MESA is an **equity program first and a STEM program second**. Each talk will center around a specific topic and focus on the challenges of **justice, equity, diversity, and inclusion** (JEDI) in that topic. A panel of subject matter experts will lead the conversation by speaking about their work, how they are contributing to JEDI within the chosen topic, and what our community can do to provide positive impact and future opportunities for those who are often overlooked.

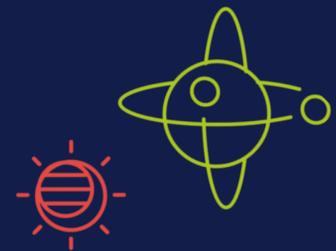
Advocacy Priorities

- Ensure that students historically underrepresented in STEM are able to have equitable engagement in high-quality STEM, CTE, and career-connected learning opportunities.
- Ensure that all teachers are supported to integrate culturally responsive STEM education into their daily practice.
- Maintain targeted investments to address opportunity gaps in well-rounded education, project-based learning, and instructional time to mitigate disparities that have been exacerbated with COVID-19. Raise awareness that out of school programs can be part of the traditional education system, especially during summer.
- Out of school programs need to be designed to serve the students most underserved and must be a part of every school community. This means including funding and services for access needs including transportation, food, and childcare that support engagement in out of school programs.

Regional Equity Committee

Regional Equity Committees work with and support MESA Regional Centers in developing meaningful partnerships and equitable programs in support of Oregon MESA's mission. Members on the committee are stakeholders from the community and will support the MESA Regional Center in developing plans and strategies to ensure equitable approaches and outcomes within the region. Members will also provide access to regional resources and partnerships that support the success and sustainability of the Regional Center.

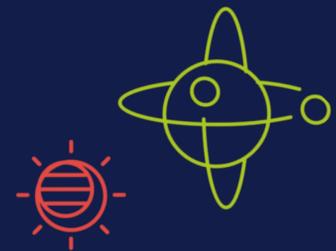




Glossary

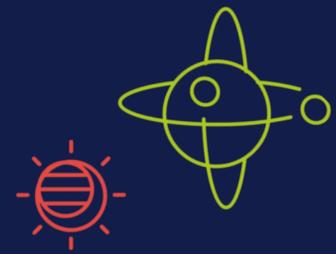
- **Myth of Meritocracy** - the false belief that anyone – regardless of race, gender, class, ability, sexual orientation – can achieve success and upward social mobility solely through their own effort and ability. This belief ignores the oppressive systems in place that favor the success of white cisgender able-bodied heterosexual upper class men, and establish real institutional barriers for BIPOC, gender diverse, lower class, disabled, and queer groups. Meritocracy does not aim to create a classless society, but it legitimizes the given hierarchical structure and empowers people to be socially re-classified (Liu, 2011). Recognizing that meritocracy is a myth means recognizing how this belief has been used for centuries to weed-out, exclude, and oppress people from holding institutional power, advancing in higher education, and gaining upward social mobility.
- **Dominant Cultures** - a dominant culture is one that establishes its own norms, values, and preferences as the standard for a community or group. These cultural expectations are imposed through stated and unstated *professionalism standards*, policies, and practices, which center whiteness and reinforce a *white supremacy culture*. Those who do not represent or conform to the dominant cultures often experience greater hostility in the workplace, such as prejudice, ostracism, threats, or violence.
- **Decolonize** - the process of calling out the roots of colonization in white supremacy and recognizing the erasure of traditional ecological knowledge, culture, and languages of BIPOC communities. Decolonization is the process of undoing colonizing practices. Within the educational context, this means confronting and challenging the colonizing practices that have influenced education in the past, and which are still present today (Centre for Youth & Society, 2021). Working to transform our approach to science, technology, engineering, and mathematics by centering Indigenous thinking and practices means teaching the history of eugenics, highlighting the ways science has been used as a tool to colonize, dehumanize, and perpetuate violence against BIPOC communities (University of Bristol Future Learn, 2022).
- **BIPOC** - Black, Indigenous, People of Color. BIPOC is a descriptive term that emphasizes the unique challenges Black and Indigenous communities face, bringing attention to Native erasure, anti-Blackness, and the history of slavery and genocide (The BIPOC Project - A Black, Indigenous, & People of Color Movement, 2016). The term also demonstrates solidarity among communities of color who face oppression, including Latine, Hispanic, Pacific Islander, and Asian persons, recognizing the different types of discrimination and prejudice faced (Davidson, 2021).
- **BIPOC women** - Black, Indigenous, People of Color who identify as women face greater barriers compared to their male counterparts because of the intersection of racism and sexism. BIPOC women have historically been prevented from accessing STEM fields, their contributions suppressed and stolen, their hidden labor erased. Still today, they are the group most underrepresented in STEM (Maryville University, 2022).





- **Historically Underrepresented in STEM** - BIPOC, women and gender diverse groups, disabled folks, and low-income communities have historically been underrepresented in STEM. White supremacy, colonization, systemic racism, and the patriarchal system have violently shaped the science, technology, engineering, and mathematics fields, excluding marginalized groups from participating, being recognized, and holding power. Currently, according to a report on the Science and Engineering Labor Force conducted by the National Science board, in 2018, Science and Engineering labor in the United States comprised of 66.6% white people, .2% American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander 0.2%, more than one race 1.6%, Black 4.8%, Hispanic 6.0%, Asian 20.6 %. According to the same study, here is the distribution by gender: women 28%, men 72%. Women and racial and ethnic minority groups also generally receive less pay than their male and white counterparts (National Science Board, 2018).
- **White Supremacy** - the belief that white people constitute a superior race and should therefore dominate society, typically to the exclusion or detriment of other racial and ethnic groups, in particular black or Jewish people. In STEM, “people color are rendered ‘minorities’ by overrepresentation of White Supremacy that actively creates a society that elevates and normalizes a hegemonic world view to the detriment of non-White people” (McGee, 2020).
- **Systemic Racism** - [*Cambridge Dictionary*](#) defines systemic racism as “the policies and practices that exist throughout a whole society or organization, and that result in and support a continued unfair advantage to some people and unfair or harmful treatment of others based on race.” Systemic racism is internalized, interpersonal, structural, institutional and individual. It enables unjust gaps in wealth, employment, education, housing, immigration, and incarceration, disproportionately favoring white people. (Fair Fight Initiative, 2022).
- **Human-Centered Design** - Human Centered Design (HCD) is an approach to invention and problem-solving that places a person at the center of the design and innovation process. Doing this through an equity lens means centering the needs of historically silenced and marginalized groups, directly interviewing the client, and adapting to the unique and different needs of diverse populations.





Citations and Resources

- Cambridge Dictionary. (2022). Systemic Racism. Cambridge University Press.
<https://dictionary.cambridge.org/us/dictionary/english/systemic-racism>
- Centre for Youth and Society. (2021). Decolonization in an educational context. University of Victoria Centre for Youth and Society.
<https://www.uvic.ca/research/centres/youthsociety/assets/docs/briefs/decolonizing-education-research-brief.pdf>
- Davidson, K. (2021, January 15). Why we use BIPOC. YWCA Works.
<https://www.ywcaworks.org/blogs/ywca/fri-01152021-1332/why-we-use-bipoc#:~:text=BIPOC%20stands%20for%20Black%2C%20Indigenous,solidarity%20between%20communities%20of%20color.>
- Fair Fight Initiative. (2022). Systemic Racism Guide. Fair Fight Initiative.
<https://www.fairfightinitiative.org/systemic-racism/>
- Laland, K. N. (2020, August 25). Racism in academia, and why the 'little things' matter. Nature
<https://www.nature.com/articles/d41586-020-02471-6>
- LeSavoy, B. (2010). "On the Outside End": Systems of Oppression and Academic Success. Black Women, Gender + Families, 4(2), 85–108. <https://doi.org/10.5406/blacwomegendfami.4.2.0085>
- Liu, A. (2011, January 25). Unraveling the Myth of Meritocracy within the context of US Higher Education. High Educ 62, 383–397 (2011). <https://doi.org/10.1007/s10734-010-9394-7>
- Maryville University. (2022). Women of Color in STEM. Maryville University Blog.
<https://online.maryville.edu/blog/women-of-color-in-stem/>
- McGee EO. (2020). Interrogating Structural Racism in STEM Higher Education. Educational Researcher. 2020;49(9):633-644. doi:10.3102/0013189X20972718
- National Science Board. (2018). Science and Engineering Labor Force Report. National Science Foundation. <https://www.nsf.gov/statistics/2018/nsb20181/report/sections/science-and-engineering-labor-force/women-and-minorities-in-the-s-e-workforce#minorities-in-the-s-e-workforce>
- Racial Equity Tools. (2020). Decolonization Theory and Practice. Racial Equity Tools.
<https://www.raciaequitytools.org/resources/fundamentals/core-concepts/decolonization-theory-and-practice>
- The BIPOC Project - A Black, Indigenous, & People of Color Movement. (2016). Our Mission. The BIPOC Project - About Us <https://www.thebipocproject.org/about-us>
- University of Bristol Future Learn. (2022) In what ways are STEM subjects colonised? Future Learn.
<https://www.futurelearn.com/info/courses/decolonising-education-from-theory-to-practice/0/steps/189533>

