



An equitable STEM future starts **here.**

Since 1985, Oregon MESA, a program of Portland State University, has invested in the potential of diverse young people. Oregon students lag behind other states in academic performance, especially in the science, technology, engineering, and math (STEM) fields. **Oregon MESA strives towards a future where all students – no matter race, economic status, or zip code – can have the opportunity and preparation to enter the innovation economy.**

Oregon MESA is the only adaptable and prototype-driven math, engineering, and science program for traditionally underrepresented students that takes an ecosystems approach to education, involving schools, families, businesses and mentors to empower the technology-based workforce of the future. Oregon MESA doesn't just increase the number of minority and low income students graduating from high school. **It increases the number of minority and low-income students who graduate, enroll in post-secondary education programs and enter the workforce equipped with STEM, 21st century, and invention skills.**

Students

Oregon MESA enables students from underrepresented backgrounds to gain math, engineering, and science skills through **hands-on, real-world invention education.**

Educators

Oregon MESA equips educators with **cutting-edge curriculum** for invention education, and creates innovators in and out of the classroom.

Ecosystem

Industry partners and parents are a key part of the MESA support system, providing **mentorship and encouragement** to pursue a promising future in high-wage fields.



Students

Oregon MESA gives students the opportunity to find success. Our leading-edge invention education program provides a confidence-building curriculum for historically underrepresented students and **improves student grades and graduation rates**. The curriculum teaches a range of applicable skills that starts with problem identification, idea generation, physical prototyping, iterative problem solving, cooperative achievement, and public speaking.



MESA students 4-year graduation rate

87%

Comparison group 4-year graduation rate

73%

According to a 2019 study, MESA students are more likely to graduate from high school in four years compared with their peers who do not participate in MESA.



98%

of MESA students gained confidence in one or more invention skills

Students involved in MESA have a greater sense of belonging, better outcomes, and higher confidence.

Educators

Educators gain **valuable skills and support in providing equity-based STEM instruction** in a fun, hands-on, collaborative setting. MESA offers teachers:

- **Valuable practice** implementing facilitated learning with diverse, underserved students that focuses on student-led learning, problem-solving, and critical thinking
- **Training opportunities** that support individual teacher growth, provide access to hands-on curriculum, and offer strategies to incorporate engineering-focused opportunities within day-to-day practices.
- **A collaborative cohort of teachers** and ongoing learning opportunities that help educators successfully apply instructional material in exciting and inclusive ways that increase peer support.

“I use this process regularly in my science classroom. It has transformed the way that I tackle engineering design projects... MESA has helped me gain confidence in teaching both engineering and computer science.”

Kerryn Henderson, MESA Advisor

Most MESA advisors felt they advanced the skills of their students.

STEM knowledge 97%

Invention skills 93%

Social emotional skills 90%

21st century skills 86%

Ecosystem

Oregon MESA creates an **ecosystem of hundreds of students, teachers, families, companies, and volunteers**, all focused on improving the diversity of the tech-based workforce and helping underrepresented students excel in math, engineering, and science. Mentorship, college and career exploration, and family engagement programs extend the reach of MESA into an inclusive invention education ecosystem.

Mentors



- College students or STEM professionals
- Strong technical knowledge
- Passionate for engaging youth

College & Careers



- College field trips
- Field trips to companies
- Interactive
- Seeing real workplaces

Family Engagement



- Culturally and regionally responsive
- Educate and provide resources to families



Partner Organizations



Portland State
UNIVERSITY

Oregon **TECH**



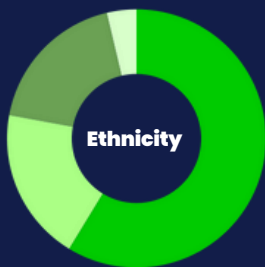
Partner School Districts

- Beaverton School District
- Bethel School District
- Centennial School District
- Eugene School District 4J
- Forest Grove School District
- Hillsboro School District
- Klamath Falls City Schools
- Klamath Falls School District
- North Clackamas School District
- North Marion School District
- Parkrose School District
- Portland Public Schools
- Reynolds School District
- Salem-Keizer School District
- Springfield Public Schools

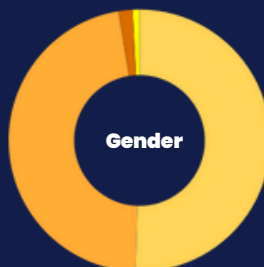
Bring MESA to your School

To learn more about our school selection criteria and getting started on bringing MESA to your school, email us at ormesa@pdx.edu

Demographics



- 58.7% Underrepresented Students of Color
- 19.2% Asian
- 39.4% Hispanic or Latina/o
- 18.4% Caucasian
- 15.6% Black or African American
- 3.7% Middle Eastern/ Northern African
- 2.7% Multi Racial
- <1% American Indian or Alaska Native
- <1% Native Hawaiian or other Pacific Islander



- 50.5% Boy/Man
- 46.9% Girl/Woman
- 1.8% Non-Binary
- <1% Transgender



- 74.7% Yes
- 25.3% No

97%

of MESA students were underrepresented in at least one of our priority categories in 2023.

Note: All data is self-reported student data. Percentages are only of those who reported.

Make a Difference

Bring MESA to your School

MESA overcomes barriers to access by **providing our program at no cost**, offering it at the schools where our students are enrolled, and engaging parents directly in the success of their child.

To learn more about our school selection criteria and getting started on bringing MESA to your school, email us at ormesa@pdx.edu or visit www.oregonmesa.org



Donate

Oregon MESA is a program of Portland State University with philanthropic funds managed by the Portland State University Foundation.

Visit www.oregonmesa.org/donate to make a difference, or email us at ormesa@pdx.edu for more information.

Volunteer

When you volunteer with Oregon MESA, we are able to expand our service areas, extend our programming and offer life-changing opportunities to more students. Visit www.oregonmesa.org/volunteer or email us at ormesa@pdx.edu to learn more.