Culturally Sustaining Framework

Overview: Lane STEM has adopted and will utilize a Culturally Sustaining Framework to consider all elements of the initiative. The framework was created in collaboration with several diverse partners and leaders throughout the county. The collaboration included equity directors/leaders in K-12 settings (Bethel SD, Eugene 4J), University experts (U of O College of Education faculty) and community groups (Centro Latino Americano). The framework was informed by the OEIB Equity Lens and the Lane County Equity & Inclusion Beliefs document.

Lane STEM
Culturally Sustaining Framework

Research illustrates that cultural factors are relevant to understanding underrepresented minorities' participation in STEM (Byars-Winston, 2014). The experience of being a member of an underrepresented or devalued minority group can trigger environmental responses from and to others that can thwart one's sense of belonging, identification with STEM, and belief in one's STEM abilities and potentially undermine the interest and performance of underrepresented minorities in STEM domains.

There are myriad root causes for underrepresentation and attrition in STEM that can affect anyone, including individual differences in career preferences, inadequate science and mathematics academic preparation, and poor STEM classroom experiences (AAUW, 2010; National Alliance for Partnerships in Equity). Despite initial connections to STEM, underrepresented minorities are systematically more likely to become disconnected from these fields (Byars-Winston, 2013).

The rationale for a "Culturally Sustaining Lane STEM Framework" calls for a paradigm shift toward an equity imperative for broadening access and improving STEM proficiency, knowledge and the skills of students who have been historically underrepresented and underserved in the STEM field in Lane County Schools. The "historically underserved and/or underrepresented" students mentioned in this framework in general this refers to students of color, and depending on the context, it can refer to LGBTQ students, students navigating poverty, students with special needs or disabilities, women/girls, and students from rural communities.

INCLUSIVENESS
- How does the proposed activity ensure that culturally diverse individuals are included and served?
- What mechanisms do you currently use to identify and recruit historically underserved and/or underrepresented?
- Which underserved and underrepresented groups in particular are you targeting?
- In what ways does your proposed activity challenge stereotypes of STEM occupations and workers?
- Which implicit bias and prejudice against underrepresented minorities in STEM will you address?

BENEFITS TO DIVERSE COMMUNITIES

- How is community defined and what is the potential for the proposed activity to benefit and impact the specified community?
- Provide informed evidence with specific examples of materials and activities that are culturally relevant and responsive to the communities being served?

UNDERSERVED/UNDERREPRESENTED YOUTH INTEREST & VOICE

- How well do the proposed activities generate or respond to youth interest/voice from underserved and underrepresented communities?

COLLABORATION WITH COMMUNITIES OF COLOR

- Are multiple stakeholders represented such as youth, families, community groups, educational providers, and workforce?
- To what degree are the stakeholders represented, involved and benefiting from this collaborative effort?

SOCIOCULTURAL STEREOTYPES

- How will you address students' STEM efficacy beliefs?
- How will your proposed activity develop STEM career resilience?
- How will you support your students to resist internalizing stereotypes about underrepresented minorities in STEM?

SCALABILITY & FEASIBILITY IN DIVERSE COMMUNITIES

- What is the potential to scale up and implement the program/project within the communities involved?
- What limitations are there and how will you address them?
- How responsive to the community is the mechanism when assessing and defining success?

VIABILITY AND SUSTAINABILITY

- What mechanism will you utilize to ensure a successful program implementation for the identified communities?
- How are you involving the identified community in designing the mechanism to ensure successful implementation?
- What data collection and/or public reporting will you use as evidence of success?
- How will you assess the level, diversity, and quality of ongoing minority communities engagement?