

BUILDING STEM EQUITY AND IDENTITY IN THE COMMUNITY

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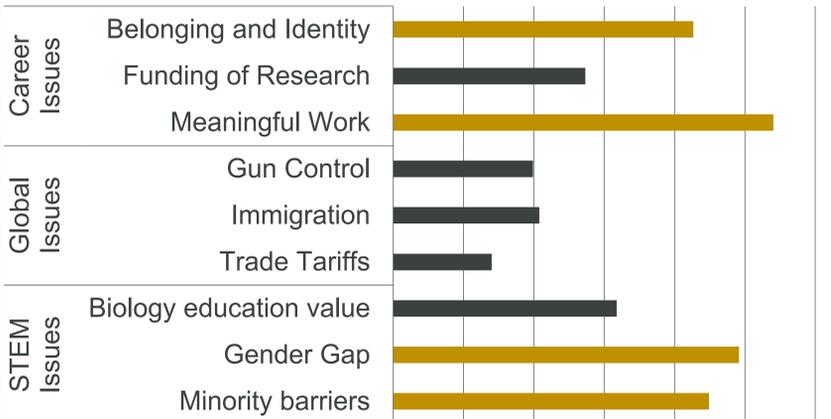
BIO 490 GOAL

Develop collaborative curriculum with senior biology students to explore topics of significance in the field and positively impact our community

CURRICULUM SURVEY

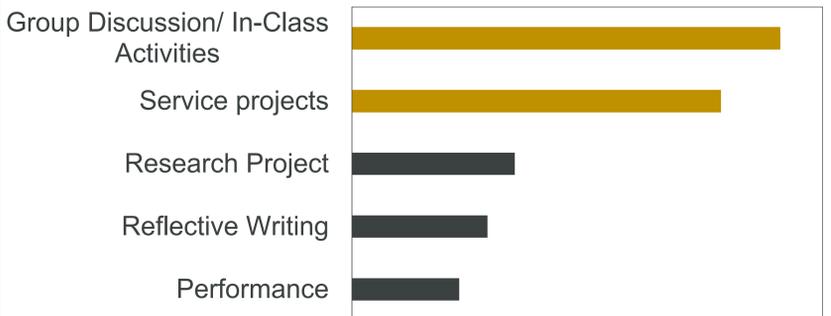
Senior Seminar Topic Rankings

0 2 4 6 8 10 12



Senior Seminar Format Rankings

0 1 2 3 4 5



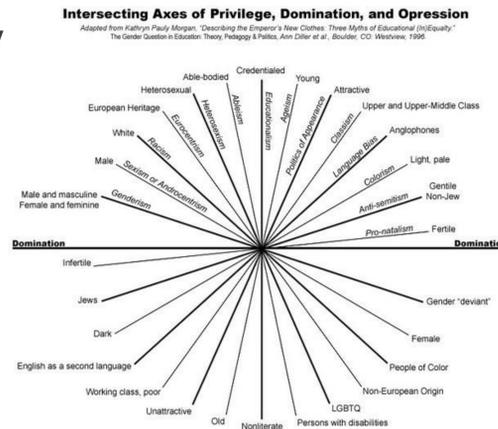
LEARNING OBJECTIVES

- Explore personal and professional identity
- Investigate factors that sustain STEM engagement
- Develop activities that promote STEM identity
- Transition resources to Indianapolis classrooms

IDENTITY AND INTERSECTIONALITY

Intersectionality

The complex, cumulative way in which the effects of multiple forms of privilege or discrimination combine, overlap, or intersect



What identity markers currently define you?

- Which are most significant?
- Which relate to your choice of major?
- Which have helped you be successful?

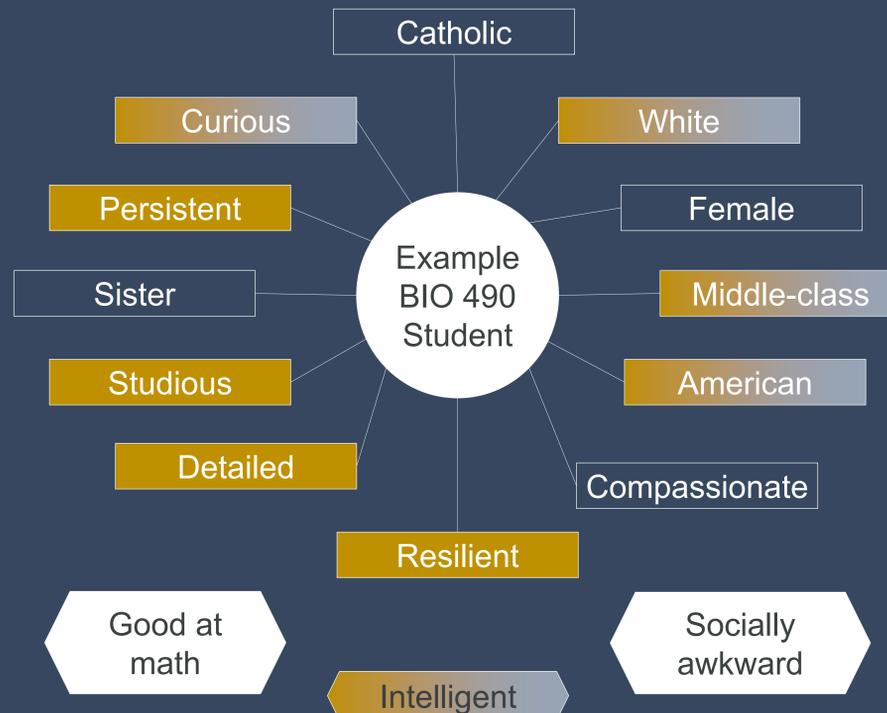
What circumstances created those markers?

- Which are intrinsic?
- Which have developed over time?
- What was most impactful in creating them?

Markers that inspired your biology major

Markers that helped you be successful

Markers associated with scientists



STEM IDENTITY RESEARCH

STEM Identity is a strong predictor of sustained interest and engagement in these fields

Many STEM initiatives fail to engage identity-forming pedagogies

Formative identity markers that address intersectionality issues are most impactful

“Re-Purpose” common classroom activities in ways that build STEM Identity for under-represented youth in our community

Community/ Family Anchoring

Reframe universal learning values

BUILDING STEM IDENTITY

Implement Formative Grading

Emphasize global character traits

STEM IDENTITY PROJECTS