Building STEM Equity and Identity in the Community

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Formative identity markers that address intersectionality issues are most impactful.

**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

<table>
<thead>
<tr>
<th>Field</th>
<th>Belonging and Identity</th>
<th>Funding of Research</th>
<th>Meaningful Work</th>
<th>Gun Control</th>
<th>Immigration</th>
<th>Trade Tariffs</th>
<th>Biology education value</th>
<th>Gender Gap</th>
<th>Minority barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

Senior Seminar Format Rankings

<table>
<thead>
<tr>
<th>Group Discussion/In-Class Activities</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td></td>
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<tr>
<td>Service projects</td>
<td></td>
<td></td>
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<tr>
<td>Research Project</td>
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<tr>
<td>Reflective Writing</td>
<td></td>
<td></td>
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<tr>
<td>Performance</td>
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</tbody>
</table>

**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?

**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.

**LEARNING OBJECTIVES**

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

**STEM IDENTITY PROJECTS**

- Example BIO 490 Student
  - Catholic
  - Curious
  - Persistent
  - Sister
  - Studious
  - Detailed
  - Resilient
  - Good at math
  - Intelligent
  - White
  - Female
  - Middle-class
  - American
  - Compassionate
  - Socially awkward

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