Undergraduate Research Opportunities Program
Office of the Vice Chancellor for Research

Using NSSE Data to Compare Senior Participation in Faculty-Mentored Research at UHM to Peer Institutions
January 28, 2021
NSSE data + MIRO tools = goals

Goals

1. Determine % of UHM undergraduate students who participated in, or planned to participate in, faculty-mentored research
2. Compare to peer institutions
## NSSE Data & MIRO tools

**Step 1: Navigate survey. Identify desired data**

**NSSE survey instrument:**

**Question:**
Which of the following have you done or do you plan to do before you graduate?

**Answer:**
Work with a faculty member on a research project

**Data collected:**
Freshmen and senior responses from 2004 – 2015, with some gaps

NSSE data + MIRO tools = goals

NSSE Data & MIRO tools

Select tool
- Engagement Indicators
- High-Impact Practices
- Time Usage
- View More

Select filters
- NSSE Survey Year: 2015
- FT/PT: Any
- Campus Resident: Any
- Campus Building: Any
- Cumulative GPA: Any
- Semester GPA: Any
- UHM Race: Any
- UHM Ethnicity: Any
- Age From: 18
- Geo Origin: Any
- Citizenship: Any
- Hawaii Residency: Any
- Island: Any
- Hawaii Area: Any

University of Hawai‘i at Mānoa NSSE Report
High-Impact Practices (HIP)
Tutorial Video | PDF Tutorial
NSSE data + MIRO tools = goals

**NSSE Data & MIRO tools**

**Generate data**

**Research with faculty:** Work with a faculty member on a research project.

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**Research with faculty/FR (Selected: N=431)**

- **Selected:** 3%
- **UHM:** 3%
- **Peers:** 6%
- **Carnegie:** 6%
- **NSSE:** 6%

**Research with faculty/SR (Selected: N=1241)**

- **Selected:** 26%
- **UHM:** 26%
- **Peers:** 22%
- **Carnegie:** 28%
- **NSSE:** 25%

**Done or in progress (2015)**

- **Plan to do (2015)**
- **Not decided (2015)**
- **No plan to do (2015)**

**Analysis:**

- **Research with faculty:**
  - **Done or in progress (2015):** 26 + 15 = 41%

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**Graphical Representation:**

- Pie charts or bar graphs showing the distribution of students who have or plan to work with faculty or peers for research projects.

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**Notes:**

- The data is selected from a larger dataset, with percentages indicating the proportion of students who have engaged in research with faculty or peers.

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**Conclusion:**

The integration of NSSE data with MIRO tools effectively highlights the percentage of students engaged in research projects with faculty or peers, emphasizing the importance of collaborative learning experiences.
Using the data

Graph C: Total Weighted Percent of UHM senior respondents who are "done" or "plan to do" faculty-mentored research from 2004-2015, with ±1 SD bars

41%
Next steps

- Set benchmarks for research participation
- Promote available research opportunities
- Emphasize impact of research on students, need for institutional support
Caution: Understand limitations

UNUSABLE

2000
2001
2002

UNUSABLE

USABLE

2004 2005 - - - - 2007 2008 2009
2010 2011 - - - - - - - - - - - 2015

WHY?

Survey instrument changed year to year

<table>
<thead>
<tr>
<th>Year</th>
<th>Prompt</th>
<th>Answer choices</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>Work on a research project with a faculty member outside of course or program requirements</td>
<td>yes, no, undecided</td>
</tr>
<tr>
<td>2011</td>
<td>(same as above)</td>
<td>done, plan to do, do not plan to do, have not decided</td>
</tr>
<tr>
<td>2015</td>
<td>Work with a faculty member on a research project</td>
<td>done or in progress, plan to do, do not plan to do, have not decided</td>
</tr>
</tbody>
</table>
Thank you for your time!

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