SURVEY RESULTS - PART THREE

To share your thoughts about these results, a blog has been created at http://blogs.bgsu.edu/idealbgsu/.

Background

Bowling Green State University, along with five partner research universities in Northern Ohio, is participating in a program funded by the National Science Foundation: Institutions Developing Excellence in Academic Leadership (IDEAL). This three-year project is designed to cultivate and support collegial environments and climates for women and underrepresented groups in the sciences, technology, engineering, and mathematics (STEM) fields.

The goals of the IDEAL project align closely with Strategy 7 of BGSU’s strategic plan: Increase institutional diversity and inclusion. As such, the BGSU Office of the Provost has been very supportive of the work that has been done by the faculty IDEAL teams.

Recently, we distributed the first and second sets of results from a BGSU climate survey, which was conducted to understand how well the university is meeting the goal of encouraging a supportive and collegial environment for all faculty, and women and underrepresented minorities in particular. The first set of results presented overall results from the faculty respondents as a whole. The second set of results presented comparisons between men and women to understand how gender impacts the experience of being a faculty member at BGSU. This third and final set of results presents differences between faculty in STEM (science, technology, and math) and non-STEM areas.

Climate survey data collection and analysis

The online faculty climate survey was conducted in Spring 2010. All full-time faculty members at BGSU were asked to complete this 140 question survey. Detailed item-level results compiled by BGSU Institutional Research are available at http://www.bgsu.edu/downloads/finance/file81023.pdf. Details about the factors and the exact wording of items can be found here and more information about the methodology can be
found in the first set of climate survey results here. Finally, a detailed report of the item level responses broken down by groups (men and women, under-represented minorities, STEM men and STEM women) can be found here.

**Sample characteristics**

A total of 55 faculty members from STEM areas and 300 faculty from other academic areas completed the survey (38 respondents did not report their department or college). Details on the sample can be seen below. We used the third response category (College of A&S, Mathematics and Sciences) to define STEM areas for this report, though certain departments in other categories such as the College of Technology and the College of Health and Human Services could qualify as STEM areas as well. The smaller number of respondents from STEM areas compared with non-STEM areas means that the statistical uncertainties associated with their responses will be larger, so that differences will need to be larger in magnitude, compared to the results we presented in the two previous reports, in order to be detected as statistically significant. These small numbers made further subdivision and comparison between responses from STEM women and STEM men, which would have been enlightening for the IDEAL project, impossible from a statistical point of view.

<table>
<thead>
<tr>
<th>College of Arts and Sciences, Arts and Humanities (ACS, ART, ENG, ETHN, GSW, GREA, HIST, IS, PHIL, POPC, ROML, THFM, WS)</th>
<th>Number (%) of respondents</th>
<th>Percent of sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>105 (46%)</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>College of Arts and Sciences, Social Sciences (POLS, PSYC, SOC)</td>
<td>28 (48%)</td>
<td>7</td>
</tr>
<tr>
<td>College of Arts and Sciences, Mathematics and Sciences (BIOL, CHEM, CS, ENVS, GEOG, GEOL, MATH, PHYS) which we have defined as STEM areas</td>
<td>55 (39%)</td>
<td>14</td>
</tr>
<tr>
<td>College of Arts and Sciences, Other (Communication, Journalism and Public Relations, Telecommunications)</td>
<td>19 (45%)</td>
<td>5</td>
</tr>
<tr>
<td>College of Business Administration</td>
<td>27 (33%)</td>
<td>7</td>
</tr>
<tr>
<td>College of Education and Human Development</td>
<td>56 (44%)</td>
<td>14</td>
</tr>
<tr>
<td>Firelands College</td>
<td>18 (38%)</td>
<td>5</td>
</tr>
<tr>
<td>College of Health and Human Services</td>
<td>17 (57%)</td>
<td>4</td>
</tr>
<tr>
<td>College of Musical Arts</td>
<td>18 (35%)</td>
<td>5</td>
</tr>
<tr>
<td>College of Technology</td>
<td>12 (30%)</td>
<td>3</td>
</tr>
</tbody>
</table>
**Results**

**Satisfaction with job conditions:**

The only area of job satisfaction in which STEM faculty and non-STEM faculty differed was advising responsibilities. Although both groups reported that they were satisfied, STEM faculty reported higher satisfaction than faculty in other disciplines.

*Note:* Advising responsibilities, job security, and opportunities for scholarly pursuit are individual survey items. The other bars represent factors comprised of several items.
Satisfaction with Resources:

STEM faculty reported lower satisfaction than faculty in other areas with both the quality of students (undergraduate and graduate) and the available library and computer resources. The closing of the Science Library and the more intensive computer needs of STEM faculty are both possible explanations for the latter difference.

Note: Clerical/administrative staff and nearby parking are individual survey items. The other bars represent factors comprised of several items.
Satisfaction with life/work balance:

The only life/work balance area in which STEM and non-STEM faculty differed was that STEM faculty were more likely to report that departmental meetings occur outside of the 9-5 workday. However, it should be noted that endorsement of this item was low for both groups.

* Indicates that STEM and non-STEM faculty reports differ at $p < .05$

Note: Department meetings outside the 9-5 workday is an individual survey item. The other bars represent factors comprised of several items.
Challenges faced by BGSU faculty members:

STEM and non-STEM faculty did not differ significantly in their reports of these challenges faced at BSGU.

There were no significant differences between STEM and non-STEM faculty at $p < .05$ on these items

Note: Questions about the career commitment of faculty members with children are individual survey items. The other bars represent factors comprised of several items.
Sources of Stress:

STEM faculty reported greater stress associated with managing a research group or grant (specifically things such as managing grant finances and personnel). In contrast non-STEM faculty reported greater stress associated with advising responsibilities.

Note: All sources of stress variables were individual survey items.
What's next?

These results show differences in the perceptions of the workplace climate between STEM and non-STEM faculty at BGSU.

Our hope is that these results can serve as a starting point for discussions about BGSU’s current climate and strategies for creating a workplace environment that maximizes our ability to recruit and retain talented and diverse faculty. Because a statistical survey can only go so far in identifying the sources of poor work climates, we rely on people’s thoughtful comments to identify more clearly the causes of dissatisfaction and to develop and lobby for actionable responses. To share your thoughts about these results, a blog has been created at http://blogs.bgsu.edu/idealbgsu/. Log on to this site and click on “comments” to share your thoughts about this important topic.

To learn more about what IDEAL is doing on campus, and to become more involved yourself, please visit our webpage

The IDEAL project at BGSU consists of:
Second Year Team:
   Dr. Andrew Layden (Physics & Astron), Dr. Dara Musher-Eizenman (Psychology), Dr. Margaret Yacobucci (Geology)
First Year Team:
   Dr. Laura Leventhal (Computer Science), Dr. Helen Michaels (Biology), Dr. Sheila Roberts (Geology)
Co-Director: Dr. Deanne Snavely (Chemistry)
Team Coach: Dr. Deborah O'Neil (Management)