Enhancing Opportunities for Diversifying STEM Faculty

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Key Components

1. Identifying and Naming Challenges
2. Using Data and Mobilizing Support
3. Moving beyond person-centered approaches
4. Implementing programs
5. Measuring progress
Identifying and Naming Challenges

- Identifying misperceptions
- Empowering change agents
- Beginning to address a problem requires acknowledgement that the problem exists
Identifying and Naming Challenges

Common misperceptions that disempower change agents

• Pipeline problem
  – ‘We can’t recruit URM’s until the pipeline fills’

• Lowering standards
  – ‘We don’t focus on diversity, we focus on excellence’

• If there were qualified candidates I would know it
  – Reliance on professional networks, ignorance of implicit bias

Negative impact on both recruiting and retention

At ISU, top administrators have “named” these issues as problems the university must address.
Identifying and Naming Challenges

Department Chair: “we may not have a method in place to make sure it’s the most diverse one [applicant pool], that’s not on the, that’s not the number one priority...., we try to find the best person and the problem that we are encountering, encountering is there aren’t very many people that fit our needs and, uh, when we hear that we should make sure to attract a diverse pool, um, it’s hard for us to envision how we would do that because we pretty much know the people or know the advisors of these people and we reach whoever’s out there. .... So that, whatever is available, the pool of eligible candidates we reach and it is what it is at that point. So we, we always struggle figuring out how can we make it more diverse if that pool is just very limited.”
Using Data and Mobilizing Support

Until you present data that verify the systemic nature of these problems, administrators and STEM faculty may see little need to invest their time addressing the problems.
Using Data and Mobilizing Support:
Be careful how you use data

Overall, how satisfied are you being a faculty member at Iowa State?
(by race/ethnicity)

<table>
<thead>
<tr>
<th></th>
<th>White Faculty</th>
<th>Faculty of Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsatisfied</td>
<td>23.9</td>
<td>25.2</td>
</tr>
<tr>
<td>Neither satisfied nor unsatisfied</td>
<td>7.2</td>
<td>12.6</td>
</tr>
<tr>
<td>Satisfied</td>
<td>68.9</td>
<td>62.2</td>
</tr>
</tbody>
</table>

Source: Iowa State University Institutional Research (2008 AAUDE Faculty Satisfaction Survey)

AAUDE Faculty Satisfaction Survey data does not show statistically significant differences in job satisfaction between White Faculty and Faculty of Color.

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ISU Office of Institutional Research
Using Data and Mobilizing Support:

KNOW what your quantitative measures are or are not capturing

Additional tenure time will not help because colleagues will look at ratio of publications per year (by race/ethnicity)

Responses for tenured and tenure-eligible faculty only
Source: Iowa State University Institutional Research (2008 AAUDE Faculty Satisfaction Survey)

However, URM faculty have different perceptions than other faculty of the outcomes of using flexible career policies.

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Using Data and Mobilizing Support:

Qualitative data can paint a different picture

Qualitative data from 9 focal STEM departments also tells a different story.
• For example, in one department where most faculty perceived the culture as open, friendly and collaborative, faculty of color related experiences of the department as “closed” to those who were not Midwestern, White and native English speakers.
Moving Beyond Person-Centered Approaches

Person-centered approaches:

• Training individual faculty of color *how to navigate the existing system* will help a few individual faculty members, but will not lead to systemic change in the conduciveness of the organization to the recruitment, retention and promotion of underrepresented groups.

Systemic approaches:

• Training administrators and faculty how to identify and address prevailing attitudes, practices and structures that reduce the likelihood that faculty of color will apply for positions, accept job offers, remain in the institution, and accept leadership roles will help to create lasting change.
Implementing programs

Focus: Programs that aim to make the institution more conducive to the recruitment, retention and promotion of faculty of color.
Implementing programs

ISU ADVANCE Scholar Program

“intended to enhance the recruitment, retention and advancement of women faculty of color in STEM disciplines. The objective is to facilitate mentoring and collaborative relationships between ISU STEM women faculty of color and eminent scholars in their fields.”

• “Exposure and advice for a small group of the finest researchers in the field of XX. Could have never had this opportunity without this program. Access to a well known researcher for advice and mentorship and getting to know all the individuals in the field that he collaborates with is leading to great things in the future: both for my career advancement but also for science.”

http://www.advance.iastate.edu/scholarprogram/scholarprogram.shtml;
Hamrick, F., ADVANCE Scholar Program, 09-10 Participant Annual Report
Implementing programs

Kinds of practices inspired by ISU ADVANCE Scholar Program:

- Department and institution-wide talks by eminent faculty of color
- Eminent scholar meetings with ISU Scholars’ colleagues, students and lab personnel
Implementing programs

Examples of ISU ADVANCE programs:

• Implicit bias training workshops focusing on race and ethnicity
• Mentoring faculty of color training workshops
• Chair training workshops
• Search committee training workshops
Measuring Progress: Transtheoretical model

Broaden conceptions of progress by showing your institution’s advancement through stages of organizational change:

• Pre contemplation
• Contemplation
• Preparation
• Action
• Maintenance

Prochaska, J. et al 2001
Measuring Progress

- Use quantitative and qualitative data to establish benchmarks
- Disseminate benchmark data broadly within the university
- Set clear goals and identify “progress indicators”
- Identify clear lines of accountability for change
- Use quantitative and qualitative data to measure progress
- Disseminate progress data broadly within the university
Conclusions

1. Identifying and Naming Challenges
   • Recognition of a problem and of barriers to addressing the problem

2. Using Data and Mobilizing Support
   • Use quantitative and qualitative measures with care

3. Moving beyond person-centered approaches
   • Address systemic issues

4. Implementing programs
   • ISU Scholar Program, Training workshops

5. Measuring progress
   • Clear accountability and progress indicators; moving through stages of organizational change
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I have a voice in the decision-making that affects the direction of my department

- **Ag. & Life Sci.**
  - White Faculty: 3.31
  - Faculty of Color: 3.61
- **Business**
  - White Faculty: 2.91
  - Faculty of Color: 2.60
- **Design**
  - White Faculty: 3.03
  - Faculty of Color: 3.40
- **Engineering**
  - White Faculty: 3.61
  - Faculty of Color: 3.40
- **Human Sci.**
  - White Faculty: 4.29
  - Faculty of Color: 3.17
- **LAS-Humanities**
  - White Faculty: 3.84
  - Faculty of Color: 3.47
- **LAS-Sci. & Math**
  - White Faculty: 3.84
  - Faculty of Color: 3.33
- **LAS-Social Sci.**
  - White Faculty: 3.84
  - Faculty of Color: 2.60
- **Library**
  - White Faculty: 2.35
  - Faculty of Color: 2.95
- **Vet. Medicine**
  - White Faculty: 4.00
  - Faculty of Color: 3.60

Scale: 1 = Strongly disagree, 5 = Strongly agree
Red line = mean response for all faculty
Source: Iowa State University Institutional Research (2008 AAUDE Faculty Satisfaction Survey)

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My department is a good fit for me

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<th>Faculty of Color</th>
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<tbody>
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<td>4.15</td>
<td>4.29</td>
</tr>
<tr>
<td>Business</td>
<td>3.72</td>
<td>3.33</td>
</tr>
<tr>
<td>Design</td>
<td>3.72</td>
<td>3.85</td>
</tr>
<tr>
<td>Engineering</td>
<td>3.85</td>
<td>4.33*</td>
</tr>
<tr>
<td>Human Sci.</td>
<td>3.74</td>
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</tr>
<tr>
<td>LAS-Humanities</td>
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Selected Literature


• Eveline, Joan. 2004. Ivory Basement Leadership. Crawley, Western Australia: University of Western Australia Press.


