Best Practices for Inclusive Graduate Admissions

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Diversity & Inclusion Study

**Purpose:** Provide tangible recommendations on how to increase SES Grad School URM admissions

**Method:** Qualitative and quantitative data was collected from faculty, prospects, current students and recent grads

**Key Findings:**

**Faculty**
- Want to increase URM diversity among students (and faculty)
- Want to know admissions best practices for URMs and GRE effectiveness in predicting success

**URM Prospects**
- Want clarification on the admissions process and funding
- Want to gain better access to to schools with a strong reputation
- Want more receptivity and warmth

**Faculty**
- See making URM students feel welcome as an area of improvement
- Believe marketing will have the most positive affect on admissions
- Want to improve the Diversity Incentive Fund

**Majority Students**
- Expect to see diversity in their department and the school
Incorporating Diversity into Admissions

Include Diversity Initiatives in Every Step

The Mission – You must have a specific, actionable goal
  • Policy
  • Strategic Plans
  • Charge
  • Defining Position

The Process – You must address the goal with a deliberate, conscientious plan
  • Recruiting & Advertising
  • Selection Criteria
  • Interviews
  • Evaluation of Fit
  • Reference Checks
  • Recommendations
Diversity is part of the Mission

Everyone is Accountable

Policy – From the President & Provost

- Realizing that graduate students are the primary pool for the next generation of faculty, the University will redouble its efforts to attract and support women and minority graduate students. Stanford must be a leader in efforts to address these challenges.

- For instance, minorities and women are often underrepresented in our candidate pools. And, despite best intentions, they are sometimes subject to an unconscious bias imposed by a society that has not yet fully recognized the value of its own diversity. At Stanford, we believe we have a special obligation to overcome these and other challenges and to succeed in our efforts.

SES Strategic Plan and Charge:

- Increase diversity of faculty, staff, and student populations.
  - develop and implement an aggressive diversity plan and give it top priority
  - institute recruitment strategies for undergraduate students, leveraging existing cultural organizations
  - develop a more aggressive program to seek out qualified graduate applicants of ethnic minorities
# Latest SES Admissions Data

## 2014

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Defining Position and Parameters for Success

To be successful you need an actionable plan

• Building a diverse team is a leadership competency
• How does your department specifically define diversity success?
• What are the specific outlined procedures to ensure this?
• How are procedures communicated to the department? How are people held accountable?
Incorporating Diversity into Admissions

Include Diversity Initiatives in Every Step

The Mission – You must have a specific, actionable plan
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The Process – You must act upon the plan in a deliberate, conscientious manner
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  • Selection Criteria
  • Interviews
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  • Recommendations
Recruiting & Advertising

Recruitment is an Active Process

- Ensure that the applicant pool is diverse. Network with minority undergrad pipeline programs, seek advice from those who can assist you in finding multicultural populations, identify and contact promising students directly.

- Increase Transparency and Access: How do students gain better access to the department and professors? Are their certain programs or conferences they should participate in? If they don’t know someone who knows someone, how do they get an ‘in’? What is the general admissions process? Funding Scenario?

- State your expectations for successful applicant behavior. If students should contact faculty prior to applying, make it clearly known. If students should demonstrate a solid interest in a research area, make it known. If there is a specific academic or research prerequisite beyond minimal coursework requirements, make it known. Should they show that they are applying to other peer institutions? Open to MS or PhD? How would you like students to approach you?

- Have sensitivity to attitudes of elitism or aggression by power holders, this reinforces stereotype threat and unconscious bias beliefs. This includes tokenism. “Are you searching for a good fit, or do you want the student to “prove” that they are a fit? Has this expectation been (tactfully) communicated?
Recruiting and Advertising

• Example: URM Prospects want clarification on the admissions process and funding
  – Desire inside information gained with more traditional networks
  – Desire greater transparency

• Funding is an important determination of admissions process, and funding mechanisms for MS and PhD each individual department admissions page.
  – ERE: “We admit students on the basis of their academic achievements, letters of recommendation, statement of purpose, work experience and Graduate Records Examination (GRE) scores. There are no minimum grade point averages or GRE scores: the admissions committee reviews each application carefully to determine the overall demonstrated and potential ability.”
  – GES: “Almost all graduate students admitted to GES receive substantial financial aid from combinations of departmental fellowships, teaching or research assistantships, and other sources; tuition is generally paid by the department…. (more detail)”
Selection Criteria

Recognize and Remedy Stereotype Threat

• Stereotype Threat: The potential of societal generalizations to affect performance of a particular group

• Examples: women aren’t good at math, minorities perform worse at standardized tests

• Meta-analysis of threat studies shows that when stereotype threat is removed, URMs and women perform better than non-minorities and men.

Walton, et. al, 2009
Combating Stereotype Threat

Recognize and Remedy Stereotype Threat

• Remove cues that trigger worries about stereotype
• Convey that diversity is valued and a sense of belonging
• Create fair tests, present them as fair and as serving a learning purpose
• Convey high standards and assure students of their ability to meet these standards
• Promote a growth mindset about intelligence
• Create critical mass

Walton, et. al, 2012
Selection Criteria

Recognize and Remedy Unconscious Bias

- **Unconscious (Implicit) Bias** is the natural tendency to “favor the “in” group rather than to directly disadvantage the “out” group.”
- While recognizing that an out-group member has an exceptional record, for example, one may fail to see the candidate as a “good fit” for the department.
Example of Unconscious Bias

Science Faculty’s Biases Favor Males

• Science faculty from research-intensive universities randomly rated identical applications of a male or female student for a lab manager position.

• The male applicant: Significantly more competent and hireable than the (identical) female applicant. The male was offered a higher starting salary and more career mentoring.

• Female and male faculty were equally likely to exhibit bias against the female student.
Example of Unconscious Bias

Science Faculty’s Biases Favor White Males

- Professors were contacted by fictional students interested in discussing research opportunities in advance of applying to their PhD program. Students names were randomly changed to reflect gender and ethnicity but otherwise the message was identical.

- Faculty answered requests from Caucasian males at a higher rate than requests from females and minorities. In particular, in higher-paying disciplines and private institutions.

- There was not a correlation between the number of female and minority faculty and increased response to females and minorities.

- In the Natural and physical sciences and mathematics: 64% Response to Women and Minorities 73% Response to White Men

Milkman, et. al, 2014
Combating Unconscious Bias

Which Criteria are Chosen determines who is most qualified

- Selection Criteria
- Interviews
- Evaluation of Fit
- Reference Checks
- Recommendations
Incorporating Diversity into Selection

The Admissions Committee

• Diversity awareness and sensitivity – recognize the relevant research on diversity and admissions
• Ensure specific, standardized rating criteria that actively deters unconscious bias
  – Interviews, Evaluation of Fit, Reference Checks, Recommendations
• Appoint a committee member as Diversity Advocate
• Expect and Maintain Faculty & Department Accountability
• Form a Diverse Committee
GRE Limitations and Misuse

• ETS states that GRE cutoff scores should not be the sole criterion for denying admission.

• Differences across population groups on various measures also suggest caution in utilizing a single score for screening purposes.
GRE Limitations and Misuse

The GRE is NOT a predictor of PhD capability

• ETS: “Special care is required in interpreting the GRE scores of students who may have had educational and cultural experiences somewhat different from those of the traditional majority.”

• “Research indicates that GRE scores are valid predictors of success in the first year of graduate school for all students. Available samples of students from underrepresented groups, however, have been very small.”
The GRE is not a measure of long term ability and ultimate success

- Physical Sciences GREQ: women score 80 points lower than men, African Americans score 200 points below whites.
- Only 26% of women, vs. 73% of men, score > 700. Only 5.2% of URMs >700 vs. 82% for whites and Asians.
- SES GREQ ave = 165 = 795 = 90th percentile.
Measurement of Long Term Success

Perseverance/Grit

- Grit: the tendency to sustain interest in and effort toward very long-term goals
- Measuring Grit: In addition to classroom and research experience, evaluate key relationships, leadership/service, and goals and objectives.

Stassun, 2011
Grit vs. GRE

Fisk-Vanderbilt MS-PhD STEM Bridge Program

• Does not use the GRE for admissions
• 65 students, 56 URM, 35 women. 85% of students <700 GREQ.
• 81% are in good standing or have their PhD, and all graduates are employed in STEM.
Sample Grit Questions - Applicant

Research Experience (in class, lab or other)
- Tell us about your most successful or interesting research experience, either in class, in the lab or at work?
- What was most challenging about it?
- How did you figure out what to do?
- What did you learn most from this experience?
- Who did you work with, and describe the working relationships.

Key Relationships
- Who are the faculty or other mentors who have been most important to you during college? Would you tell us about that relationship—how it developed, how you work together, why it is important?
- If we talked to your mentor, what do you think he/she would say you are really good at?
- What would you say you could have done better?

Leadership/Service
- Have you had any experiences where you were playing a leadership or mentoring role for others?
- What did you do, and how did these experiences come about?

Goals and Objectives
- Why science? What is compelling to you about this opportunity with the Bridge program?
- Where do you want to take your career? What do you want to do long term?
- What concerns do you have?
- What will be the biggest challenge for you?
- Is there anything else we should know?
Sample Grit Questions - Recommender

Mentor/Reference Interview

- How do you know the applicant?
- What were the person’s biggest strengths? Could you give me some examples?
  - How did they compare with their peers?
- What were some of the person's biggest areas for improvement?
  - What challenges did they face? How did they navigate them?
  - How did the applicant respond to failure or setbacks in the work?
- How did the applicant respond to critical feedback? Could you give an example?
- If the applicant did research under your supervision, would you describe their role and their performance?
  - Describe their development over the course of the work.
  - How did they work with others?
  - How would you rate their commitment/reliability/follow-through?
- The candidate indicated that they struggled with__________. Could you tell me more about that?
- Have you observed the candidate in any leadership roles? What were your observations?
- What do you anticipate will be their biggest challenges in graduate school?
- Is there anything else we should know that will help us determine whether this program is a good fit for the candidate's capabilities and interests?
In Summary

Best Practices to Ensure Success

• Make a Department commitment to Diversity with Accountability
• Discuss Recruitment and Admissions Best Practices Across Departments
• Outreach and Network with Minorities in STEM
• Recognize Grit and Remediate Evaluation Bias
• Incorporate Specific and Actionable Best Practices in Admissions
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