Benefits and Challenges of Diversity in Academic Settings

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"It is time to renew the promise of American higher education in advancing social progress, end America's discomfort with race and social difference, and deal directly with many of the issues of inequality present in everyday life."

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Benefits and Challenges of Diversity

The diversity of a university's faculty, staff, and students influences its strength, productivity, and intellectual personality. Diversity of experience, age, physical ability, religion, race, ethnicity, gender, and many other attributes contributes to the richness of the environment for teaching and research. We also need diversity in discipline, intellectual outlook, cognitive style, and personality to offer students the breadth of ideas that constitute a dynamic intellectual community.

A vast and growing body of research provides evidence that a diverse student body, faculty, and staff benefits our joint missions of teaching and research by increasing creativity, innovation, and problem-solving. Yet diversity of faculty, staff, and students also brings challenges. Increasing diversity can lead to less cohesiveness, less effective communication, increased anxiety, and greater discomfort for many members of a community.[1]

Learning to respect and appreciate each other's cultural and stylistic differences and becoming aware of unconscious assumptions and behaviors that may influence our interactions will enable us to minimize the challenges and derive maximum benefits from diversity.

This booklet summarizes research on the benefits and challenges of diversity and provides suggestions for realizing the benefits. Its goal is to help create a climate in which all individuals feel *"personally safe, listened to, valued, and treated fairly and with respect."* [2]

Benefits for Teaching and Research

Research shows that diverse working groups are more productive, creative, and innovative than homogeneous groups, and suggests that developing a diverse faculty will enhance teaching and research.[3]

Some findings are:

- A controlled experimental study of performance during a brainstorming session compared ideas generated by ethnically diverse groups composed of Asians, Blacks, Whites, and Latinos to those generated by ethnically homogenous groups composed of Whites only. Evaluators who were unaware of the source of the ideas found no significant difference in the number of ideas generated by the two types of groups. However, when applying measures of feasibility and effectiveness, they rated the ideas generated by diverse groups as being of higher quality.[4]

- The level of critical analysis of decisions and alternatives was higher in groups exposed to minority viewpoints than in groups that were not. Minority viewpoints stimulated discussion of multiple perspectives and previously unconsidered alternatives, whether or not the minority opinion was correct or ultimately prevailed.[5]

- A study of corporate innovation found that the most innovative companies deliberately established diverse work teams.[6]

- Data from the 1995 Faculty Survey conducted by UCLA's Higher Education Research Institute (HERI) demonstrated that scholars from minority groups have expanded and enriched scholarship and teaching in many academic disciplines by offering new perspectives and by raising new questions, challenges, and concerns.[7]

- Several investigators found that women and faculty of color more frequently employed active learning in the classroom, encouraged student input, and included perspectives of women and minorities in their coursework.[8]

Benefits for Students

Numerous research studies have examined the impact of diversity on students and educational outcomes. Cumulatively, these studies provide extensive evidence that diversity has a positive impact on all students, minority and majority.[9]

Some examples are:

- A national longitudinal study of 25,000 undergraduates at 217 four-year colleges and universities showed that institutional policies fostering diversity of the campus community had positive effects on students' cognitive development, satisfaction with the college experience, and leadership abilities. These policies encouraged faculty to include themes relating to diversity in their research and teaching, and provided students with opportunities to confront racial and multicultural issues in the classroom and in extracurricular settings.[10]

- Two longitudinal studies—one conducted by HERI in 1985 and 1989 with over 11,000 students from 184 institutions, and another in 1990 and 1994 on approximately 1500 students at the University of Michigan—showed that students who interacted with racially and ethnically diverse peers both informally and within the classroom showed the greatest "engagement in active thinking, growth in intellectual engagement and motivation, and growth in intellectual and academic skills."[11] A more recent study of 9,000 students at ten selective colleges reported that meaningful engagement rather than casual and superficial interactions led to greater benefit from interaction with racially diverse peers.[12]

- Data from the National Study of Student Learning indicated that both in-class and out-of-class interactions and involvement with diverse peers fostered critical thinking. This study also found a strong correlation between "the extent to which an institution's environment is perceived as racially nondiscriminatory" and students' willingness to accept both diversity and intellectual challenge.[13]

- A survey of 1,215 faculty members in departments granting doctoral degrees in computer science, chemistry, electrical engineering, microbiology, and physics showed that women faculty played important roles in fostering the education and success of women graduate students.[14]
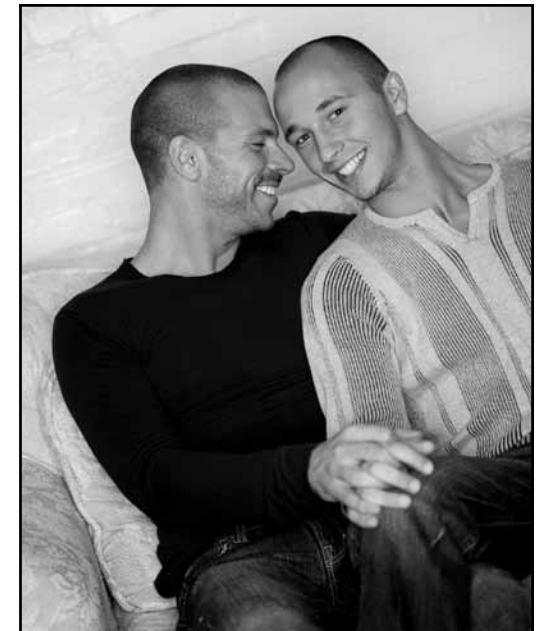
Challenges of Diversity

Despite the benefits that a diverse faculty, staff, and student body provide to a campus, diversity also presents considerable challenges that must be addressed and overcome.

Some examples include:

- Numerous studies have reported that women and minority faculty members are considerably less satisfied with many aspects of their jobs than are majority male faculty members. These aspects include teaching and committee assignments, involvement in decision-making, professional relations with colleagues, promotion and tenure, salary inequities, and overall job satisfaction.[15]

- A study of minority faculty at universities and colleges in eight Midwestern states showed that faculty of color experience exclusion, isolation, alienation, and racism in predominantly white universities.[16]

- Multiple studies demonstrate that minority students often feel isolated and unwelcome in predominantly white institutions and that many experience discrimination and differential treatment. Minority status can result from race, ethnicity, national origin, sexual orientation, disability and other factors.[17]

- Women students, particularly when they are minorities in their classes, may experience unwelcoming climates that can include sexist use of language, presentation of stereotypic or disparaging views of women, differential treatment from professors, and/or sexual harassment.[18]

- Research has demonstrated that a lack of previous positive experiences with "outgroup members" (minorities) causes "ingroup members" (majority members) to feel anxious about interactions with minorities. This anxiety can cause majority members to respond with hostility or to avoid interactions with minorities.[19]

Influence of Unconscious Assumptions and Biases

Research studies show that people who have strong egalitarian values and believe that they are not biased may unconsciously behave in discriminatory ways.[20] A first step towards improving climate is to recognize that unconscious biases, attitudes, and other influences that are not related to the qualifications, contributions, behaviors, and personalities of our colleagues can influence our interactions, *even if we are committed to egalitarian views*.

Although we all like to think that we are objective scholars who judge people on merit, the quality of their work, and the nature of their achievements, copious research shows that a lifetime of experience and cultural history shapes every one of us and our judgments of others.

The results from controlled research studies demonstrate that people often hold unconscious, implicit assumptions that influence their judgments and interactions with others. Examples range from expectations or assumptions about physical or social characteristics associated with race, gender, age, and ethnicity to those associated with certain job descriptions, academic institutions, and fields of study.

> *"People confident in their own objectivity may overestimate their invulnerability to bias."*
>
> ERIC LUIS UHLMANN AND GEOFFREY L. COHEN

Examples of common social assumptions or expectations:

- When shown photographs of people of the same height, evaluators overestimated the heights of male subjects and underestimated the heights of female subjects, even though a reference point, such as a doorway, was provided.[21]

- When shown photographs of men of similar height and build, evaluators rated the athletic ability of African American men higher than that of White men.[22]

- When asked to choose counselors from a group of equally competent applicants who were neither exceptionally qualified nor unqualified for the position, college students chose White candidates more often than African American candidates, exhibiting a tendency to give members of the majority group the benefit of the doubt.[23]

These studies show that we often apply generalizations about groups (that may or may not be valid) to the evaluation of individuals.[24] In the study on height, evaluators applied the statistically accurate generalization that men are usually taller than women to estimate the height of individuals who did not necessarily conform to the generalization. If we can inaccurately apply generalizations to objective characteristics as easily measured as height, what happens when the qualities we are evaluating are not as objective or as easily measured? What happens when, as in the studies of athletic ability and choice of counselor, the generalizations are not valid? What happens when such generalizations unconsciously influence the ways we interact with other people?

Examples of assumptions or biases that can influence interactions:

- When rating the quality of verbal skills as indicated by vocabulary definitions, evaluators rated the skills lower if told that an African American provided the definitions than if told that a White person provided them.[25]

- When asked to assess the contribution of skill versus luck to successful performance of a task, evaluators more frequently attributed success to skill for males and to luck for females, even though males and females performed the task identically.[26]

- Evaluators who were busy, distracted by other tasks, and under time pressure gave women lower ratings than men for the same written evaluation of job performance. Sex bias decreased when they took their time and focused attention on their judgments, which rarely occurs in actual work settings.[27]

- Research has shown that incongruities between perceptions of female gender roles and leadership roles can cause evaluators to assume that women will be less competent leaders. When women leaders provided clear evidence of their competence, thus violating traditional gender norms, evaluators perceived them to be less likeable and were less likely to recommend them for hiring or promotion.[28]

- A study of nonverbal communication found that White interviewers maintained higher levels of visual contact, reflecting greater attraction, intimacy, and respect, when talking with White interviewees and higher rates of blinking, indicating greater negative arousal and tension, when talking with Black interviewees.[29]

Examples of assumptions or biases in academic contexts:

Several research studies conclude that implicit biases and assumptions can affect evaluation and hiring of candidates for academic positions. These studies show that the gender of the person being evaluated significantly influences the assessment of résumés and postdoctoral applications, evaluation of journal articles, and the language and structure of letters of recommendation. As we attempt to enhance campus and department climate, consider whether the influence of such biases and assumptions also affects selection of invited speakers, conference presenters, committee membership, interaction, and collaboration with colleagues, and promotion to tenure and full professorships.

- A study of over 300 recommendation letters for medical faculty hired by a large American medical school found that letters for female applicants differed systematically from those for males. Letters written for women were shorter, provided "minimal assurance" rather than solid recommendations, raised more doubts, and included fewer superlative adjectives.[30]

- In a national study, 238 academic psychologists (118 male, 120 female) evaluated a junior-level or a senior-level curriculum vitae randomly assigned a male or a female name. These were actual vitae from an academic psychologist who successfully competed for an assistant professorship and then received tenure early. For the junior-level applicant, both male and female evaluators gave the male applicant better ratings for teaching, research, and service and were more likely to hire the male than the female applicant. Gender did not influence evaluators' decisions to tenure the senior-level applicant, but evaluators did voice more doubts about the female applicant's qualifications.[31]

- A study of postdoctoral fellowships awarded by the Medical Research Council of Sweden found that women candidates needed substantially more publications to achieve the same rating as men, unless they personally knew someone on the selection panel.[32]

- A 2008 study showed that when the journal *Behavioral Ecology* introduced a double-blind review process that concealed the identities of reviewers and authors, there was a significant increase in the publication of articles with a woman as the first author.[33]

Reaping the Benefits and Minimizing the Challenges of Diversity

In order to reap the benefits and minimize the challenges of diversity, we need to overcome the powerful human tendency to feel more comfortable when surrounded by people we resemble. We need to learn how to understand, value, and appreciate difference. Below is some advice for doing so:

Become aware of unconscious biases that may undermine your conscious commitment to egalitarian principles.

One way of doing so is to take the Implicit Association Test (IAT) offered by Project Implicit (a research collaborative at the University of Virginia, Harvard University, and the University of Washington): https://implicit.harvard.edu/implicit/demo.

Consciously strive to minimize the influence of unintentional bias.

Question your judgments and decisions and consider whether unintentional bias may have played a role. One way to do so is to perform a thought experiment: ask yourself if your opinions or conclusions would change if the person was of a different race, sex, or religion, etc. Some questions to consider include:

- Are women or minority colleagues/students subject to higher expectations in areas such as number and quality of publications, name recognition, or personal acquaintance with influential colleagues?

- Are colleagues or students who received degrees from institutions other than major research universities under-valued? Are we missing opportunities to benefit from the innovative, diverse, and valuable perspectives and expertise of colleagues or students from other institutions such as historically black universities, four-year colleges, community colleges, government, or industry?

- Are ideas and opinions voiced by women or minorities ignored? Are their achievements and contributions under-valued or unfairly attributed to collaborators, despite evidence to the contrary in their publications or letters of reference?

- Is the ability of women or minorities to lead groups, raise funds, and/or supervise students and staff underestimated? Are such assumptions influencing committee and/or course assignments?

- Are assumptions about whether women or minorities will "fit in" to an existing environment influencing decisions?
- Are assumptions about family obligations inappropriately influencing appointments and other decisions?

Seek out opportunities for greater interaction with women and minority colleagues.

Get to know women and minority colleagues in your department, your campus, and your professional associations. Pursue meaningful discussions with them about research, teaching methodologies, and ideas about the direction of your department, college, and profession. Listen actively to any concerns they express and try to understand and learn from their perspectives and experiences.

Focus on the individual and on his/her personality, qualifications, merit, interests, etc.

Consciously avoid the tendency to make assumptions about an individual based on the characteristics (accurate or not) of his/her group membership. Likewise, avoid the tendency to make assumptions about groups based on the behavior, personality, qualifications, etc. of an individual group member. Instead, concentrate on the individual and his/her qualities.

Treat all individuals—regardless of race, sex, or status—with respect, consideration, and politeness.

- Greet faculty, staff, and students pleasantly in hallways or in other chance encounters.
- Make requests to faculty, staff, and students politely—even when the work you are asking for is part of their obligations.
- Acknowledge and appreciate the work, assistance, and contributions of faculty colleagues, staff, and students. Do so in public forums as well as privately.
- Address individuals by their appropriate titles or by their preferred forms of address.

Actively promote inclusive communities.

- In classroom, committee, laboratory, and departmental settings, work to ensure that everyone has a chance to voice opinions, concerns, or questions. Acknowledge and attribute ideas, suggestions, and comments accurately. Women and minorities often report that their remarks or contributions are ignored or unheard.
- Support efforts to ensure that leadership and membership of departmental and professional committees are diverse with respect to age, gender, nationality, race, ethnicity, etc.

- Support efforts to ensure that departmental events such as seminar series and sponsored conferences include presenters of various ages, genders, nationalities, races, and ethnicities.
- Promote inclusive language by example. Avoid using only male pronouns when referring to groups of both sexes. Avoid language that makes assumptions about marital status and or/sexual orientation, i.e., consider using "partner" rather than "spouse."
- Welcome new departmental members by initiating conversations or meetings with them. Attend social events hosted by your department and make efforts to interact with new members and others who are not part of your usual social circle.

Conclusion

Diversity is not an end in itself.

Diversity is a means of achieving our educational and institutional goals. As such, merely adding diverse people to a homogeneous environment does not automatically create a more welcoming and intellectually stimulating campus.

Long-term efforts, engagement, and substantial attention are essential for realizing the benefits that diversity has to offer and for ensuring that all members of the academic community are respected, listened to, and valued.

References

Complete references, including links to articles, are available online:
http://wiseli.engr.wisc.edu/docs/benefits_references.pdf

[1] Manzoni, Strebel, and Barsoux, 2010; Herring, 2009; Page, 2007; Putnam, 2007; van Knippenberg and Schippers, 2007; Mannix and Neale, 2005; Cox, 1993.
[2] University of Wisconsin–Madison, Office of the Provost, 2004.
[3] Herring, 2009; Chang et al., 2003; ACE and AAUP, 2000.
[4] McLeod, Lobel and Cox, 1996.
[5] Nemeth, 1995; 1986; 1985. See also: Schulz-Hardt, et al., 2006; Sommers, 2006; Antonio, et al., 2004.
[6] Kanter, 1983.
[7] Antonio, 2002. See also: Turner, 2000; Nelson and Pellet, 1997.
[8] Milem in Chang et al., 2003.
[9] Smith et al., 1997. See also: Beck, 2009.
[10] Astin, A.W., "Diversity and Multiculturalism on Campus." 1993; Astin, A.W., *What Matters in College?* 1993.
[11] Gurin et al., 2002; Gurin, 1999.
[12] Espenshade and Radford, 2009.
[13] Pascarella et al., 1996.
[14] Fox in Hornig, 2003. See also: Carbonell and Castro, 2008; Kutob, Senf, and Campos-Outcalt, 2006; Bakken, 2005.
[15] Sheridan and Winchell, 2006; 2003; Harvard University Task Force on Women Faculty, 2005; Astin, H.S. and Cress in Hornig, 2003; Zakian et al., 2003; Allen et al. in Smith, Altbach and Lomotey, 2002; Trower and Chait, 2002; Turner, 2002; Aguirre, 2000; Foster, S.W. et al., 2000; Turner and Myers, 2000; MIT Committee on Women Faculty, 1999; Blackburn and Hollenshead, 1999; Riger et al., 1997.
[16] Turner and Myers, 2000. See also: Turner, 2002.
[17] Rankin, 2003; Suarez-Balcazar et al., 2003; Hurtado, Carter and Kardia, 1998; Cress and Sax, 1998; Nora and Cabrera, 1996; Smedley, Myers and Harrell, 1993; Hurtado, 1992.
[18] Salter and Persaud, 2003; Crombie et al., 2003; Swim et al., 2001; Whitt, 1999; Sands, 1998; Foster, T., 1994; Hall and Sandler, 1982.
[19] Plant and Devine, 2003.
[20] Dovidio, 2001.
[21] Biernat, Manis and Nelson, 1991.
[22] Biernat and Manis, 1994.
[23] Dovidio and Gaertner, 2000.
[24] Bielby and Baron, 1986.
[25] Biernat and Manis, 1994.
[26] Deaux and Emswiller, 1974.
[27] Martell, 1991.
[28] Eagly and Sczesny in Barreto, Ryan and Schmitt, 2009; Eagly and Koenig in Borgida and Fiske, 2008; Heilman et al., 2004; Ridgeway, 2001.
[29] Dovidio et al., 1997.
[30] Trix and Psenka, 2003.
[31] Steinpreis, Anders and Ritzke, 1999.
[32] Wennerås and Wold, 1997.
[33] Budden et al., 2008.

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