

Ethnicity *celebration* **Age** *respect*
Ideas *advocacy* **Gender** *participation*
Income *inclusion* **Language** *support*
Race *engagement* **Religion** *tolerance*
Physical Ability *understanding*
Sexual orientation *recognition*

Benefits and Challenges of Diversity



W I S E L I

Women in Science & Engineering Leadership Institute
University of Wisconsin-Madison

Benefits and Challenges of Diversity

The diversity of the 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.

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 (Cox, 1993). To minimize the challenges and derive maximum benefits from diversity, we must be respectful of each other's cultural and stylistic differences and aware of unconscious assumptions and behaviors that may influence interactions. The goal is to create a climate in which all individuals feel "personally safe, listened to, valued, and treated fairly and with respect" (Definition of Campus Climate, UW Provost's Office, 2004).

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.

Benefits for teaching and research:

Research shows that diverse working groups are more productive, creative, and innovative than homogeneous groups. This research suggests that developing a diverse faculty will enhance teaching and research (Milem, 2001). **Some findings are:**

- A controlled experimental study of performance in a brainstorming session compared the 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, but, using measures of feasibility and effectiveness, rated the ideas generated by diverse groups as being of higher quality (Cox, 1993; McLeod, Lobel, & Cox, 1996).
- The level of critical analysis of decisions and alternatives was higher in groups subjected to minority viewpoints than in those that were not, regardless of whether or not the minority opinion was correct or ultimately prevailed. Minority viewpoints stimulated discussion of multiple perspectives and previously unconsidered alternatives (Nemeth, 1985; 1995).
- A study of innovation in corporations found that the most innovative companies deliberately established diverse work teams (Kanter, 1983).

- Using data from the 1995 Faculty Survey conducted by the Higher Education Research Institute (HERI) at UCLA, another study documented that scholars from minority groups have expanded and enriched scholarship and teaching in many intellectual disciplines by offering new perspectives, raising new questions, challenges, and concerns (Antonio, 2002. See also Turner, 2000; Nelson and Pellet, 1997).
- Several research studies found that women and faculty of color more frequently used active learning in the classroom, encouraged student input, and included perspectives of women and minorities in their coursework (Milem, 2001).
- An analysis of two longitudinal studies, one using data from the Cooperative Institutional Research Program (CIRP), a national survey conducted by the Higher Educational Research Institute on more than 11,000 students from 184 institutions in 1985 and 1989, and one on approximately 1500 students at the University of Michigan conducted in 1990 and 1994, 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” (Gurin, 1999; 2002).
- Another major study used data from the National Study of Student Learning (NSSL) to show that both in-class and out-of-class interactions and involvement with diverse peers fostered critical thinking. This study also showed 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 (Pascarella et al., 1996).

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 (Smith et al., 1997). **Some examples are:**

- A national longitudinal study, conducted by the Higher Educational Research Institute at UCLA, involving 25,000 undergraduates attending 217 four-year colleges and universities in the late 1980s showed that institutional policies emphasizing diversity of the campus community, inclusion of themes relating to diversity in faculty research and teaching, and opportunities for students to confront racial and multicultural issues in the classroom and in extracurricular settings had uniformly positive effects on students’ cognitive development, satisfaction with the college experience, and leadership abilities (Astin, 1993).
- Using the “Faculty Classroom Diversity Questionnaire,” a comprehensive survey of faculty attitudes toward and experiences with ethnic and racial diversity on campus, researchers found that more than 69 percent of approximately 500 faculty respondents in a randomly selected sample of 1,210 faculty from Carnegie Classified Research I institutions believed that all students benefited from learning in racially and ethnically diverse environments; that such environments exposed students to new perspectives and encouraged them to examine their

own perspectives. More than 40 percent of respondents believed diversity fostered interactions that helped develop critical thinking and leadership skills (Maruyama and Moreno, 2000). Another survey found that more than 90% of 55,000 faculty respondents believed that a racially and ethnically diverse campus enhanced students' educational experiences (Milem and Hakuta, 2000).

- A 1993-94 survey of 1,215 faculty in doctoral-granting departments of computer science, chemistry, electrical engineering, microbiology, and physics showed that women faculty play an important role in fostering the education and success of women graduate students (Fox, 2003).

Challenges of diversity

Despite the benefits that a diversified faculty, staff, and student body offer to a campus, diversity also presents considerable challenges that must be addressed and overcome. Some examples include:

- Numerous studies show 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, and overall job satisfaction (Allen et al., 2002; Aguirre, 2000; Astin & Cress, 2003; Foster et al., 2000; Milem & Astin, 1993; MIT Committee on Women Faculty, 1999; Riger, 1997; Somers, 1998; Task Force on the Status of Women Faculty in the Natural Sciences and Engineering at Princeton, 2003; Trower & Chait, 2002; Turner, 2002; Turner & Myers, 2000; University of Michigan Faculty Work-Life Study

Report, 1999; Study of Faculty Worklife at the University of Wisconsin - Madison).

- A recent study of minority faculty in universities and colleges in eight Midwestern states (members of the Midwestern Higher Education Commission) showed that faculty of color experience exclusion, isolation, alienation, and racism in predominantly white universities (Turner and Myers, 2000).
- Minority students often feel isolated and unwelcome in predominantly white institutions and many experience discrimination and differential treatment. Minority status can result from race, ethnicity, national origin, sexual orientation, disability and other factors (Amaury & Cabrera, 1996; Cress & Sax, 1998; Hurtado, 1999; Rankin, 1999; Smedley et al., 1993; Suarez-Balcazar et al., 2003).
- Women students, particularly when they are minorities in their classes, may experience "a chilly climate" – which can include sexist use of language; presentation of stereotypic and/or disparaging views of women; differential treatment from professors; and sexual harassment (Crombie et al., 2003; Foster 1994; Hall & Sandler, 1982, 1984; Sands, 1998; Swim et al., 2001; Van Roosmalen, 1998; Sandler & Hall, 1986; Whitt et al, 1999).
- Studies show that the 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 simply avoid interactions with minorities (Plant & Devine, 2003).

Influence of Unconscious Assumptions and Biases

Research studies show that people who have strong egalitarian values and believe that they are not biased may nevertheless unconsciously or inadvertently behave in discriminatory ways (Dovidio, 2001). A first step towards improving climate is to recognize that unconscious biases, attitudes, and other influences 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 based entirely on merit and on the quality of their work and the nature of their achievements, copious research shows that every one of us brings a lifetime of experience and cultural history that shapes our interactions with others.

The results from controlled research studies in which people were asked to make judgments about subjects demonstrate the potentially prejudicial nature of the many implicit or unconscious assumptions we can make. Examples range from physical and social expectations or assumptions to those that have a clear connection to the environments in which we work.

Examples of common social assumptions/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 (Biernat et al., 1991).
- When shown photographs of men with similar athletic abilities, evaluators rated the athletic ability of African American men higher than that of white men (Biernat et al., 1991).
- Students asked to choose counselors from among a group of applicants of marginal qualifications more often chose white candidates than African American candidates with identical qualifications (Dovidio & Gaertner, 2000).

These studies show how generalizations that may or may not be valid can be applied to the evaluation of individuals (Bielby & Baron, 1986). In the study on height, evaluators applied the statistically accurate generalization that men are usually taller than women to their estimates of the height of individuals who did not necessarily conform to the generalization. If we can inaccurately apply generalizations to characteristics as objective and 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 generalization is 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 they were told an African American provided the definitions than if they were told that a white person provided them (Biernat et al., 1991).
- When asked to assess the contribution of skill and 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 (Deaux & Emswiller, 1974).
- 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 gave all their time and attention to their judgments, which rarely occurs in actual work settings (Martell, 1991).
- Evidence suggests that perceived incongruities between the female gender role and leadership roles cause two types of disadvantage for women: (1) ideas about the female gender role cause women to be perceived as having less leadership ability than men and consequently diminish women's rise to leadership positions, and (2) women in leadership positions receive less favorable evaluations because they are perceived to be violating gender norms. These perceived incongruities lead to attitudes that are less positive toward female than male leaders (Eagly & Karau, 2002; Ridgeway, 2001).
- A study of nonverbal responses of white interviewers to black and white interviewees showed that white interviewers maintained higher levels of

visual contact, reflecting greater attraction, intimacy, and respect, when talking with whites and higher rates of blinking, indicating greater negative arousal and tension, when talking with blacks (Dovidio et al., 1997).

Examples of assumptions or biases in academic contexts:

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

- A study of over 300 recommendation letters for medical faculty hired at a large American medical school in the 1990s found that letters for female applicants differed systematically from those for males (Trix & Psenka, 2002).
- In a national study, 238 academic psychologists (118 male, 120 female) evaluated a résumé randomly assigned a male or a female name. Both male and female participants gave the male applicant better evaluations for teaching, research, and service and were more likely to hire the male than the female applicant (Steinpreis et al., 1999).
- A study of postdoctoral fellowships awarded by the Medical Research Council in Sweden found that women candidates needed substantially more

publications to achieve the same rating as men, unless they personally knew someone on the panel (Wenneras & Wold, 1997).

- In a replication of a 1968 study, researchers manipulated the name of the author of an academic article, assigning a name that was male, female, or neutral (initials). The 360 college students who evaluated this article were influenced by the name of the author. They evaluated the article more favorably when written by a male than when written by a female. Questions asked after the evaluation was complete showed that bias against women was stronger when evaluators believed that the author identified only by initials was female (Paludi & Bauer, 1983).

Biases and assumptions can influence interaction between colleagues in the following ways:

- Women and minorities may be subject to higher expectations in areas such as number and quality of publications, name recognition, or personal acquaintance with a committee member.
- Colleagues from institutions other than the major research universities that have trained most of our faculty may be under-valued. Opportunities to benefit from the experiences and expertise of colleagues from other institutions, such as historically black universities, four-year colleges, government, or industry, who can offer innovative, diverse, and valuable perspectives on research, teaching, and the functioning of the department, may consequently be neglected.

- The work, ideas, and findings of women or minorities may be undervalued, or unfairly attributed to a research director or collaborators despite contrary evidence in publications or letters of reference.
- The ability of women or minorities to run a research group, raise funds, and supervise students and staff may be underestimated, and may influence committee and teaching assignments.
- Assumptions about possible family responsibilities and their effect on a colleague's career path may negatively influence evaluation of merit, despite evidence of productivity and may affect committee and teaching assignments.
- Negative assumptions about whether female or minority colleagues "fit in" to the existing environment can influence interactions.

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