

# **Multi-cultural Awareness Matters:** More Engaged Communities More Robust Knowledge

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# Why are we talking about “multi-cultural awareness” now?

The student population in the U.S. has shifted and will continue to do so. Many studies report that the college student population includes many more adult students, students of color, first-generation students, international immigrant students, students from less-advantaged families, and students who work.

Today's college students. (n.d.) Retrieved from <https://postsecondary.gatesfoundation.org/what-were-learning/todays-college-students/>.

# Why are we talking about “multi-cultural awareness” now?

In addition, major funders of research, teaching, and outreach initiatives—federal agencies and philanthropic organizations alike—have recognized these demographic shifts and have become active in funding projects that reach out to and support these populations.

Diversity Initiatives. (n.d.) National Science Foundation. Retrieved from <https://www.nsf.gov/od/odi/diversity.jsp>.

NIH Diversity Offices. (2018, October 9). Retrieved from <https://diversity.nih.gov/programs-partnerships/nih-diversity-offices>.

# What is “multi-cultural” awareness?

People talk about multi-cultural awareness in higher education through a variety of lenses.

Three terms are commonly used to talk about cultural differences:

**\*\*\*diversity\*\*\***

**\*\*\*equity\*\*\***

**\*\*\*inclusion\*\*\***

# What is “multi-cultural” awareness?

The Independent Sector, a national organization that brings together nonprofits, foundations, and corporations to advance the common good, offers clear definitions for these important concepts.

Kapila, M., Hines, E., Searby, M. (2016, October 6). Why diversity and inclusion matter. Retrieved from <https://independentsector.org/resource/why-diversity-equity-and-inclusion-matter/>

# Diversity

“Diversity includes all the ways in which people differ, encompassing the different characteristics that make one individual or group different from one another.”

When people talk about diversity, they are often talking about race, ethnicity, gender, age, national origin, dis/ability, sexual orientation, education level, and socio-economic status.

At the same time, it is also important to think about “diversity of thought: ideas, perspectives, or values.”

# Equity

“Equity is the fair treatment, access, opportunity, and advancement for all people, while at the same time striving to identify and eliminate barriers that have prevented the full participation of some groups.”

Addressing equity issues means assessing and changing institutional or organizational features—including procedures, processes, and resource distribution—that inhibit full participation by some groups.

# Inclusion

“Inclusion is the act of is creating environments in which any individual or group can be and feel welcomed, respected, supported, and valued to fully participate.”

It is important to understand that an inclusive climate feels welcoming—in both word and deed—to a broad range of participants, including those who are underrepresented in organizations or institutions.

There is a key distinction between “diversity” and “inclusion”: “while an inclusive group is by definition diverse, a diverse group isn’t always inclusive.”

# Why do people get involved in diversity, equity, and inclusion issues in higher education?

Faculty and staff in higher education get involved for a variety of reasons.

\*\*\*rectifying a history of “under-representation” and “under-service”

\*\*\*improving learning outcomes

\*\*\*preparing students for diverse workforce

# Rectifying a history of “under-representation”

Data show that women and some racial and ethnic groups continue to be under-represented in STEM fields.

	Percent of total population	Percent of science and engineering workforce
White male	32.1	51
White female	32.2	18
Hispanic male	8.1	4
Hispanic female	7.7	2
Black male	5.8	3
Black female	6.5	2

Guterl, F. Where are the data. *Scientific American*, 311(4), 40-41.

# Rectifying the past (and the present)

In addition, many students from under-represented populations who start college as STEM majors do not complete degrees.

\*\*\*33% of college students who enter college interested in studying STEM are underrepresented minorities.

\*\*\*16% of baccalaureate degree recipients in STEM are underrepresented minorities

\*\*\*10% of PhDs in STEM are underrepresented minorities.

24 institutions committee to diversity and inclusion through 2017 HHMI inclusive excellence initiative. (2017, June 7). Retrieved from <https://www.hhmi.org/news/24-institutions-commit-diversity-and-inclusion-through-2017-hhmi-inclusive-excellence>

# Improving Learning Outcomes

Studies show that diverse learning environments improve educational outcomes:

**\*\*\*active thinking**

**\*\*\*intellectual engagement**

**\*\*\*improved problem-solving and critical thinking**

Gurin, P., Dey, E., Hurtado, S., & Gurin, G. Diversity and higher education: Theory and impact on educational outcomes. *Harvard Educational Review*, 72(3), 330-367.

# Improving Learning Outcomes

Studies show that diverse learning environments also improve social outcomes:

**\*\*\*perspective-taking**

**\*\*\*mutuality and reciprocity**

**\*\*\*acceptance of conflict as normal**

**\*\*\*capacity to perceive commonalities and differences**

Gurin, P., Dey, E., Hurtado, S., & Gurin, G. Diversity and higher education: Theory and impact on educational outcomes. *Harvard Educational Review*, 72(3), 330-367.

# Preparing students for diverse workforce

Like our society, the workforce is becoming increasingly diverse.

Hispanics, Asians, and other “minority” groups are expected to increase their numbers in the workforce for the foreseeable future.

Labor force projections to 2024: The labor force is growing but slowly. (2015, December). Retrieved from <https://www.bls.gov/opub/mlr/2015/article/labor-force-projections-to-2024.htm>

# a fourth reason for engaging diversity, equity and inclusion

For some time, research has shown that diverse teams lead to better outputs and increased productivity.

- \*\*\*increased innovation and creativity
- \*\*\*enhanced problem-solving
- \*\*\*better decision-making

# Better outputs/increased productivity

“Decades of research by organizational scientists, psychologists, sociologists, economists and demographers show that socially diverse groups (that is, those with a diversity of race, ethnicity, gender and sexual orientation) are more innovative than homogeneous groups.”

Phillips reports on several studies that demonstrated this.

Phillips, K. W. (2014). How diversity works. *Scientific American* 311(4), 43-47.

# How does diversity improve science?

Freeman and Huang show that diverse teams produce higher quality research papers.

“...[research] teams with greater ethnic diversity generate papers that make more of a splash in the scientific literature.”

\*\*\*greater number of citations

\*\*\*higher impact journals

Freeman, R. B. and Huang, W., (2014). Collaboration: Strength in diversity.” *Nature News*, 513, 305.

# How does diversity improve science?

“In other words, greater diversity of authorship might boost either the quality of the paper or the number of people who notice it, or both.”

\*\*\*higher quality of work

\*\*\*broader professional networks

Freeman, R. B. and Huang, W., (2014). Collaboration: Strength in diversity.” *Nature News*, 513, 305.

# How does diversity improve science?

Medin, Lee, and Bang talk about another benefit.

Scientists from diverse experiences and perspectives may actually produce different knowledge.

Medin, D., Lee, Carol D., & Bang, M. (2014). Points of view affects how science is done. *Scientific American*, 311(4), 44-45.

# How does diversity improve science?

Cultural differences influence

\*\*\*what we choose to study

\*\*\*our perspective when we approach scientific phenomena

\*\*\*our strategies for studying them

Medin, D., Lee, Carol D., & Bang, M. (2014). Points of view affects how science is done. *Scientific American*, 311(4), 44-45.

# How does diversity improve science?

For example, in the 20<sup>th</sup> century:

Male primatologists focused on competition among males for access to females; little attention was paid to sexual/dominance behavior by female primates until female biologists began doing field observations.

US scientists were interested in male dominance and mating; Japanese scientists were interested in status and social relationships.

Different perspectives/viewpoints may produce different knowledge.

Medin, D., Lee, Carol D., & Bang, M. (2014). Points of view affects how science is done. *Scientific American*, 311(4), 44-45.

# How does diversity work?

Diversity brings different perspectives, different information to the table.

Anticipating that others may not share our perspectives, experiences, and information, we work harder in diverse environments—both cognitively and socially. And this work can lead to better outcomes.

Phillips, K. W. (2014). How diversity works. *Scientific American* 311(4), 43-47.

# How does diversity work?

Researchers have been shown to think differently and often more productively when they work in diverse groups.

\*\*\*they expect greater challenges to their ideas

\*\*\*they may have to adjust to different group dynamics

\*\*\*they may have to work through linguistic differences

Diversity alters their work, and often productively so.

Freeman, R. B. and Huang, W., (2014). Collaboration: Strength in diversity." *Nature News*, 513, 305.

# How do we create climates and cultures that support diversity and inclusion?

Emerging evidence in experimental social psychology and organizational sociology suggests there are strategies that can support diversity in our work spaces.

Plaut, V. (2014) Inviting everyone in. *Scientific American*, 311(4), 52-57.

# How do we create climates and cultures that support diversity and inclusion?

“All too often, our efforts have been focused on ‘fixing the student’ while not critically examining the institutional culture and learning environment. The scientific community needs to shift the locus of responsibility from the students to the schools.”

--David Asai, HHMI

Asai, D. (n.d.) A new strategy to build capacity for creativity. Retrieved from <https://www.hhmi.org/content/new-strategy-build-capacity-creativity-science-education>.

# How do we create climates and cultures that support diversity and inclusion?

Strategy 1: Don't ignore cultural differences.

\*\*\*In a number of studies of “color blind” departments, nonwhite employees were less engaged and perceived more bias.

\*\*\*The opposite was true in departments where cultural differences were acknowledged.

Plaut, V. (2014) Inviting everyone in. *Scientific American*, 311(4), 52-57.

# How do we create climates and cultures that support diversity and inclusion?

## Strategy 2: Bolster belonging.

“Research in social psychology suggests that for underrepresented students, a sense of belonging is a key driver of participation and performance.”

Plaut, V. (2014) Inviting everyone in. *Scientific American*, 311(4), 52-57.

# How do we create climates and cultures that support diversity and inclusion?

Strategy 3: Commit to changing the organizational structure in order to support diversity, equity, and inclusion.

Plaut, V. (2014) Inviting everyone in. *Scientific American*, 311(4), 52-57.

## **In sum...**

**“New Majority”:** Student populations on college campuses are more diverse.

**New possibilities:** Diversity offers distinct advantages.

**New orientation:** Institutions need to build capacity.

# Questions to consider

Shifting student population: Are you seeing this shifting population at your institution?

If so, how might it impact what you do in the classroom or laboratory?

# Questions to consider

Shifting workforce population: Are you seeing this shifting population in your discipline or industry?

If so, how might it impact what you do in the classroom or laboratory?

# Questions to consider

Organizational change: What are some of the changes your institution could make to more fully support student success for those students who have diverse perspectives, backgrounds, and experiences to offer your discipline, your industry, your institution?

**Thank you!**

# References

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