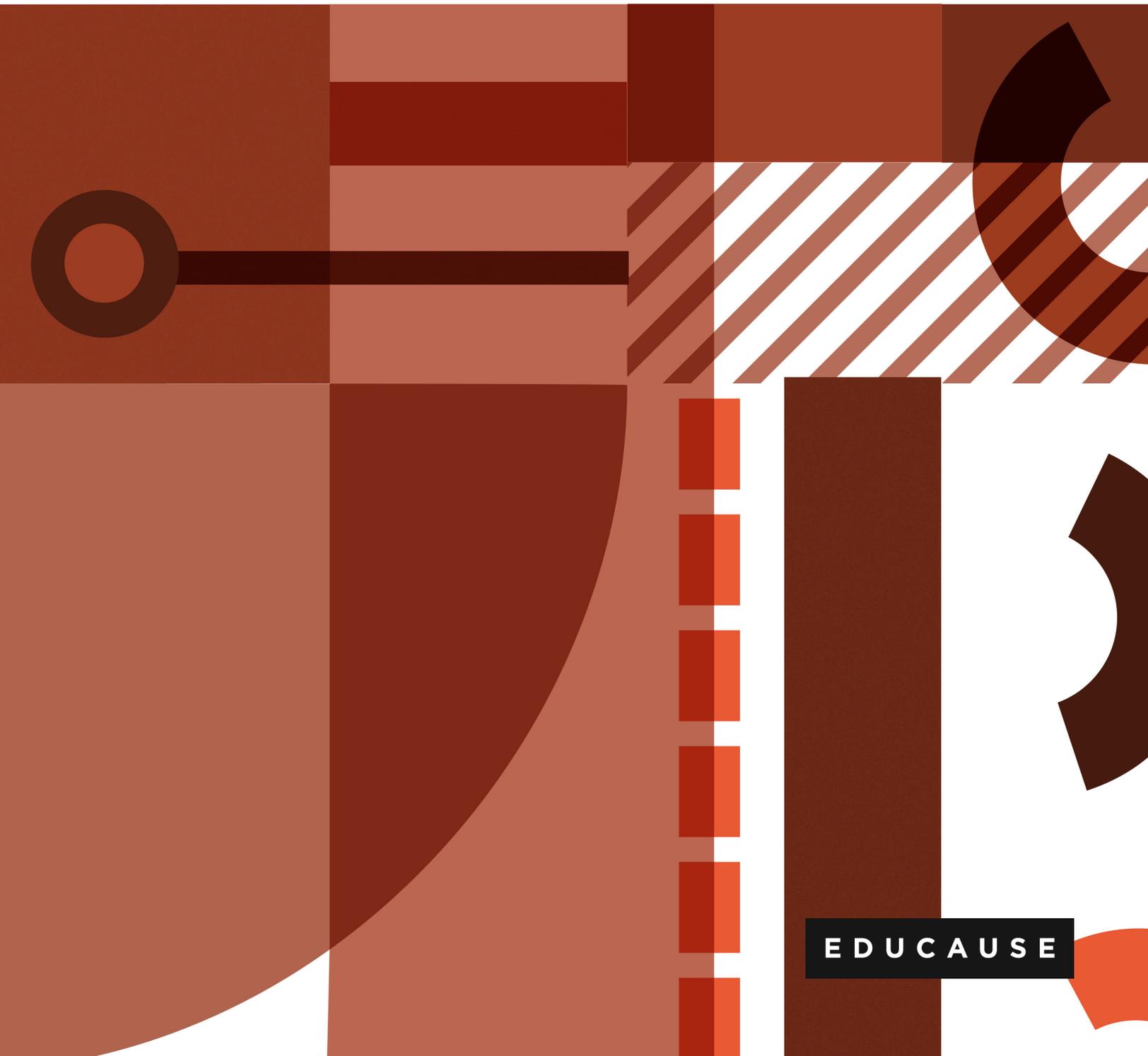


# Diversity, Equity, and Inclusion in the IT Workforce, 2019



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## EDUCAUSE

EDUCAUSE is a higher education technology association and the largest community of IT leaders and professionals committed to advancing higher education. Technology, IT roles and responsibilities, and higher education are dynamically changing. Formed in 1998, EDUCAUSE supports those who lead, manage, and use information technology to anticipate and adapt to these changes, advancing strategic IT decision making at every level within higher education. EDUCAUSE is a global nonprofit organization whose members include US and international higher education institutions, corporations, not-for-profit organizations, and K-12 institutions. With a community of more than 99,000 individuals at member organizations located around the world, EDUCAUSE encourages diversity in perspective, opinion, and representation. For more information please visit [educause.edu](http://educause.edu).

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## Introduction

Research has shown the numerous benefits<sup>1</sup> of having a diverse and inclusive workforce, from having a variety of cultural perspectives to increased employee creativity, innovation, and productivity.<sup>2</sup> Despite these benefits, higher education IT is not keeping pace with the larger US workforce in its employment of underrepresented groups.<sup>3</sup> EDUCAUSE has made diversity, equity, and inclusion (DEI) a priority and is committed to promoting professional growth opportunities to individuals of all identities and backgrounds. To date, nearly 450 CIOs have signed a commitment to “promote diversity, equity, and inclusion (DEI) for the benefit of the technology profession in [their] institution and in the profession generally.” As part of our continuing efforts to support IT professionals and institutions in addressing the challenges related to this strategic mission, we asked the 1,592 respondents in our 2019 Higher Education Workforce Landscape study several DEI-related questions to learn more about how IT professionals in higher education perceive DEI issues and efforts at their institutions. Understanding their perceptions and experiences is important as higher education IT organizations work toward fostering a workplace where employees of all identities and cultures feel welcomed and included.

### EDUCAUSE’s DEI Vision

**Diversity:** Our professional community reflects myriad demographic characteristics, identities, perspectives, and backgrounds.

**Equity:** All members of our professional communities have access to opportunity and advancement because we have promoted fair treatment and removed barriers that have prevented participation by underrepresented groups.

**Inclusion:** All colleagues in our thriving community experience a sense of belonging, high levels of engagement, and shared respect.

See Diversity, Equity, and Inclusion for more information and resources.

## Key Findings

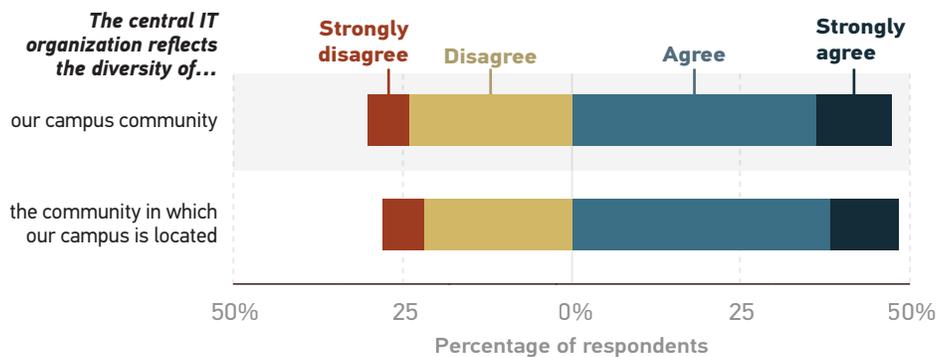
- **The higher education IT community is split on whether the IT workforce reflects the community's diversity.** A plurality (47%) of respondents said that their IT organization reflects the diversity of their campus community and the community in which the campus is located, but nearly a third disagreed. Millennials and individuals with disabilities reported higher rates of disagreement, and more women than men said the diversity in their central IT organizations was not reflective of their on- and off-campus communities.
- **DEI workshops and/or training works.** Employees who are *encouraged* to participate in and/or *do* actually participate in DEI workshops are more likely to see DEI as an important contributor to their professional development in their current position. The more that employees think DEI training contributes to their professional development, the more likely they are to consider DEI to be a priority for themselves and their colleagues, supervisors, units, IT organizations, institutions, and communities.
- **Over half of IT professionals in higher education have participated in a DEI workshop or training program in the past two years.** However, participation is not being widely promoted from the top down. Only about a third of respondents reported that their supervisors encouraged them to participate in a DEI workshop or training program.
- **Most respondents believe participating in a DEI workshop or training program would contribute to their professional growth.** Women, nonwhites, and LGBTQ<sup>4</sup> members of the higher education IT workforce are even more likely to feel this way. These results align with other studies that have shown that members of underrepresented groups are more supportive of diversity programs than their counterparts.

## The IT Workforce Is Diverse ... for Some

The Delphic maxim to “know thyself,” a critical aspect of Socratic thought, suggests that in order to know one’s place in the world and how to relate to others, we need to reflect critically on who we are and how our own unconscious biases<sup>5</sup> might be shaping our perceptions and actions. Higher education IT is at a crossroads in terms of addressing a host of issues related to DEI. But to understand how to approach the issue of improving diversity, establishing equitable policies, and becoming more inclusive, higher education IT needs to “know itself” and understand the current workforce landscape.

In addition to reporting on the composition of the higher education IT workforce, as we did in our report *The Higher Education IT Workforce Landscape, 2019*, asking higher education IT employees whether their unit reflects the diversity of their campus or community provides a set of data points that help us understand how well IT knows itself. Whether or not the responses reflect the *actual* alignment of the community, campus, and unit on various demographics is beside the point here; the perception of whether an IT unit successfully mirrors the broader sociological context from which it is derived and in which it is nested is what really matters in this instance. If individuals do not see the community and campus reflected in the workplace, then this is a problem.

Almost half of respondents agreed that their central IT organization reflects the diversity of their campus community (47%) and the community where their campus is located (49%) (figure 1). On the other hand, nearly a third of our respondents believe otherwise; 29% disagreed that their IT organization mirrors their campus, and 28% said the same for their campus vicinity. There were no significant differences in these perceptions of diversity across ethnicities or for employees who identified as LGBTQ; both of these groups generally agreed that their central IT units are a reflection of both their larger campus and the surrounding communities. However, we did observe an association in these areas based on other demographic factors. Millennials reported higher rates of disagreement in these areas, as did individuals with disabilities. And we found a highly significant difference based on gender: significantly more women than men said the diversity in their central IT organizations was not reflective of their on- and off-campus communities.



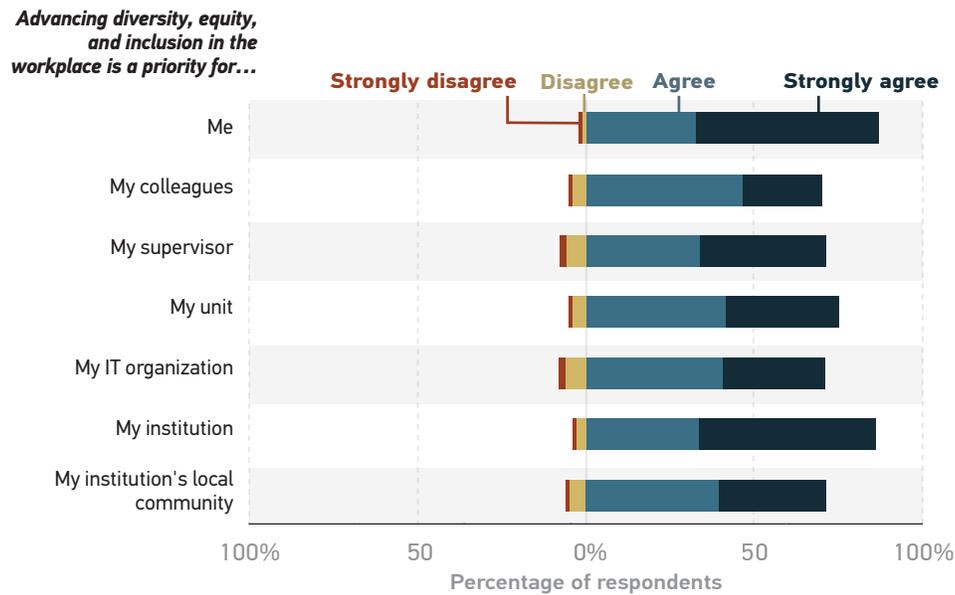
**Figure 1. Perceptions of central IT organizational diversity compared to campus and community**

These findings are better understood when we consider what we learned about the makeup of the IT workforce in the 2019 IT workforce in higher education study.<sup>6</sup> In our sample, Baby Boomers and Gen Xers outnumbered Millennials, so their responses about diversity in their IT organization in comparison to other communities could point to this generational disparity. The same could also be true for the differences we observed between genders; women made up only 38% of the higher education IT workforce study respondents. And only 8% of the workforce reported having a disability or impairment.

Individuals in a dominant group may believe the workforce to be more diverse than it actually is. Other researchers have explored similar workplace issues and the differences between male and female perceptions. For example, findings from the 2017 Women in the Workplace report revealed that almost half of men—and a third of women—believed women were well represented in leadership positions in organizations where only 1 in 10 among the senior ranks were female.<sup>7</sup> The report argues that we have diversity “blind spots” that are perpetuated by the status quo, and this can be a problem; that is, if the perception of diversity is better than the reality, then the urgency to implement change may very well wane—or worse, stall entirely. These perception differences among men and women about what constitutes diversity and how much is enough may also exist in the higher education IT workforce. Offering training on unconscious bias or other DEI-related issues can help IT organizations address diversity blind spots and challenge the status quo idea that having only one or just a few employees from underrepresented groups is enough to make a unit diverse. The 2017 Women in the Workplace report also recommends setting targets for gender representation across ranks, tracking those data, and sharing those metrics with all employees to create accountability and foster results.

## DEI a Priority for Self, Less So for Others

We asked higher education IT employees to tell us how much they thought DEI in the workplace is a priority for themselves, their colleagues, various parts of the institution, and the local community. For every entity we asked about, more than 70% of respondents agreed that DEI in the workplace is a priority (figure 2). However, individual respondents rated themselves and their institution significantly higher in terms of their prioritization of DEI compared with their colleagues, supervisor, unit, organization, and community.

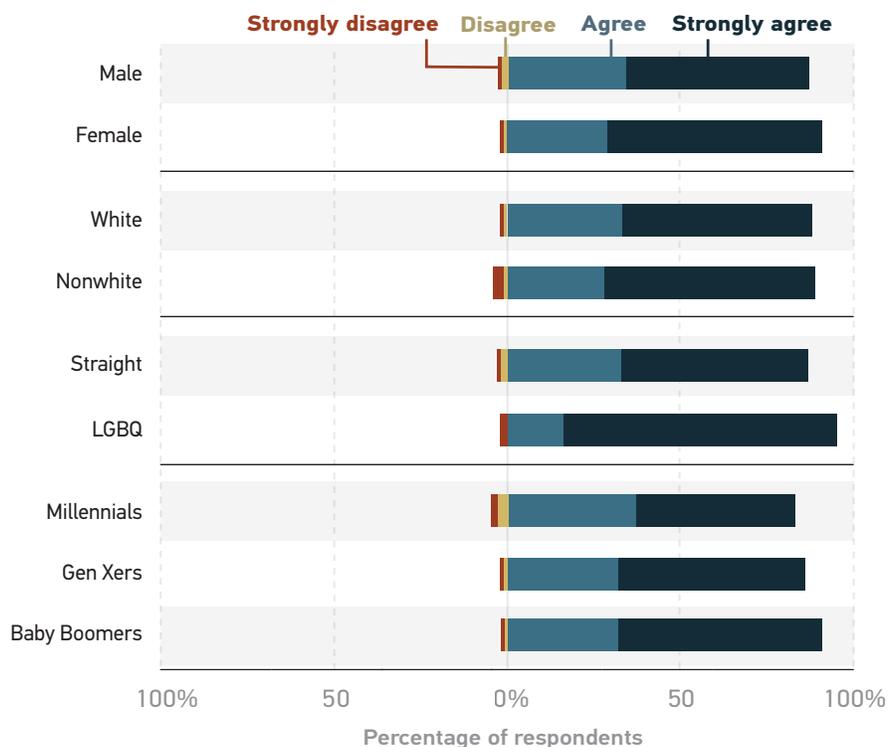


**Figure 2. Levels of agreement that advancing DEI is a priority for oneself and others**

There are at least three possible explanations for these observed differences in how individuals view themselves and others around them. It could be that the findings are simply true to the sample; that is, the individuals who responded to our survey really do prioritize and see their institution as prioritizing the advancement of DEI in the workplace more than their peers, managers, IT units, and communities. Another explanation suggests the possibility of a Lake Wobegon<sup>8</sup> effect, a condition in which everyone overestimates their own capabilities or tendencies in relation to others. This form of cognitive bias, scientifically known as illusory superiority, also allows for the diminishing of others on the same traits in order to elevate one’s own standing. A third, related phenomenon that might help explain the significantly higher ratings of DEI prioritization for oneself and one’s institution is that of social desirability bias, in which survey respondents answer questions in ways that may be viewed more

positively by the interviewer. This may lead to an overreporting of desirable behavior and an underreporting of undesirable behavior and can sometimes include the diminishing of others in order to elevate one’s own desirability. If being seen as supporting the advancement of DEI in the workplace is a desirable trait, our results may be biased in the direction of agreement. Despite the potential presence of these forms of bias in our responses, however, our data suggest that most higher education IT employees believe that their colleagues, institution, and community support the ideals of DEI in practices, policies, and outcomes.

When we take a deeper dive into the data, we find that advancing DEI in the workplace is more of a priority for female, nonwhite, LGBQ, and older IT professionals than for male, white, straight, and younger professionals (figure 3). While a supermajority of respondents overall agreed or strongly agreed that DEI is a priority for them, the intensity of that prioritization appears to be higher for nontraditional groups. For example, more women (62%) strongly agreed that advancing DEI is a priority for them than do men (53%); those who identify as LGBQ (79%) are more likely to strongly agree than those who identify as straight (54%). Whites (88%) and nonwhites (89%) are practically identical in terms of their overall agreement about DEI’s priority for them, but more nonwhites (61%) than whites (55%) strongly agreed.



**Figure 3. Levels of agreement that advancing DEI is a priority for oneself, by key demographic group**

The one surprising finding among these comparisons is that older IT professionals prioritize advancing DEI more than do younger ones. DEI might be construed as being based upon a set of progressive or postmaterialist<sup>9</sup> values that emphasize self-expression and quality of life, values that tend to be closely associated with younger generations. Thus, that Millennials prioritize DEI at levels significantly lower than Boomers seems counterintuitive. However, Boomers might see the ageism that leads to their being forced out of long-held positions or being passed over in favor of younger, more affordable talent as part and parcel of a DEI issue. We may also be observing the trickle-down effect caused by the tendency of older generations to hold more higher-ranking positions and therefore feel they have a greater ability to influence the entire workplace.

## Despite Limited Encouragement, IT Staff Attend DEI Training

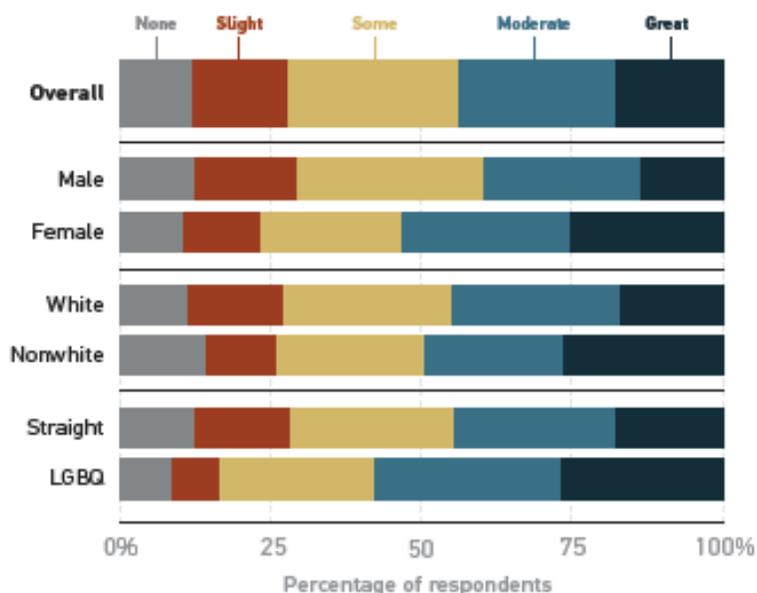
One of the most basic tools IT leaders have available is to encourage and/or to provide professional development opportunities for DEI training. Many colleges and universities have created or are considering the creation of a Chief Diversity Officer (CDO) position to increase numbers of underrepresented groups on campus via recruitment and retention efforts for students, faculty, and staff. Some of these efforts include homegrown DEI training programs. For institutions that do not have a CDO or internal DEI training programs, there are any number of groups and organizations that can be contracted to provide such services.

Providing training on DEI topics is an important part of moving the needle toward cultural change. And based on our findings, many IT professionals are taking advantage of these programs. More than half (57%) of our respondents told us they participated in a DEI workshop or training program in the past two years, and this was consistent across genders and ethnicities. This is promising, as it suggests that either institutions are offering workshops to employees or employees are seeking out these learning opportunities on their own—maybe both. Our results indicate, however, that although the majority have attended a training program, participation is not being widely promoted from the top down. Only about a third (36%) of respondents reported that their supervisors encouraged them to participate in a DEI workshop or training program.

Why might so few managers be encouraging their staff to participate in DEI training? One reason might be that the regular workflow of an IT unit simply cannot accommodate the time and resources required to incorporate DEI measures or attend outside programs. Another might be that leadership simply does not see DEI as an IT issue that can and/or should be addressed by the IT organization. Yet another reason might be that managers prioritize other, more technical professional development opportunities for their staff to improve IT skill sets germane to carrying out the work to be done.<sup>10</sup> Finally, if DEI initiatives originate from other parts of the institution, managers may feel as if the topic is already covered elsewhere and does not need to be replicated within the IT unit. Regardless, we suggest that managers seriously consider making the time and space available for their staff—either as individuals or as a team—to engage in DEI training. We know that DEI training is most effective when leadership makes it a priority, articulates clearly the benefits of such training,<sup>11</sup> and offers flexible and multiple opportunities for staff to attend. Fostering an inclusive work environment starts with the organizational leaders, and, as we have noted previously, should not be considered an HR-only responsibility.<sup>12</sup>

## DEI Training Benefits Underrepresented Groups

If IT leaders and managers were to create DEI professional development opportunities, how might higher education IT staff respond? Our results suggest that many would welcome it. Most of the respondents in our study (73%) believe that participating in a DEI workshop or training program (regardless of whether they have done so) would make at least some contribution to their professional growth in their current position (figure 4).



**Figure 4. Perceived contributions of a DEI workshop or training to professional growth**

Our data also suggest that employees in underrepresented groups in higher education IT consider DEI programming especially beneficial: larger proportions of women, ethnic minorities, and members of the LGBQ community found more value for professional growth in DEI training than did their peers. These findings make sense when we consider that those not in a dominant social group may have experienced discrimination themselves and thus better understand and appreciate the goals for DEI programming. Members of underrepresented groups are also more likely to directly benefit from the positive application and outcomes of successful DEI training, which can foster a more equitable and inclusive workplace.

Research on different kinds of diversity policies has yielded similar results and demonstrates that race and gender can influence beliefs about workplace

inequality. A 2019 study showed that nonwhites and women were significantly more supportive of diversity policies—which included training programs—than whites and men.<sup>13</sup> The study also found that one’s beliefs about inequality were predictors of support for workplace diversity policies; women and nonwhites more frequently than their counterparts believed discrimination causes inequalities. In addition, policies that are communicated in terms of addressing discrimination had more support than those that are framed with the goal of increasing diversity. As a result, DEI training programs that are designed to educate and increase awareness about gender, race, and class discrimination are effective ways to encourage more employee support,<sup>14</sup> which could have greater impacts on professional growth.

Studies also suggest that voluntary training has more support by employees<sup>15</sup> and can be more effective than mandated programs in decreasing bias and increasing the representation of some minority groups in the workplace.<sup>16</sup> Mandates can be met with resistance, and research suggests that required participation can result in no improvement or declines in minority representation,<sup>17</sup> and even increased hostility toward other groups.<sup>18</sup> Voluntary DEI training allows employees to choose to participate, which can in turn decrease resistance and offer more space for cultural change in the workplace.

## DEI Training Works

If higher education IT professionals see DEI as a priority for themselves, others, and their institutions; are encouraged to participate in DEI workshops; and see DEI training as something that can contribute to their professional growth, what can we say about the actual impact of DEI training on the individuals who participate in those opportunities? According to one study, a meta-analysis of 260 independently published projects spanning 40 years of research assessing the impact of diversity training, those who participate in DEI training can and do experience improvements in their understanding of DEI and shifts in their behavior.<sup>19</sup> The greatest and most enduring impact appears to be on the cognitive dimension in which participants acquire knowledge about issues related to DEI. Changes in behavior such as skill acquisition and judgment, and changes in attitudinal/affective learning such as attitudes about diversity, self-efficacy, and the capacity to perform, were smaller and appear to decay over time without reinforcement.

While our survey instrument was not designed to capture either cognitive or behavioral data on higher education IT professionals, our results do afford us the opportunity to explore the relationship between DEI training and the attitudinal/affective dimension. Specifically, we can explore the impact of DEI training on its affective contributions to professional growth and how that, in turn, shapes individuals' attitudes about the priority of DEI for themselves and, subsequently, others.

Using the advanced statistical method of structural equation modeling (figure 5), we identified the relationships among the variables in question, all of which are positive and statistically significant. Reading the figure left to right and top to bottom, we find that when higher education IT professionals are encouraged to attend a DEI workshop or training program, they are significantly more likely to actually participate in a DEI workshop and to agree that DEI training contributes to their professional growth. Additionally, actually participating in a workshop significantly contributes to the perception that DEI is important to professional growth in their current position. When IT professionals think that DEI workshops and/or training contributes to their professional growth, they are significantly more likely to see DEI as a greater priority for themselves. And, finally, the greater the prioritization of DEI for oneself, the more likely a person is to perceive DEI as a priority for one's colleagues, supervisors, units, IT organizations, institutions, and local communities. Our findings align well with the research in the field: DEI training has a positive and significant impact on the affective and attitudinal dispositions of higher education IT employees. In the simplest terms, DEI training works.



**Figure 5. A model of how DEI training impacts professional development and growth and becomes a priority for the individual and the wider community**

We should caution, however, that our results do not show an actual causal impact, as our data are not the results of quasi-experimental designs with baselines and posttests that measure particular quantities of interest. And, in keeping with research on the subject, we should caution against thinking that a single workshop or training event can solve all of the problems of DEI; that is, the relationships we find in our data are precisely the kind that the authors of the cited meta-analysis say will decay over time. Indeed, we recommend their key finding that DEI training should be “complemented by other diversity initiatives, targeted to both awareness and skills development, and conducted over a significant period of time.”<sup>20</sup> If anything, what our findings suggest is that IT leadership should encourage and support DEI workshops and training over an extended period of time for their employees as a *first step* toward changing the attitudes, beliefs, behaviors, and culture of their organization.

## Conclusion

Although the diversity of the higher education IT workforce is gradually improving, its current composition continues to be dominated by white, male, and older professionals. IT organizations that recognize the ways in which monocultural work environments stunt innovation, creativity, and effectiveness are at a clear advantage over those that fail to do so.<sup>21</sup> Fortunately, our data suggest that the workforce itself is primed to embrace DEI. Higher education IT employees see DEI as a priority in the workplace for themselves, their colleagues, their leaders, and their institutions. They view DEI training and workshops as a valuable contribution to their professional growth and participate in those professional development opportunities, with or without managerial encouragement. As a result, their attitudes, beliefs, and behaviors about DEI-related topics are changed, at least in the short term. What is needed to transform the technology workforce culture in higher education is for leadership to make DEI an explicit organizational priority, create frequent and enduring DEI professional development opportunities for their employees, and build organizational practices that support DEI in every part of the day-to-day work of IT professionals. To facilitate those efforts, EDUCAUSE is poised to help the higher education technology community build the capabilities needed to engender DEI with an aim of realizing a more diverse community of higher education IT professionals.

## Recommendations

- **Offer DEI training programs to address unconscious bias or other diversity “blind spots” to better align employee perceptions of diversity with organizational realities.** Track data related to underrepresented groups across ranks, and share these metrics with the workforce to raise awareness and promote accountability.
- **Make DEI education a priority by dedicating time and space for employees to engage in training, and communicate the benefits of these programs.** Offer employees multiple opportunities to attend, and plan workshops at various times to accommodate different schedules.
- **Allow participation in training to be voluntary to decrease resistance and increase the receptiveness to the importance of DEI messages.** IT leadership and managers can lead by example by participating in DEI training themselves and sharing widely the advantages of this professional development opportunity within and across units.
- **Encourage and support DEI training as a continuing, ongoing pursuit.** A one-time DEI workshop or training program is not a silver bullet. Combine training with additional initiatives that foster awareness of and sensitivity to issues of diversity, equity, and inclusion, and offer opportunities to develop skills in these areas to deepen the impact of the initiative. Pairing training with periodic assessment of the impact of DEI programs on staff attitudes and behaviors could help sustain these efforts.

## Methodology

Survey invitations were sent to 40,317 IT professionals in the EDUCAUSE database. A total of 1,592 respondents provided data that could be used for analysis, resulting in a response rate of 4%. Respondents were from all 50 US states (plus the District of Columbia, Puerto Rico, and Guam) and from 35 countries outside the United States; 815 institutions of higher education were represented. Non-US respondents made up 10% of the sample. Data collection took place in April and May of 2018.

## Acknowledgments

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## Notes

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2. Thomas Barta, Markus Kleiner, and Tilo Neumann, “[Is There a Payoff from Top-Team Diversity?](#)” *McKinsey Quarterly*, April 2012; Katherine W. Phillips, “[How Diversity Makes Us Smarter](#),” *Scientific American*, October 1, 2014; and “[Waiter, Is That Inclusion in My Soup? A New Recipe to Improve Business Performance](#),” Deloitte and the Victorian Equal Opportunity & Human Rights Commission, May 2013.
3. Joseph D. Galanek, Dana C. Gierdowski, and D. Christopher Brooks, *The Higher Education IT Workforce Landscape, 2019*, research report (Louisville, CO: ECAR, February 2019).
4. LGBTQ is an initialism that stands for lesbian, gay, bisexual, and queer. Transgender was not included in our questions regarding sexual orientation but was included in our question regarding gender identity.
5. Unconscious, or implicit, bias “is often defined as prejudice or unsupported judgments in favor of or against one thing, person, or group as compared to another, in a way that is usually considered unfair.” For more on what unconscious bias is and how to combat it, see [Unconscious Bias](#).
6. Galanek, Gierdowski, and Brooks, *The Higher Education IT Workforce Landscape, 2019*.
7. “[Women in the Workplace, 2017](#),” McKinsey & Company and Lean In, October 2017.
8. In the radio program *A Prairie Home Companion*, Garrison Keillor always closed his stories from Lake Wobegon with the descriptive tagline of the town’s being a place where “all the women are strong, all the men are good-looking, and all the children are above average.” Justin Kruger, “[Lake Wobegon Be Gone! The ‘Below-Average Effect’ and the Egocentric Nature of Comparative Ability Judgments](#),” *Journal of Personality and Social Psychology* 77, no. 2 (1999): 221–232.
9. For a basic overview, see [Postmaterialism](#).
10. Our data support this explanation, with managers encouraging each of the following professional development activities over that of DEI: attending a conference focused on higher education IT (52%); analyzing data to help inform strategic decisions (51%); reading about current IT news/developments (49%); reading about current higher education news/developments (45%); serving on a professional working group, task force, committee, or board (44%); delivering a presentation at one’s institution (42%); reading a higher education IT research report (41%); engaging in informal peer networking (40%); and giving advice as a mentor (39%).
11. Frank Dobbin and Alexandra Kalev, “[Why Diversity Programs Fail](#),” *Harvard Business Review*, July/August 2016.
12. D. Christopher Brooks, “[Why Isn’t DEI in the Top 10?](#)” *EDUCAUSE Review*, January 28, 2019.
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20. Ibid.
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