Mentoring in Higher Education IT, 2019

EDUCAUSE

Contents

Learn More

Access additional materials at The IT Workforce in Higher Education, 2019: CIOs, DEI, HR, Mentoring, and Salaries.

Authors

Joseph D. Galanek, EDUCAUSE
Shana Campbell, EDUCAUSE

Citation

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.

Thank You to Our
IT Workforce Research Sponsor

workday.
Built for the future.™

Platinum Partner

Introduction

Both individuals and organizations can benefit from mentoring. For institutions, it is a "relatively low-cost and high-reward" activity to increase engagement among employees and groom and retain institutional talent.[1] For individuals, engaging in mentoring is associated with higher compensation, increased career commitment and satisfaction, and more promotions.

Mentoring is an opportunity to grow a diverse workforce and ensure a viable and consistent talent pipeline. This is particularly important for higher education, whose IT workforce is getting older and has fewer Millennials, women, and minorities compared with the general U.S. workforce.[2] This report includes a particular focus on mentoring these underrepresented groups to provide insight into how higher education IT might recruit, retain, and grow professionals from these demographics.

By sharing these findings, we aim to raise awareness of the importance of and interest in mentoring among the higher education IT workforce to expand professional development opportunities across all organizational levels, improve retention, and increase the opportunities and growth for underrepresented groups.

Key Findings

- **Seventy-one percent of higher education IT mentors and 86% of mentees (or protégés) reported that mentoring had made a moderate or great contribution to their professional development.** About 60% of higher education IT mentors have aspirations for IT executive leadership. Fifty-one percent of mentees were in mentoring relationships described as "senior executive mentor, aspiring executive mentee," suggesting that mentees view mentoring relationships as a pathway to executive leadership. The most frequently cited benefit of mentoring (cited by around 70% of CIOs, managers, and staff) was having a "safe space/sounding board for problems and challenges."

- **Forty-one percent of those surveyed want to be in a mentoring relationship but are not currently in one.** Overall, more higher education IT employees are engaged as mentors than as protégés, and few employees have no interest in engaging in a mentoring relationship.[3]

- **One-third of all mentoring relationships developed from mentee requests.** This finding suggests that the responsibility likely is placed on mentees to initiate the relationship, which could contribute to the low numbers of higher education IT employees who are mentees and the high numbers of employees who desire to be in a mentoring relationship but are not.

- **Women are active in mentoring relationships at rates similar to those of men.** Although women are in the minority among higher education IT employees, their rate of engagement in mentoring indicates a strong need among this underrepresented population.

- **Women (31%) and men (34%) served as mentors at similar rates, and mentoring relationships most often are between members of the same gender.** Same-gender mentors can offer specific guidance and support in a male-majority field, but mixed-gender mentoring can contribute to a more inclusive working environment due to male mentors engaging with and promoting their female mentees.

- **Fifty-one percent of Millennial employees were not in a mentoring relationship but wanted to be.** Millennials expect to engage in mentoring within their workplace. To attract, retain, and grow talent, higher education IT needs to enable mentoring relationships for Millennial employees.

- **The majority of mentors (57%) and protégés (82%) work at the same institution.** CIOs had the largest percentage of mentees and mentors

working at another institution or outside higher education IT, likely due to career pathways of CIOs and the cross-institutional relationships that develop through their careers. Smaller institutions and BA and AA institutions, compared with other institution types, had larger numbers of mentees working at another institution, likely due to their smaller IT departments.

- **Forty percent of all mentoring relationships were characterized as peer mentoring, followed by mentees who aspire to executive positions and who have current executives as mentors (31%).** Peer mentoring can be a means for employees at the same career stage to support each other in their career goals. Engaging in a mentoring relationship may also be perceived as a pathway to IT executive leadership, attesting to the perceived importance of mentoring among higher education IT employees.

- **A majority of mentors (74%) and mentees (65%) met either once a week or once a month.** Navigating appropriate time frames for mentoring meetings may depend on the individual needs of both parties but should be incorporated into employees' workflow.

Types of Mentoring: Pick the One That Works for You

At EDUCAUSE we define mentoring as the sharing of expertise, values, skills, and perspectives. Mentors function as a catalyst—an agent who provokes a reaction that might not otherwise have taken place or speeds up the steps to a reaction.[4] As a catalytic function, mentoring embraces the approach of "let's work together to accomplish your goals and desires" while avoiding telling someone what to do. Mentoring also provides a safe environment for challenging conversations to facilitate powerful learning, providing an opportunity for both mentors and protégés to grow and build trust that leads to professional rewards.

Overall, mentoring has been traditionally envisioned as a formal relationship between a senior, experienced individual and a "newbie" or much less experienced individual in the workplace. However, there are other possible mentoring relationships, and people select whichever best suits their needs: formal mentoring, informal mentoring, group mentoring, reverse mentoring, or peer mentoring.

- **Traditional mentoring** is the most common relationship, wherein a senior professional provides guidance and coaching to a less experienced employee.

- **Formal mentoring** is organizationally focused and driven. This type of program operates in the confines of a specific structure, offering participants direct guidance for how to establish and work through their relationship. In addition, the organization is invested in the success of the relationship, while also creating buy-in, connections, and support that can directly influence organizational culture.

- **Informal mentoring** leverages the connection between the two individuals and focuses on gleaning career strategies, learning through conversation, and applying the results to their careers. It may look and feel like a friendship, where both parties engage in a casual manner. In addition, this type of relationship may provide additional benefits to mentees, since it's a mutually agreed upon, organic connection. In these types of informal relationships, activities such as counseling or role modeling can occur more often.[5]

- **Group mentoring** can be conducted with one or many mentors among individuals who have come together to pursue professional development. This is a networking, collaborative group that is guided by one or more facilitators to achieve shared or individual goals. A benefit of group mentoring is that it typically has more fluidity in how mentoring is

executed. Examples of group mentoring include peer group mentoring; one (mentor) to many (protégés); many (mentors) to one (protégé); and many (mentors) to many (protégés).[6]

- **Reverse mentoring** is less common but can bring value to both mentees and mentors. Reverse mentoring is categorized by a senior, experienced individual receiving mentoring from an early-career professional; it is usually technical in nature, such as a younger employee providing guidance on latest trends or technology within an industry.[7] This type of mentoring can be extremely valuable in a multigenerational working environment where needs may center on technical skills, such as the use and troubleshooting of programs and platforms, or on soft skills, such as trends in how people communicate (e.g., through social media).

- **Peer mentoring** is commonly conducted by a pair or trio of individuals who are on or near the same level professionally and who explore and achieve expressed goals. One of the greatest values of peer mentoring is having someone who is at your career and experience level and who is likely navigating (or has navigated) the same types of challenges and opportunities.

These types of mentoring relationships are some of the possibilities, and we urge readers not to dismiss a mentoring offer because the mentor is younger than you or the mentoring takes place in a group setting. We view mentoring not only as a strategic decision and activity for professional development but also as an opportunity that can arise spontaneously. Engage in a mentoring relationship when opportunity arises, and don't discount nontraditional approaches.

Benefits from Mentoring: Having a "Safe Space"

Regardless of how often managers and administrators tout the latest and greatest ideas and opportunities for changing workplace culture or processes, without buy-in from staff on workplace initiatives, implementation of innovative ideas is simply not going to happen.[8] The good news this year is that higher education IT employees have a positive perspective on mentoring—a majority of respondents agreed that mentoring and being mentored can contribute to their professional growth (figure 1).[9] When asked about perceptions of what mentoring can do for their careers, 81% of respondents—whether they had engaged in mentoring or not—reported that "*giving* advice as a mentor" provided at least some contribution to their professional growth, and 56% reported it was a great or moderate contribution. Eighty-five percent also reported that "*obtaining* advice from a mentor" provided at least some contribution to their professional growth; 65% reported it was a great or moderate contribution.[10] Of those respondents actually engaged in a mentoring relationship, most reported benefits—71% of higher education IT mentors and 86% of mentees (or protégés) reported that mentoring had made a moderate or great contribution to their professional development.
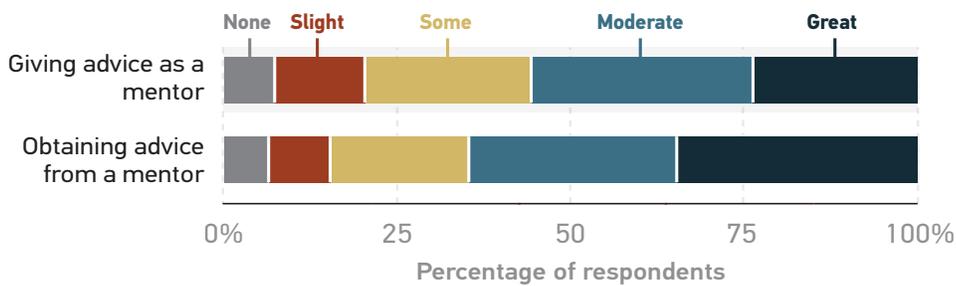

Figure 1. Perceived contribution of mentoring to professional growth in current position

These results reflect a workforce that sees mentoring relationships as a value-add to their careers, indicating that higher education IT administrators who want to create a culture of mentoring will discover that the buy-in to such an initiative is already present in the workforce. Indeed, 82% of those higher education professionals surveyed also reported that they would like to participate in an EDUCAUSE mentoring program as a mentor, a protégé, or both.

The top-ranked perceived benefit of mentoring identified by CIOs, managers, and staff (around 70% by each) was "having a safe space/sounding board for problems or challenges" (table 1). These results support mentoring as an opportunity for protégés (and perhaps mentors) to vent, address workplace issues, or check

perceptions and perspectives within a nonjudgmental space, where it's ok to speak freely. This is a space with "no dumb questions" (or perhaps even "no dumb comments").[11]

Table 1. Perceived benefits of being in a mentoring relationship

	CIOs	Managers	Staff
1st	Have a safe space/sounding board for problems or challenges (70%)	Have a safe space/sounding board for problems or challenges (72%)	Have a safe space/sounding board for problems or challenges (71%)
2nd	Give back to the profession (68%)	Have access to high-quality professional advice (59%)	Have access to high-quality professional advice (63%)
3rd	Have access to high-quality professional advice (58%)	Give back to the profession (50%)	Build reputation/networking (50%)
4th	Pursue personal fulfillment (42%)	Build reputation/networking (43%)	Give back to the profession (40%)
5th	Build reputation/networking (35%)	Pursue personal fulfillment (40%)	Pursue personal fulfillment (37%)

CIOs and managers reported that giving back to the profession is a benefit, which bodes well for mentees seeking manager and executive-level mentors. This suggests "a rising tide lifts all boats" perspective,[12] whereby developing talent and developing mentor skills may aid the profession overall or, more locally, the CIOs' and managers' own institutions and IT departments. For staff, expansion of networks is a key area that can increase career development. For example, among women in the technology sector, the lack of professional networks was perceived as a barrier to career development.[13]

Higher education IT employees who engage in mentoring relationships aspire to IT leadership positions, suggesting that they may perceive mentoring as a stepping-stone to executive positions. Significant differences were found between those who were in a mentoring relationship versus those who were not and whether they aspired to be in an IT executive position. Fifty-nine percent of those who identified as a mentor and 56% who identified themselves as a protégé also reported that they aspire to hold an IT executive leadership position immediately after their current position. Only 17% of those who reported not being in a mentoring relationship (and showed no interest in being in one) reported that they aspired to an IT executive leadership position. Although career advancement depends on growth in technical skills, experiences such as mentoring may also be a deciding factor in achieving an executive position. Among those who have engaged in mentoring, a majority see it as an activity that will likely help them achieve these career aspirations.

Overall State of Mentoring: High Need, but Few Receiving Mentoring

What if you were throwing a party that everyone was excited about but no one knew when and where it was taking place? Or worse yet, people arrived and there actually wasn't a party? Mentoring is not necessarily a party, but enthusiasm for being in a mentoring relationship doesn't guarantee it will occur. Even formal mentoring program goals may not always translate into robust mentoring relationships or an institutional culture of mentoring.[14] With this in mind, we asked higher education IT employees what they are actually doing in terms of mentoring relationships and goals (figure 2).
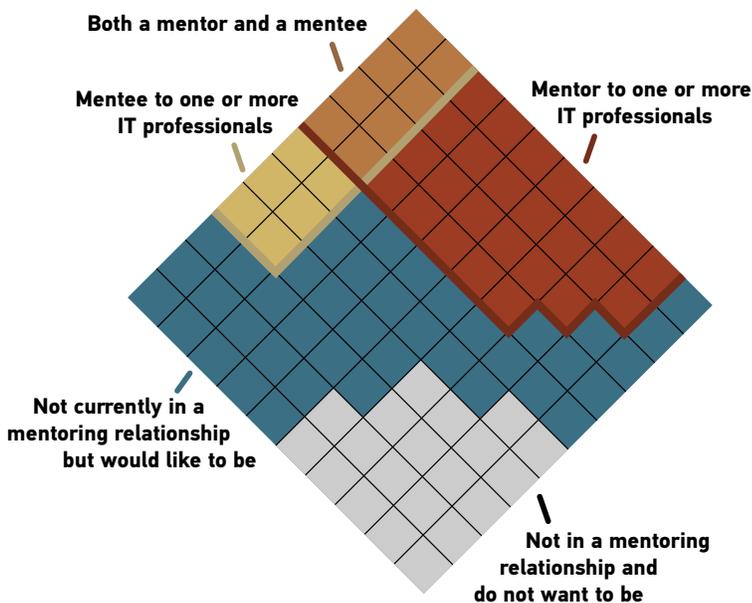

Figure 2. Overall state of mentoring in higher education IT

Overall, 39% of higher education IT professionals were either protégés or mentors. Only 14% reported they were currently protégés, and a third (33%) were mentoring one or more IT professionals. Few (8%) served as both mentors and protégés. Higher education IT professionals want to engage in a mentoring relationship, and there is a strong need among the workforce to both learn from more seasoned employees and share their own expertise. Forty-one percent were not in a mentoring relationship but would like to be; 20% were not in a mentoring position and would not like to be.

This year's workforce landscape report found that although women continue to increase their numbers in the higher education IT workforce, it remains a

male-majority workforce.[15] Despite this gender imbalance, men and women are involved in a mentoring relationship at similar rates. Comparable percentages of men (34%) and women (31%) were mentors, and comparable percentages of men (13%) and women (15%) were protégés. Among those who were not in a mentoring relationship but wanted to be, 42% were men and 40% were women. Finally, only slightly fewer men (18%) than women (23%) were not in a mentoring relationship and did not want to be.

Our findings across organizational levels reflect a workforce that is hungry to be mentored. This is good news for those who wish to mentor, as it suggests a large pool of potential protégé candidates, but not so great news for those staff seeking to be mentored; for many, this simply has not happened yet. We found significant differences between professional seniority for being a mentor and the desire to be in a mentoring position. More CIOs (56%) and managers (40%) reported being mentors than staff (15%). About half of staff (49%) told us they were not currently in a mentoring relationship but would like to be, compared with managers (36%) and CIOs (31%). Managers should seriously consider that staff crave mentoring relationships and seek to link their employees with mentoring opportunities. CIOs and managers are engaging as mentors more than staff, so this suggests that experienced mentors at management levels are available for mentoring. This also suggests that there are opportunities for staff to engage in peer mentoring or group mentoring with CIOs and managers.

Differences between generations were also found, suggesting that age of higher education IT employees may be an important factor when it comes to understanding mentoring relationships (noting that older generations tend to occupy more of the higher-ranking positions). Millennials, Generation Xers, and Baby Boomers[16] differed significantly in terms of their mentoring activities. More Millennials (51%) than Gen Xers (43%) and Baby Boomers (35%) were not in a mentoring relationship but wanted to be. In light of our findings, mentoring Millennials should be seen as a priority for IT managers and CIOs. Given the low numbers of Millennials in the higher education IT workforce (compared with the general US workforce),[17] mentoring should be viewed as an important means to attract and retain Millennial talent.[18] However, our results suggest that we can't focus solely on mentoring younger IT employees. Even seasoned employees see benefits and learning opportunities as they continue to grow their careers.[19]

Millennial employees expect their supervisors to provide career guidance, feedback, mentorship, and sponsorship to help them thrive in the workplace.[20] With a formal mentoring program opportunity, younger employees are able to have their career goals addressed, gain industry knowledge, increase leadership and technical skills, and develop the ability to creatively foster innovation. Formal mentorship can provide structure and a clear path toward identifying and achieving goals while demonstrating the organization's investment in the success of this generation of employees.

Establishing Mentoring Relationships: Start in the Workplace, but Don't Get Stuck There

When we think of a mentoring relationship, we may visualize a protégé or mentor working with us in the same workplace, addressing similar issues, challenges, and opportunities. However, if you're working at a smaller institution, with a small IT department, your opportunities for a mentoring relationship might be severely restricted. But that doesn't necessarily mean you're not going to be able to engage with a protégé or mentor. We found that although a majority of protégés and mentors worked at the same institution (figure 3), differences in location were noted across organization level and institution type. This indicates that viable pathways to mentoring relationships are not solely centered on institutional opportunities.
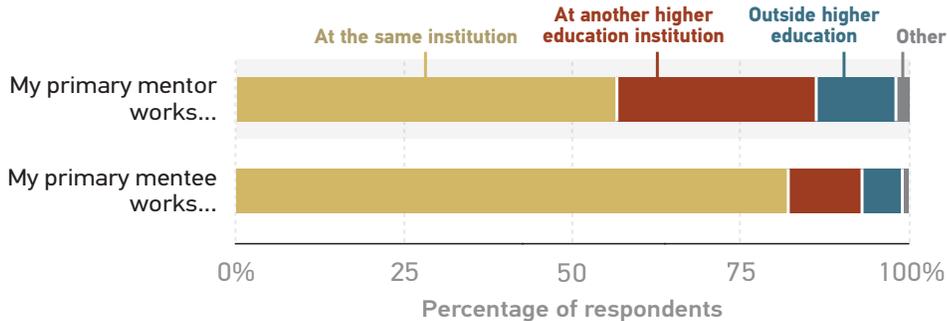

Figure 3. Where mentors and mentees work

CIO mentors had the highest percentage (21%) of protégés working at another higher education institution. CIOs possibly have larger networks to draw from to engage with potential mentees, likely due to the unique career pathways of CIOs and their cross-institutional networks. Additionally, CIOs are likely to have had to move to another institution to obtain that position.[21] This may facilitate more external connections for current or future CIOs, due to their travel to other institutions, conference attendance, and the networking opportunities these activities provide. This sets up a wider network for CIOs, who likely have continued links to the institution(s) where they began their career. For CIOs (or CIO aspirants) who work at smaller institutions, leveraging their external networks to identify potential protégés or mentors may overcome the barrier of having smaller pools of employees with whom to engage in mentoring relationships.

Significant differences were found between organizational levels (CIOs, managers, and staff) and where protégés' mentors work. Most CIOs' mentors work at another higher education institution (59%) or outside higher education (21%). However, for managers and staff, seeking a mentor at their home institution may be more effective due to the shared insight into the workings of the organization or understanding how to grow a career within a particular institution. A majority (60%) of managers' mentors work at their institution, while fewer than a third (28%) of managers' mentors work at another higher education institution, and relatively few are outside higher education (12%). By the same token, three-quarters (75%) of staff's mentors work at their institution, while 17% work at another institution and 8% work outside higher education.

Employees at smaller schools may need to reach out beyond their organization to establish mentoring relationships because the IT workforce at these institutions is usually small. Mentors who work at a BA institution, compared with other institution types, had the largest percentage (26%) of mentees working at another institution. Similarly, AA (70%) and BA (67%) protégés had higher percentages of mentors working at another institution, compared with around 20% for protégés at MA or DR institutions. In the same vein, mentors at smaller institutions (fewer than 4,000 FTE) had more primary protégés working at a different institution or outside higher education.

Smaller institutions may need to consider becoming more intentional about mentoring for those employees who do not have extensive professional networks to draw from for mentoring. More strategically, CIOs can strengthen relationships with nearby institutions to promote "mentoring exchanges" and work within consortia to enlarge the field of possible mentoring participants. Since CIOs often come to their current position from different institutions,[22] they may be able to effectively leverage their networks to increase mentoring opportunities for their staff.

Mentors outside the protégés' institution can be beneficial because they may offer objective and honest opinions to their mentees. Such mentors face little or no political risk when offering perspectives on the experiences of mentees.[23] For similar reasons, mentees may also feel comfortable speaking to someone outside their institution, as it decreases risk-taking within the relationship and may open up a more honest discussion about the protégés' current institution and career goals.

Characteristics of Mentoring Relationships: Engaging with Differences and Similarities

When seeking a potential mentor or protégé, an individual may have a list of desired attributes. A potential mentee may want to identify a peer who is of the same gender, an executive of the same ethnicity, or an older senior manager who can impart to a protégé lessons gained from experience.[24] Having a mentor of the same gender who is similar in age or ethnicity establishes a basis for understanding experiences or challenges in the workplace specific to the mentee. Women may want to find a senior female mentor who can offer insight into how she advanced in a predominantly male workforce, for example. Nevertheless, being in a mentoring relationship with someone who has a different ethnicity or gender can also be beneficial. Such a relationship can offer opportunities for career advancement for women and non-whites in predominantly male or white workplaces.[25] Different-gender mentoring may also be beneficial because it offers both parties a learning opportunity to understand similar—or different—experiences and perspectives in the workplace.[26] To better understand how these mentoring relationships are structured, we asked mentors and mentees to characterize their relationships on the basis of gender, ethnicity, workplace status (peer or manager), and stage in career (figure 4).
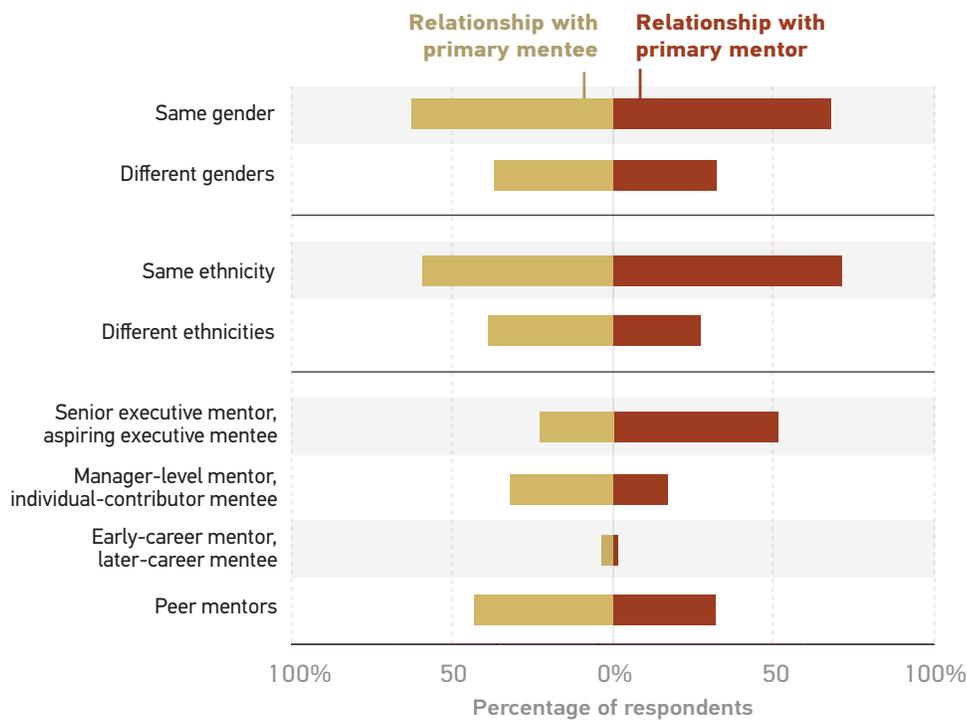

Figure 4. Characteristics of mentee and mentor relationships

When looking at mentoring relationships based on career stages and whether one is a mentor or a mentee (lower half of figure 4), the characteristics reflect what we'd typically consider a classic mentoring relationship. Mentors (31%) were often engaged in a traditional relationship, i.e., manager to mentee (individual contributor). Half (51%) of protégés were aspiring executives with senior executive mentors. This confirms that protégés perceive career benefits from such an arrangement. These perceptions are well founded, given that those who have a mentor may be more likely to experience gains in salary or career development.[27]

We also found the peer mentoring model to be prominent, accounting for 44% of mentors' relationships.[28] By "ditching the hierarchy," individuals may be on more equal footing in the relationship, since they are likely in the same stage of their career.[29] They might collaborate to share networking contacts, get professional development experience, or simply support each other's career path choices.[30] Senior staff may need a peer to offer specific feedback and support as they address challenges in the latter half of their career.[31] This is good news for both organizations and individuals. Peer mentoring can increase collaboration, address individual needs for support, and boost sharing of institutional knowledge, which could be particularly useful for institutions that are shifting administrative structures or undergoing system change.[32] Moreover, having a peer mentor may contribute substantially to career development, particularly for women who aspire to executive positions at their institution.[33]

Significantly more ethnic minority mentors (37%) participated in early-career peer mentoring relationships than white mentors (17%). This is encouraging for ethnic minorities in higher education IT because early-career mentoring has been associated with career development and being fast-tracked into executive positions.[34] Additionally, mentoring of underrepresented ethnic minorities can improve retention in predominantly white institutions via connections with mentors who understand the career struggles specific to their mentees.[35] Whites and ethnic minorities engaged in identical rates (52%) of mentoring relationships consisting of an aspiring executive and an executive mentor. This is also encouraging, since some studies suggest that ethnic minority managers' mentors invested in them as potential managers.[36]

Overall, mentoring relationships tend to involve members of the same gender (64%). These findings may reflect the fact that protégés, who frequently initiate relationships, are seeking mentors of the same gender.[37] For women, having a female mentor can be important for role modeling: if a female employee "can see it, she can be it"—meaning that female executive mentors can provide a roadmap and guidance for a successful career.[38] Although having a strong female mentor can be of benefit to aspiring women employees, being mentored by a man may also be beneficial not only to the mentee but also the organization. Our findings are encouraging in that more than a third of mentoring relationships involve a male–female dynamic.

Engaging in mixed-gender mentoring relationships can contribute to gender inclusiveness, which involves "*both* men and women in advancing women's leadership," especially for women working in male-majority industries.[39]

How Mentoring Relationships Develop: Protégés Are Seeking You Out!

Connecting with the right mentor can help a protégé grow and excel, both personally and professionally, in ways that may not be achievable alone. With an opportunity to have such a powerful impact on one's career, how does one develop such an important relationship? There is no "right way" to develop a mentoring relationship (figure 5). Mentors and protégés should explore all avenues, including informal means as well as formal invitations, to establish a relationship. In fact, a great number of mentoring relationships come about in an informal and casual manner. These relationships can develop organically and resemble a collegial relationship rather than the expected formalities of a traditional mentee/mentor relationship.
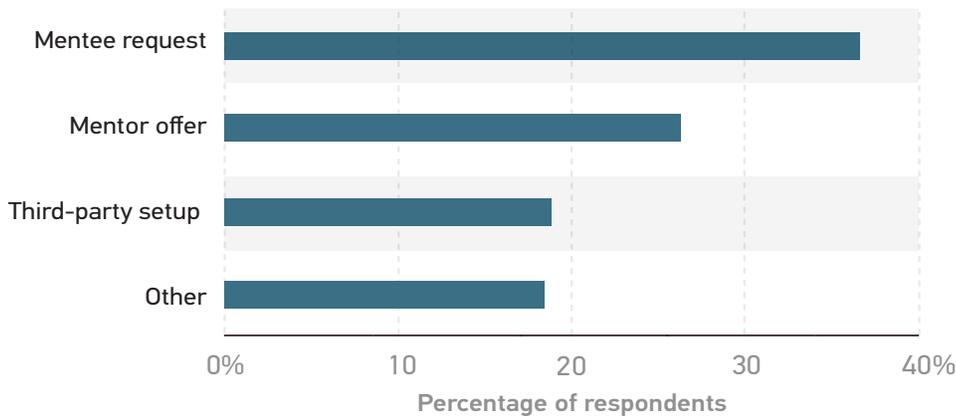

Figure 5. How mentoring relationships developed

Protégé request was the most frequently reported way in which a mentoring relationship developed for mentors (38%) and mentees (33%). Fewer than a third of mentors (27%) and protégés (24%) told us that the relationship developed through a mentor offer. About one-fifth of each group said that a third party (e.g., supervisor) arranged the relationship or it was enabled through a formal program.

Of the 17% of mentors and 23% of protégés who reported that their relationship developed in an "other" way, one-third reported it developing "organically," "casually," or "informally." This suggests that for those seeking to be mentored, reaching out proactively will likely be a successful strategy. Additionally, keeping alert to the potential of established professional connections and informally leveraging them can lead to a mentor–mentee relationship.

CIOs are reaching out to create mentoring opportunities that, in turn, may build their careers, expand their leadership experiences, extend their professional networks within their institution, and increase engagement with their staff. More CIO mentors (32%) offered to develop the relationship than manager mentors (24%), but more managers (40%) and CIOs (38%) than staff (30%) developed the relationship through protégé request. Managers may want to consider the CIO model of establishing mentoring relationships, which makes mentors more proactive participants in identifying potential mentees. It may also be a salient strategy for those seeking executive positions as their career grows.

Men and women in higher education IT appear to be establishing relationships with mentors in similar ways. This is encouraging, since one of the factors that has been identified as a barrier to women in IT is lack of female mentors.[40] Women had slightly higher percentages of mentee requests (41%) than men (37%); more male mentors (29%) than female mentors (23%) reported initiating the mentoring relationship. If we hope to decrease the gender disparities in this workforce and retain female talent, women proactively establishing these relationships among female employees may be one means to address this issue.

Senior women leaders in higher education have noted that having the support of institutional leadership provided formalized professional development opportunities and often early leadership experience.[41] Ethnic minorities also indicated that mentorship provided greater opportunities for collaboration (75%), invitations to attend professional and career growth events (58%), and the chance to serve as a co-author on publications (58%).

We found similar disproportions across generations concerning how relationships developed, with more Millennials than other generations engaging in relationship development. More Millennial mentors (33%) than either Gen Xers (28%) or Baby Boomers (24%) told us they offered to develop a relationship. Millennial mentors also received protégé requests (44%) more than Gen Xers (35%) or Baby Boomers (38%). This reveals that younger mentors may be slightly more active in developing relationships, which bodes well for IT departments seeking to develop Millennial employees. Millennials who engage in mentoring may be more committed to their workplace, which translates into higher retention rates for this generation of employees.[42] However, similar to the rates across genders, these findings also reflect a minority demographic in the workforce engaging at the same rates as the majority. This can open the door for "reverse mentoring," whereby a younger employee mentors an older, more experienced employee.[43] This could benefit the organization by bridging divides between generations in the workplace, as well as empowering Millennials as future institutional leaders.

How Often Do We Meet? Be Flexible

Once you establish a relationship, how often should you meet (figure 6)? This should be negotiated between mentors and protégés at the onset of a mentoring relationship to ensure consistent structuring of time and the ability to slot meetings into a regular workflow.[44] For example, the ID2ID peer mentoring program for instructional designers—a partnership between the EDUCAUSE Learning Initiative (ELI) and Penn State—encourages the mentoring pair to establish the frequency that works best to accomplish established, agreed-upon goals. For ID2ID participants, the more frequent the meetings, generally the more successful they were in reaching agreed-upon goals.[45] However, it's important to note that although frequency is important, setting clear goals and deadlines to achieve the goals is also key to success.
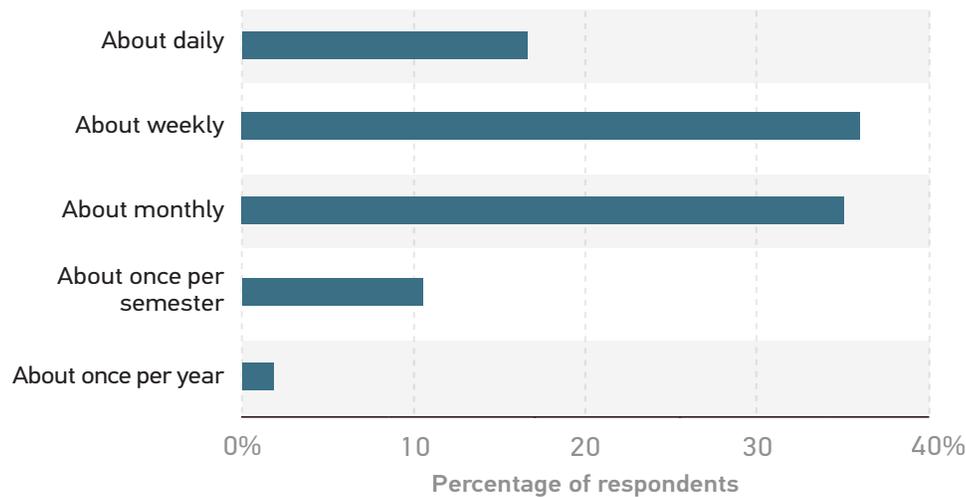

Figure 6. How frequently mentors and mentees meet

Mentors most often engaged with their protégés about once a week (41%), followed by about once a month (33%), about once a day (19%), and about once a semester (7%). Protégés most often engaged about once a month with their mentor (39%), followed by about once a week (26%). Twenty percent of women protégés met with their mentors on a weekly basis; for male protégés, that number is 30%. More Baby Boomers (17%) engaged with their mentors about once a day, compared with Gen Xers (10%) or Millennials (9%). Mentors who engage with women employees may consider offering more frequent meeting times, as women may need additional support or guidance as they navigate careers in a field where they are underrepresented. And for mentees, we suggest it's okay to negotiate the time you need to make the most of your relationship with your mentor.

Conclusion

This report reflects important trends in the higher education IT workforce. Mentoring is a professional development activity that higher education IT professionals place great value on, even if they have not engaged in it. Indeed, among those surveyed, large majorities agreed that it provides a great contribution to their development, including pathways to IT executive leadership positions as well as an opportunity for reflecting on one's professional experiences in a safe space. Unfortunately, the rate of participation is somewhat less encouraging. Few (14%) higher education IT employees told us they were mentees, and only a third of respondents reported being mentors. There is an unfortunate disconnect between the perceived value of mentoring and its implementation at higher education institutions. Another challenge is that mentee requests are the most frequent means to establish a mentoring relationship, which places larger responsibility on (likely) less senior or younger staff to initiate a professional development activity that is highly valued as a career stepping-stone.

Underrepresented groups (women, ethnic minorities, and Millennials) all appear to be engaging in mentoring relationships at similar (if not higher) rates than other groups in the workforce, attesting to a strong desire to mentor and be mentored. However, as with the entire workforce, there's room to grow these mentoring activities among these underrepresented groups too. Worth considering is how the lack of adequate mentoring affects one's career. For example, senior women leaders in higher education identified the barriers stemming from lack of support that contribute to problems of leadership identity, differentiating gender-based expectations, lack of opportunity, and sabotage.[46]

This isn't all discouraging for our workforce. On the contrary, it demonstrates a high need that can be strategically addressed to increase representation, retention, job satisfaction, and career development for these IT professionals. We should encourage them to reach across institutions as well and think innovatively about how to leverage technology, nontraditional mentoring relationships (e.g., group mentoring), and peer and professional networks to meet mentoring needs. Our next steps should ensure that we engage not only with these underrepresented groups but also with older employees—even managers and executives—to determine and address their career development through mentoring relationships. It can benefit not only their individual careers but also the institutions they work for. This report and EDUCAUSE's online mentoring resources are good places for institutional staff and leaders to start exploring the opportunities that our workforce values and wants. We just need to take the first step to ensure we meet their needs.

Recommendations

- **Encourage and sustain mentoring at your institution by communicating its value and how relationships are a catalyst for change for both mentors and protégés.** Higher education IT professionals are already sold on the value of mentoring, but fewer are engaged in mentoring relationships than wish to be. Emphasize with employees that mentoring can occur casually and organically with established professional networks and can be facilitated through attendance at networking events (such as conferences). Tap into the potential on your campus.

- **Cultivate partners to aid in establishing mentoring programs.** Work with HR within your institution, collaborate with professional associations and consortia outside your institution, and explore interest among nearby institutions and corporations to pilot cross-organizational mentoring.

- **Encourage potential mentors to seek out protégés.** The responsibility of seeking a mentoring relationship should not fall solely on would-be protégés. This responsibility of seeking a mentor may create barriers to successfully engaging in mentoring relationships or decrease opportunities among young or newly hired staff. Potential mentors should seek out mentees by using both formal and informal means.

- **Create formal mentoring programs to enable employees to engage in personal and professional development guided by the structure of the organization.** Formal programs offer the opportunity to help protégés and mentors gain a better understanding of organizational culture, broaden their perspectives, increase leadership skills, and increase levels of employee engagement and retention.

- **Prioritize mentoring for underrepresented groups in higher education IT.** For women, ethnic minorities, and Millennials, this is particularly important if higher education IT seeks to increase diversity, increase retention, grow its own leaders, and ensure a workforce that is able to fill the gaps stemming from looming Baby Boomer retirements.

- **Be open to developing a mentoring relationship with someone who differs in ethnicity, gender, or age—it can increase insights and perspectives on others' experiences in the workforce.** It may also increase retention and job satisfaction among underrepresented groups in the higher education IT workforce. Reverse mentoring may offer substantial insights into other generations' perspectives and skill sets.

- **Look outside your institution and engage with your professional network in order to cast a wide net for mentoring opportunities.** When seeking a mentor or protégé, consider someone outside your institution. Such

individuals can offer unique and fresh perspectives without fear of reprisal for honest communication regarding careers and organizational challenges.

- **Consider group or peer mentoring as an option.** If a one-on-one relationship can't be initiated, consider peer mentoring with colleagues sharing the same experiences, challenges, and goals. Group mentoring may be helpful for cohorts of employees who wish to be engaged in a more collaborative mentoring process, and it can maximize the time of senior institutional leaders who seek to mentor.

- **Use technology to maximize available mentoring relationship opportunities.** Taking advantage of platforms such as Skype, Zoom, Hangouts, or other digital tools can create and facilitate connections and build and support rapport when faced with geographic or scheduling barriers.

- **Identify the time frames for meeting with your mentor or protégé that work for both of you.** There's no hard and fast rule for how often mentors and protégés should meet. Negotiate this time on the basis of need and other responsibilities. Keep in mind, however, that more frequent meetings are generally associated with more successful mentoring relationships.

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

Notes

1. Chris Farrell, "Why More and More People Are Eager to Mentor," *Forbes*, September 30, 2016.

2. Joseph D. Galanek, Dana C. Gierdowski, and D. Christopher Brooks, *The Higher Education IT Workforce Landscape, 2019*, research report (Louisville, CO: ECAR, February 2019).

3. Survey respondents who reported being mentored or being mentors are not necessarily in mentoring relationships with each other. Consequently, the same question asked of each group separately often results in different percentages.

4. See Mentoring.

5. L. D. Inzer and C. B. Crawford, "A Review of Formal and Informal Mentoring: Processes, Problems, and Design," *Journal of Leadership Education* 4, no. 1 (Summer 2005): 31–50.

6. R. L. Huizing, "Mentoring Together: A Literature Review of Group Mentoring," *Mentoring & Tutoring: Partnership in Learning* 20, no. 1 (2012): 27–55.

7. Lisa Quast, "Reverse Mentoring: What It Is and Why It Is Beneficial," *Forbes*, January 3, 2011.

8. See, for example, "The Value of Establishing a Mentoring Program Within Your Organization," Kent State University, The Center for Corporate and Professional Development.

9. Galanek, Gierdowski, and Brooks, *The Higher Education IT Workforce*.

10. On a 1–5 scale with 1 = no contribution and 5 = great contribution.

11. Jennifer Zeidler, "The ROI of Mentoring Young Talent," *Forbes,* August 30, 2018.

12. See, for example, Margie Warrell, "Mentoring Matters: How More Women Can Get the Right People in Their Corner," *Forbes*, June 24, 2017.

13. Barbara Orser, Allan Riding, and Joanne Stanley, "Perceived Career Challenges and Response Strategies of Women in the Advanced Technology Sector," *Entrepreneurship & Regional Development* 24, nos. 1–2 (2012): 73–93.

14. See, for example, challenges in formal mentoring program participation here: Amanda Schnieders, "Why Workplace Mentoring Programs Fail," *Entrepreneur*, June 25, 2018.

15. Galanek, Gierdowski, and Brooks, *The Higher Education IT Workforce*.

16. In 2019, we continue the practice of drawing up generational definitions as delineated by the Pew Research Center. The definitions used in this report are as follows: Millennials (born 1981–1997), Gen Xers (born 1965–1980), and Baby Boomers (born 1946–1964). For more information, see Pew Research Center, "The Generations Defined," May 8, 2015.

17. Galanek, Gierdowski, and Brooks, *The Higher Education IT Workforce*.

18. See "The 2016 Deloitte Millennial Survey: Winning Over the Next Generation of Leaders."

19. See, for example, Judith Lindenberger and Marian Stoltz-Loike, "Mentoring and Baby Boomers," *The Balance Careers*, December 16, 2018.

20. Jeanne C. Meister and Karie Willyerd, "Mentoring Millennials," *Harvard Business Review*, May 2010.

21. Galanek, Gierdowski, and Brooks, *The Higher Education IT Workforce*.

22. Ibid.

23. Anne Perschel, "Do You Need an In-House or an External Mentor?," *Forbes*, July 21, 2014.

24. Sarah Frances Bailey, Elora C. Voyles, Lisa Finkelstein, and Kristina Matarazzo, "Who Is Your Ideal Mentor? An Exploratory Study of Mentor Prototypes," *Career Development International* 21, no. 2 (2016): 160–175.

25. Alexandra Kalev, Frank Dobbin, and Erin Kelly, "Best Practices or Best Guesses? Assessing the Efficacy of Corporate Affirmative Action and Diversity Policies," *American Sociological Review* 71, no. 4 (2006): 589–617.

26. Geri Stengel, "Men and Women Benefit When Mentorship Cross[es] the Gender Divide," *Forbes*, June 13, 2018.

27. See, for example, Anton James Duvall, "Calculating a Mentor's Effect on Salary and Retention," *Financial Management*, November 30, 2016.

28. This is the sum of early-, mid-, and later-career peer mentoring.

29. Chrissy Scivicque, "The Benefits of Peer Mentorship: What You Can Gain When You Ditch the Hierarchy," *Ivy Exec*.

30. Susan E. Metros and Catherine Yang, "The Importance of Mentors," in *Cultivating Careers: Professional Development for Campus IT*, ed. Susan E. Metros, EDUCAUSE (2006).

31. Scivicque, "The Benefits of Peer Mentorship."

32. Linda Holbeche, "Peer Mentoring: The Challenges and Opportunities," *Career Development International* 1, no. 7 (1996): 24–27.

33. Lilian H. Hill and Celeste A. Wheat, "The Influence of Mentorship and Role Models on University Women Leaders' Career Paths to University Presidency," *The Qualitative Report* 22, no. 8 (2017): 2090–2111.

34. See Catherine A. Hansman, "Diversity and Power in Mentoring Relationships," in *Critical Perspectives on Mentoring: Trends and Issues*, ed. C. A. Hansman, ERIC Clearinghouse on Adult, Career, and Vocational Education (2002): 44–53.

35. Ruth Enid Zambrana, Rashawn Ray, Michelle M. Espino, Corinne Castro, Beth Douthirt Cohen, and Jennifer Eliason, "'Don't Leave Us Behind': The Importance of Mentoring for Underrepresented Minority Faculty," *American Educational Research Journal* 52, no. 1 (2015): 40–72.

36. David A. Thomas, "The Truth about Mentoring Minorities: Race Matters," *Harvard Business Review* 79, no. 4 (2001): 98–107.

37. Bailey et al., "Who Is Your Ideal Mentor?"

38. Kailynn Bowling, "Why Female Mentorship in the Workplace Is More Important Than Ever," *Forbes*, August 3, 2018.

39. Anna Marie Valerio and Katina Sawyer, "The Men Who Mentor Women," *Harvard Business Review*, December 7, 2016.

40. Manju K. Ahuja, "Women in the Information Technology Profession: A Literature Review, Synthesis and Research Agenda," *European Journal of Information Systems* 11, no. 1 (2002): 20–34.

41. Zambrana et al., "Don't Leave Us Behind," 49.

42. Cindy Solomon, "Five Secrets to One Company's 96% Millennial Retention Rate," *LinkedIn*, February 24, 2017.

43. Quast, "Reverse Mentoring"; and Kevin Roose, "Executive Mentors Wanted. Only Millennials Need Apply." *New York Times*, October 15, 2017.

44. Steve Cooper, "3 Tips for a Great Mentor Relationship," *Forbes*, March 20, 2012.

45. Based on informal participant feedback.

46. Kelly Hannum, Shannon Muhly, Pamela Shockley-Zalabak, and Judith S. White, "Stories from the Summit Trail: Leadership Journeys of Senior Women in Higher Education," HERS–Higher Education Resource Services, August 2014.