Is EdTech Paying Off?
Faculty speak out on the benefits, burnout, and future of tech in higher education

College Innovation Network
Faculty EdTech Survey

Please direct media queries to:
cin@wgulabs.org

CIN EdTech Survey Series.

Citation:
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Executive Summary

Over the past several decades, educational technology has cemented a permanent role in higher education. Proponents of tech-enabled learning argue that it will increase access to college,\(^1\) make courses more engaging,\(^2\) and personalize the learning experience to better meet students’ needs.\(^3\) Whether EdTech can deliver on these promises, however, depends in large part on how faculty experience and adopt EdTech tools in their teaching. Without faculty support and buy-in, students are unlikely to reap the full benefits of tech-enabled learning. Understanding how faculty perceive, experience, and interact with EdTech will be critical for institutions to successfully integrate EdTech to improve the student experience.

To gain insights into the faculty perspective on EdTech, the College Innovation Network (CIN) launched its second Annual CIN Faculty EdTech Survey in November 2022. The survey, which included 491 faculty members across nine diverse colleges and universities, explores challenges in the faculty experience with technology — and opportunities to better serve faculty needs moving forward. In this report, we outline four key takeaways from the survey findings and offer recommendations for institutions and EdTech vendors to improve the faculty experience with EdTech. Overall, results of the survey show both promise and peril in how faculty are currently experiencing EdTech in their institutions. Similar to the faculty we heard from in the 2021 Faculty EdTech Survey, the faculty we heard from this year were relatively positive about using technology in their teaching. When we probed more deeply this year, however, we found that many faculty are nonetheless dissatisfied with how technology is being implemented in their institutions and its anticipated future impact on instruction:

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KEY TAKEAWAYS:

• **Takeaway 1: Faculty see value in EdTech for teaching and learning, but do not necessarily trust that available products are effective.** Even after instruction has largely shifted back to face-to-face modalities, the majority of faculty recognize the benefits of EdTech for teaching and learning. Eighty-three percent of faculty responding to the survey agreed that EdTech enhances teaching and learning experiences, and 73% agreed that EdTech is essential to student engagement and success. However, many faculty do not trust the efficacy of the EdTech products available to them. **Fifty-six percent reported that it is difficult to know whether an EdTech product will work effectively.** Thirty percent do not trust their institution to choose effective products, and 27% do not trust EdTech vendors to provide effective products. To increase their trust in EdTech products, most faculty reported that they want to see evidence of successful implementations in other institutions.

• **Takeaway 2: Faculty perceive that those furthest from the classroom have the greatest influence on EdTech decisions.** When asked which groups in the institution have the most influence in decisions about EdTech, faculty respondents perceived that the groups that are the furthest from the classroom, including college administrators, instructional designers, and department chairs, have the most influence in decisions about available EdTech options. Students and faculty, who have more direct experience in the classroom, were perceived as having the least influence. **Eighty-seven percent of faculty agreed that college administrators have high levels of influence, while only 22% of faculty agreed that students had high levels of influence and 61% agreed that faculty have high levels of influence.**

• **Takeaway 3: Faculty are wary of a tech-enabled future that is more standardized with less faculty-to-student interaction.** The majority of faculty respondents agreed that higher education will become increasingly tech-enabled in the future, and they believe that it will diminish their impact on instruction. Eighty-six percent of faculty agreed that they will spend more time delivering course content online and that instructors will use more educational technology tools in class. Faculty are concerned about what this future might mean for the nature of instruction. **Sixty-one percent agreed that instruction will become more standardized in the future, 53% agreed that they will have less autonomy over their course design, and 49% agreed that faculty will spend less time interacting with students.**
Takeaway 4: Faculty are experiencing high levels of technology fatigue and burnout. Seventy-seven percent of faculty who responded to the survey agreed that they feel like they are “always on the job because of technology,” and 67% agreed that there are days when they do not want to use technology because they need a break from it. Subgroup analyses revealed that women were experiencing particularly high levels of technology fatigue and burnout. Faculty who reported higher levels of technology fatigue were also more likely to agree that they are “burned out” and “emotionally exhausted” because of their work.

Taken together, these findings reveal that the majority of faculty see the potential benefit that EdTech can bring to the student experience, even as they harbor some concern about its implications for their profession. A substantial number of faculty find technology to be burdensome, a likely threat to their autonomy and control in shaping their courses, and something they feel they have little influence over. A rising sense of burden, with diminishing perceptions of autonomy and influence, often leads to low morale and lower interest in remaining in and joining the profession. As we continue to track changes in teaching and learning in higher education, it will be critical to stay attuned to the faculty experience.

ABOUT THE COLLEGE INNOVATION NETWORK

The College Innovation Network (CIN) at WGU Labs is a network of higher education institutions committed to addressing the core challenge of promoting belonging and engagement in the modern higher education environment. We’re leveraging technology to build highly engaged learning communities from enrollment through graduation — and beyond. CIN supports educational institutions by identifying areas of need, implementing effective education technology for students, and demonstrating impact through research.

ABOUT THE CIN EDTECH SURVEY SERIES

CIN is in a unique position to learn about the student and faculty experience with EdTech by leveraging the diversity of institutions within the Network. The CIN EdTech Survey Series is an annual survey series administered across the Network with the goal of generating valuable insights to help institutions understand how faculty and students experience EdTech. These insights can be applied to improve faculty and student experiences, and ultimately bolster the impact of EdTech across the sector. To complement the student and faculty perspectives on EdTech, CIN will be launching a Survey with College Administrators in 2023. As CIN continues to grow, so will the impact of the CIN EdTech Survey Series.

Queries about CIN, including how your institution can participate in future surveys can be addressed to cin@wgulabs.org.
Over the past several decades, there has been a rapid increase in the use of educational technologies, or EdTech, in higher education. This trend was accelerated in 2020 with the shift to completely virtual instruction. Now, even as many colleges have shifted back to primarily face-to-face instruction, the trend toward tech-enabled learning is likely here to stay.

Understanding the impact of the digital shift on key users of educational technology, including students, faculty members, and administrators, is critical for the successful implementation of tech-enabled learning. To keep a pulse on the role of technology and its impact on these user groups, the College Innovation Network (CIN) launched its annual EdTech survey series in 2020. This report details key findings from our 2022-2023 Faculty EdTech Survey and offers actionable recommendations to improve the faculty experience with EdTech.

The increase in technology in higher education means that students and faculty are more likely than ever to encounter EdTech tools in their teaching and learning. More students are enrolling in and more faculty are teaching fully online courses. For instance, a recent analysis of federal data showed that from 2019 to 2021, there was a 23 percentage point increase in the number of students enrolled in online courses. Students are increasingly using EdTech tools to connect with their peers, instructors, and campus resources. And institutions now have countless EdTech products at their disposal that promise to improve the learning and teaching experience for students and faculty.

Proponents of tech-enabled learning argue that it will increase access to college, make courses more engaging, and personalize the learning experience to better meet students’ needs. Whether EdTech can deliver on these promises, however, depends in large part on how faculty experience and adopt EdTech tools in their teaching. Without faculty support and buy-in, students are unlikely to reap the benefits of tech-enabled learning.

Understanding how faculty perceive, experience, and interact with EdTech will be critical for institutions to successfully integrate EdTech to improve the student experience.
By gaining the faculty perspective on EdTech, we can uncover pain points in the ways that faculty experience and use EdTech in their teaching — and identify opportunities for improvement. With this information, we can propose actions that institutions might take to streamline the faculty experience with EdTech and create more effective tech-enabled learning experiences for students.

With these goals in mind, CIN surveyed 491 faculty members across nine institutions in November of 2022 (Figure 1). The survey focused on three key research questions:

- How do faculty perceive and interact with EdTech in their teaching practices?
- What individual and institutional barriers are faculty facing in their adoption and use of Edtech?
- What opportunities are there for EdTech to better serve faculty’s needs in the classroom?

In this report, we present the main findings from the survey, organized into the four following key takeaways. From these takeaways, we offer strategic recommendations that institutions and EdTech vendors can leverage to improve the faculty experience with EdTech.

KEY TAKEAWAYS:

- **Takeaway 1**: Faculty see value in Edtech for their teaching and learning but do not trust that available products are effective.
- **Takeaway 2**: Faculty perceive that those furthest from the classroom have the greatest influence on EdTech decisions.
- **Takeaway 3**: Faculty are wary of a tech-enabled future that is more standardized with less faculty-to-student interaction.
- **Takeaway 4**: Faculty are experiencing high levels of technology fatigue and burnout.

As higher education continues to evolve, evaluating and understanding the faculty experience with EdTech will be critical for achieving a successful tech-enabled future for students.

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**PERCENT OF RESPONSES BY SCHOOL TYPE**

<table>
<thead>
<tr>
<th>School Type</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Primarily Online College</td>
<td>7.1%</td>
</tr>
<tr>
<td>Four-year College</td>
<td>34.6%</td>
</tr>
<tr>
<td>Community College</td>
<td>58.2%</td>
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**UNCOVERING THE FACULTY PERSPECTIVE**

In November 2022, the CIN research team emailed surveys to more than 6,400 faculty across nine teaching-focused CIN member institutions. These post-secondary institutions included community colleges, private and public four-year institutions, and one primarily online, not-for-profit college. The survey contained 56 questions to better understand the faculty experience with EdTech and teaching. The final sample included 491 faculty respondents. Fifty-eight percent of respondents teach at community colleges, 35% at 4-year universities, and 7% at a primarily online college. See the appendix for a more detailed description of the sample and methodology.
Takeaway 1: Faculty see value in EdTech for teaching and learning, but do not trust that available products are effective.

During the 2022-2023 academic year, higher education saw a return to the classroom after two years of predominantly virtual instruction. Despite the return to in-person instruction, data from our survey show that the majority of faculty recognize the benefits of tech-enabled learning for students. However, faculty also expressed a lack of trust in the efficacy of the EdTech products currently available. When asked about factors that would increase their trust in EdTech products, faculty wanted to see successful implementations in other institutions.

FACULTY HAVE LARGELY MOVED BACK TO FACE-TO-FACE INSTRUCTION.
Compared to respondents from our 2021 survey, faculty who responded to the survey this year were more likely to be teaching face-to-face courses. In the fall of 2021, only 28% of faculty respondents were teaching primarily face-to-face. In the fall of 2022, this percentage increased to 47% (Figure 2).

FACULTY STILL SEE THE VALUE OF EDTECH AND ARE OPEN TO TRYING NEW EDTECH FOR TEACHING.
Faculty continue to see technology’s benefits for student engagement, equity, and teaching and learning, even as many return to in-person learning.

The majority of respondents agreed with these statements: 83% of faculty agreed that EdTech enhances teaching and learning experiences, 71% agreed that
EdTech is essential to student engagement and success, and 63% agreed that EdTech helps create equitable learning experiences for students (Figure 3).

Even the majority of faculty who were teaching primarily face-to-face courses recognized the benefits of EdTech: 78% of primarily face-to-face faculty agreed that EdTech enhances teaching and learning experiences, 64% agreed that EdTech is essential to student engagement and success, and 58% agreed that EdTech helps create more equitable learning experiences for students.

Consistent with the results of the 2021 Faculty EdTech Survey, we also saw that most faculty are open to trying new technologies in the classroom. We asked faculty to select which of the following three statements best described their willingness to adopt new technologies, and then categorized them as EdTech Leaders, Followers, or Resisters based on their responses:

- Leader → “I’m usually one of the first among my faculty peers to try new EdTech in my courses”
- Follower → “I’m someone who tries new EdTech after seeing some of my faculty peers use a product effectively”
- Resister → “I’m usually one of the last among my faculty peers to try new EdTech in my courses”

Only 14% of faculty described themselves as EdTech Resisters. Forty-eight percent identified as EdTech Followers, and 38% identified as EdTech Leaders (Figure 4). Overall, these results suggest that faculty are open to trying new EdTech products, particularly when they see their peers using it effectively.
FACULTY DO NOT TRUST THAT THE EDTECH OPTIONS AVAILABLE TO THEM ARE EFFECTIVE.

Even though faculty see the value of EdTech overall, they do not necessarily trust that the products available to them are effective. Fifty-six percent of faculty agreed that it is difficult to know whether an EdTech product will work effectively. Almost a third of faculty respondents did not trust their administration to choose effective EdTech products and did not trust EdTech vendors to provide effective products (Figure 5).

We asked faculty whether evaluation data, collaboration in determining solutions for their institution, or seeing successful implementations in other institutions would be more important for increasing their trust in EdTech products. On average, faculty ranked successful implementation as the most important factor, followed by collaboration in determining solutions for their institution, and evaluation research (Figure 6). While there was a tendency to favor evidence of successful implementations, none of the factors were overwhelmingly favored over the others.
These findings are noteworthy because they highlight a triad of equally important factors that impact faculty decisions about which products to employ. Vendors who overly focus on one of the three, while neglecting the others, may find it more difficult to partner with the faculty looking for innovative solutions for their classrooms.

### FACTORS THAT INFLUENCE TRUST IN EDTECH (RANKING)

Which of the following information would be most important for helping you trust vendors/companies to provide effective EdTech products? (please rank the following options in order of your preferences):

- Successful implementation within other institutions: 3.13
- Collaboration in determining solutions for your institution: 2.88
- Evaluation research: 2.73
- Other: 1.26

**Figure 6**

### WHY THIS MATTERS

Our data show that most faculty, even those teaching in person, recognize the benefits of educational technology in an abstract sense. However, many lack trust in EdTech vendors and the specific products they see on the market. This lack of trust may prevent faculty from fully embracing and adopting these products and, subsequently, students from benefiting from them. To address this lack of trust, vendors should ensure that evidence of the impact and successful implementation of their product is marketed not just to the administrators who will be purchasing the product, but also to the faculty who will be using it. Institutions should focus on providing necessary support and resources for students and faculty to learn and use new EdTech products to streamline implementations.
Takeaway 2: Faculty perceive that those furthest from the classroom have the greatest influence on EdTech decisions.

As the primary users of EdTech and the groups with the most direct classroom experience, it is critical that students and faculty members have a voice in decisions about what EdTech options are available to faculty for teaching. Yet faculty said college administrators (87%), instructional designers (78%), and department chairs (74%) have a large amount of influence in EdTech decisions (Figure 7).

In contrast, only 22% of faculty agreed that students have a large amount of influence in EdTech decisions; 78% agreed that students have no influence or only a minor influence. While 61% said that faculty have a large amount of influence in EdTech decisions, 39% said that faculty have no or minor influence. These results indicate faculty perceive that EdTech decisions in their institutions are largely driven by people who sit furthest from the classroom.

We also asked faculty about how much influence they think these groups should have on EdTech decisions. Their responses showed a gap between their perceptions of actual vs. ideal influence. Almost all faculty surveyed thought faculty should have high levels of influence in EdTech decisions. Eighty-six percent thought department chairs should have high levels of influence, and 82% thought instructional designers should have high levels of influence. Seventy-eight percent thought students should have high levels of influence. Just over half thought college administrators should have high levels of influence, and 44% thought college administrators should have no or minor influence in EdTech decisions.
FACULTY PERCEPTIONS OF ACTUAL VS. IDEAL INFLUENCE ON DECISIONS CONCERNING WHAT EDTECH OPTIONS ARE AVAILABLE TO FACULTY FOR TEACHING

**Why This Matters**

As noted earlier, faculty ultimately determine how any technology is adopted in their courses. If faculty do not believe they have input in these processes, they may be less likely to champion available products to their peers and less likely to incorporate these products into their teaching practices. Rather than making EdTech purchasing decisions in a top-down fashion, institutions should bring faculty in as partners in the process.
Takeaway 3: Faculty are wary of a tech-enabled future that is more standardized with less faculty-to-student interaction.

The faculty we surveyed view EdTech as a permanent feature in higher education but believe technology will impact their role, the control they have over their course content, and the extent to which they engage directly with students. A large majority of faculty agree that higher education will become increasingly tech-enabled in the future. While they had positive attitudes toward the expansion of hybrid programs and microcredentials, they were less positive about the increasing number of online courses and programs. When asked about what the future of instruction might look like, faculty largely believed that higher education would become increasingly standardized and less focused on interactions with students.

**FACULTY AGREE THAT THE FUTURE OF HIGHER EDUCATION IS TECH-ENABLED.**

A large majority of faculty surveyed envision a future of higher education that is increasingly digital: 88% agree that they will spend more time supporting students online, 86% agree that instructors will use more education technology tools in class, and 86% agree that instructors will spend more time delivering course content online in the future. When asked about their attitudes toward this tech-enabled future, faculty expressed neutral to positive attitudes. Over two-thirds of faculty felt positively about institutions offering increasing numbers of hybrid courses and micro-credential/certificate programs. However, faculty were less positive toward online courses and online programs. Just over half of faculty felt positively about institutions offering increasing numbers of online courses and programs, and roughly a third of faculty felt negatively about these possible futures. This pattern of responses suggests that faculty view programs that augment traditional in-person methods positively, whereas they are less positive about offerings that could replace in-person instruction.

**FACULTY ENVISION A FUTURE THAT IS MORE STANDARDIZED AND LESS CONNECTED FOR STUDENTS.**

Faculty were also wary of what an increasingly tech-enabled future may mean for the teaching and learning experience. Most believe that the future of higher education may be more standardized and less focused on social connection and human interaction. For example, despite technology’s ability to enhance learning outcomes, only 41% agreed that instruction will become more personalized while 61% agreed that it will become more standardized. Roughly half of faculty who responded to the survey agreed that they will have less autonomy over their course design and that instructors will spend less time interacting with students.

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Below are some possible futures that higher education instructors may soon experience. To what extent do you agree that each will occur within the next five years?

**Figure 8**

- **I expect instructors will spend more time supporting students online (e.g., online office hours).**
  - Strongly disagree: 4%
  - Somewhat disagree: 8%
  - Neither agree nor disagree: 88%

- **I expect instructors will use more education technology tools in class.**
  - Strongly disagree: 4%
  - Somewhat disagree: 10%
  - Neither agree nor disagree: 86%

- **I expect that instructors will spend more time delivering course content online.**
  - Strongly disagree: 5%
  - Somewhat disagree: 9%
  - Neither agree nor disagree: 86%

Below are some possible futures that higher education may soon experience. How positively or negatively do you view each of these potential scenarios for student learning?

**Figure 9**

- **Institutions offering increasing number of hybrid courses.**
  - Extremely negative: 12%
  - Somewhat negative: 18%
  - Neither positive nor negative: 70%

- **Institutions offering increasing number of micro-credential and certificate programs.**
  - Extremely negative: 12%
  - Somewhat negative: 21%
  - Neither positive nor negative: 67%

- **Institutions offering increasing number of fully online courses.**
  - Extremely negative: 29%
  - Somewhat negative: 17%
  - Neither positive nor negative: 54%

- **Institutions offering increasing number of fully online programs.**
  - Extremely negative: 33%
  - Somewhat negative: 15%
  - Neither positive nor negative: 51%
WHY THIS MATTERS

Proponents argue that tech-enabled learning has the potential to provide a more personalized learning experience for students, streamline communication between students and faculty, and better meet the needs of diverse learner groups. Yet, when asked about what the tech-enabled future might look like, faculty predominantly believe that it will be less personalized, more standardized, and less socially-connected for students. Addressing these concerns by giving faculty autonomy in developing tech-enabled instruction, bringing them in as partners in the expansion of online courses and programs, and highlighting the benefits of tech-enabled learning for the learner experience will be critical for faculty to fully embrace the tech-enabled future. Rather than treating technology as an add-on to or replication of traditional instructional models, institutions should approach tech-enabled instruction as a new learning model that leverages both the capabilities of tech and the expertise of faculty.

FACULTY AGREEMENT WITH STATEMENTS ABOUT THE FUTURE OF EDUCATION

Below are some possible futures that higher education instructors may soon experience. To what extent do you agree that each will occur within the next five years?

I expect courses will become more standardized.

- Strongly disagree: 16%
- Somewhat disagree: 23%
- Neither agree nor disagree: 22%
- Somewhat agree: 27%
- Strongly agree: 61%

I expect that I will have less autonomy over my course design.

- Strongly disagree: 27%
- Somewhat disagree: 21%
- Neither agree nor disagree: 22%
- Somewhat agree: 29%
- Strongly agree: 53%

I expect instructors will spend less time interacting with students.

- Strongly disagree: 29%
- Somewhat disagree: 22%
- Neither agree nor disagree: 27%
- Somewhat agree: 36%
- Strongly agree: 49%

I expect instruction to become more personalized.

- Strongly disagree: 36%
- Somewhat disagree: 22%
- Neither agree nor disagree: 27%
- Somewhat agree: 41%
- Strongly agree: 29%

Figure 10
The COVID-19 pandemic created a host of tech-related and non-tech-related challenges for higher education faculty. High levels of stress and burnout among faculty have been widely reported, threatening a wave of faculty exits for other career opportunities.⁹ To capture these trends and to provide insights into how institutions and providers can better support faculty, we included several questions assessing technology fatigue, burnout, job satisfaction, and turnover intentions. Based on our survey results, faculty are experiencing high levels of both technology fatigue and burnout. Those who reported higher levels of technology fatigue also reported higher levels of overall burnout. Although faculty overall reported high levels of satisfaction with their jobs, a sizable portion are considering leaving their positions in the next three years.

FACULTY ARE FATIGUED BY TECHNOLOGY.

Over two-thirds of faculty surveyed agreed that they feel as if they are always “on the job” because of technology, and that there are days they do not want to use technology because they need a break from it. Sixty-two percent agreed that technology makes it difficult for them to take a break from work and/or their students. Forty-three percent of faculty agreed that they had stopped using one or more tools in the past year because they were tired of technology.

To provide deeper insights into this phenomenon, we also explored technology fatigue broken down by gender. These analyses revealed that women in our sample experienced particularly high levels of technology fatigue. Women were nine percentage points higher than men on average. (Gewin, 2021)

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more likely than men to say they had stopped using one or more tools in the last year because they are tired of technology, six percentage points more likely to say that technology makes it difficult for them to take a break from work and/or their students, and 12 percentage points more likely to say that there are days they do not want to use technology because they need a break from it.

**TECH FATIGUE PREDICTS GREATER OVERALL JOB BURNOUT AND LOWER JOB SATISFACTION.**

To assess overall job burnout, we included two items from the Maslach Burnout Inventory, which is a widely used questionnaire that assesses general burnout in the workplace. Their responses to these two items indicated that they were also experiencing higher levels of general burnout. Forty-four percent agreed that they feel burned out because of their work, and 43% agreed that they feel emotionally exhausted because of their work.

Subgroup analyses revealed that women were also experiencing particularly high levels of burnout, which is consistent with broader trends in higher education.

We also looked at overall job satisfaction by asking faculty how satisfied they felt with their jobs as a whole and how likely they were to leave their current job in the next three years.
Although the majority of faculty were satisfied with their jobs, roughly 20% were unsatisfied and over a quarter intended to leave their jobs in the next three years. We did not see substantial gender differences in job satisfaction.

Technology fatigue was a robust predictor of burnout and job satisfaction among our sample. Those who reported more technology fatigue were also more likely to agree that they were “burned out” and “emotionally exhausted” by their work, less satisfied with their jobs overall, and more likely to report that they were considering leaving their jobs in the next three years.
Please indicate the extent to which you agree with each of the following statements:

**I feel burned out because of my work.**

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<thead>
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<th></th>
<th>Women</th>
<th>Men</th>
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<td>44%</td>
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<td>22%</td>
</tr>
<tr>
<td>Neither agree nor disagree</td>
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</tr>
<tr>
<td>Somewhat agree</td>
<td>49%</td>
<td>34%</td>
</tr>
<tr>
<td>Strongly agree</td>
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**I feel emotionally exhasuted because of my work.**

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<th></th>
<th>Women</th>
<th>Men</th>
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<tr>
<td>Strongly disagree</td>
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<td>48%</td>
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<tr>
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<td>15%</td>
<td>21%</td>
</tr>
<tr>
<td>Neither agree nor disagree</td>
<td>21%</td>
<td>31%</td>
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<tr>
<td>Somewhat agree</td>
<td>49%</td>
<td>34%</td>
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<tr>
<td>Strongly agree</td>
<td>4%</td>
<td>3%</td>
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**Taking everything into consideration, how satisfied do you feel about your job as a whole?**

- Extremely satisfied: 4.1%
- Somewhat satisfied: 14.4%
- Neither satisfied nor dissatisfied: 8.4%
- Somewhat dissatisfied: 26.3%
- Extremely dissatisfied: 46.8%

**How likely are you to leave your current job in the next three years?**

- Extremely likely: 9.2%
- Somewhat likely: 17.7%
- Neither likely nor unlikely: 17.7%
- Somewhat unlikely: 19.1%
- Extremely unlikely: 36.3%
**FACULTY FATIGUE WITH TECHNOLOGY**

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<th>Faculty who reported that technology makes it difficult for them to take a break from work and/or their students are also...</th>
<th>Faculty who reported that there are days when they do not want to use technology because they need a break from it are also...</th>
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<td><img src="up.png" alt="Up" /></td>
</tr>
<tr>
<td><img src="image.png" alt="Image" /></td>
<td>$r = .15^{**}$</td>
<td>$r = .12^{*}$</td>
</tr>
</tbody>
</table>

* indicates that the correlation is significant at $p < 0.01$

** indicates that the correlation is significant at $p < 0.001$

**WHY THIS MATTERS**

If faculty are fatigued by technology, they may be less likely to adopt new tools and to use existing tools as they're intended, diminishing the benefits to students. In addition, faculty experiencing burnout may be more likely to leave their jobs, which creates challenges for institutions, students, and the faculty who remain. Data from our survey show that faculty are experiencing high levels of technology fatigue and that this fatigue may be contributing to greater burnout and lower job satisfaction. Addressing high levels of technology fatigue and burnout by being intentional about the rollout and implementation of new EdTech, reducing irrelevant or redundant tools, and providing sufficient time, resources, and institutional support for faculty to learn new technologies will be critical for retaining faculty over time.
Strategies to Improve the Faculty EdTech Experience

Listening to the faculty perspective on EdTech is critical for the successful integration of technology in higher education. The 2022 CIN EdTech Faculty Survey provided critical insights into pain points in the faculty experience with EdTech. These insights suggest a need to rethink institutional approaches to EdTech to achieve a successful technology-enabled future.

ADOPT A MORE STRATEGIC TECHNOLOGY SELECTION PROCESS THAT INCLUDES THE VOICES OF FACULTY

First, institutions should adopt a more strategic technology selection process that includes the voices of faculty. This process should identify aspects of tech-enabled instruction that need to be centralized versus aspects that can be more decentralized. For example, learning management, student information, and university communication systems should be centralized to provide a more cohesive instructional experience for students. But curriculum and instructional tools could be more decentralized to give departments and faculty more autonomy and control. When vetting the more centralized tools, it will be critical to engage a broad range of faculty and student perspectives, provide a robust rationale for the decisions, present evidence of both impact and successful implementation in the review process, and provide proper training for these tools to both students and faculty.

REDEFINE TECHNOLOGY-ENABLED INSTRUCTIONAL MODELS TO AVOID FACULTY’S PREDICTED PATH OF INFLEXIBLE AND IMPERSONAL LEARNING

Second, findings from our survey suggest a need to redefine technology-enabled instructional models to avoid faculty’s predicted path of inflexible and impersonal learning. Our data suggest that faculty view technology as an additional burden, rather than a tool to improve the teaching and learning experience. Moving forward, it will be crucial to think about an instructional model that integrates the benefits of technology with the expertise of faculty. Throughout this process of redefining technology-enabled instructional models, it will also be critical to engage the faculty voice. If faculty perceive that technology and online learning are being forced upon them, they will be less likely to embrace the tech-enabled future and students will be less likely to benefit from it. To successfully integrate technology in institutions of higher education, faculty should be included as partners in this process.
Conclusion

As technology becomes an increasingly central feature of higher education, listening to faculty about their experiences with EdTech is critical. In this report, we shared insights into the ways that faculty perceive, experience, and use EdTech in their teaching — and offered actionable strategies to improve their experiences.

Education technology has clearly cemented a role in higher education. Faculty and students not only perceive technology as a fixture in higher education but understand the value it can bring in expanding access, engagement, and increasing flexibility. These benefits, however, will rely on robust engagement from faculty to chart the path forward. The findings from this survey suggest that a great deal more needs to be done by higher education institutions to engage faculty in the decision-making process, build faculty’s confidence in EdTech solutions and the future of tech in learning, and provide them with the resources they need to succeed in implementing tech solutions in their classrooms.
SURVEY APPROACH

In November 2022, the CIN research team emailed surveys to more than 6,400 faculty across nine teaching-focused CIN member institutions. These post-secondary institutions included community colleges, private and public four-year institutions, and one primarily online, not-for-profit college. The survey contained 56 questions to better understand the faculty experience with EdTech and teaching. Specific topics included perceptions of the benefits of EdTech, adoption of EdTech, trust in the efficacy of EdTech, perceptions of EdTech decision-making processes in their institution, and perspectives on possible futures of higher education (see Appendix for full list of questions). The survey also included a set of demographic questions, which are shown in Figures X-X. Faculty were compensated $35 for participating in the survey. The final sample included 491 faculty respondents. Fifty-eight percent of respondents teach at community colleges, 35% at 4-year universities, and 7% at a primarily online college.
WHO TOOK OUR SURVEY?

We compared the demographic characteristics of our sample with the overall populations of faculty at each participating institution, according to available Integrated Postsecondary Education Data System (IPEDS) data. This comparison allows us to determine how representative our sample of faculty were of the larger populations of faculty at participating CIN institutions. These comparisons revealed that women were overrepresented in our sample compared to IPEDS data, while men were underrepresented (see Figure 18).

Our sample was largely consistent with the IPEDS data in terms of race/ethnicity, though white faculty were slightly overrepresented in our survey, whereas Black and Asian faculty were slightly underrepresented (See Figure 19).

FACULTY AGREEMENT WITH STATEMENTS ABOUT THE FUTURE OF EDUCATION

<table>
<thead>
<tr>
<th></th>
<th>Survey</th>
<th>IPEDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>62.0%</td>
<td>52.2%</td>
</tr>
<tr>
<td>Men</td>
<td>37.1%</td>
<td>47.8%</td>
</tr>
<tr>
<td>Non-binary, third gender, or other identity not listed</td>
<td>0.8%</td>
<td></td>
</tr>
</tbody>
</table>

Figure 18

NUMBER OF RESPONSES BY SCHOOL

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Survey</th>
<th>IPEDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>80.5%</td>
<td>78.5%</td>
</tr>
<tr>
<td>Asian</td>
<td>8.2%</td>
<td>9.4%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>7.8%</td>
<td>8.9%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>3.5%</td>
<td>2.9%</td>
</tr>
<tr>
<td>American Indian or Alaska Native Native Hawaiian or Other Pacific Islander</td>
<td>0.0%</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

Figure 19
**TEACHING EXPERIENCE**

Faculty respondents also had a wide range of teaching experience. Some faculty had less than five years of teaching experience, whereas a sizable number of faculty had more than 20 years of experience (see Figure 20).

Only about a third of our faculty respondents were in tenure track positions. Twenty-three percent were in full-time, non-tenure track positions, and 42% were part-time or adjunct faculty (see Figure 21).
Survey Questions

CORE SURVEY ITEMS

1.1 Teaching and EdTech General

1. This semester, I have taught most classes:
   • Face to face
   • Online, synchronously
   • Online, asynchronously
   • Hybrid (some aspects online, some aspects face to face)

2. Please rank your preferred teaching modalities:
   • Face to face
   • Online, synchronous
   • Online, asynchronous
   • Hybrid (some aspects online, some aspects face to face)

3. Which of the following statements best describes you? (choose only one)
   • I'm usually one of the first among my faculty peers to try new EdTech in my courses.
   • I'm someone who tries new EdTech after seeing some of my faculty peers use a product effectively.
   • I'm usually one of the last among my faculty peers to try new EdTech in my courses.

4. How satisfied are you with the amount of time you currently have available to spend on: [1 - dissatisfied to 5 - satisfied]
   • Vetting and evaluating new EdTech for use in my courses
   • Learning to implement and use new EdTech for my courses

1.2 EdTech Self-Efficacy

Please indicate the extent to which you agree with each of the following statements about EdTech: [1 - strongly disagree to 5 - strongly agree]
   • I feel confident in my ability to adapt to using new EdTech in my courses.
   • I have struggled to integrate new EdTech in my courses.
   • I feel confident in my ability to teach effectively in online environments.
   • I feel confident in my ability to effectively use EdTech in my courses.
   • I feel confident in my ability to evaluate research about the impact and efficacy of EdTech tools.

1.3 EdTech Integration & Support

Please indicate the extent to which you agree with each of the following statements about EdTech: [1 - strongly disagree to 5 - strongly agree; don't know]
   • There are educational technologies that my students cannot use due to lacking other technologies that are necessary (e.g., wifi, webcams, latest/updated computers, tablets, etc).
   • My institution provides effective training for faculty to learn how to use EdTech in the classroom.
   • My institution provides effective support for students to learn how to use EdTech in the classroom.
How much actual influence do you think each group or person has on decisions concerning what EdTech options are available to faculty for teaching? [1- no influence, 2- minor, 3- moderate, 4 -major]

- Faculty
- Department Chairs
- College administrators
- Instructional designers
- Students
- Other [please specify]

How much influence should each group or person have on decisions concerning what EdTech options are available within an institution? [1- no influence, 2- minor, 3- moderate, 4 -major]

- Faculty
- Department Chairs
- College administrators
- Instructional designers
- Students
- Other [please specify]

ATTITUDES AND BELIEFS ABOUT EDTECH

Please indicate the extent to which you agree with each of the following statements about EdTech: [1- strongly disagree to 5- strongly agree; don't know]

- EdTech is essential to student engagement and success.
- EdTech enhances teaching and learning experiences.
- EdTech helps create more equitable learning experiences for students.
- Students are resistant to using new EdTech.
- It is difficult to know whether an EdTech product will work effectively.
- I trust vendors/companies to provide effective EdTech products.
- I trust my institution's administration to choose effective EdTech products.

Which of the following information would be most important for helping you trust vendors/companies to provide effective EdTech products? (please rank the following options in order of your preferences)

- Evaluation research
- Successful implementation within other institutions
- Collaboration in determining solutions for your institution
- Other [please specify]

1.4 Future opportunities

Below are some possible futures that higher education may soon experience. How positively or negatively do you view each of these potential scenarios for student learning? [1- extremely negative to 5- extremely positive]

- Institutions offering increasing number of fully online courses
- Institutions offering increasing number of fully online programs
- Institutions offering increasing number of hybrid courses (i.e., some online aspects and some in person aspects of the same course)
- Institutions offering increasing number of micro-credential and certificate programs

Below are some possible futures that higher education instructors may soon experience. To what extent do you agree that each will occur within the next five years? [1- strongly disagree to 5- strongly agree]

- I expect that instructors will spend more time delivering course content online.
- I expect instructors will spend more time supporting students online (e.g., online office hours).
- I expect instructors will use more education technology tools in class.
- I expect instruction to become more personalized.
- I expect instructors will spend less time interacting with students.
- I expect courses will become more standardized.
- I expect that I will have less autonomy over my course design.
1.5 Technology fatigue

- I feel as if I am always “on” the job because of technology.
- Technology makes it difficult for me to take a break from work and/or my students.
- There are days when I do not want to use technology because I need a break from it.
- I have stopped using one or more tools in the last year (e.g., social media, listservs, gadgets etc.) because I am tired of technology.
- I feel “mentally tired” due to the use of technology in teaching.
- I feel overwhelmed by technology.

Now, think about how you typically spend your time at your job.

- During the 21-22 academic year, about what percentage of your time did you spend learning and using new educational technology? [0% - 100%]
- About what percentage of your time do you think you will spend learning and using new educational technology in the 22-23 academic year? [0% - 100%]

1.6 Burnout

- I feel burned out because of my work
- I feel emotionally exhausted because of my work

1.7 Satisfaction/ quitting intentions

- Taking everything into consideration, how do you feel about your job as a whole? [1 = not at all satisfied to 5 = very satisfied]
- How likely are you to leave your current job in the next three years? [1 = not at all likely to 5 = very likely]

1.8 Miscellaneous Demographics

Years of teaching completed
[drop down menu of years]

Are you currently:
- Full-time, non-tenure track
- Full-time, tenure track
- Part-time or adjunct

Number of courses typically taught during an average fall or spring semester
- 1-2
- 3-4
- 5+

Number of students (approximate) you’re responsible for this semester (total across all courses)
- <30
- 31-60
- 61-90
- 91-120
- 121-150
- 151+

My highest degree earned is:
- Bachelor degree
- Masters degree
- Doctorate or other professional degree

My gender is:
- Female
- Male
- Non-binary, third gender, or other identity not listed

What department or field do you teach?
[open box]

Choose the race/ethnicity groups you identify with:
[granular response options programmed in qualtrics]
Join the Network

The College Innovation Network (CIN) at WGU Labs is a network of higher education institutions committed to addressing the core challenge of promoting belonging and engagement in the modern higher education environment. We're leveraging technology to build highly engaged learning communities from enrollment through graduation - and beyond. CIN supports educational institutions by identifying areas of need, implementing effective education technology for students, and demonstrating impact through research.

We seek institutions that educate diverse student populations— including a significant proportion of traditionally underrepresented and underserved students. By joining CIN, institutions are connected with a community of like-minded education leaders who are committed to the common goal of leveraging technology and designing innovations to better support belonging, engagement, and equity.

We would love to chat with you and see if your institution would be a good fit for our growing Network.

Contact Business Operations & Product Manager Erika Wandsneider at cin@wgulabs.org to get started.

Join us as we build learning communities where all students belong.

ABOUT THE CIN EDTECH SURVEY SERIES

CIN is in a unique position to learn about the student and faculty experience with EdTech by leveraging the diversity of institutions within the Network. The CIN EdTech Survey Series is a biannual survey administered across the Network with the goal of generating valuable insights to help institutions understand how faculty and students experience EdTech. These insights can be applied to improve faculty and student experiences, and ultimately bolster the impact of EdTech across the sector. As CIN continues to grow, so will the impact of the CIN EdTech Survey Series.

Queries about CIN can be addressed to cin@wgulabs.org
ACKNOWLEDGEMENTS

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The support of generous donors who believe in the mission of CIN make this work possible. If you are interested in supporting CIN, please contact us at cin@wgulabs.org.

REPORT CONTRIBUTIONS

This research was made possible through the collaboration of institutional leaders at Wayne Community College, Piedmont Community College, Calbright College, Marshall University, Pennsylvania Western University, Central Ohio Technical College, Loyola University New Orleans, Northern Virginia Community College, Rio Salado College, and Cuyahoga Community College. Stephanie Reeves of WGU Labs is responsible for survey design, data collection, data analysis, and writing of the report. Natalie Berkey, Omid Fotuhi, Betheny Gross, and Holly Wallace at WGU Labs provided critical revisions to the report. The report was designed by CallyAnn Hamilton and Christine McDonough at WGU Labs.

ABOUT WGU LABS

WGU Labs is the nonprofit EdTech consulting, incubation, research, and design arm of Western Governors University, where our mission is to identify and support scalable solutions that address the biggest challenges in education today.