# Faculty as EdTech Innovators: Moving Beyond Stereotypes to Promote Institutional Change

College Innovation Network
EdTech Faculty Survey

wgu labs | College Innovation Network

# Table of **Contents**

# Executive Summary

Higher education is now in the future it has been predicting for decades: online, flexible, technology-driven, and broadly accessible. Now that we're in this new era, we must be mindful of using EdTech to meet the needs of diverse learner populations, and understand how its primary users–faculty and students–are experiencing EdTech.
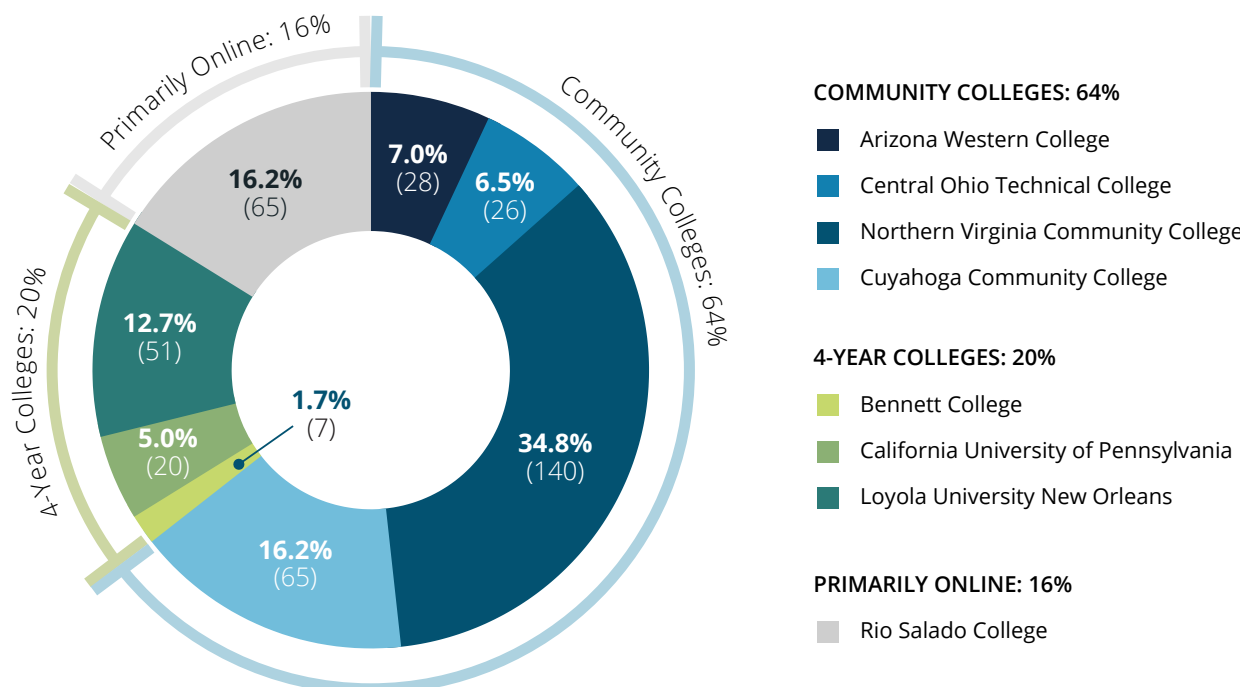
The rapid advancements in technology-enabled learning means that technology is now integrated into education more than ever before. When used well, EdTech can be a valuable tool for teaching practice, yet little is known about how faculty are experiencing EdTech or their decision-making process about which tools to use, and why.

The question now becomes: **what can we do to help faculty get the most out of EdTech to enhance their teaching practice and, ultimately, their students' learning experiences?**

To find out, the College Innovation Network (CIN) research team surveyed 402 faculty members across eight higher education institutions in November 2021.

## NUMBER OF RESPONSES ACROSS PARTICIPATING CIN INSTITUTIONS



Primarily Online: 16%

Community Colleges: 64%

4-Year Colleges: 20%

7.0% (28)

6.5% (26)

16.2% (65)

34.8% (140)

16.2% (65)

12.7% (51)

5.0% (20)

1.7% (7)

**COMMUNITY COLLEGES: 64%**
- Arizona Western College
- Central Ohio Technical College
- Northern Virginia Community College
- Cuyahoga Community College

**4-YEAR COLLEGES: 20%**
- Bennett College
- California University of Pennsylvania
- Loyola University New Orleans

**PRIMARILY ONLINE: 16%**
- Rio Salado College

As part of our biannual survey series, the 2022 CIN EdTech Faculty Survey sought to dive deep into the faculty experience with technology-enabled teaching and learning,

In this report, we outline the findings from the survey results and derive actionable strategies that administrators and EdTech vendors can adopt to improve the faculty EdTech experience.

**HERE ARE FOUR KEY TAKEAWAYS FROM OUR RESEARCH WITH FACULTY**

**1 - Faculty view themselves as EdTech leaders**
Contrary to stereotypes that faculty resist using EdTech, our survey shows that only 11% of faculty are resistant to using EdTech. The remaining faculty identify as EdTech leaders (41%) or enthusiastic followers after seeing successful use cases (48%). Also, **81% of faculty are confident in their ability to adapt to using EdTech in their courses**, with only 5% of faculty overall reporting not feeling confident.

**2 - Faculty need more time, resources, and input to effectively use EdTech**
Many faculty are struggling with limited time. Thirty percent of faculty are dissatisfied with the time they have to learn how to use and implement new EdTech; **34% of faculty are dissatisfied with the time they have to evaluate EdTech products**; and, 15% of faculty report they do not receive effective EdTech training.

How EdTech information flows through university systems is also a barrier. Faculty learn about EdTech through their faculty communities. Yet, much of EdTech is purchased by, and sold to, institutional leaders rather than directly to faculty. As a result, less than half of faculty report that they and their peers have "a lot" or "a great deal" of influence over pedagogical EdTech decisions, despite faculty having clear expectations about what they want from EdTech.

**3 - Faculty prioritize access and equity when adopting EdTech**
Faculty have clear expectations from EdTech, with **88% and 86% of faculty reporting that an EdTech product being accessible to students with disabilities and to underserved students**, respectively, is "very" or "extremely important" when choosing EdTech products. And, 84% of faculty report that on-demand tech support for students from the product vendor is "very" or "extremely important" in their EdTech decision making.

**4 - Faculty are aligned on the future of online learning, but divided in how they feel**
When asked about the future of higher ed, **88% of faculty agree that they will spend more time delivering course content online**, and 88% of faculty agree that they will be using more EdTech tools in class in the near future. However, 21% of faculty feel negatively about increasing the number of fully online courses and 28% of faculty feel negatively about increasing the number of fully online programs. ■



**81%**
of faculty are confident in their ability to adapt to using EdTech in their courses.

**34%**
of faculty are dissatisfied with the time they have to evaluate EdTech products.

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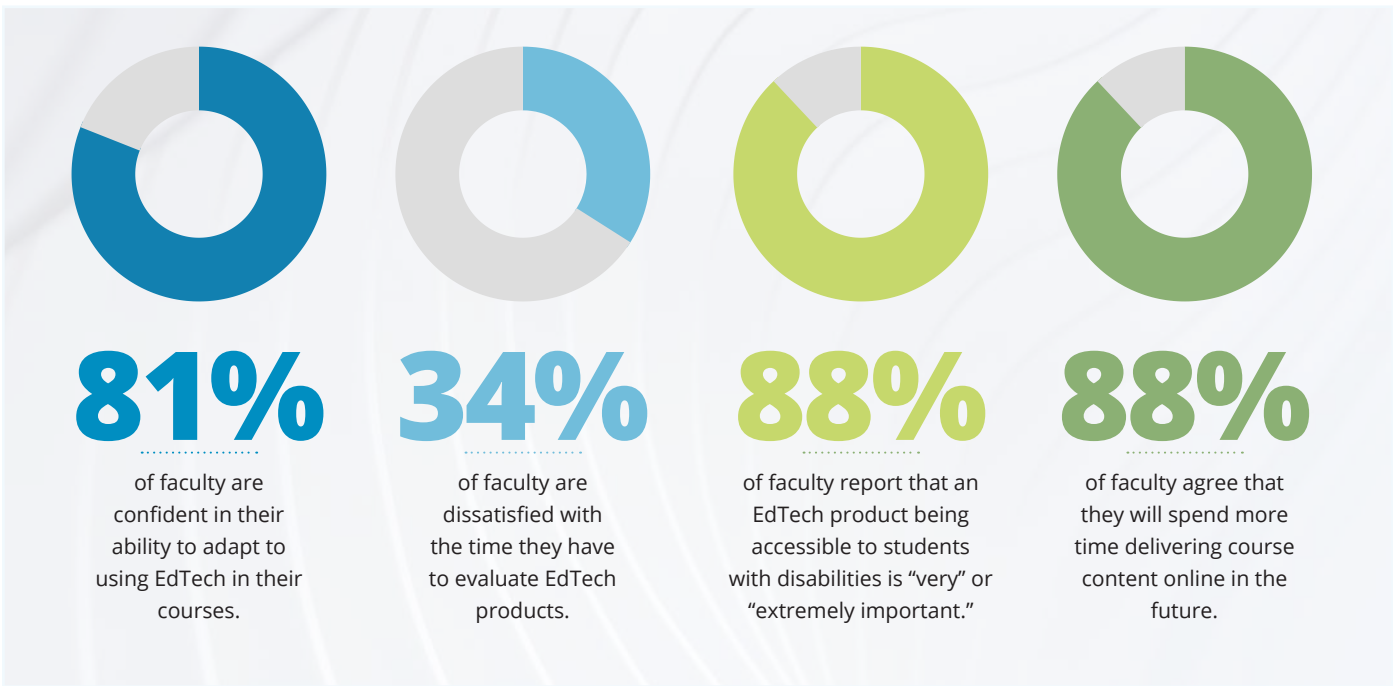
## ABOUT THE COLLEGE INNOVATION NETWORK

**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 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

# The Technology-Enabled Future of Higher Education is Now

Higher education is now in the future it has been predicting for decades: online, flexible, technology-driven, and broadly accessible. Now that we're in this new era, we must be mindful of using EdTech to meet the needs of diverse learner populations, and understand how faculty and students are experiencing EdTech.

Although technology-enabled learning is not new—it's been around for decades—the ubiquity of EdTech in students' learning experiences and faculty teaching practice is. For example, more students than ever are taking some or all courses online. Classrooms are adding new technology to broaden pedagogical opportunities. Students have access to more learning apps to complete class assignments and study than ever before. And there is now an entire technology-enabled ecosystem of fully online colleges, programs, and credentialing options available to students.

When used well, EdTech can be a valuable tool for teaching practice, yet little is known about how faculty are experiencing EdTech or their decision-making process about which tools to use, and why. It is critical that we listen to our faculty, who are working directly with students over the course of their programs, to understand their experiences with EdTech.

Successful use of EdTech in the classroom requires faculty adoption; without faculty support, EdTech can be ineffectual and burdensome for students. If faculty aren't fully supported in their adoption and implementation of EdTech by their institutions, then the student experience will suffer. By listening to faculty about their experiences,

we can identify barriers to effective adoption and integration of EdTech into their pedagogy. With this information, we can then derive actionable strategies to make real changes to enhance the faculty EdTech experience.

The question now becomes: **what can we do to help faculty get the most out of EdTech to enhance their teaching practice and, ultimately, their students' learning experiences?**

To find out, the College Innovation Network (CIN) research team surveyed 402 faculty members across eight higher education institutions in November 2021. As part of our biannual survey series, this year's CIN EdTech Faculty Survey sought to dive deep into the faculty experience with technology-enabled teaching and learning,

### THE GOALS OF THE 2022 CIN EDTECH FACULTY SURVEY WERE:

- Understand faculty attitudes and experiences with EdTech, including their confidence and ability to learn and adapt to EdTech in their teaching practice, a concept we call *EdTech self-efficacy*.

- Identify the institutional and market forces that help or hinder the faculty EdTech experience.

- Learn about the faculty EdTech decision-making process when choosing EdTech for their courses.

- Gain insight to faculty's perceptions of the future of technology-enabled higher education.

In this report, we present all the survey data collected from faculty, and organize the results into four key takeaways. From these takeaways, we derive five actionable strategies that administrators and EdTech vendors can adopt to improve the faculty EdTech experience.

**FOUR KEY TAKEAWAYS FROM OUR RESEARCH WITH FACULTY:**

1. **Faculty view themselves as EdTech leaders**

2. **Faculty need more time, resources, and input to effectively use EdTech**

3. **Faculty prioritize access and equity when adopting EdTech**

4. **Faculty are aligned on the future of online learning, but divided in how they feel**

As higher education embraces a flexible, technology-enabled future, the CIN EdTech Survey Series will continue to yield powerful insights for effectual change, with the ultimate goal of improving the learning experience for our students. ■
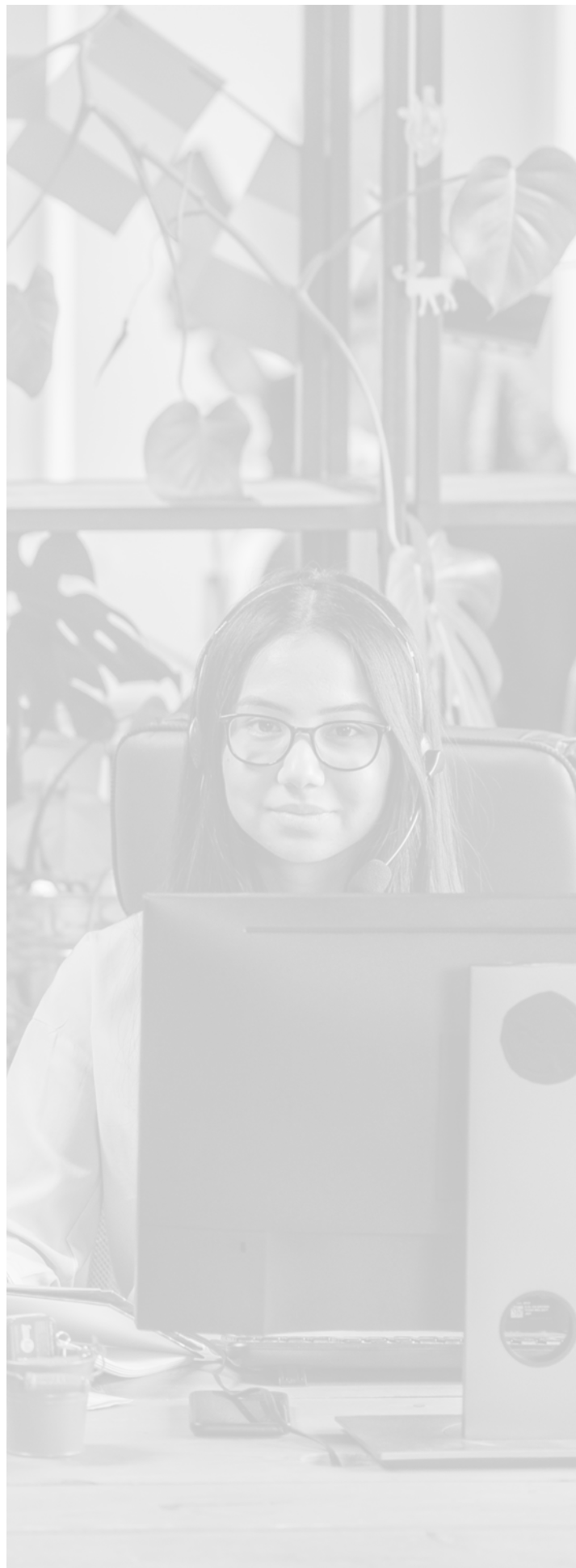
# About the Data and Methods

## SURVEY APPROACH

In November 2021, the CIN research team emailed surveys to more than 4,500 faculty across eight institutions within the Network. These institutions represented public and private 4-year universities, community colleges, and a primarily online institution that all represented teaching-focused institutions.

The CIN EdTech Faculty Survey contained 51 items to better understand the faculty experience with EdTech and teaching. The survey specifically asked about their teaching approach, EdTech decision making, EdTech implementation and support, and perspectives on possible futures of technology-driven higher education (see **Appendix**), in addition to a set of demographic questions we asked, which are shown in **Figures 2 - 8**. Faculty were compensated $25 for participating in the survey.

The analytic sample comprised 402 faculty members (**Figure 1**). Although all of the institutions in CIN are currently teaching-focused, there remain notable differences among the types of institutions in the sample. Sixty-four percent of faculty respondents teach at community colleges, 20% at 4-year universities, and 19% at a primarily online college.



**NUMBER OF RESPONSES ACROSS PARTICIPATING CIN INSTITUTIONS**

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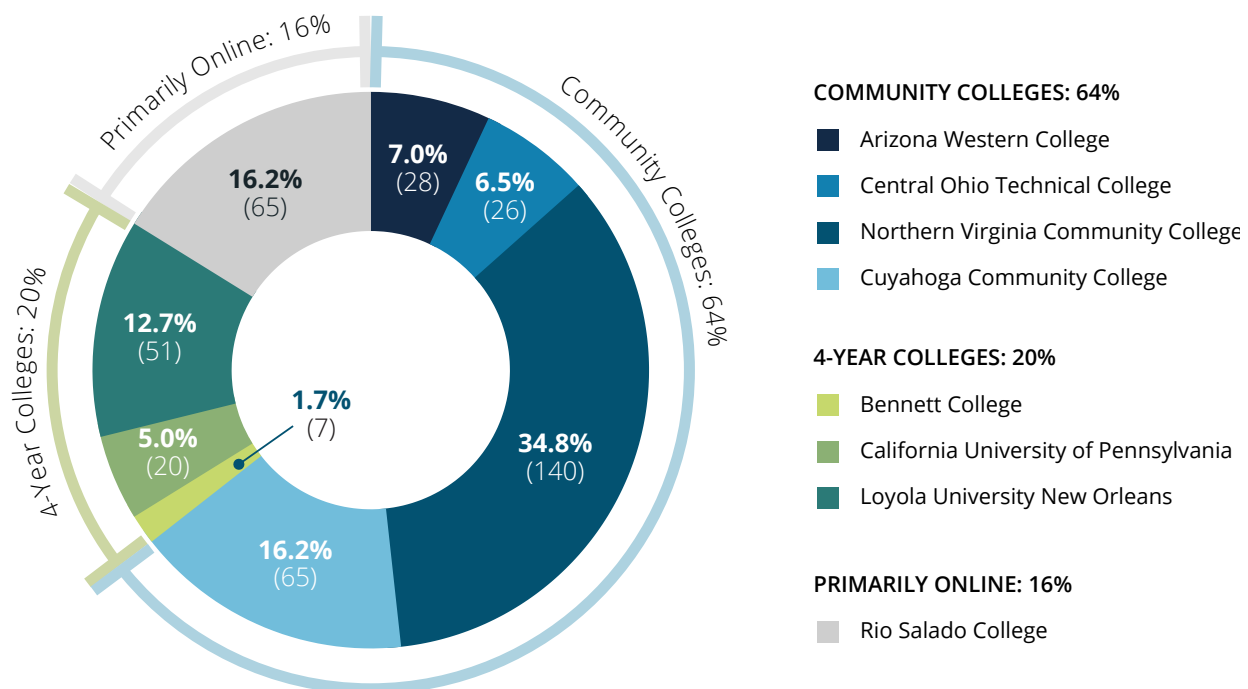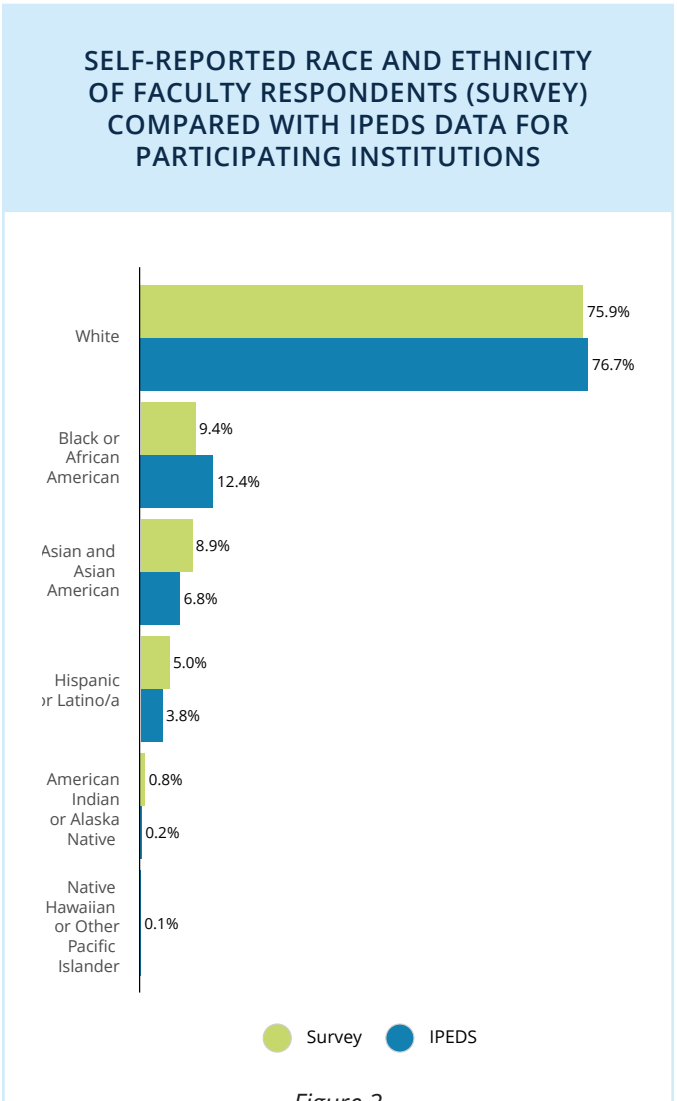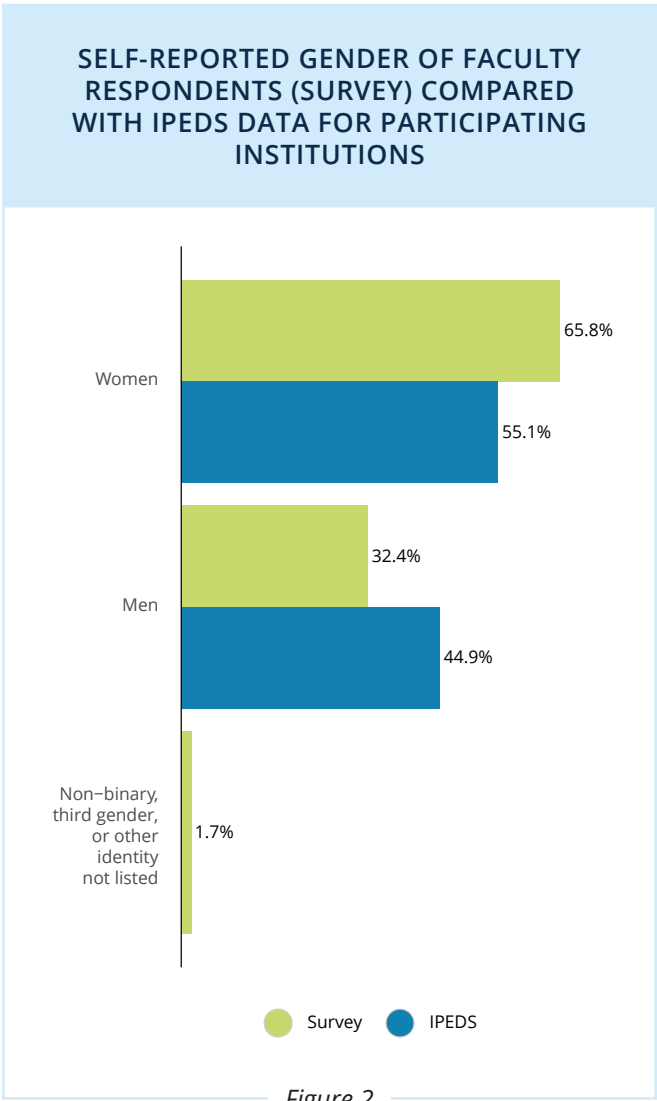- Rio Salado College

*Figure 1*

These distinctions of institution type turned out to be important across many questions presented throughout this report. Data are reported across all faculty respondents (denoted by "overall" throughout the report) and by institution type ("community college," "4-year college," and "primarily online college") where notable differences in responses are observed.

**WHO TOOK OUR SURVEY**

Across gender, our sample has more women relative to the data provided to IPEDS (**Figure 2**). With regard to self-reported race and ethnicity in our survey compared to IPEDS data, our sample slightly underrepresents Black and African American faculty, and slightly overrepresents Hispanic and Latino/a faculty and Asian and Asian American faculty (**Figure 3**).

Faculty respondents teach in a wide array of disciplines, with the most prominent departments being Biology, English, Computer Science/IT, Math, Nursing, and Business. **Figure 4** shows disciplines in which at least five or more faculty reported that department, which represents 85% of faculty in the sample.

**SELF-REPORTED GENDER OF FACULTY RESPONDENTS (SURVEY) COMPARED WITH IPEDS DATA FOR PARTICIPATING INSTITUTIONS**



*Figure 2*

**SELF-REPORTED RACE AND ETHNICITY OF FACULTY RESPONDENTS (SURVEY) COMPARED WITH IPEDS DATA FOR PARTICIPATING INSTITUTIONS**
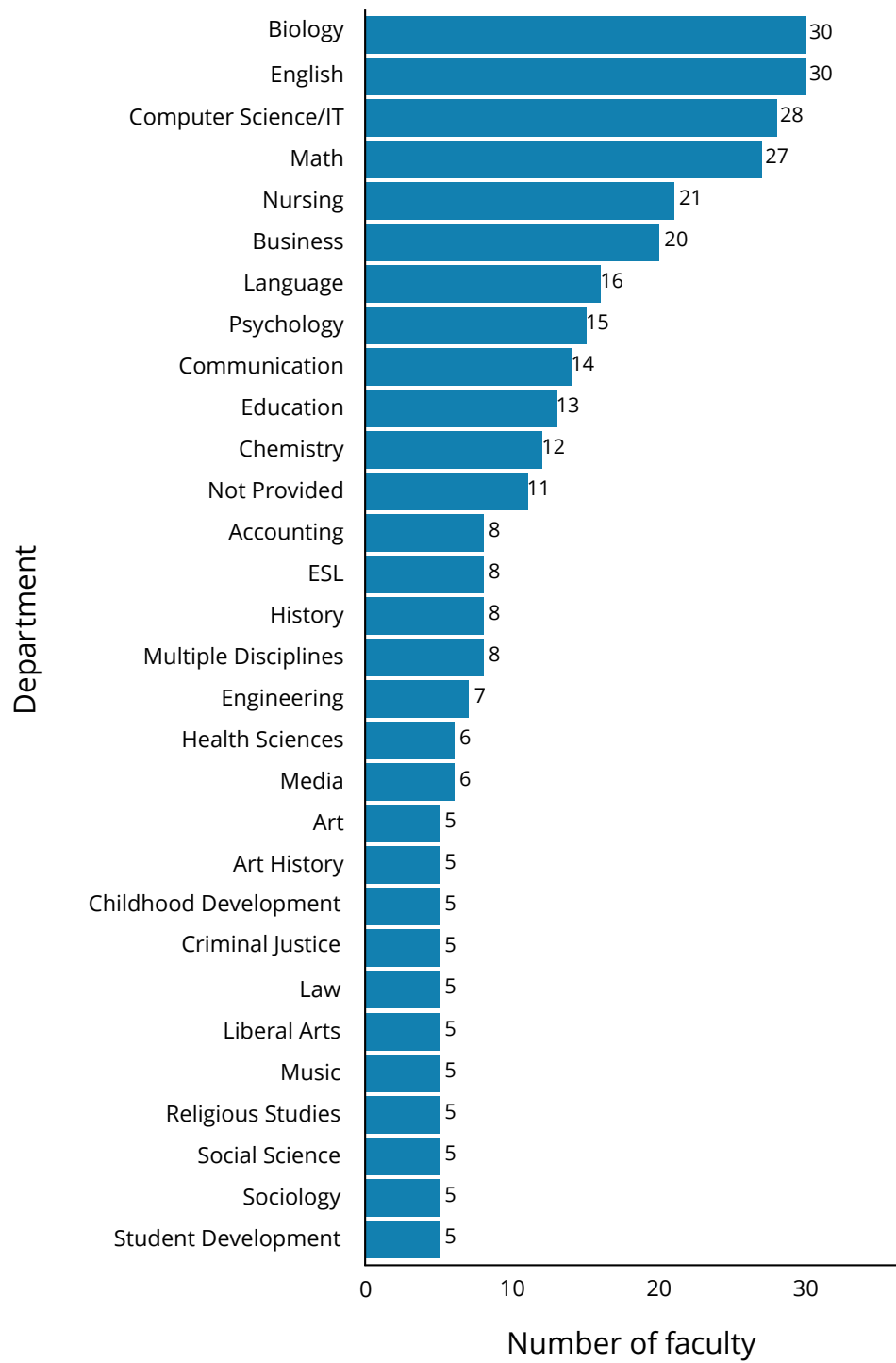


*Figure 3*

*Figure 4*

## PERCENT OF FACULTY BY YEARS TEACHING
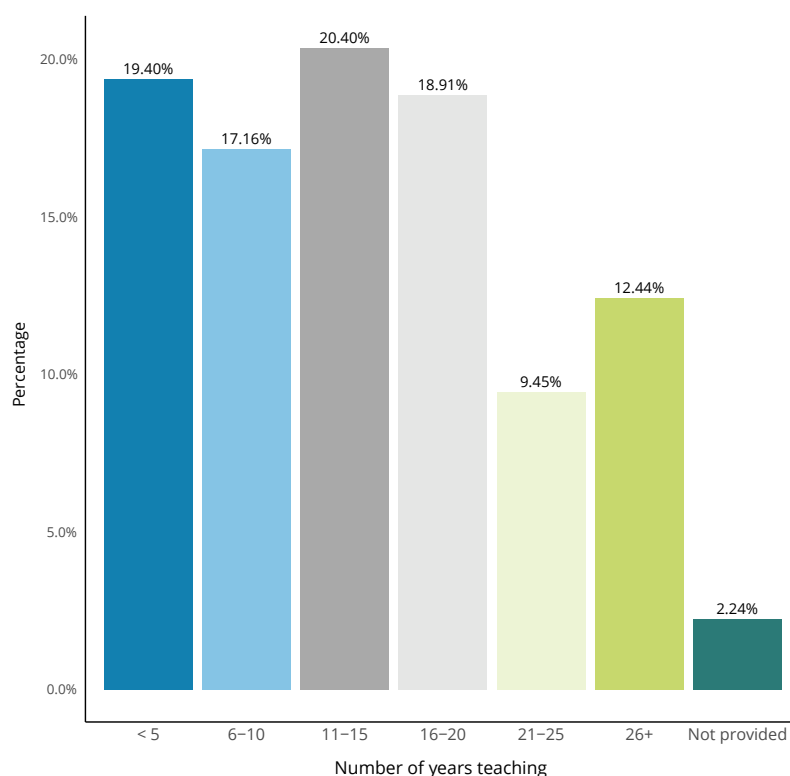


*Figure 5*

### FACULTY TEACHING EXPERIENCE

The faculty in our sample had a wide range of teaching experience, with many newer faculty who have been teaching less than five years and many faculty who have been teaching for more than 20 years (**Figure 5**).

About 80% of faculty who participated in the survey were not tenure-track, compared to 55% of the faculty population at these institutions as reported to IPEDS. Full-time and part-time faculty status were aligned with IPEDS data, with 60% of respondents reporting part-time status (**Figure 6**). Minimal differences by part-time/full-time or tenure-track/non-tenure-track status emerged across questions in the survey, but where notable differences emerged, they are reported.

Our sample of faculty nearly all had advanced degrees, with 55% having earned a master's degree and 41% having earned a doctorate or professional degree; the remaining 4% had a bachelor's degree.

## PERCENT OF FACULTY BY PART-TIME AND FULL-TIME STATUS REPORTED IN THE SURVEY COMPARED WITH IPEDS DATA FOR PARTICIPATING INSTITUTIONS
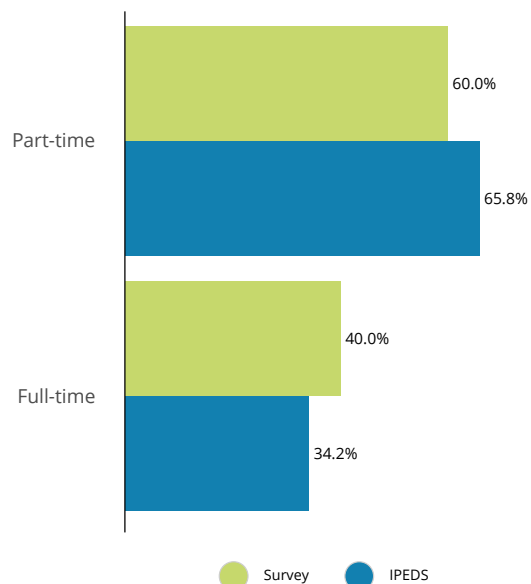


*Figure 6*

## REPORTED TEACHING MODALITY OF COURSES DURING FALL 2021 TERM

**Online, asynchronously**
- 29.4%
- 80.0%
- 16.7%
- 20.5%

**Face to face**
- 28.4%
- 0.0%
- 57.7%
- 26.6%

**Online, synchronously**
- 22.6%
- 12.3%
- 10.3%
- 29.0%

**Hybrid**
- 19.7%
- 7.7%
- 15.4%
- 23.9%

Legend: Community College • Four-year College • Primarily Online College • Overall
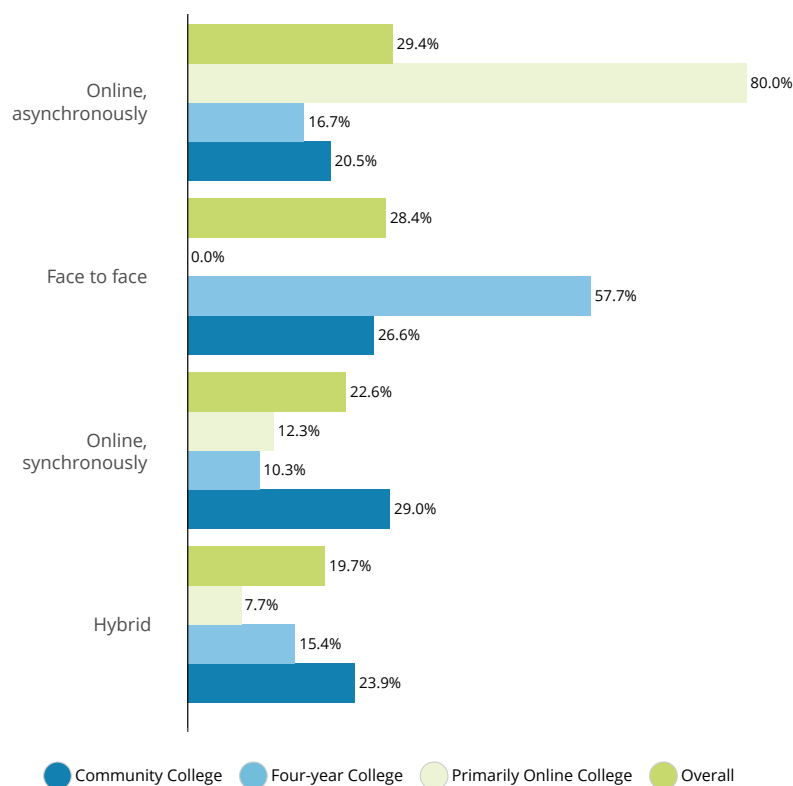
*Figure 7*

We asked teachers to identify in which modality they taught most of their classes in the Fall 2021 term: fully online and synchronous; fully online and asynchronous; hybrid; or face to face (**Figure 7**). About 51% of faculty in our sample primarily taught online courses in Fall 2021, but 57% of faculty at 4-year colleges report teaching face to face. Another 20% of faculty taught in a hybrid arrangement, which incorporates some online elements.

Despite the majority of faculty teaching online in some capacity, in-person remains the top preferred modality of teaching among most faculty, with the exception of faculty at the online institution surveyed who prefer teaching online (**Figure 8**). ◼

## RANKED PREFERENCE OF TEACHING MODALITY OF FACULTY ACROSS INSTITUTION TYPE

**Face to face**

**Hybrid**

**Online, synchronously**

**Online, asynchronously**

Legend:
- Community College
- Four-year College
- Primarily Online College
- Overall

*Bars represent mean average rank and error bars represent 95% CI.*

Least preferred to most preferred (1 to 4)

*Figure 8*

# Takeaway 1: Faculty View Themselves as EdTech Leaders

There remains a persistent narrative that faculty resist EdTech in their classrooms and are in constant tension with administration and EdTech vendors about using EdTech. Although it is true that faculty are generally protective of their academic freedom in the classroom, our survey shows that only a minority of faculty resist EdTech. In fact, the vast majority of faculty are actually enthusiastic about EdTech. Faculty are also largely confident in their ability to use new EdTech in their classrooms.

## FEW FACULTY RESIST EDTECH

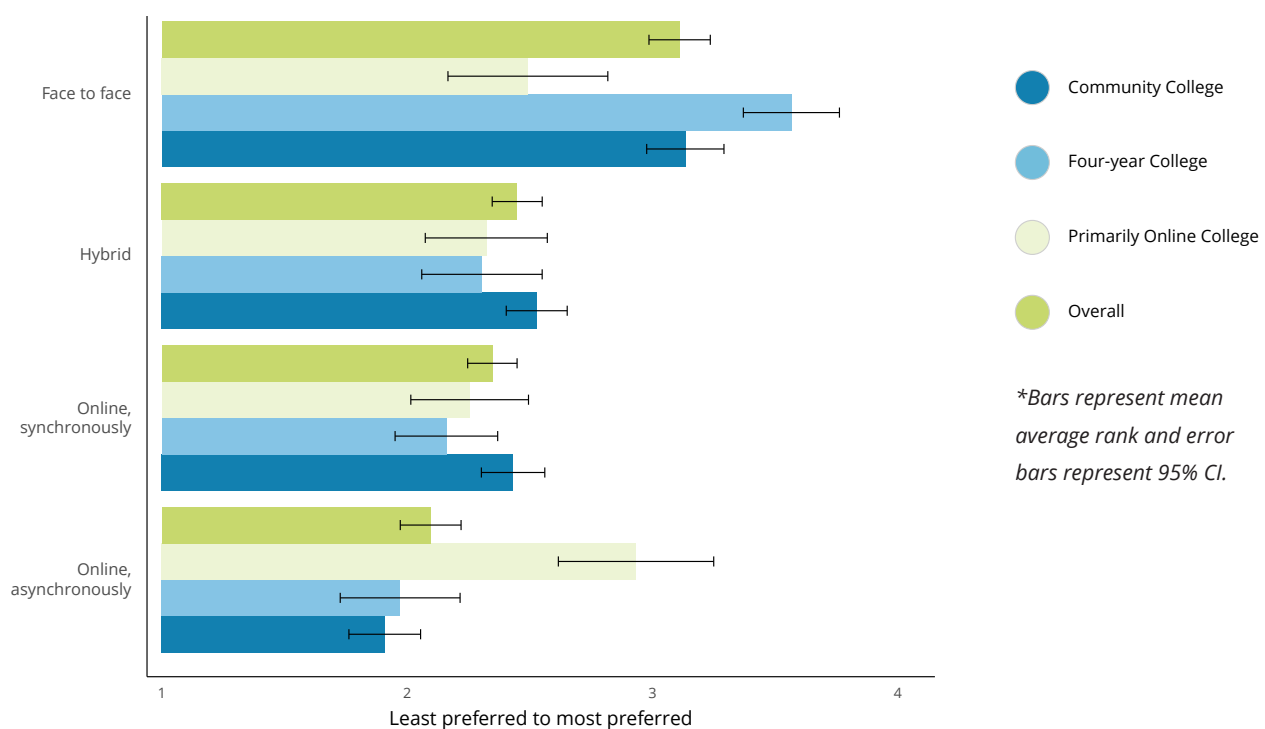To better understand faculty's relationship with EdTech, we asked them to identify with one of the following descriptions:

- 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"

Our results were surprising (**Figure 9**). Only 11% of faculty self-identify as being "one of the last to try something new," or what we label as "resisters". **Forty-one percent of faculty identify as "leaders," being one of the first to try new EdTech.** The remaining 48% of faculty adopt new EdTech after seeing a successful peer-use case.

## FACULTY ARE CONFIDENT IN THEIR EDTECH ABILITIES

Our survey also asked faculty several questions about their confidence in learning and adapting to EdTech—a concept we refer to as **EdTech self-efficacy**.

**PERCENT OF FACULTY WHO IDENTIFY AS EDTECH LEADERS, FOLLOWERS, OR RESISTERS**

| | |
|---|---|
| Leader | 41.3% |
| Follower | 47.5% |
| Resister | 11.2% |
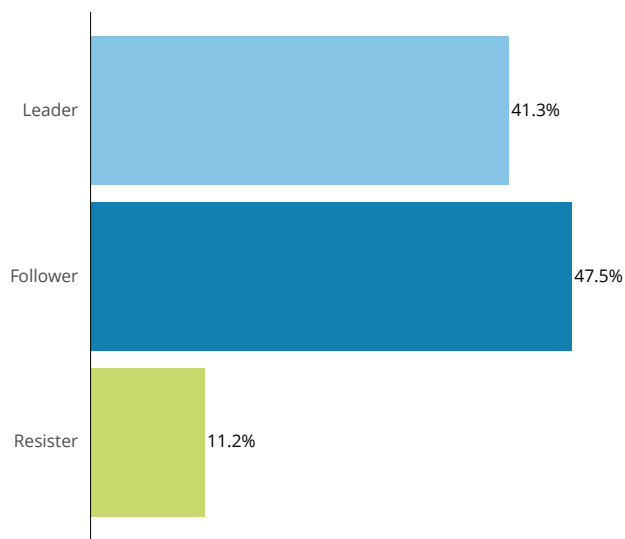
*Figure 9*

The concept of EdTech self-efficacy was first introduced in the 2021 CIN EdTech Student Survey to better understand how students were learning and adapting to EdTech in the classroom.

We assessed EdTech self-efficacy of faculty with seven items (**Figure 10**) to gauge how they feel about using and integrating EdTech in their courses. The percentages of faculty who disagree and agree with each statement are displayed across four groupings: Overall (all 402 faculty responses), plus the aggregate responses for faculty subgroups across the different institution types of community college, 4-year college, and primarily online college. This visualization by institution type is used throughout the report.

# FACULTY AGREEMENT WITH STATEMENTS ABOUT EDTECH SELF-EFFICACY

## EdTech enhances my teaching experiences.

| | | |
|---|---|---|
| Overall | 5% | 24% | 71% |
| Primarily Online College | 0% | 25% | 75% |
| Four–year College | 9% | 32% | 59% |
| Community College | 5% | 22% | 74% |

## I feel confident in my ability to adapt to using new EdTech in my courses.

| | | |
|---|---|---|
| Overall | 5% | 14% | 81% |
| Primarily Online College | 2% | 12% | 86% |
| Four–year College | 10% | 9% | 81% |
| Community College | 5% | 15% | 80% |

## I feel confident in my ability to effectively use EdTech in my courses.

| | | |
|---|---|---|
| Overall | 4% | 19% | 77% |
| Primarily Online College | 2% | 14% | 85% |
| Four–year College | 6% | 27% | 67% |
| Community College | 4% | 18% | 78% |

## I feel confident in my ability to evaluate research about the impact and efficacy of EdTech tools.

| | | |
|---|---|---|
| Overall | 14% | 26% | 60% |
| Primarily Online College | 12% | 18% | 69% |
| Four–year College | 27% | 26% | 47% |
| Community College | 11% | 28% | 61% |

## I feel confident in my ability to teach effectively in online environments.

| | | |
|---|---|---|
| Overall | 4% | 12% | 84% |
| Primarily Online College | 0% | 5% | 95% |
| Four–year College | 12% | 12% | 77% |
| Community College | 2% | 14% | 84% |

## I have struggled to integrate new EdTech in my courses.

| | | |
|---|---|---|
| Overall | 46% | 35% | 19% |
| Primarily Online College | 56% | 30% | 14% |
| Four–year College | 47% | 27% | 26% |
| Community College | 43% | 38% | 18% |

## Keeping up with how to use EdTech in courses has been difficult.

| | | |
|---|---|---|
| Overall | 35% | 39% | 26% |
| Primarily Online College | 42% | 38% | 20% |
| Four–year College | 27% | 40% | 32% |
| Community College | 35% | 39% | 25% |

100          50          0          50          100

PERCENTAGE

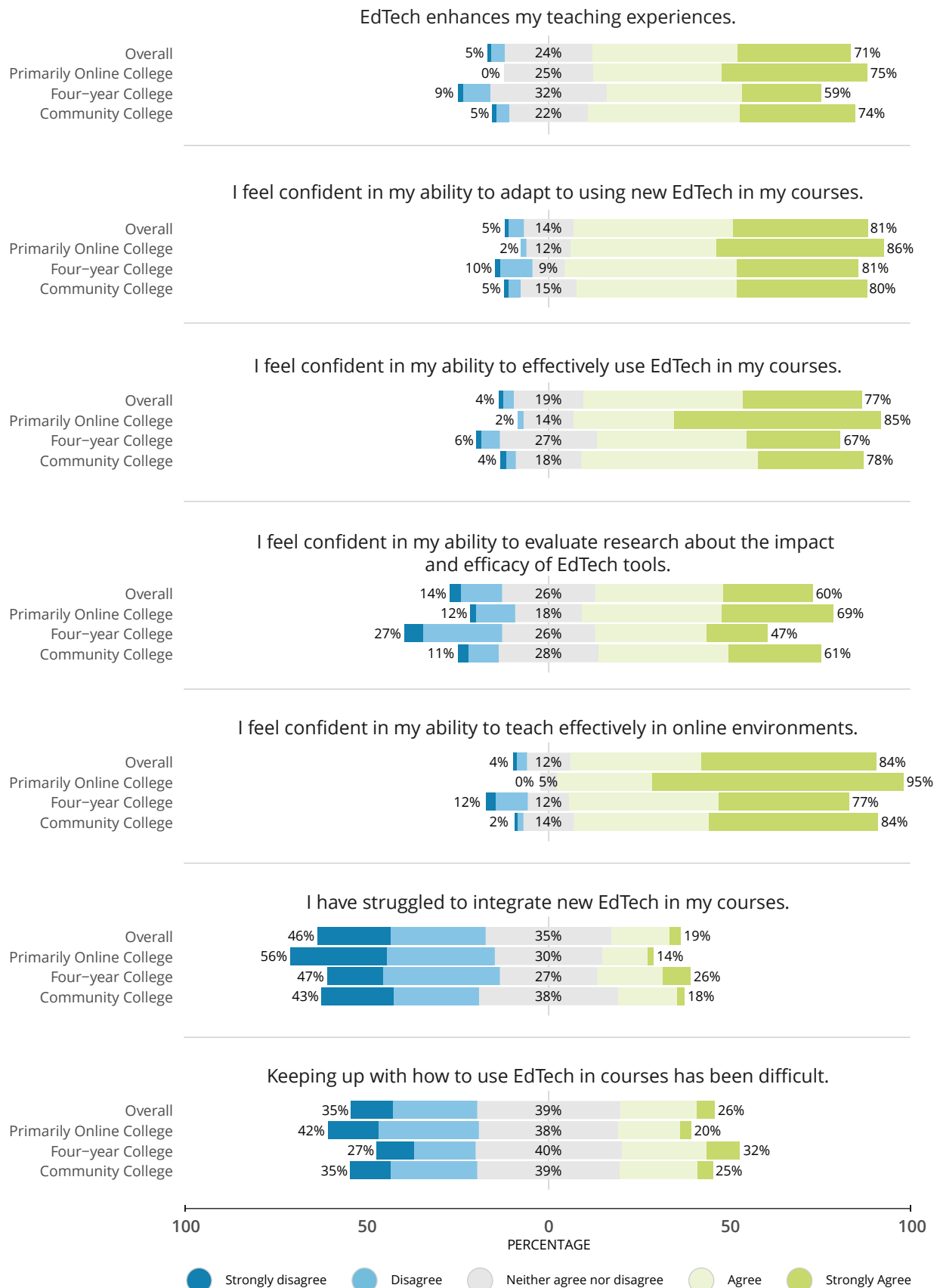● Strongly disagree     ● Disagree     ● Neither agree nor disagree     ● Agree     ● Strongly Agree

*Figure 10*

Overall, faculty report a high degree of Ed Tech self-efficacy: **81% of faculty are confident in their ability to adapt to using EdTech** in their courses, with only 5% of faculty overall reporting not feeling confident, and **84% percent of faculty are confident in their ability to teach effectively in online environments.**

Faculty from 4-year colleges report being least confident in their ability to use technology in their instruction, however. **There is an 18 percentage point difference of faculty reporting feeling confident teaching online between faculty at 4-year colleges and faculty at the fully online institution surveyed**. Faculty at 4-year colleges are also 3x more likely to say they are not confident teaching online relative to faculty overall. Similarly, **71% of faculty respondents report that EdTech enhances their teaching** but only 59% of faculty at 4-year colleges report the same. Evaluating evidence about teaching practices is vital to pedagogical innovation. When we asked faculty whether they are confident in their ability to evaluate EdTech research, 61% and 69% of faculty at community colleges and the primarily online college, respectively, agreed, whereas only 47% of 4-year faculty agreed.

We also found that EdTech self-efficacy is associated with whether faculty identify as an EdTech leader, follower, or resister. Faculty who identify as an EdTech leader—those who are usually the first among their colleagues to use new EdTech—report significantly higher overall EdTech self-efficacy (calculated as a mean-average of all seven items displayed in **Figure 10**) than either followers or resisters (**Figure 11**). Even followers have significantly higher EdTech self-efficacy as compared to resisters.

## DIFFERENCES IN OVERALL EDTECH SELF-EFFICACY AMONG FACULTY EDTECH LEADERS, FOLLOWERS, AND RESISTERS



Low EdTech self−efficacy to high EdTech self−efficacy

*F(2, 399) = 51.93, p < .001; all groups different from one another at p < .001; error bars represent 95% CI*
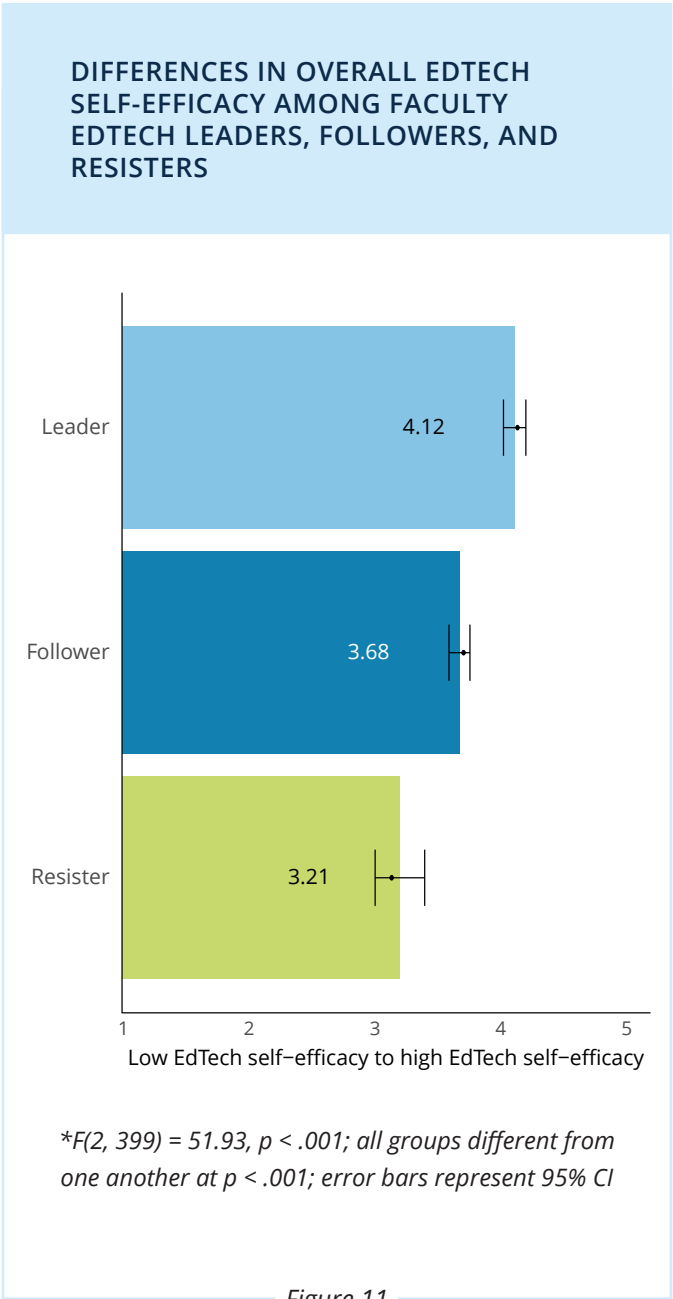
*Figure 11*

## WHY THIS MATTERS

Our data of how faculty identify as EdTech leaders, followers, or resisters, don't align with the popular EdTech Adoption Curve; our data suggest that **there are more than 2x as many faculty innovators and early adopters than what previous models suggest**, and far fewer resisters as well.

Our data also show that EdTech leaders report higher confidence in their ability to learn and adapt to EdTech—what we refer to as EdTech self-efficacy. **EdTech self-efficacy can be improved through proper training and support to increase the number of EdTech leaders on faculty**. More faculty leaders are essential to improve adoption rates of EdTech products and the quality of instruction for students. ■
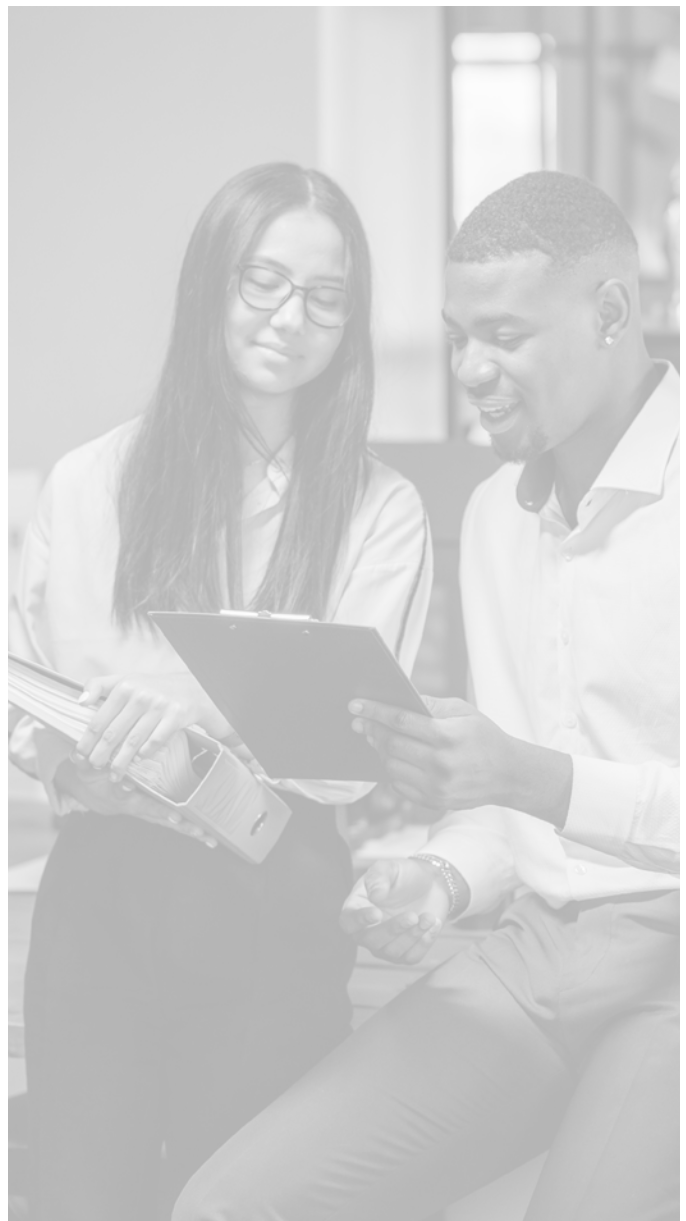
# Takeaway 2:
# Faculty Need More Time, Resources, and Input to Effectively Use EdTech

Our survey revealed that the tension that may arise between faculty and administrators or EdTech vendors is unlikely a result of faculty being resistant to tech (which is not common as we saw above), but more likely a result of inadequate systems that negatively impact faculty adoption and use of EdTech.

Faculty do more than teach. They mentor students, sit on committees, contribute scholarship to their fields and, especially for part-time faculty (60% of our faculty sample), may have other full-time jobs and careers. Outside the (virtual) classroom, time is limited to evaluate new EdTech and learn to implement it effectively. Also, because the EdTech market is set up to sell to administrators rather than direct to faculty, faculty feel that they do not have influence over the EdTech being introduced.

### FACULTY NEED MORE TIME AND SUPPORT TO USE EDTECH

Our data show that faculty are feeling dissatisfied with the time they have available to adequately prepare and implement EdTech in their teaching (**Figure 12**). When asked, **30% of faculty overall are dissatisfied with the time they have available to learn how to use and implement new EdTech** in their courses, with 44% of faculty at 4-year colleges reporting being dissatisfied. And time to properly choose effective EdTech is also limited: **34% of faculty report that they are dissatisfied with the time available to evaluate EdTech products to use in their courses**, with 48% of full-time (non-tenure track) faculty reporting being dissatisfied —the highest of any faculty sub-group.

# PERCENT OF FACULTY RESPONSES TO SATISFACTION WITH TIME ACROSS TASKS

## BY INSTITUTION TYPE

### Learning to implement and use new EdTech for my courses

| | Extremely dissatisfied / Somewhat dissatisfied | Neither | Somewhat satisfied / Extremely satisfied |
|---|---|---|---|
| Overall | 30% | 33% | 37% |
| Primarily Online College | 18% | 45% | 37% |
| Four–year College | 44% | 28% | 28% |
| Community College | 30% | 31% | 39% |

### Planning and prepping my courses prior to the start of the semester

| | | | |
|---|---|---|---|
| Overall | 26% | 20% | 54% |
| Primarily Online College | 11% | 32% | 57% |
| Four–year College | 42% | 17% | 41% |
| Community College | 25% | 18% | 58% |

### Vetting and evaluating new EdTech for use in my courses

| | | | |
|---|---|---|---|
| Overall | 34% | 35% | 30% |
| Primarily Online College | 22% | 42% | 37% |
| Four–year College | 47% | 31% | 22% |
| Community College | 33% | 35% | 31% |

## BY EMPLOYMENT STATUS

### Learning to implement and use new EdTech for my courses

| | | | |
|---|---|---|---|
| Overall | 30% | 33% | 37% |
| Full–time, tenure track | 38% | 29% | 34% |
| Full–time, non–tenure track | 40% | 34% | 26% |
| Part–time or adjunct | 25% | 34% | 41% |

### Planning and prepping my courses prior to the start of the semester

| | | | |
|---|---|---|---|
| Overall | 26% | 20% | 54% |
| Full–time, tenure track | 38% | 20% | 42% |
| Full–time, non–tenure track | 37% | 16% | 47% |
| Part–time or adjunct | 18% | 21% | 61% |

### Vetting and evaluating new EdTech for use in my courses

| | | | |
|---|---|---|---|
| Overall | 34% | 35% | 30% |
| Full–time, tenure track | 42% | 31% | 26% |
| Full–time, non–tenure track | 48% | 31% | 21% |
| Part–time or adjunct | 27% | 38% | 35% |

100    50    0    50    100
PERCENTAGE

Legend:
- Extremely dissatisfied
- Somewhat dissatisfied
- Neither satisfied nor dissatisfied
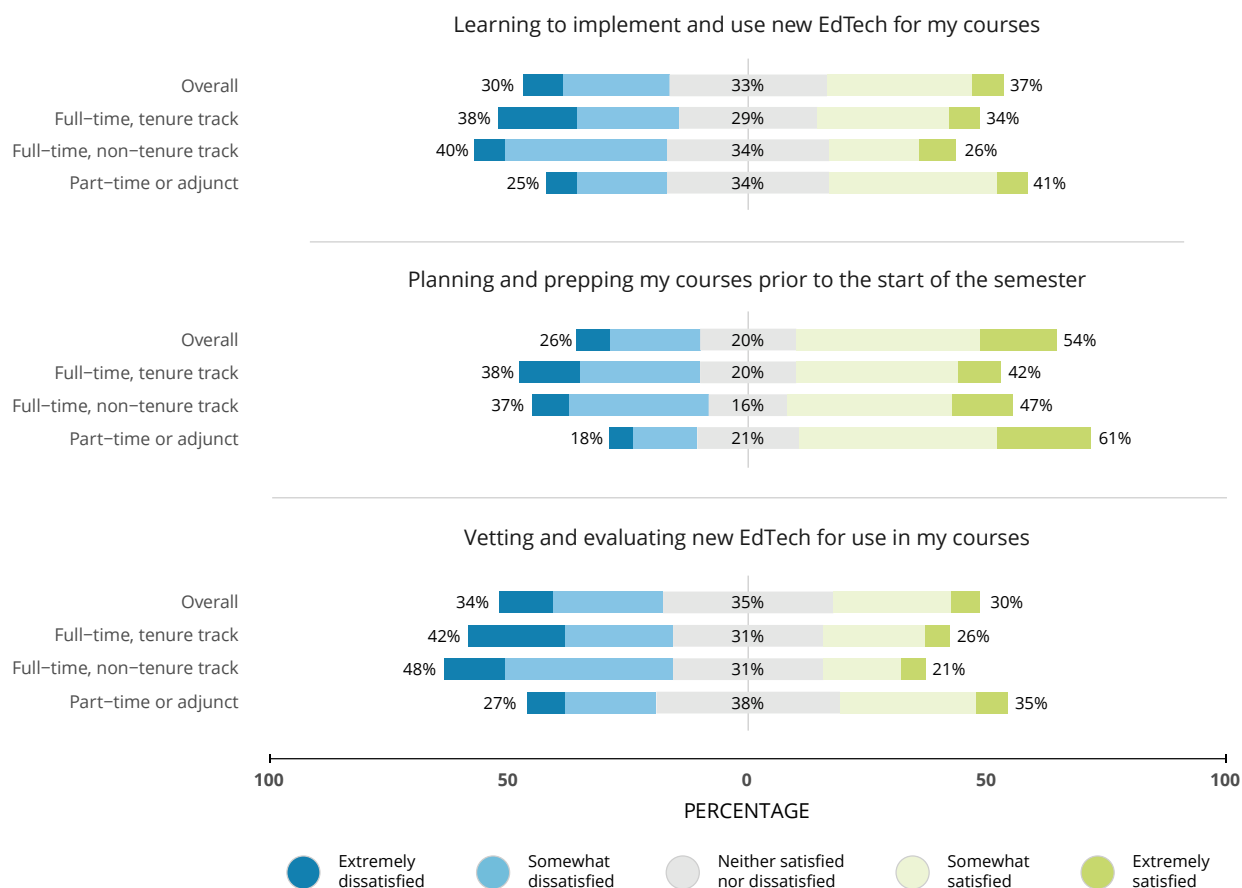- Somewhat satisfied
- Extremely satisfied

*Figure 12*

At the department and institutional level, we observe that **15% of faculty report that they do not receive effective training on how to use EdTech in the classroom** and only **18% of faculty report that their department rewards using EdTech in courses**. (**Figure 13**). The combination of ineffective training, inadequate time, and lack of reward structure points to a substantial minority of faculty struggling to adequately implement EdTech in courses to enhance teaching and learning.

## FACULTY LEARN ABOUT EDTECH FROM PEERS, BUT ADMINISTRATION MAKES EDTECH DECISIONS

Part of the institutional structure of EdTech in higher education is who makes the decisions about what EdTech licenses should be bought and integrated into the university learning management systems. The EdTech marketplace is unique compared to other tech industries because many EdTech vendors sell primarily to institutions, but faculty and students are the primary users of EdTech in the classroom.
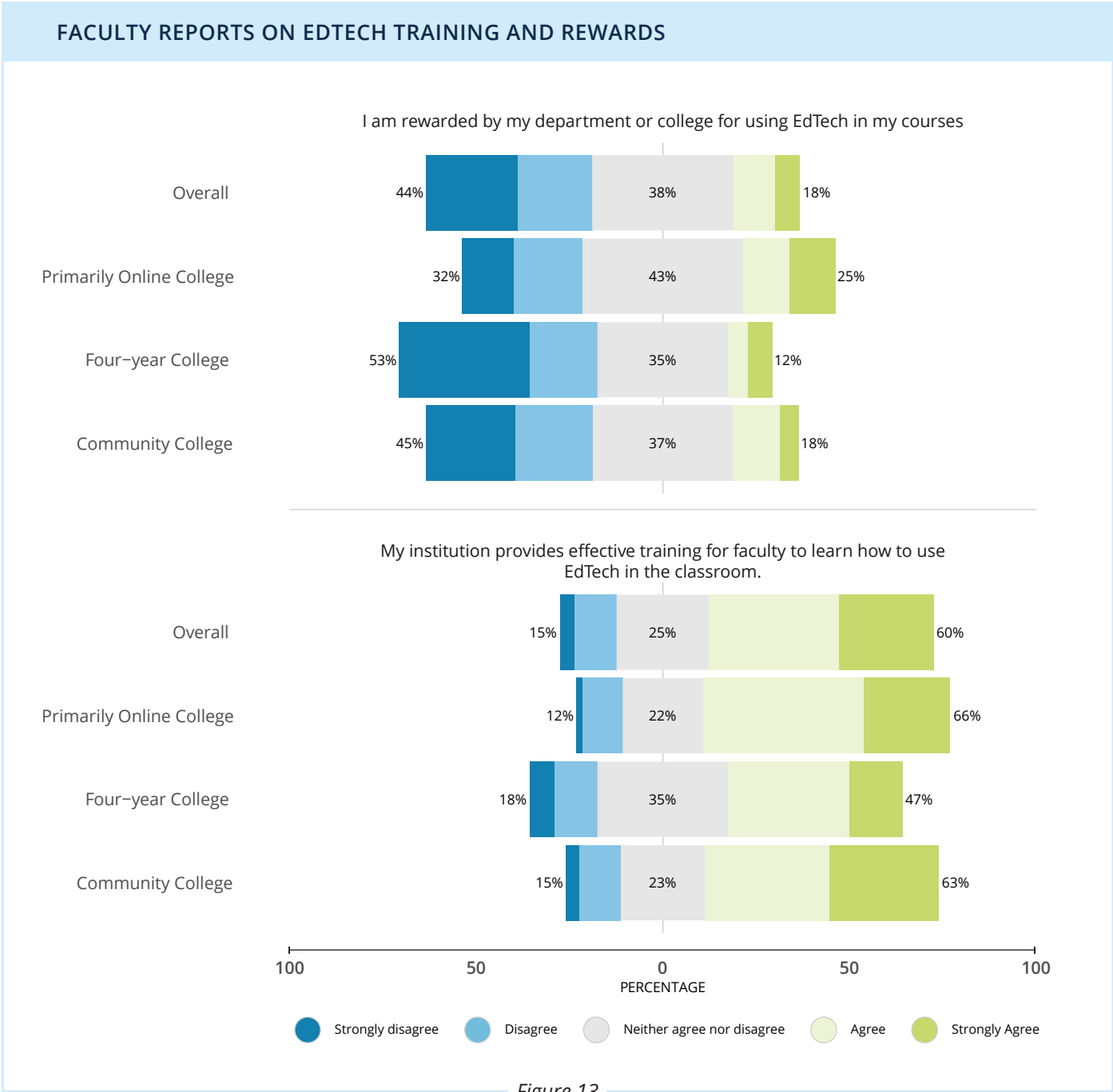
### FACULTY REPORTS ON EDTECH TRAINING AND REWARDS

**I am rewarded by my department or college for using EdTech in my courses**

| | | | |
|---|---|---|---|
| Overall | 44% | 38% | 18% |
| Primarily Online College | 32% | 43% | 25% |
| Four-year College | 53% | 35% | 12% |
| Community College | 45% | 37% | 18% |

**My institution provides effective training for faculty to learn how to use EdTech in the classroom.**

| | | | |
|---|---|---|---|
| Overall | 15% | 25% | 60% |
| Primarily Online College | 12% | 22% | 66% |
| Four-year College | 18% | 35% | 47% |
| Community College | 15% | 23% | 63% |

100    50    0    50    100
PERCENTAGE

● Strongly disagree    ● Disagree    ○ Neither agree nor disagree    ○ Agree    ● Strongly Agree

*Figure 13*

## HOW MUCH INFLUENCE FACULTY PERCEIVE OTHERS TO HAVE OVER PEDAGOGICAL EDTECH DECISIONS

College administrators 12% 18% 71%

Department Chairs 17% 25% 58%

Instructional designers 15% 27% 58%

Faculty 21% 32% 47%

Students 60% 20% 20%

100 50 0 50 100
PERCENTAGE
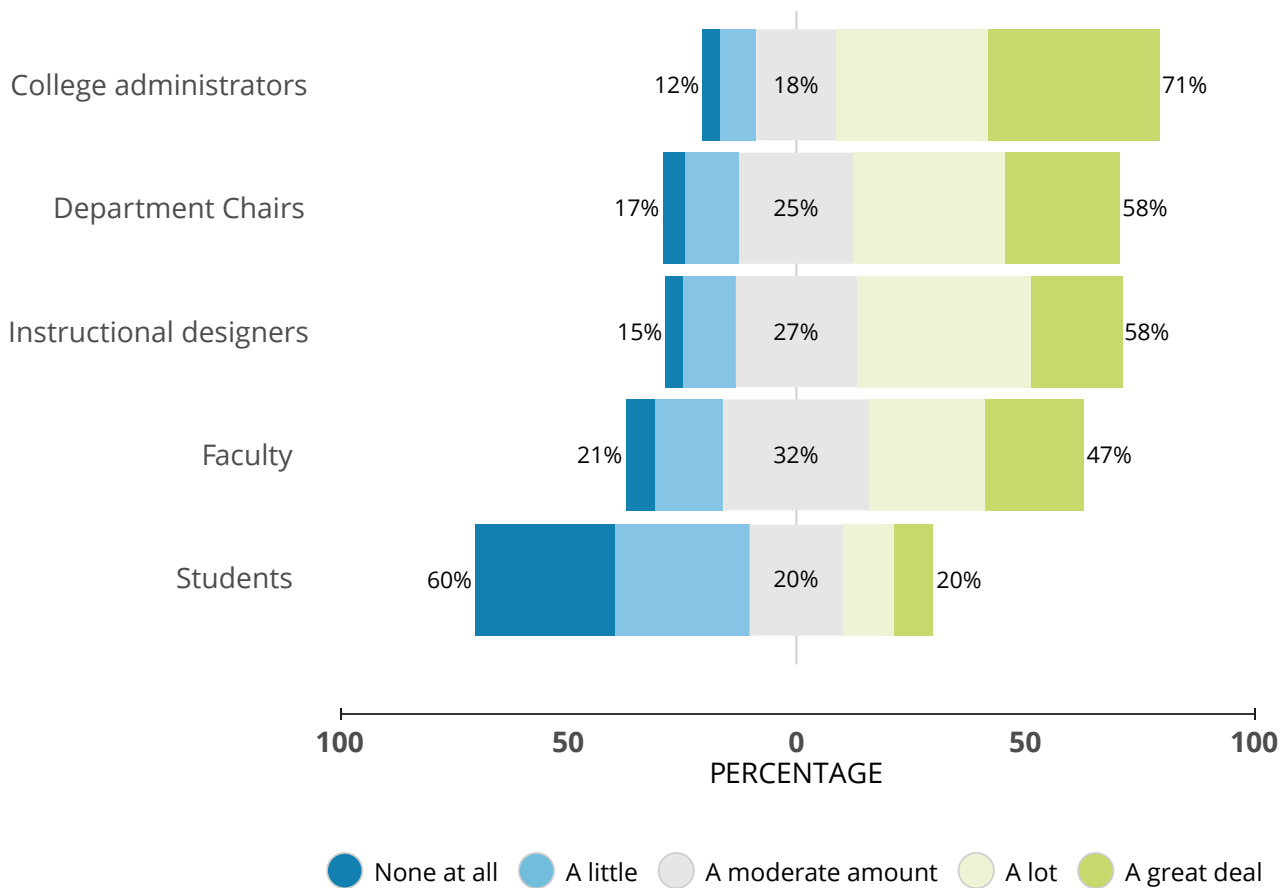
● None at all ● A little ● A moderate amount ● A lot ● A great deal

*Figure 14*

Faculty are aware of this misalignment. When asked about how much influence people in various university roles have over EdTech decisions (**Figure 14**), the results are clear: 71% of faculty report that administrators have "a lot" or "a great deal" of influence on what EdTech is available to them. But **less than half of faculty report that they and their faculty peers have "a lot" or "a great deal" of influence over pedagogical EdTech decisions**.

Because administrators have the greatest influence over EdTech decisions, one might expect that faculty learn about new available EdTech products from them. We asked faculty to rank from whom they learn about

new EdTech products (**Figure 15**) and the results show a disconnect between who makes decisions and from whom faculty learn. It turns out that **faculty are learning about new EdTech from faculty peers** at their own institution and faculty from other institutions.

A notable exception are faculty at the primarily online institution surveyed who do learn about new EdTech from administrators more than faculty at other types of institutions. This is likely due to the fact that the online institution surveyed is predominantly part-time faculty and the courses are more standardized with tight technological integration.

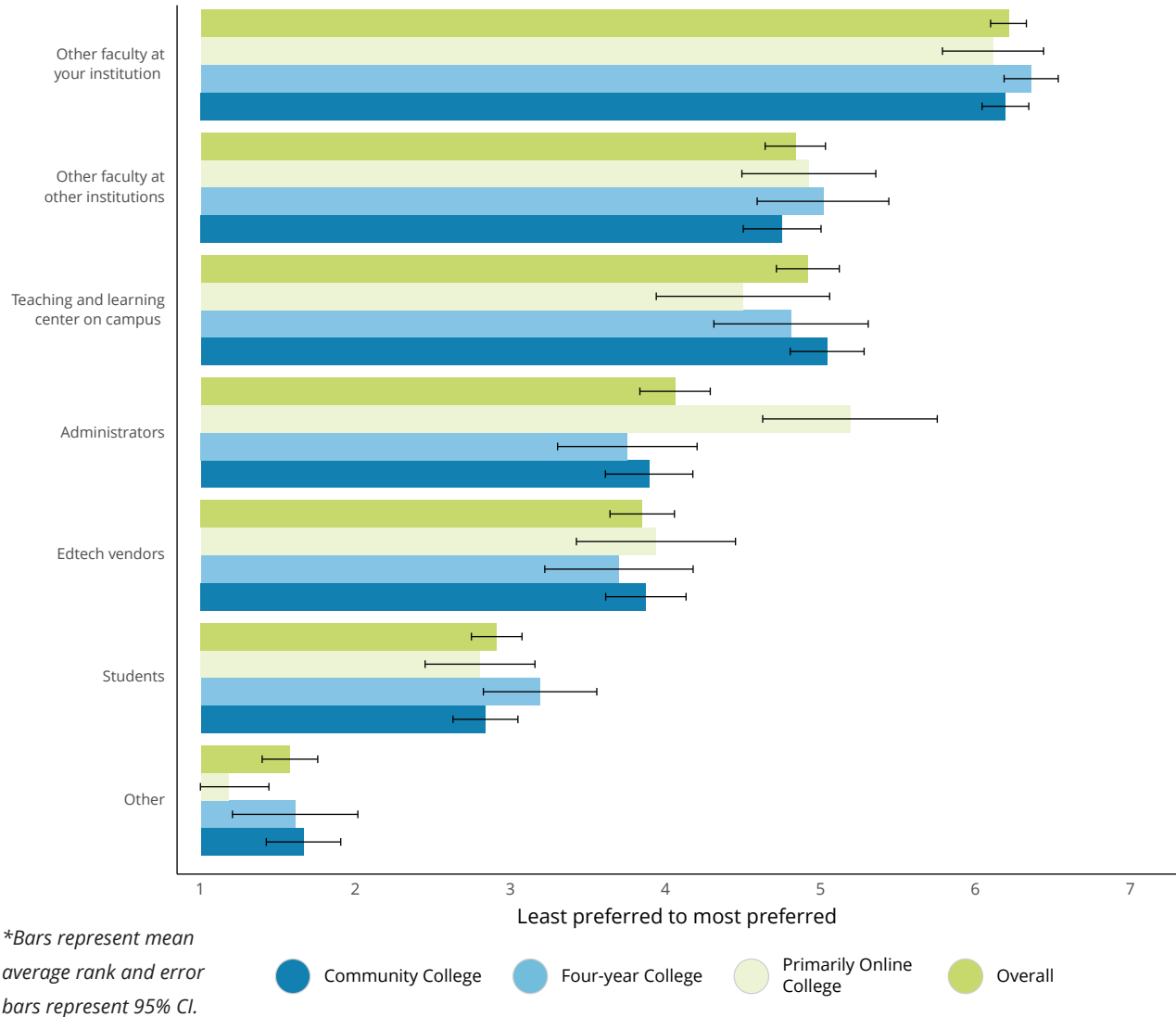**FACULTY RANKING FROM WHOM THEY LEARN ABOUT NEW EDTECH BY SCHOOL TYPE**

Least preferred to most preferred

*Bars represent mean average rank and error bars represent 95% CI.*

● Community College  ● Four-year College  ● Primarily Online College  ● Overall

*Figure 15*

**WHY THIS MATTERS**

Despite most faculty embracing EdTech, it appears that substantial proportions of faculty report barriers to success. The current institutional and EdTech market systems also appear to cause friction. Faculty feel they have a minor voice in university EdTech decisions, and prefer to learn from their own peer communities.

With the technological transformation of higher education underway, it is **necessary that institutional and market systems be set up in ways that promote, rather than inhibit, the faculty use of EdTech.** Faculty must have a strong voice in EdTech decisions that impact their teaching. Institutions must also provide appropriate support and resources for faculty to effectively integrate EdTech into their courses. These needs suggest a new approach to how EdTech is bought and sold within universities.

# Takeaway 3: Faculty Prioritize Access and Equity When Adopting EdTech

The near-universal shift to online learning during the pandemic highlighted the still present digital divide in access to technology. Faculty, who had to overcome access barriers for their students directly, know better than anyone the needs of students.

Technology-enabled learning is only as effective as students' access to, and confidence in using, that technology. And for many lower-income or minoritized student populations, access must be of top concern when making EdTech decisions that impact students' learning experiences.

We asked faculty what factors are most important to them when they are choosing EdTech products for their classroom to better understand the critical features that EdTech must have (**Figure 16**). The results show that faculty are intently mindful of the equitable access of EdTech products for their students: **88% and 86% of faculty report that an EdTech product being accessible to students with disabilities and to underserved students, respectively, is "very" or "extremely" important** when choosing EdTech products. Integration with the university learning management systems also topped the list with 81% of faculty noting that this is "very" or "extremely" important.

Faculty also want direct support from EdTech vendors—for both students and themselves. **Eighty four percent of faculty report that on-demand tech support for students from the product vendor is "very" or "extremely important" in their decision making**, and 72% of faculty report that on-demand tech support for themselves from the product vendor is "very" or "extremely important".

## FACULTY RESPONSES TO WHAT FACTORS ARE MOST IMPORTANT WHEN CHOOSING EDTECH FOR THEIR COURSE
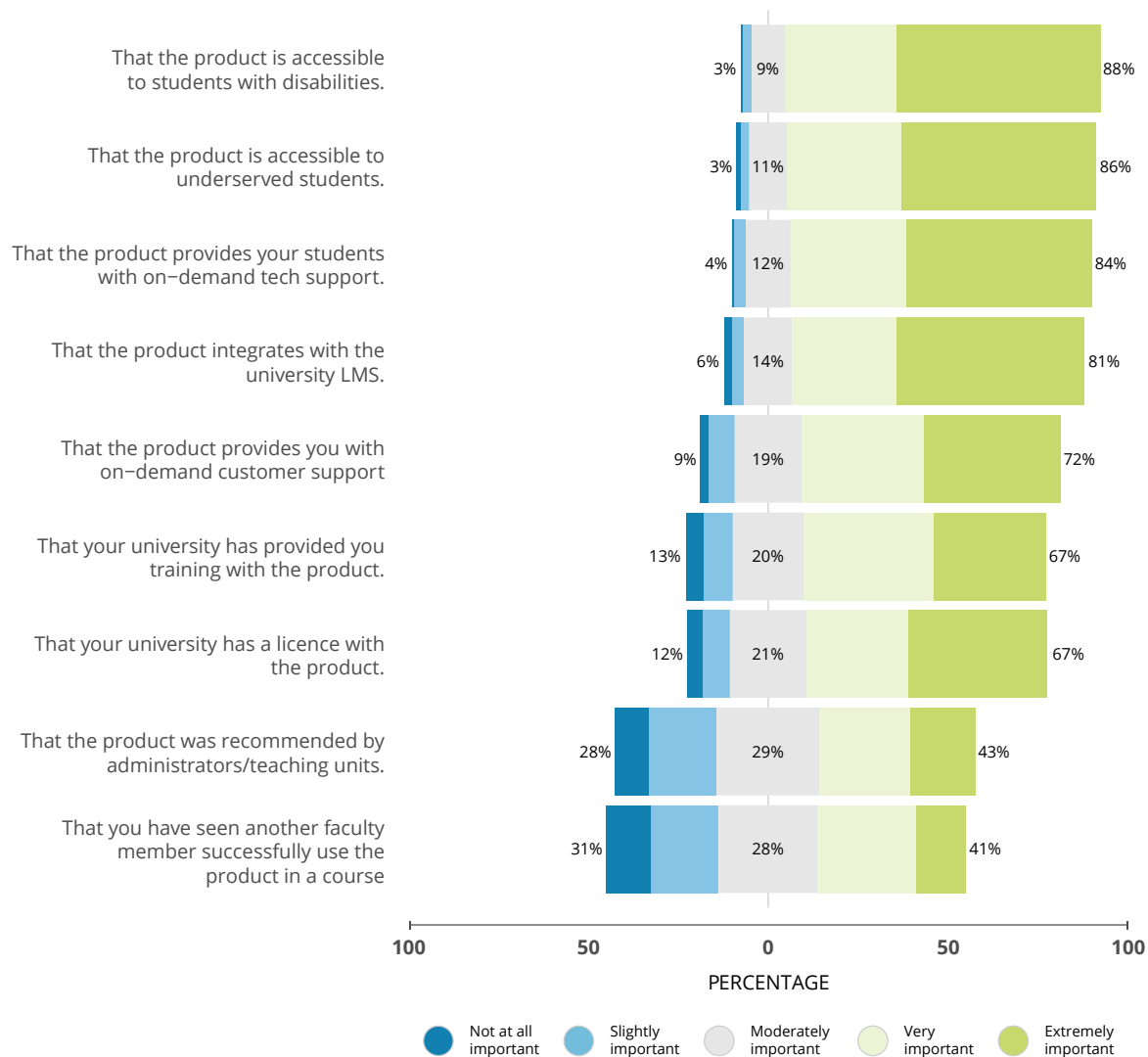


That the product is accessible to students with disabilities. — 3% | 9% | 88%

That the product is accessible to underserved students. — 3% | 11% | 86%

That the product provides your students with on-demand tech support. — 4% | 12% | 84%

That the product integrates with the university LMS. — 6% | 14% | 81%

That the product provides you with on-demand customer support — 9% | 19% | 72%

That your university has provided you training with the product. — 13% | 20% | 67%

That your university has a licence with the product. — 12% | 21% | 67%

That the product was recommended by administrators/teaching units. — 28% | 29% | 43%

That you have seen another faculty member successfully use the product in a course — 31% | 28% | 41%

PERCENTAGE

Legend: Not at all important | Slightly important | Moderately important | Very important | Extremely important

*Figure 16*

### WHY THIS MATTERS

Faculty know best what their students need in the classroom. And faculty are communicating that **equitable access to EdTech is a "must have" for products they integrate into their courses.** This includes ensuring that EdTech products are compatible with the university systems students already have access to, and vendor support being available when their students and faculty need help troubleshooting EdTech products.

These priorities for faculty may contribute to faculty preferring to learn about new products from faculty rather than administration; faculty know best what other faculty view as important regarding EdTech. In addition to soliciting strong faculty input about EdTech, administration and vendors can likewise ensure that access and equity aren't "nice to haves" but instead are "must haves" during EdTech decision making. Faculty are clear: equitable access is critical to students' success.

# Takeaway 4: Faculty Are Aligned on The Future of Online Learning, But Divided in How They Feel

As higher education moves forward after years of disruption, the question on everyone's mind is what the future of higher ed really looks like. We asked faculty to report their agreement or disagreement with several technology-enabled futures of higher education.

The majority of faculty agree that their job as faculty will be more technology-driven in the near future: **89% of faculty agree that they will spend more time supporting students online**, 88% of faculty agree that they will spend more time delivering course content online, and **88% of faculty agree that they will be using more EdTech tools in class in the near future** (**Figure 17**).

Importantly, there was little difference among faculty at different institution types when asked about what the future might look like. But there were notable differences among institution types when faculty indicated how positively or negatively they felt about technology-enabled changes to higher ed.

A substantial minority of faculty feel negatively about a full shift to online: **21% of faculty feel negatively about increasing the number of fully online courses** and **28% of faculty feel negatively about increasing the number of fully online programs**. There is the notable exception of faculty at the primarily online institution surveyed who report feeling highly positive about these online futures (**Figure 18**).

However, faculty do generally feel positive about integrating online aspects of courses and non-degree offerings: **76% of faculty feel positively about increasing hybrid course offerings**, and 71% of faculty feel positive about institutions offering increasing numbers of non-degree offerings such as credentials and certificates.
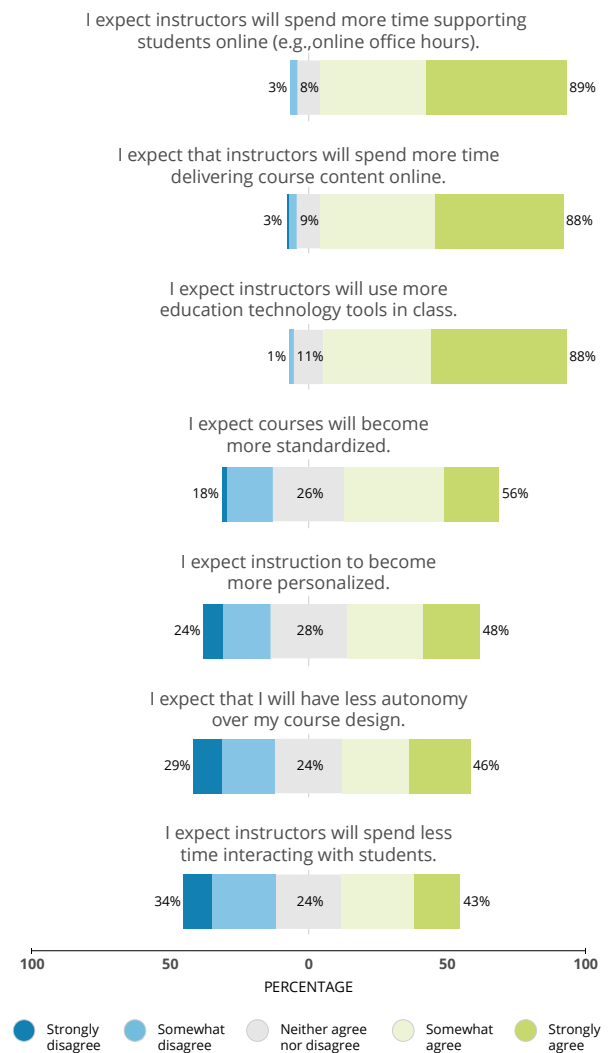
## FACULTY RESPONSES ABOUT POSSIBLE FUTURES OF HIGHER ED



I expect instructors will spend more time supporting students online (e.g.,online office hours).
3%  8%  89%

I expect that instructors will spend more time delivering course content online.
3%  9%  88%

I expect instructors will use more education technology tools in class.
1%  11%  88%

I expect courses will become more standardized.
18%  26%  56%

I expect instruction to become more personalized.
24%  28%  48%

I expect that I will have less autonomy over my course design.
29%  24%  46%

I expect instructors will spend less time interacting with students.
34%  24%  43%

PERCENTAGE
100  50  0  50  100

Legend: Strongly disagree · Somewhat disagree · Neither agree nor disagree · Somewhat agree · Strongly agree

*Figure 17*

## FACULTY PERCEPTIONS OF POSSIBLE HIGHER ED FUTURES

**Institutions offering increasing number of fully online courses.**

| | Negative | Neutral | Positive |
|---|---|---|---|
| Overall | 21% | 21% | 58% |
| Primarily Online College | 3% | 14% | 83% |
| Four–year College | 33% | 27% | 40% |
| Community College | 22% | 21% | 57% |

**Institutions offering increasing number of fully online programs.**

| | Negative | Neutral | Positive |
|---|---|---|---|
| Overall | 28% | 16% | 55% |
| Primarily Online College | 11% | 11% | 78% |
| Four–year College | 40% | 15% | 45% |
| Community College | 29% | 18% | 53% |

**Institutions offering increasing number of hybrid courses.**

| | Negative | Neutral | Positive |
|---|---|---|---|
| Overall | 9% | 15% | 76% |
| Primarily Online College | 2% | 17% | 82% |
| Four–year College | 22% | 12% | 67% |
| Community College | 7% | 15% | 78% |

**Institutions offering increasing number of micro–credential and certificate programs.**

| | Negative | Neutral | Positive |
|---|---|---|---|
| Overall | 7% | 22% | 71% |
| Primarily Online College | 3% | 14% | 83% |
| Four–year College | 13% | 26% | 62% |
| Community College | 7% | 22% | 71% |

PERCENTAGE
100 — 50 — 0 — 50 — 100

Legend: Extremely negative · Somewhat negative · Neither positive nor negative · Somewhat positive · Extremely positive

*Figure 18*

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**WHY THIS MATTERS**

Faculty agree that higher education will have a strong online presence moving forward. But, a substantial minority of faculty don't feel positively about courses and programs shifting to fully online.

As institutions begin to experiment and rapidly diversify their offerings for students, it's vital to keep a pulse on how faculty are experiencing the transition. The outlook for online programming and other technology-enabled education pathways is promising, but **sustaining this positive outlook will require immediate attention to gaps in support, resources for faculty, and fielding input from faculty.**

# Strategies to Improve the Faculty EdTech Experience

Faculty are foundational to successfully usher in the technological transformation of higher education. That's why it's more important than ever to ensure that we are listening to the faculty voice and understanding their experience with EdTech and online learning.

The **2022 CIN EdTech Faculty Survey** provides insightful data that yield powerful strategies for both institutional leaders and EdTech executives to make changes that will improve the faculty EdTech experience.Here, we provide five data-informed strategies which will ultimately enhance our students' learning experience in the modern higher education environment.

## TREAT FACULTY AS PARTNERS, NOT OBSTACLES IN TRANSFORMATIONAL CHANGE

Our data show that few faculty identify as resisters to using EdTech in the classroom. It's clear that faculty should be seen as partners in the institution's digital transformation, not sources of tension.

It's crucial that leaders actively listen to their faculty—leaders and resisters alike—to understand where friction arises in the process of EdTech adoption and implementation so it can be addressed and reduced. Faculty are experts in their craft and by fielding conversations with those who feel positively and negatively about technology-enabled education, educational leaders can make impactful institutional changes, improve the faculty experience, and boost positive perceptions about the future of their role at the institution.

## FIELD THE FACULTY VOICE IN EDTECH DECISIONS

Faculty know what they need best to effectively teach their students, which is why many prefer to learn from each other and not administrators or EdTech executives. But because much of EdTech is bought by and sold to administrators, faculty feel they have little relative influence on EdTech decisions.

To best ensure that the right EdTech are entering the university ecosystem, faculty must have a seat at the decision-making table and, most importantly, have their voices heard. Faculty know what needs are not being addressed, which challenges their students are facing, and what tools they need to succeed.

By fielding the faculty voice regularly to identify needs, barriers, and EdTech tools they're using, educational leaders can more effectively broker products that will actually be used by their faculty to advance their pedagogy and help their students.

## CREATE A CULTURE OF FACULTY PEER-TO-PEER LEARNING

Our data show that one in five faculty are struggling to integrate EdTech into their courses. Faculty are also learning about EdTech primarily from other faculty, not institutional leadership. These data point to the need to create strong cultures of faculty peer-to-peer learning to spread the adoption of impactful EdTech tools.

By first fielding the faculty voice in EdTech decisions, once tools enter the university ecosystem, the EdTech leaders among the faculty are best positioned to share with their peers how they are using the EdTech to advance pedagogy. It should be the norm in departments and colleges for faculty to share best practices, which also include best technology practices. To do this effectively, however, requires adequate time and support.

### GIVE SPACE FOR ADEQUATE TRAINING AND SUPPORT TO FACULTY

Put simply, faculty need more time, resources, and support if expected to use EdTech effectively in their teaching practice. By not providing what faculty need, institutions may inadvertently create resisters or fuel tension.

Adequate support is necessary to ensure that faculty can fully focus on their teaching development and pedagogical practice. Our data suggest that faculty teaching at institutions where the faculty role is broader in scope, specifically at 4-year institutions, report significantly greater time stress than faculty at institutions with more focused teaching responsibilities.

By making professional development and EdTech training integral parts of faculty roles, decreasing peripheral responsibilities, and ensuring adequate staffing, faculty can use their time to truly innovate in the EdTech and teaching space.

### COMMUNICATE EFFECTIVELY ABOUT EDTECH

Our data show that faculty have a clear consensus about what they expect from EdTech: accessibility, integration, impact, and tech support. But because faculty are stressed for time, it's difficult to evaluate each EdTech solution to understand what products meet their standards. What faculty need from both administrators and EdTech companies is better communication and information about the products available to them.

Administration can create a list of basic minimum requirements that each EdTech product must meet to be added to the university ecosystem. Vendors, in turn, can use the data here and other similar reports to ensure their products are designed to at least meet the minimum needs of faculty.

Lastly, faculty want to know if a product will have a positive impact on their students' learning experience. This is no small feat. But companies and organizations, like WGU Labs, are working to share results of EdTech impact evaluations. It's crucial that this research is communicated clearly and concisely, rather than putting the responsibility on faculty to assess jargon-laden research reports—which, based on our data, leave up to 40% of faculty in a position of uncertainty about evaluating the research. ◼

# Conclusions

With technology-enabled higher education proliferating rapidly across the sector, it's crucial to understand how our faculty are experiencing EdTech and online learning.

This report shares powerful data and informative insights about the faculty EdTech experience. We find that the majority of faculty have a positive perception of using EdTech in their teaching practice, but institutional and market systems are not designed for faculty to effectively use EdTech. **Institutional changes that provide more time, better training, and a seat at the decision-making table are starting points for an improved faculty EdTech experience.** Because higher education shares the goal to better serve students and provide optimal learning experiences, faculty must receive the proper support, training, and resources.

As higher education ventures forward into a technology-enabled future, the CIN EdTech Survey Series will continue to yield insights for effectual institutional change with the ultimate goal to improve the learning experience for our students. ■

# 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

**wgu labs** | College Innovation Network

# Appendix: 2022 CIN EdTech Faculty Survey

My typical teaching methodology over the past five years has been... (If you've been teaching less than five years, then answer for however long you've been teaching for).

- Largely teacher-directed (e.g., teacher-led discussion, lecture)
- More teacher-directed than student-centered
- Even balance between teacher-directed and student-centered activities
- More student-centered than teacher-directed
- Largely student-centered (e.g., flipped classroom, discovery learning)

Do you prefer a "one course, many sections" teaching schedule, or "many courses, one section" teaching schedule?

- one course, many sections
- many courses, one section

How does this model allow you to adapt your course design most effectively?
[open multi-line box]

This semester, I have taught most classes:

- Face to face
- Online, synchronously
- Online, asynchronously
- Hybrid (some aspects online, some aspects face to face)

Please rank your prefered teaching modalities:

- Face to face
- Online, synchronous
- Online, asynchronous
- Hybrid (some aspects online, some aspects face to face)

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

How satisfied are you with the amount of time you currently have available to spend on: [1-5 dissatisfied-satisfied]

- Vetting and evaluating new EdTech for use in my courses
- Learning to implement and use new EdTech for my courses
- Planning and prepping my courses prior to the start of the semester
- Planning and prepping each class meeting during the semester
- Meeting with students about course content during the semester

Who are you most likely to learn about new EdTech products from? (Please rank in order with 1 being the group you are most likely to learn about EdTech from)

1. Other faculty at your institution
2. Other faculty at other institutions
3. Teaching and learning center on campus
4. Administrators (e.g., deans, technology officers, etc)
5. Edtech vendors
6. Students
7. Other

Please indicate the extent to which you agree with each of the following statements about EdTech: [1-5 disagree-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

- Keeping up with how to use EdTech in courses has been difficult

- 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 am rewarded by my department or college for using EdTech in my courses

- EdTech enhances my teaching experiences

- I feel confident in my ability to evaluate research about the impact and efficacy of EdTech tools.
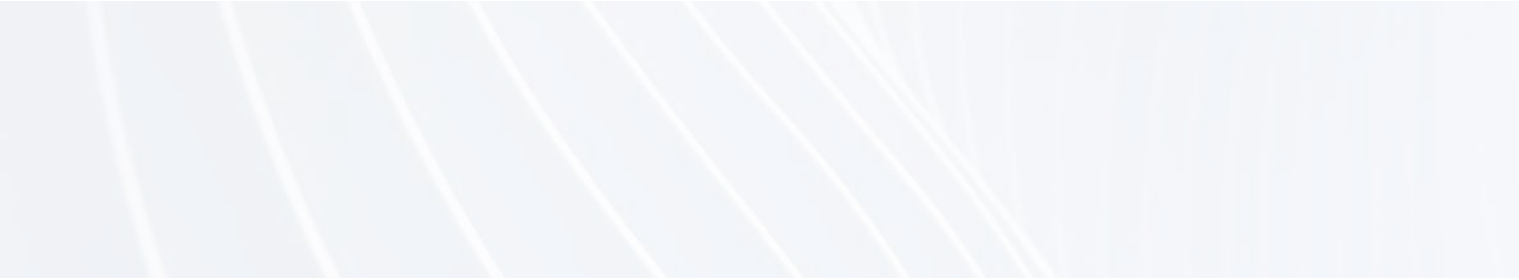
Please indicate the extent to which you agree with each of the following statements about EdTech: [1-5 disagree-agree; don't know]

- My students have access to wifi, hardware, and other technologies needed for online learning.

- My students have ownership of wifi, hardware, and other technologies needed for online learning.

- 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 students are able to quickly learn to use the new EdTech I introduce in my courses.

- 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.

- I am rewarded by my department or college for using EdTech in my courses

How important each of the following aspects are when choosing edtech for your course: [1-5, not at all - extremely]

- That the product is accessible to underserved students

- That the product is accessible to students with disabilities

- That the product integrates with the university LMS

- That your university has a license with the product

- That the product was recommended by administrators/teaching units

- That your university has provided you training with the product

- That the product provides you with on-demand customer support

- That the product provides your students with on-demand tech support

- That you have seen another faculty member successfully use the product in a course

How much actual influence do you think each group or person has on decisions concerning what EdTech options are available to faculty for teaching? [1-4, no influence, minor, moderate, major]

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

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.