Higher Ed’s New Normal
Perils, Progress, and Predictions for Tech-Enabled Learning

2022 CIN EdTech Student Survey

Please direct media queries to:
cin@wgulabs.org

Citation:
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Executive Summary

The second annual CIN EdTech Student Survey collected data from 1,402 students across six diverse colleges and universities to understand the year-over-year changes in their technology-enabled learning experiences, and learn what students want their college experiences to look like in the years ahead.

The data from the 2022 CIN EdTech Student Survey show promising progress toward positive tech-enabled learning experiences for students, but also highlight the gaps that institutions must address to meet students’ learning expectations.

NUMBER OF RESPONSES ACROSS PARTICIPATING CIN INSTITUTIONS

2-YEAR COLLEGES: 31.4%
- Northern Virginia Community College
- Central Ohio Technical College
- Cuyahoga Community College
- Piedmont Community College

4-YEAR UNIVERSITIES: 68.6%
- PennWest University, California
- Loyola University New Orleans
TAKEAWAY 1: STUDENTS’ EXPERIENCES WITH TECHNOLOGY-ENABLED LEARNING HAVE IMPROVED SINCE 2021

Students surveyed continue to encounter new EdTech at similar rates as last year, with over one third of students indicating that most of the EdTech they used in 2021-22 was new to them. The good news is that students are highly confident in their ability to adapt to this new normal of EdTech: 88% of students surveyed report feeling confident in their ability to adapt to new EdTech, up 5 percentage points from 2021.

Compared to 2021 survey results, students in 2022 are reporting substantial improvements in their overall learning experiences, which may be due in large part to the calming of the pandemic, and campus operations resuming at or near full capacity. Results from our 2022 survey show that 76% of students overall felt prepared for the next steps in their educational journey after the academic year, compared to only 53% who said the same in 2021.

“After this academic year, I feel academically prepared for the next steps in my educational journey.”

TAKEAWAY 2: STUDENTS WANT ONLINE LEARNING BUT INSTITUTIONS MUST OVERCOME PERCEPTIONS OF LOWER LEARNING QUALITY

Online learning modalities in 2022 remain high despite the rebounding of in-person learning since 2021: 40% of students surveyed report learning primarily online in 2022. But despite this considerable online presence in higher education, higher education must grapple with negative perceptions of online learning from some students.

Our data show that students perceive that they are learning less effectively in online formats as compared to in-person, and that students perceive credentials earned online as lower quality compared to traditionally-earned credentials. The exception to the pattern is students 25 years of age and older who report learning equally effectively in online and in-person modalities.

Students’ perceptions of learning may not perfectly reflect true learning outcomes, however. Our data cannot speak to the actual learning quality of online course modalities, but perceptions by students of lower online learning quality could impact enrollment and retention outcomes.
The student learning experience is more tech-enabled than at any point in higher education’s history. But a shift of scale from a traditionally in-person learning experience to a new technology-enabled one requires intentional effort to understand how students are experiencing this new reality, and how institutions can meet the quality expectations of students.

The 2022 CIN EdTech Student Survey shows that students are adapting well to the technology-enabled new normal of their higher education experiences. As our students, faculty, and institutions continue to change, the CIN EdTech Survey Series will continue to track the perils, progress, and predictions of the new technology-enabled state of higher education.

**ABOUT THE COLLEGE INNOVATION NETWORK**

The College Innovation Network (CIN) at WGU Labs is a grant-funded, research-oriented initiative that connects institutions with the best solutions to ensure student belonging, engagement, and equity. CIN supports educational institutions by identifying areas of need, supporting the implementation of effective education technology for students, and evaluating impact through research. Our goal is to have a meaningful impact on higher education at large through the evaluation of impactful solutions that promote belonging, engagement, and equity.

**ABOUT THE CIN EDTECH SURVEY SERIES**

CIN is in a unique position to learn about the student, faculty, and administrator experience with EdTech by leveraging the diversity of institutions within the Network. The CIN EdTech Survey Series is administered across the Network three times a year 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

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**TAKEAWAY 3: STUDENTS FEEL GENERALLY POSITIVE ABOUT AN ONLINE-ENABLED FUTURE FOR HIGHER EDUCATION - BUT LESS SO FOR THEMSELVES**

When asked about how positively or negatively students felt about increasing online options in higher education, students were clearly positive: more than two-thirds of students surveyed report feeling positively about higher education adopting more hybrid and online courses, and fully online programs.

But when students were asked if they were interested in taking more online courses at their own institutions, slightly fewer said yes. There appears to be a disconnect between how students view their own learning online and how students view the future of online higher education as an institution. Continued research to identify reasons for these differences will be foundational for institutions to ensure that they are meeting their students’ learning expectations.

More than two-thirds of students surveyed report feeling positively about higher education adopting more hybrid and online courses, and fully online programs.
Meeting Students’ Expectations with Tech-Enabled Learning in Higher Education

The student learning experience is more tech-enabled than at any point in higher education’s history. The radical shift to multi-modal, hybrid, and online learning afforded by technology allows learning to take place nearly anywhere, at any time, with anyone. But a shift from a traditionally in-person learning experience to a new tech-enabled one requires intentional effort to understand how students are experiencing this new reality and how institutions can meet the quality expectations of students.

The College Innovation Network (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.

The 202 CIN EdTech Student Survey found that students at traditionally campus-based institutions that had to transition to online learning for the pandemic were less satisfied with their learning experiences than those who were already enrolled in an online institution. We also learned that students' confidence in their ability to adapt and learn how to use EdTech, and university tech and access support. New in 2022 are data about students' perceptions of learning and quality of credentials in different learning formats, such as online, hybrid, and in-person modes. We also learn what formats students want for a variety of campus support services offered. Finally, we ask detailed predictions for the future of higher education: how do students view the tech-enabled future?

CIN will continue to chart year-to-year changes on core aspects of students’ tech-enabled learning experiences, tracking how EdTech is perceived and used, in addition this year, we administered our second annual survey of students at CIN institutions to better understand how learning experiences with EdTech and online formats have changed now that tech-enabled, multimodal, and online learning are the new “normal” for students. Are students continuing to struggle with EdTech and online learning? How have learning formats changed? Do students feel they are learning effectively in the various learning formats now offered? What do students predict for the future of higher education? These are the questions our 2022 report aims to answer.

The 2022 CIN EdTech Student Survey reports on year-over-year changes since 2021 of students’ learning experiences generally, their ability to adapt and learn how to use EdTech, and university tech and access support. New in 2022 are data about students' perceptions of learning and quality of credentials in different learning formats, such as online, hybrid, and in-person modes. We also learn what formats students want for a variety of campus support services offered. Finally, we ask detailed predictions for the future of higher education: how do students view the tech-enabled future?

CIN will continue to chart year-to-year changes on core aspects of students’ tech-enabled learning experiences, tracking how EdTech is perceived and used, in addition
to monitoring the gap in perceived learning quality in online, hybrid, and in-person learning modes. By tracking changes over time we can monitor progress, spot trends, and identify gaps in need of intervention.

The data from the 2022 CIN EdTech Student Survey show promising progress toward positive tech-enabled learning experiences for students, but also highlight the gaps that institutions must address to meet students’ learning expectations.

TAKEAWAY 1: STUDENTS’ EXPERIENCES WITH TECHNOLOGY-ENABLED LEARNING HAVE IMPROVED SINCE 2021

- Students’ overall learning experiences with EdTech have improved, with 23% more students this year citing that EdTech has enhanced their learning, and 23% more students reporting that they feel more prepared for the next steps in their academic journey.
- Students encountered fewer difficulties in accessing necessary EdTech in 2022 compared to 2021.
- Students continue to encounter a lot of new EdTech in 2022, similar to reports in 2021, but this year students report higher confidence in learning how to use and adapt to new EdTech.

TAKEAWAY 2: STUDENTS WANT ONLINE LEARNING BUT INSTITUTIONS MUST OVERCOME PERCEPTIONS OF LOWER LEARNING QUALITY

- In-person learning has rebounded since 2021, but 40% of student respondents in 2022 report learning in a primarily online modality.

- Students perceive online learning options to be less effective and lower quality than in-person learning, with a corresponding perception that credentials earned via online modalities are of lower quality.
- An exception to these trends are adult students 25 years and older who have more positive perceptions of online learning compared to 18-24 year old students.

TAKEAWAY 3: STUDENTS FEEL GENERALLY POSITIVE ABOUT AN ONLINE-ENABLED FUTURE FOR HIGHER EDUCATION — BUT LESS SO FOR THEMSELVES

- Two-thirds of surveyed students feel positively about institutions offering more fully online courses and fully online programs, but nearly one in five students feel negatively about the shift to fully online courses and programs.
- Students feel more positively about higher education implementing more fully online options, but slightly fewer students report wanting to enroll in such options for themselves.

Higher education has shifted out of the pandemic and into the new normal of tech-enabled learning. Students are adapting to the new environment and want tech-enabled options both in the classroom and on-campus – and institutions seem poised to deliver.

But challenges still remain for institutions. Most pressing is the gap in students’ perceptions of learning effectiveness and quality in online environments compared to traditional in-person environments. Higher education must commit to meeting students’ expectations in the modern tech-enabled environment. The 2022 CIN EdTech Student Survey report shares the data institutions need to know on these topics, and offers recommendations for institutions to improve the student experience.
About the Data and Methods

In April 2022, the CIN research team emailed surveys to over 13,000 students at six colleges and universities that are part of CIN: Central Ohio Technical College, Cuyahoga Community College, Loyola University New Orleans, Northern Virginia Community College, PennWest California, and Piedmont Community College (see Figure 1). The analytic sample comprised 1,402 students. These students come from diverse backgrounds, attend diverse school types, and are at various stages of their higher education journey (see Figures 2 - 4).

The 2022 CIN EdTech Student Survey reports on core questions about students’ experiences with EdTech and online learning over the 2021–22 academic year, along with demographic questions (see the Technical Methodology Appendix for full detailed methods of this survey). Students who completed the survey were compensated $15 for their time.

In 2021, 92% of students in our survey learned primarily online, whereas in 2022 40% of students surveyed were learning in an primarily online mode (i.e., either online synchronously, online asynchronous, or hybrid; Figure 5), with 48% of students surveyed learning primarily in-person.

<table>
<thead>
<tr>
<th>2-YEAR COLLEGES: 31.4%</th>
</tr>
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<tbody>
<tr>
<td>Northern Virginia Community College</td>
</tr>
<tr>
<td>Central Ohio Technical College</td>
</tr>
<tr>
<td>Cuyahoga Community College</td>
</tr>
<tr>
<td>Piedmont Community College</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4-YEAR UNIVERSITIES: 68.6%</th>
</tr>
</thead>
<tbody>
<tr>
<td>PennWest University, California</td>
</tr>
<tr>
<td>Loyola University New Orleans</td>
</tr>
</tbody>
</table>
THE CIN STUDENT SAMPLE BY THE NUMBERS

25
The average age of students

33
The average self-reported income percentile of students

54
The percent of students who are first-generation college students

63
The percent of students who identified as female

63
The percent of students working full- or part-time

SELF-REPORTED RACE AND ETHNICITY OF STUDENTS

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>59.8%</td>
</tr>
<tr>
<td>Black</td>
<td>10.1%</td>
</tr>
<tr>
<td>Hispanic/Latino/a</td>
<td>6.7%</td>
</tr>
<tr>
<td>Native American</td>
<td>0.4%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>0.2%</td>
</tr>
<tr>
<td>Multirace</td>
<td>7.7%</td>
</tr>
<tr>
<td>Not provided</td>
<td>10.1%</td>
</tr>
</tbody>
</table>

CURRENT ACADEMIC STANDING OF STUDENTS AT THE END OF THE SPRING 2022 TERM

- Freshman Status: 9.8%
- Sophomore Status: 19.2%
- Junior Status: 19.9%
- Senior Status: 15.0%
- Enrolled Grad Student: 121+
- Freshman Status: 0-30
- Sophomore Status: 31-60
- Junior Status: 61-90
- Senior Status: 91-120

SELF-REPORTED AGE OF STUDENTS

- 18-24 year old students: 61%
- 25+ year old students: 27%
- Not Provided: 12%

PRIMARY MODALITY OF LEARNING DURING THE 2021-22 ACADEMIC YEAR

- Fully In-Person: 47.7%
- Online Synchronous: 11.1%
- Online Asynchronous: 25.2%
- No Primary Modality: 12.8%
- Hybrid Model: 3.2%
- Info Not Provided: 9.8%
Takeaway 1: Students’ Experiences with Technology-Enabled Learning Have Improved Since 2021

Our 2021 EdTech Student Survey showed that about 1 in 3 students reported that it was hard keeping up with learning how to use new EdTech across the year. And students who reported struggling more were, unsurprisingly, more likely to report worse overall learning experiences across the year.

In 2022, however, only 1 in 5 students surveyed reported that it was hard keeping up with learning how to use new EdTech. Our survey results show an overall improvement of tech-enabled learning for students at campus-based institutions (our sample this year does not include any online-only institutions). Students in 2022, compared to 2021, were more likely to report positive attitudes toward EdTech enhancing their learning, feeling prepared for next year, and greater confidence in their ability to adapt to new technology.

STUDENTS REPORT MORE POSITIVE LEARNING EXPERIENCES SINCE LAST YEAR

The biggest year-over-year improvements are in students’ self-reported learning experiences with EdTech. After a notably rocky year in which just over half of students in our 2021 survey reported that EdTech enhanced their learning experiences, we observe that nearly four in five students reported the affirmative in 2022 (Figure 6).

STUDENT RESPONSES ABOUT HOW EDTECH ENHANCED LEARNING, 2021 VS. 2022

Educational technologies enhanced my learning experiences during this school year.

<table>
<thead>
<tr>
<th>Modality</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online, synchronously</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Online, asynchronously</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>No primary modality</td>
<td>9%</td>
<td>11%</td>
</tr>
<tr>
<td>Hybrid model</td>
<td>9%</td>
<td>18%</td>
</tr>
<tr>
<td>Fully in-person</td>
<td>21%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Overall
- 2021: 24%
- 2022: 56%

STUDENT RESPONSES ABOUT HOW EDTECH ENHANCED LEARNING, 2021 VS. 2022

<table>
<thead>
<tr>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>50</td>
</tr>
<tr>
<td>70</td>
</tr>
</tbody>
</table>

Figure 6
Students in 2022 also report feeling substantially more prepared for the next steps in their education journey than did students in 2021. In 2021, just 53% of students surveyed felt prepared for next steps in their educational journey after a year of online learning. In contrast, results from our 2022 survey show that 76% of students overall felt prepared for their next steps after the academic year, which did not differ substantially by the primary modality of learning (Figure 7). Students in 2022 feel similarly prepared and, if anything, students with online learning components report feeling more prepared than their primarily in-person learning peers.

### STUDENT RESPONSES ABOUT FEELING PREPARED FOR NEXT STEPS IN EDUCATION, 2021 VS. 2022

![Figure 7: After this academic year, I feel academically prepared for the next steps in my educational journey.](image)

#### STUDENTS ENCOUNTERED FEWER DIFFICULTIES USING AND ACCESSING EDTECH IN 2022

The near-universal shift to online learning in 2020 and 2021 brought with it a ubiquitous integration of EdTech to facilitate learning. But as technology-enabled learning became the new normal for students in the past year, student respondents seem to have adapted well to the variety of technology regularly introduced in classes (Figure 8). Thirty percent of students surveyed in 2022 reported encountering difficulties using or accessing EdTech needed for online learning – down from 40% in 2021.

University support, however, seems to have dipped from last year. Whereas in 2021 66% of students agreed that their institution was helpful with providing access to needed EdTech and 56% of students agreed their institution was helpful in resolving EdTech issues, in 2022, 65% and 52%, respectively, agreed with the same question.

### STUDENTS’ CONFIDENCE IN THEIR ABILITY TO ADAPT TO EDTECH IS HIGHER IN 2022

Our inaugural Student EdTech Survey in 2021 explored a new concept for understanding how students are experiencing EdTech, which we refer to as EdTech self-efficacy. EdTech self-efficacy refers to how confident students feel about using, learning, and adapting to EdTech. Understanding students’ confidence in using, learning, and adapting to EdTech is an important way to look at the digital divide. It is about more than access to hardware, software or Wifi; it is a student’s ability to navigate using technology.

Our 2022 results show that learning how to use new EdTech is still a challenge that afflicts a substantial minority of students: up to 24% of students agreeing compared to 20% last year. This may be due, in part, to students continuing to encounter new EdTech at their institutions: 37% of students surveyed in 2022 agree that most of the EdTech they used over the school year had been new, similar to the 34% reported in 2021 (Figure 9).
STUDENT RESPONSES ABOUT EDTECH ACCESS AND SUPPORT, 2021 VS. 2022

[Institution name] was helpful in providing me access to technologies I needed for online learning.

Overall

2021
2022

2022 (by modality)

[Institution name] was helpful in resolving technology issues I experienced across the year.

Overall

2021
2022

2022 (by modality)

Across the academic year, I encountered difficulties in using or accessing necessary educational technologies for online learning.

Overall

2021
2022

2022 (by modality)
Understanding what proportion of students struggle with using EdTech in their courses is important for two primary reasons. First, failing to address these struggles risks alienating a substantial proportion of students struggling. And second, because students’ reports of struggling with EdTech continue to predict key aspects of their learning experience (see Table 1), as we observed in 2021.

The good news is that students are adapting well to new EdTech. Compared to 2021, 14% fewer students report that keeping up with having to learn how to use new EdTech throughout the year has been hard (33% in 2021 vs only 19% in 2022). And, confidence in overcoming EdTech challenges is high: 88% of students report in 2022 that “I am able to adapt to new technology in my courses”, with only 4% disagreeing, and an increase of 5 percentage points from 2021 (Figure 9).

**Table 1**

<table>
<thead>
<tr>
<th>More likely to report</th>
<th>Less likely to report</th>
</tr>
</thead>
<tbody>
<tr>
<td>... that they encountered difficulties in using or accessing necessary EdTech for online learning.</td>
<td>... that they are able to adapt to new technologies in their courses.</td>
</tr>
<tr>
<td>... that it was hard to learn how to use new EdTech throughout the year.</td>
<td>... that EdTech enhanced their learning experiences.</td>
</tr>
<tr>
<td>... that they felt academically prepared for the next steps in their educational journey.</td>
<td>... that they had access and ownership of EdTech necessary for learning.</td>
</tr>
</tbody>
</table>
Takeaway 2: Students Want Online Learning but Institutions Must Overcome Perceptions of Lower Learning Quality

Although the initial transition to online learning was rocky at first, students came to enjoy the flexibility of online-enabled options for their courses. Options beyond the traditional in-person courses were not only more flexible, but also more inclusive to broader student populations. And students let faculty and college leaders know they wanted to retain online options. In fact, our 2021 survey showed that nearly half of students wanted online learning options for the next academic year.

But, as our results show, expectations around learning, availability, and quality in online formats remains a challenge that traditionally campus-based institutions must address.

IN-PERSON LEARNING HAS REBOUNDED, BUT TWO IN FIVE STUDENTS SURVEYED ARE STILL LEARNING PRIMARILY ONLINE

Colleges and universities are largely back to full capacity operations on campus. The institutions we surveyed have returned to primarily face-to-face instruction: 40% of students surveyed in 2022 reported that they learned primarily online, compared to 92% in 2021 (see Figure 5).

Students’ increased preferences for online-enabled learning options come through in our 2022 survey. Although face-to-face learning is still the most preferred modality overall, the preference gap between face-to-face and online preferences narrowed (Figure 10), with little difference in preferences for different types of online options (i.e., asynchronous, asynchronous, hybrid).

**STUDENTS’ PREFERENCE FOR DIFFERENT LEARNING MODALITIES**

Please rank your preferred course modalities

<table>
<thead>
<tr>
<th>Course Modality</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face to face</td>
<td>2.7</td>
</tr>
<tr>
<td>Online, asynchronously</td>
<td>2.5</td>
</tr>
<tr>
<td>Online, asynchronously</td>
<td>2.43</td>
</tr>
<tr>
<td>Online, synchronously</td>
<td>2.38</td>
</tr>
</tbody>
</table>

Figure 10
STUDENTS PERCEIVE ONLINE LEARNING OPTIONS TO BE LESS EFFECTIVE AND LOWER QUALITY THAN IN-PERSON LEARNING

Although students are in favor of increased online learning options, they remain critical of the efficacy and quality as compared to traditional in-person options. Our 2022 survey shows that students’ perceived learning is substantially lower in online options (i.e., online asynchronous, online synchronous, hybrid) versus fully in-person courses (Figure 11). Whereas 84% of students said they felt that in-person courses were effective for learning, only 65-70% said the same about online-enabled learning options. These numbers are, however, an improvement over last year when only 52% felt that online courses were effective for learning.

**STUDENT RESPONSES OF PERCEIVED LEARNING EFFECTIVENESS OF DIFFERENT LEARNING MODALITIES**

**Figure 11**

How effective were the following class formats for your learning?

- **Fully in-person courses?**
  - Overall: 84% Very effective, 71% Somewhat effective, 15% Somewhat ineffective, 10% Not at all effective
  - Students <24 years old: 71% Very effective, 64% Somewhat effective, 29% Somewhat ineffective, 16% Not at all effective
  - Students 25+ years old: 84% Very effective, 71% Somewhat effective, 29% Somewhat ineffective, 10% Not at all effective
  - Age not provided: 85% Very effective, 71% Somewhat effective, 15% Somewhat ineffective, 10% Not at all effective

- **Hybrid courses (e.g., some components online and some components in-person?)**
  - Overall: 70% Very effective, 71% Somewhat effective, 27% Somewhat ineffective, 30% Not at all effective
  - Students <24 years old: 59% Very effective, 63% Somewhat effective, 37% Somewhat ineffective, 32% Not at all effective
  - Students 25+ years old: 81% Very effective, 73% Somewhat effective, 29% Somewhat ineffective, 30% Not at all effective
  - Age not provided: 70% Very effective, 71% Somewhat effective, 29% Somewhat ineffective, 30% Not at all effective

- **Online asynchronous courses (i.e., online classes not occurring live or in real-time)?**
  - Overall: 68% Very effective, 59% Somewhat effective, 41% Somewhat ineffective, 32% Not at all effective
  - Students <24 years old: 68% Very effective, 63% Somewhat effective, 37% Somewhat ineffective, 32% Not at all effective
  - Students 25+ years old: 65% Very effective, 60% Somewhat effective, 31% Somewhat ineffective, 31% Not at all effective
  - Age not provided: 68% Very effective, 63% Somewhat effective, 37% Somewhat ineffective, 32% Not at all effective

- **Online synchronous courses (i.e., online classes occurring live or in real-time)?**
  - Overall: 65% Very effective, 60% Somewhat effective, 35% Somewhat ineffective, 32% Not at all effective
  - Students <24 years old: 65% Very effective, 63% Somewhat effective, 32% Somewhat ineffective, 32% Not at all effective
  - Students 25+ years old: 68% Very effective, 68% Somewhat effective, 32% Somewhat ineffective, 32% Not at all effective
  - Age not provided: 65% Very effective, 60% Somewhat effective, 35% Somewhat ineffective, 32% Not at all effective

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**Figure 11**
One interesting exception though is that of students 25+ years of age (sometimes referred to as “non-traditional age students”). These adult student populations, who are more prominent in graduate programs and community colleges included in our sample, as compared to students aged 18-24, report learning more effectively online than in-person – the only grouping variable to show a reversed trend.

When asked about the quality of credentials earned online versus in-person, 35% of students agreed with the statement that “online credentials are lower quality than those earned from in-person courses” (Figure 12). Again, however, 25+ year old college students feel significantly more positively about credentials earned online.

The negative perceptions of online credentials may be due to the perception of learning less effectively in online-based courses compared to in-person, as our data suggest above. If students do not feel that they are learning effectively, then they may conclude that credentials earned online are of lower quality.

**STUDENTS WANT ONLINE OPTIONS FOR CAMPUS SUPPORT SERVICES, TOO**

We asked students how they would like to experience their college’s support services available outside the classroom. Across all the domains of services we asked students about – career, student support, academic, and social – most reported wanting a mix of online and in-person options (Figure 13). One third still preferred engaging in social and peer connections in-person, and just over one quarter preferred engaging in academic supports in person.

Students aged 25 years and older are again the most enthusiastic about online options. These students are similarly likely to report wanting a mix of online and in-person student support options available to them across domains, but show the greatest demand for entirely online support services compared to students 18-24 years of age.
STUDENT MODALITY PREFERENCES FOR INSTITUTIONAL SUPPORT SERVICES

How would you most prefer to receive each of the following types of services?

Career services (e.g., career coaching, alumni–student connections, resume building services)

Overall
Students <24 years old
Students 25+ years old
Age not provided

Entirely in-person
A mix of online and in-person
Entirely online / virtually

Student support services (e.g., counseling, financial services, IT support)

Overall
Students <24 years old
Students 25+ years old
Age not provided

Entirely in-person
A mix of online and in-person
Entirely online / virtually

Academic services (e.g., tutoring, academic advising, writing center services)

Overall
Students <24 years old
Students 25+ years old
Age not provided

Entirely in-person
A mix of online and in-person
Entirely online / virtually

Social and peer connection services (e.g., orientation, campus events, student organizations)

Overall
Students <24 years old
Students 25+ years old
Age not provided

Entirely in-person
A mix of online and in-person
Entirely online / virtually

Figure 13
Takeaway 3: Students Feel Generally Positive About an Online-Enabled Future for Higher Education — But Less So for Themselves

As technology-enabled learning becomes ever more integrated into the college learning experience, there’s little doubt that EdTech and online learning options continue to play an outsized role in higher education. We saw above that students want online options for learning and are quickly gaining confidence in their ability to adapt to this tech-enabled environment.

When we asked students about their feelings toward the shift to more online learning options, students generally reported feeling positive. About two-thirds of students feel positively about institutions offering more hybrid and online courses, and fully online programs (Figure 14).

There remains about one in five students, however, that feel negatively about the shift to fully online courses and programs. Compared with faculty at these institutions, who responded to the same questions in our May 2022 faculty survey, students overall feel more positively about online courses (58% vs 67%) and online programs...
(55% vs 66%), suggesting that student demand will likely fuel the transition to more fully online programming for universities.

These data suggest that institutions must offer diverse learning models to best serve all students. Such models could include more hybrid and multi-modal course offerings, in addition to non-degree pathways. In fact, students in our survey report feeling most positively about institutions offering more micro-credentials and certificates, with 72% feeling positive and only 5% feeling negative.

When asked about online-enabled learning at their own institution, students generally feel positively about their specific institutions’ ability to provide fully online courses and integrate EdTech effectively (Figure 15). But 20% of students reported not wanting to take more online courses at their own institution, which did not differ by upperclassmen who’ve been in college during COVID transition, or new students who have not.

STUDENT RESPONSES ABOUT TECHNOLOGY OPTIONS AT THEIR INSTITUTION

Below are statements regarding the use of technology in your institution. To what extent do you agree with each statement?

[Institution name] can successfully provide fully online courses.

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>12%</td>
<td>16%</td>
<td>72%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the future, I would like to take online courses at [Institution name].

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>18%</td>
<td>61%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[Institution name] will successfully implement EdTech in courses into the future.

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>7%</td>
<td>38%</td>
<td>54%</td>
<td></td>
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</tbody>
</table>

Figure 15
Strategies for Improving the Student EdTech Experience

The data presented as part of our EdTech Survey Series with students and faculty show that higher education is bound for a technology-enabled future. When implemented well, integration of EdTech in students’ learning experiences can provide ample opportunity to boost student success.

But students are expecting more from their institutions today: they want high-quality, effective learning both in person and online, in addition to multi-modal options for academic, support, career, and social experiences. The ubiquitous nature of EdTech within the college experience necessitates that college leaders act to ensure the best possible experiences with EdTech to improve student satisfaction and success.

Our 2022 data show that institutions have made many improvements in students’ tech-enabled learning experiences since the 2020-21 academic year, but there remain areas for innovation. To meet student expectations, institutions must commit to improving the student EdTech experience year after year. Based on the data reported in this 2022 report, we recommend three strategies to do so.

INVEST IN TECH SUPPORT FOR STUDENTS

Our 2022 data show that 30% of students surveyed reported encountering difficulties using or accessing EdTech needed for online learning; and just over half of students reported that their institution was helpful in resolving such issues. Although this is an improvement from the 2020-21 academic year, there remains substantial gaps to be filled with student tech support.

As EdTech is increasingly needed to participate in college courses, students need variable support options – both in-person and online – from institutions and EdTech companies to ensure they can fully engage with the course, content, and their peers. Especially as college courses with fully online components become more common, which allow for students to engage with the course on their own schedule, institutions must rethink how they staff tech support on campus – staffed offices only during regular business hours may not effectively serve many students.

IDENTIFY STUDENTS WHO STRUGGLE WITH ETech EARLY

Our 2022 data shows that 24% of students surveyed report struggling with learning how to use EdTech, and 37% of students surveyed report that most of the EdTech they used in the past year was new to them. This matters because students who report struggling with EdTech also report feeling less confident about adapting to new EdTech, feeling less confident about their next educational steps, among other things.

Boosting student confidence in their ability to adapt to changing technology and improving their experience using EdTech can be improved by identifying struggling students early on in the term. This can be achieved both at the university level and the course level.

Universities can ensure proper education and training with university-wide EdTech systems such as their learning management system, email and communications channels, and how to resolve issues.
Faculty in courses can survey students the first week of courses about their skill-level and confidence in using the variety of technologies that are being used in the course. By proactively offering EdTech instruction and resolving gaps in knowledge early, EdTech can be a source of enhancing learning rather than a barrier to it.

**RETHINK IMPLEMENTATION OF LEARNING SCIENCE IN ONLINE COURSE MODALITIES**

Our 2022 data show that students want more online learning options but they remain critical of the quality of learning they receive in online courses, and whether the credentials they earn are equivalent to in-person credentials. There are many potential reasons for why online learning is perceived as lower quality. Ensuring that online courses are being designed around learning science is one way to combat this perception gap.

The near-universal shift to online learning in higher education in 2020 revealed that online learning has different challenges that must be addressed compared to in-person learning. Creating the online courses that students want requires intentional design, creative thinking, and a deep understanding of the user experience with technology and online settings. Although similar learning principles will apply in all course modalities, implementation of those principles will look different.
Conclusions

The technological transformation of higher education has brought about substantial change to college students’ learning experience. EdTech is more ubiquitous than ever before. College courses are offered in a variety of online and in-person formats. And, student support services are becoming increasingly hybrid.

Our year-over-year data from students across CIN shows that students’ overall technology-enabled learning experiences during the 2021-22 academic year improved since the 2020-21 academic year. This positive shift could be the result of more intentional deployment of online learning options this year as compared to the emergency shift that occurred in 2020. But it could also be due to lessons learned during the pandemic about how to best serve students in a tech-enabled learning environment.

The data presented here show that students have high expectations of their institutions: they want a mix of online and in-person options not only in the classroom but also across the university, from career advising to social events. But perceived quality of online options remains a hurdle for institutions to overcome.

Students have a perception that they are learning less effectively online and that the credentials they earn online are of lower quality as compared to traditional in-person credentials. Although our year-over-year data show a 10+ percentage point increase in perceived learning quality in online settings since last year, about a third of students surveyed report online learning options being ineffective for their learning.

Despite this perception, however, students view higher education’s shift to online classes and programs as an overall positive. There appears to be a disconnect between how students view their own learning online and how students view the future of online higher education as an institution. Continued research to identify reasons for these differences will be foundational to institutions ensuring they are meeting their students’ learning expectations.

Overall, the 2022 CIN EdTech Student Survey shows that students are adapting well to the technology-enabled new normal of their higher education experiences. In fact, 88% of students surveyed report feeling confident in their ability to adapt to new EdTech being used in their courses. As our students, faculty, and institutions continue to change, the CIN EdTech Survey Series will continue to track the perils, progress, and predictions of the new technology-enabled state of higher education.
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, faculty, and administrator experience with EdTech by leveraging the diversity of institutions within the Network. The CIN EdTech Survey Series is administered across the Network three times a year 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
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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.

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Emily Streeper and Stephanie Reeves of WGU Labs are responsible for survey design, data collection, and data analyses. Nicole Barbaro of WGU Labs is responsible for writing the report. Natalie Berkey, Omid Fotuhi, Betheny Gross, and Erika Wandsneider at WGU Labs provided critical revisions to the report. The report was designed by CallyAnn Hamilton and Christine McDonough of WGU Labs.