

# CHLOE 8

STUDENT DEMAND MOVES HIGHER ED  
TOWARD A MULTI-MODAL FUTURE

## CHLOE 8: STUDENT DEMAND MOVES HIGHER ED TOWARD A MULTI-MODAL FUTURE

THE CHANGING LANDSCAPE OF ONLINE EDUCATION, 2023

*Quality Matters & Eduventures Survey of Chief Online Officers*

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**\*The CHLOE report categorizes institutions by size of fully and partly online enrollment as follows:**

- 1. Low online enrollment institutions (low-OE)** = Less than 1,000 online students
- 2. Mid or mid-sized online enrollment institutions (mid-OE)** = 1,000- 7,500 online students
- 3. High online enrollment institutions (high-OE)** = More than 7,500 online students

## SUGGESTED CITATION

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# CHLOE 8: STUDENT DEMAND MOVES HIGHER ED TOWARD A MULTI-MODAL FUTURE

## *The Changing Landscape of Online Education, 2023*

### I. EXECUTIVE SUMMARY

As U.S. higher education emerged from COVID-19 pandemic conditions in 2021-2022, asynchronous learning remained the dominant mode of online learning for traditional-age undergraduates, adult undergraduates, and graduate students at all types of institutions and for both degree and non-degree programs.

Most chief online officers (COOs) reported examples of mixed-mode instruction, combining synchronous and asynchronous elements, and of hybrid courses incorporating in-person<sup>1</sup> *and* distance learning, but few cited widespread use of these formats. Whether versions of these delivery modes become more common over time remains to be seen, but the pedagogical challenges and logistical difficulties of mounting such courses may limit their practicality at scale.

The majority of COOs reported strong growth in online and hybrid learning enrollments from 2021 to 2022, as contrasted with stagnant or declining in-person numbers. A majority of COOs believe student interest in online options has not yet peaked. These findings add support to the prediction made by COOs in the CHLOE 7 Survey that by 2025 the great majority of students at all postsecondary levels would include a mix of face-to-face, online, and hybrid learning experiences in their studies.

Given current and still-growing student demand for online modalities, many institutions are taking steps to expand online offerings in an effort to attract and retain students seeking greater flexibility in course delivery. Half of responding COOs affirmed that their current strategic plans and resource allocations support greater emphasis on online learning and multi-modal study, although many of them acknowledged resource constraints in meeting these expectations. An additional third of respondents reported that a reconsideration of strategic priorities is currently underway to address changing student demand.

Of the remaining 15% that indicated adherence to a pre-pandemic in-person mission the majority, nevertheless, claimed that they too are striving to meet increasing demand for online learning. Only 6% of the entire CHLOE 8 sample indicated that their focus remains on serving an in-person student body, and/or that they see no evidence of online demand among their own current and prospective students. Open-ended comments, however, suggest that the shift to multi-modal learning is not without controversy at many institutions.

<sup>1</sup>Throughout the report, “in-person,” “face-to-face,” “F2F,” and “on-campus” are used interchangeably to mean courses that students attend at scheduled times and in-person.



Most institutions appear to be playing catchup to meet student online demand. Specific measures to attract and retain students seeking delivery mode flexibility are the expansion of online and hybrid curricula, ongoing market research to stay ahead of shifting student preferences, and increasing availability of non-degree options.

Despite the evident need for an online-capable faculty, nearly half of institutions surveyed still do not require faculty members to undergo formal training in order to teach online. While CHLOE 8 found a higher proportion of full- and part-time (PT) faculty members prepared to develop and teach online and hybrid courses than any previous CHLOE survey, they still constitute a minority at most schools. Less than a quarter of COOs claimed that the majority of their faculty have experience designing online courses.

Financial incentives are, by far, the most widely used and effective means to encourage course and program development and quality assurance. The majority of schools surveyed have Teaching and Learning Centers (TLCs), but they appear to be an underutilized resource for online and hybrid curriculum development and faculty training in many cases. What role, if any, TLCs have in training faculty for online or multi-modal curriculum development or teaching varies greatly.

The majority of institutions provide a range of administrative, technical, and academic services tailored to the needs of the online or remote student, but most institutions still have work to do to assure students the best chance of success in online study. For example, while virtually all schools offer one or more formats of orientation to online study, few require any students, even those in primarily or exclusively online programs, to complete orientation either prior to or during their online study. The fastest growing component of student support in the past several years is mental health services, but the integration of remote students into student life activities continues to lag far behind.

The majority of institutions have trimmed back the large-scale investments in new technology that were begun during the pandemic years. Core technologies are still widely supported, but experimental pedagogical tools are being introduced more selectively, where they can have measurable impact. Focus has shifted to more administrative software/services (e.g., student retention and academic integrity tools) and away from more academic ones (e.g., virtual labs, third-party courses).

A substantial majority of COOs reported that their institutions engage in quality assurance benchmarking for asynchronous courses and programs, and nearly two-thirds said they do so for online teaching and technical support for students. However, less than 15% communicate the results of these efforts to current and prospective students. Despite evidence that a majority of schools have access to data that would enable formal QA measures for other delivery modes, they are much less common for synchronous and hybrid formats and least of all for in-person learning or direct comparisons among delivery modes.

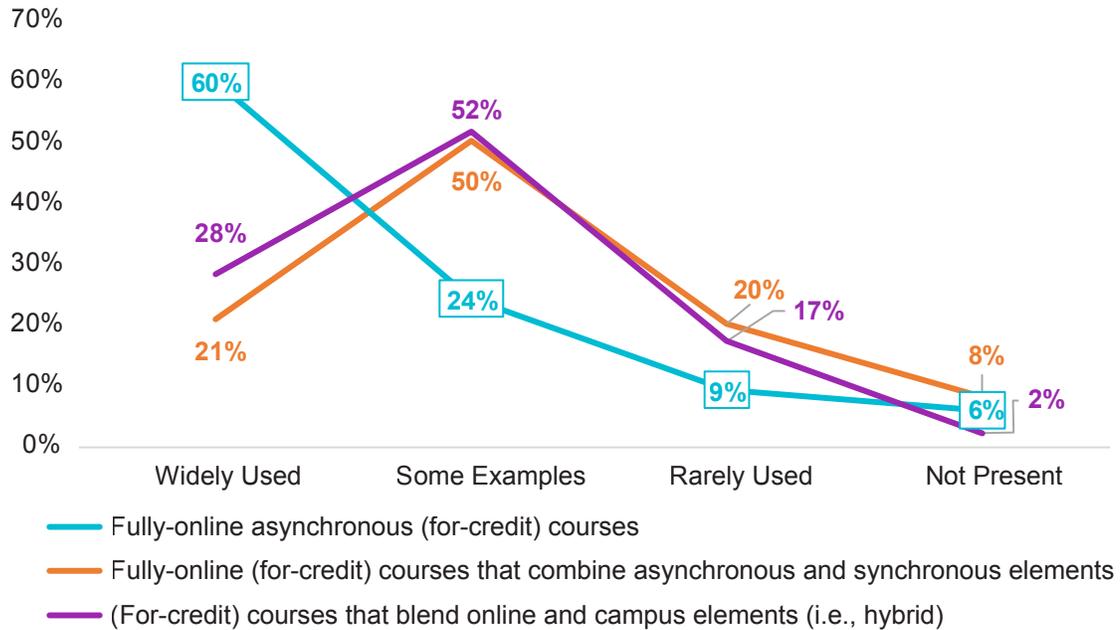
## II. TODAY'S ONLINE LEARNING PROFILE

The term “online learning” is longstanding and familiar but can mask important differences at the institutional, program, and course level. The rapid deployment of “emergency remote learning” during the pandemic rendered “online” yet more pervasive but less clear. As colleges and universities emerge from the COVID-19 crisis, the CHLOE 8 Survey sought to clarify—from the perspective of chief online officers—what online learning looks like at different institutions and for different student types.

The survey first asked about credit-bearing courses, distinguishing fully online asynchronous, synchronous, and hybrids of online and on-campus. Figure 1 shows responses for traditional-age undergraduates. Responses for degree and non-degree programs and for other types of students (adult undergraduate, graduate) are discussed later in this section.



**Figure 1. Online (Credit) Course Variety and Prevalence at Institutions for Traditional-Age Undergraduates (Sample = 264)**



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*N.B. Only includes CHLOE 8-responding schools that report serving this student population.*

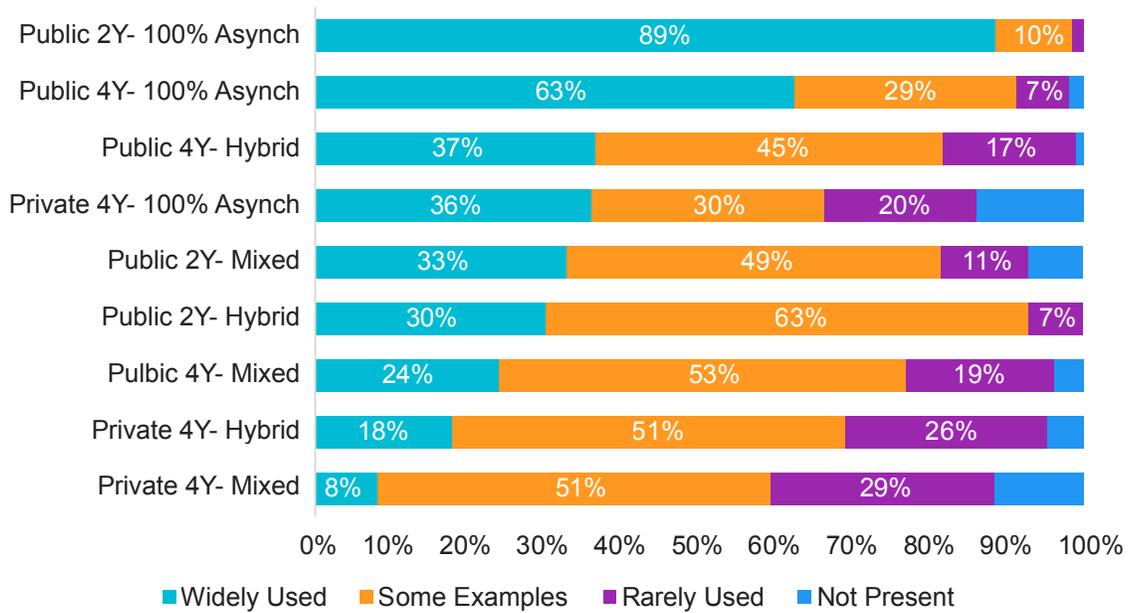
The most obvious takeaway from Figure 1 is that fully online asynchronous courses are by far the most common version of “online” for this type of student. The typical school can cite examples of synchronous or hybrid credit courses but does not consider them widely used. As was the case pre-pandemic, the convenience of fully asynchronous provision still outweighs the pedagogic variety afforded by mixing in synchronous or in-person elements.

This may be due both to student preference—real and perceived—and operational simplicity. Another factor may be that at many schools synchronous and hybrid courses may still be experimental. On the other hand, few schools in the sample cited any of the three course types as rarely used or not present, indicating that such experimentation is widespread and ongoing.

By sector, the picture diverges (Figure 2).



**Figure 2. Online (Credit) Course Variety and Prevalence by Sector for Traditional-Age Undergraduates (Sample = 260)**



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Almost all community colleges (89%) said that online asynchronous courses are widely used for traditional-age undergraduates compared to 63% of public four-year institutions and 36% of private four-year institutions. This underscores that sector is a reliable guide to online activity at public two-year schools and to a lesser extent at their public four-year peers but is hit-or-miss for private schools. Across the sample, there is a positive correlation between fully online enrollment scale as reported to IPEDS and a greater prevalence of asynchronous courses for traditional-age undergraduates.

When it comes to courses for this audience that combine asynchronous and synchronous elements, sector also reveals differences. Community colleges are most active at 33% saying widely used, followed by public four-year schools at 24% and only 8% at private four-year schools. Community colleges may feel the most need to supplement asynchronous courses with synchronous elements, trying to boost engagement and socialization for younger but less traditional and well-prepared students for whom 100% asynchronous may appeal in theory but be challenging in practice. Greater activity at community colleges and public four-year schools versus private schools is consistent with more recent and more limited online experience at many of the latter types of schools.

Hybrid courses for traditional-age undergraduates are most common among public four-year schools (37% said, “widely used”), versus 30% among community colleges and 18% among private four-year schools. Greater incidence of branch campuses and sites at public four-year institutions may be one explanation for above-average hybrid course activity. The relative lack of online learning development generally at many private institutions may also be a key variable.

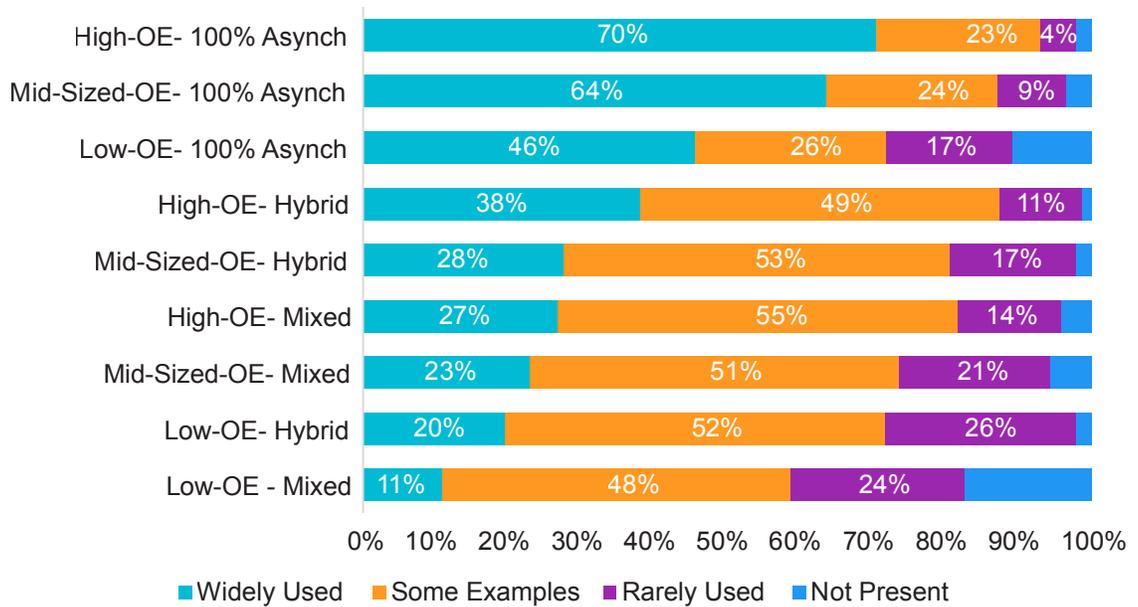
If campus resources and appeal drive hybrid course investment, the private four-year school widely used average should be higher than that for two-year institutions, but that is not the case. On average, private schools report much greater investment in fully online asynchronous courses than in mixed or hybrid. Private school commitment to hybrid is somewhat more visible at the degree level (Figure 4).



In all three sectors, about half of the sample selected some examples of mixed online, suggesting plenty of bottom-up experimentation at the program and department level to achieve pedagogic fit and enhancement. It is interesting that the public four-year schools’ hybrid “widely used” ratio is a little higher than the same fully asynchronous ratio among private four-year schools, suggesting a growing maturity of hybrid programming in one sector, at least at the course level for traditional-age undergraduates.

Figure 3 breaks down the data by online enrollment scale.

**Figure 3. Online (Credit) Course Variety and Prevalence by Online Enrollment Scale for Traditional-Age Undergraduates (Sample = 257-260)**



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Not surprisingly, regardless of online-enrollment volume, fully asynchronous courses are most widely used. Hybrid (part online, part in-person) are more prevalent than mixed (synchronous<sup>2</sup>) online courses.

By online enrollment scale, mid-online enrollment (mid-OE) schools (those with between 1,000 and 7,500 fully online students) and high-online enrollment (high-OE) (7,500+) report the highest rates of asynchronous-synchronous mixing (23% and 27% widely used, respectively) for this population. Such online diversity may emerge with enrollment scale as more courses and faculty are drawn in, and as the strengths and weaknesses of different modalities come into focus. Institutions with higher online enrollment may be anticipating stricter “regular and substantive interaction” federal rules pertaining to online-student interaction in distance learning.

Most schools make choices: Only 9% of the sample report “widely used” for mixed synchronous and hybrid courses in addition to fully online asynchronous, when targeting traditional-age undergraduates. However, no other combination is dominant, and most fall below 10% and many below 5% of the sample. The most common, at 15% of the sample, is “widely used” for fully online asynchronous and “some examples” for mixed and hybrid courses.

Only two schools (<1% of the sample, both public four-year) said that mixed (synchronous) courses are widely used for this student type at the same time not citing wide use for either of the other two online

<sup>2</sup>Throughout the report, “mixed” refers to online synchronous courses that include some asynchronous elements.



course types. Another dozen institutions (<5%) position hybrid courses as widely used for traditional-age undergraduates alongside less developed asynchronous and mixed offerings. This variety of online learning coordinates is a reminder of both programmatic range and that at many schools online learning has evolved organically, driven by personalities, imitation, and happenstance more than by evaluated fit or efficacy.

How do online course configurations for adult undergraduates and graduate students compare?

Fully online asynchronous courses are even more common for adult undergraduates, with 72% of the sample citing them as widely used, compared to 60% for traditional-age undergraduates. For adult undergraduates, the convenience of asynchronous online coursework is particularly appealing, and the market is concentrated in good-fit fields of study.

Yet, few schools indicated a sole focus on asynchronous online courses for adult undergraduates.

Combined asynchronous-synchronous courses are somewhat more common (27% of schools who serve adult undergraduates said widely used versus 21% for traditional-age) and hybrid somewhat less common (24% widely used versus 28%).

Consistent with the picture for traditional-age undergraduates, about half the sample pointed to some examples of mixed and hybrid courses for adults. This suggests experimentation around the edges of the asynchronous norm or alternatives crafted for particular programs. Only seven schools (3% of the sample) report leading with mixed or hybrid courses when it comes to adult undergraduates. This group includes a public R1, a regional public, a regional private, and a community college, among others.

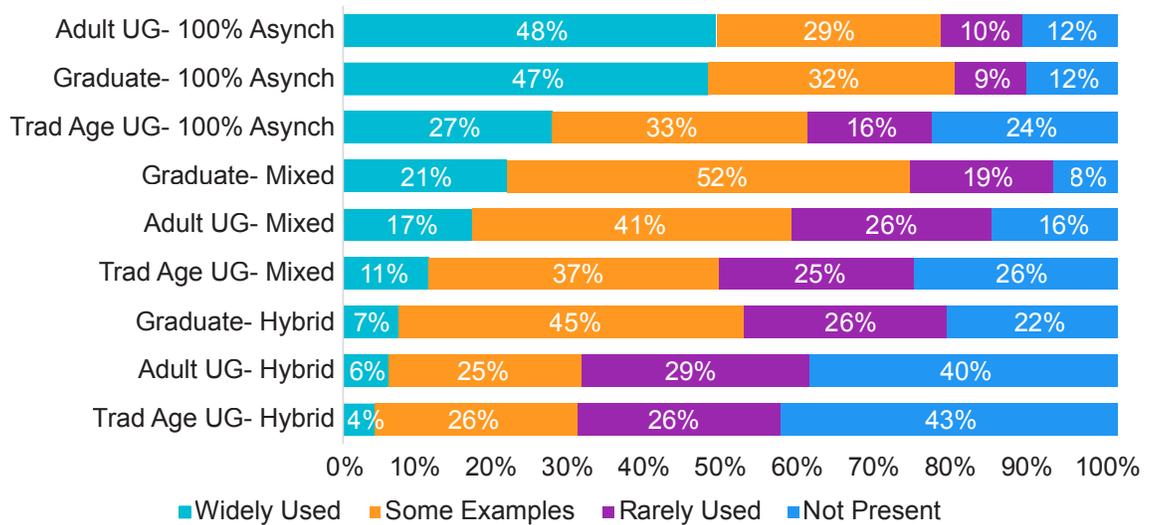
By sector, just as for traditional-age undergraduates, community colleges are most dedicated to asynchronous online courses for adult undergraduates, and private four-year schools are least so (86% versus 57% widely used).

For graduate students, the “widely used” fully online asynchronous online ratio is 58%, in line with that for traditional-age undergraduates. This reflects graduate student diversity by credential, field of study, and institutional setting, spanning examples of good and less-good fit with this type of online education. Schools that enroll graduate students cited the highest “widely used” ratio for mixed asynchronous-synchronous courses at 33%, but average for hybrid. Nevertheless, an elevated mixed figure was not associated with a particular sector or Carnegie classification. Private schools were somewhat more likely to cite wide use of hybrid graduate courses. For both adult undergraduate and graduate “online” courses, the exceptional school is dedicated to multiple course types. Most lead with one—typically asynchronous—and turn to others on occasion.

The CHLOE 8 Survey then asked about online degree programs, breaking out fully asynchronous, mixed asynchronous-synchronous combinations, and hybrid (including “low residency”). Figure 4 sets out the responses across all three online and student types.



**Figure 4. Online Degree Program Variety and Prevalence at Institutions (Sample = 194-266)**



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*N.B. Only includes CHLOE 8-responding schools that report serving a given student population.*

The chart is ordered from the highest to lowest “widely used” ratio. Fully asynchronous online degree programs, aimed at adult undergraduates or graduate students, are by far the most common, with almost half of schools saying this type of online program is prevalent.

No mixed or hybrid program type even matches 100% asynchronous. Institutions are more likely to cite wide use of fully asynchronous degree programs for traditional-age undergraduates—an audience not associated with online programs—than to point to such scale for mixed or hybrid degree programs for any student type. This is unlikely to be a pandemic hangover because the CHLOE 8 Survey asked chief online officers to look back to online learning in Fall 2022 when most schools had transitioned away from emergency remote measures. A 27% “widely used” ratio for fully asynchronous online degree programming aimed at traditional-age undergraduates may indicate new demand from this audience that the pandemic helped stimulate.

Community colleges, at 34%, were more likely to say fully online asynchronous degree programs are widely used for this student type, followed by 29% for public four-year schools. The “online giants” in the sample—large, wholly online institutions (a subgroup of the large-OE school category)—were most likely (66%) to cite this, indicating that serious online players are paying more attention to this population.

It is notable that mixed programs rank next after fully asynchronous programs in Figure 4, and hybrid brings up the rear rather than being interleaved. This posits that real and perceived pedagogic and operational modality fundamentals affect program design and adoption, regardless of student type. In other words, it does not appear that, on average, schools see mixed or hybrid as a particularly good fit for a certain student audience. Only the fully asynchronous version of online is yet commonplace at scale for any student type.

Large-OE schools were most likely to say mixed online degrees are widely used (19% versus the sample average of 11%) for traditional-age undergraduates and two-thirds of the largest nonprofits and for-profits said the same. Similarly, when it comes to hybrid degree programs for this audience, large-OE schools are most active (7% reported wide use versus 4% reporting average use). Program range, post-pandemic thinking, and the search for an edge or diversification in the highly commoditized fully asynchronous



degree program market are the likely explanations. Most of the largest nonprofits and for-profits said that they make wide use of mixed online for traditional-age undergraduates, but none said that for hybrid. Among schools serving adult undergraduates, there were minimal differences in mixed and hybrid distribution by sector or online-enrollment scale.

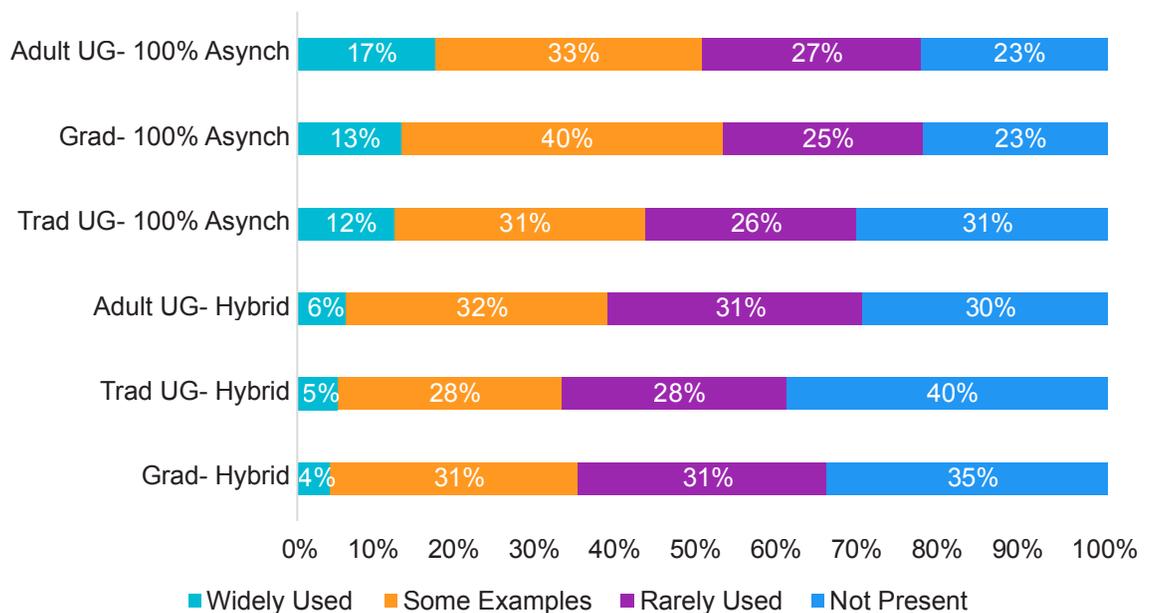
The “widely used” ratios for hybrid—for all three student types—are strikingly low. This casts doubt on the notion that hybrid affords the best of online and in-person study—transcending both—or at least underscoring that student schedules and institutional logistics often get in the way. A hybrid experience might be very high quality but can be a hard sell to students who do not live close to the institution.

The graduate level exhibits the greatest experimentation, featuring the two highest some-examples ratios for mixed (52% of respondents) and hybrid (45%). If either version of online learning is able to scale, it will be at the graduate level. Private institutions were more likely than average to say mixed or hybrid degree programs are widely used, suggesting that departure from the 100% asynchronous norm is seen as a way to differentiate their brand and justify the price.

Again, schools make choices: Only a handful of schools said they make widespread use of asynchronous, mixed, and hybrid degree programs at the same time, regardless of student type. Almost none led with either mixed or hybrid but cited less activity for 100% asynchronous.

The final dimension of this section is non-degree online programs. So-called micro-credentials, almost always offered online, have been much discussed over the past decade, with advocates claiming cost, time, and relevance benefits over full degree programs. CHLOE 8 sought to get beyond the hype and gauge true institutional activity (Figure 5).

**Figure 5. Online Non-Degree Program Prevalence and Variety at Institutions (Sample = 195-265)**



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 N.B. Only includes CHLOE 8-responding schools that report serving a given student population.



It is clear that online non-degree programming is much less common than degree or for-credit course equivalents. The typical school did not cite widespread use; although, the data does point to plenty of experimentation. This underlines the immaturity of much of the online non-degree space. It may also suggest modest consumer demand in some fields, as well as institutional doubts about the viability of some short, low-price non-degree programs. Underrepresentation of for-profit schools in the CHLOE 8 sample may obscure the extent of non-degree activity, which may be dominated by a few major players in this arena.

Just as with credit courses and degrees, fully asynchronous non-degree programming is more prevalent than hybrid. The survey did not try to distinguish mixed asynchronous-synchronous non-degree provision.

The fact that graduate non-degree online programming is less prevalent than undergraduate is a reminder of the scale of legacy undergraduate versus graduate certificates, despite the recent boom in graduate-oriented micro-credentials on platforms like Coursera and edX. This is consistent with longstanding certificate programming at community colleges. Community colleges are most active in the non-degree arena targeting traditional-age undergraduates: 19% said fully asynchronous non-degree programming is widespread compared to 13% of public four-year and 8% of private four-year schools. The same is true for non-degree hybrid programming for this audience (10% versus a sample average of 5%).

Community colleges are also leaders in online non-degree programming aimed at adult undergraduates: 25% of public two-year schools in the sample that serve this audience cited widespread deployment of asynchronous online non-degree programs compared to 17% of the sample as a whole. Hybrid non-degree offerings aimed at adults are also favored by community colleges (11% versus the 7% sample mean).

At the graduate level, public schools are most likely to offer asynchronous non-degree programs (15% cited widespread use of such programs compared to 10% among private schools). For hybrid non-degree graduate programs, public schools are also more active, allowing for a lower base (5% widespread versus 2% for private schools). Growing experimentation with online graduate non-degree programming is evidenced by the fact that the fully asynchronous combination of widely used and some examples stands at 53% of the sample, the highest in Figure 5.

Research-intensive universities—most visible on platforms like Coursera and edX—show up as most active in the CHLOE 8 Survey: 19% of these schools from the sample said that asynchronous non-degree graduate programming is widespread versus 13% of the sample as a whole. High-OE schools are less active than average when it comes to graduate non-degree programming but more active when targeting adult undergraduates. The latter may reflect the challenges of long-term enrollment decline in the adult undergraduate market, with non-degree offerings developed in an attempt to turn things around. But, regardless of institutional size, scaled online non-degree programming generally is atypical.

To summarize this section, 100% asynchronous remains by far the most common variety of “online” courses, degree, and non-degree programs. This is true for traditional-age undergraduates, adult undergraduates, and graduate students. There is no shortage of experimentation with mixed asynchronous-synchronous and hybrid models, but very few institutions yet specialize in either at the expense of fully asynchronous. There is a tension between the purported pedagogical benefits of mixed/hybrid modalities and scheduling and operational realities.



### III. SHIFTING ONLINE VS. IN-PERSON ENROLLMENT, 2021-2022

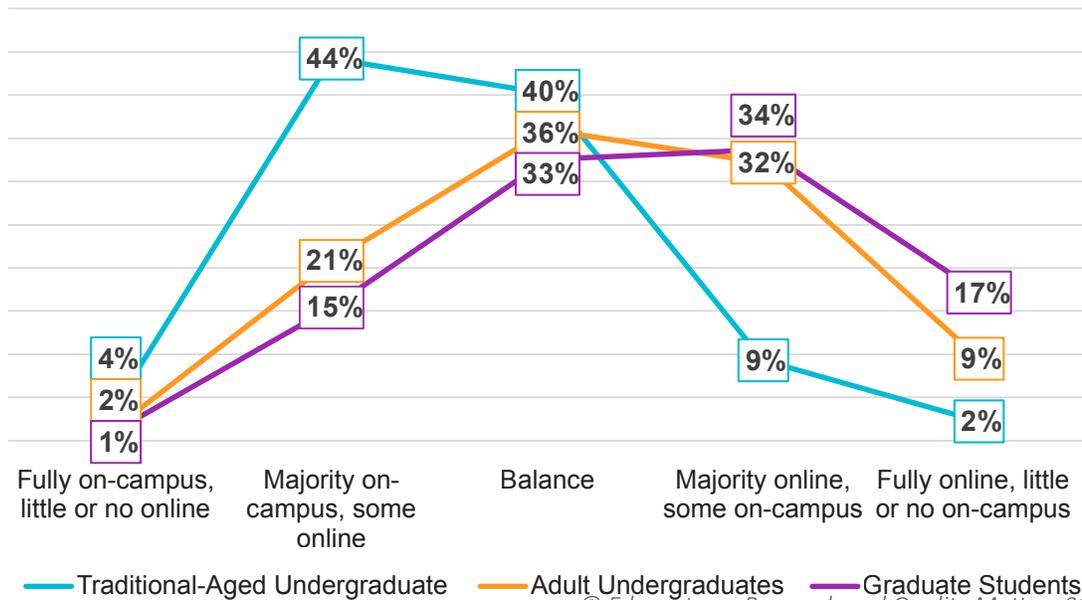
Last year’s CHLOE Survey (CHLOE 7, with 2021 survey data), as we emerged from the shadow of COVID, asked chief online officers to project the different modes of study that would be typical at their institution by 2025. The results were striking in several ways<sup>3</sup>.

First, they demonstrated the belief of most participating COOs that on-campus, in-person instruction would not dominate course delivery at their institutions to the extent that it had in the past. While not projecting wholesale abandonment of traditional classroom education in favor of other modes of instruction, they pointed, instead, to an emerging student preference to blend classroom, online, and hybrid experiences, driven by availability, convenience, and appropriateness to content, and resulting in most students, undergraduate and graduate alike, being exposed to a range of delivery modes over the duration of their studies.

The challenge in CHLOE 8 has been to measure whether the most recent enrollment data corroborates this projected student demand for flexibility and choice in modes of instruction and whether institutions are putting in place the policies, plans, and resources to support a multi-modal future.

The data presented by COOs in Figure 6 regarding shifts in mode of study from 2021 to 2022 does, indeed, provide direct evidence that traditional-age students moved significantly into online and hybrid programs and away from traditional in-person programs in the past year.

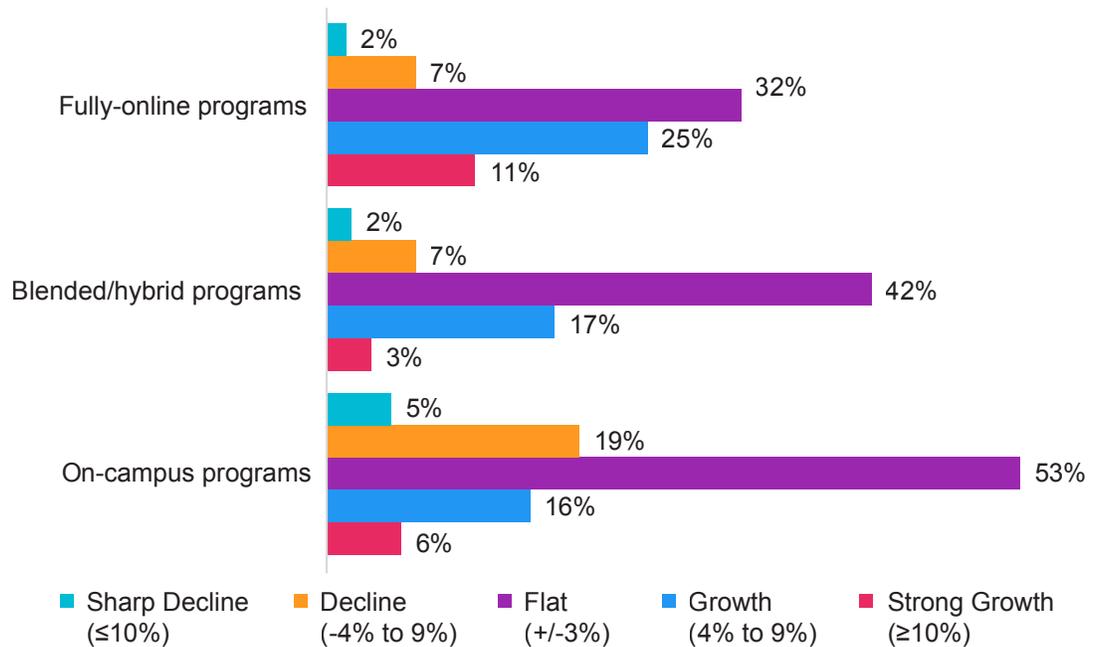
<sup>3</sup>CHLOE 7, Figure 3. COOs’ Projection of Student Distribution by Delivery Mode in 2025: (Sample = 269 Traditional-Aged UG, 264 Adult UG, 175 Graduate)



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**Figure 6. 2021-2022 Programmatic Enrollment Shifts Among Traditional-Age Undergraduates (Sample = 292)**



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More than half of CHLOE 8 respondents reported that traditional undergraduate enrollment in on-campus programs was flat from 2021 to 2022. Of those reporting change, the number reporting decline and sharp decline slightly outnumbers those reporting growth or strong growth, pointing to steady or slightly declining overall on-campus enrollment from year to year.

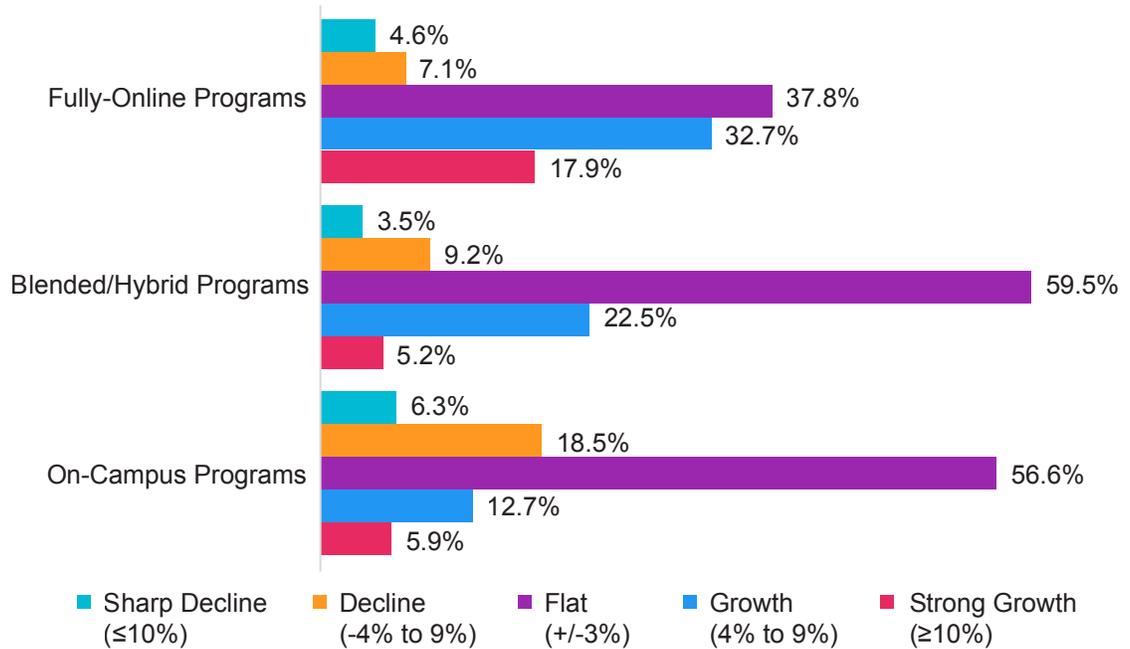
This stands in sharp contrast to the growth pattern for fully online and hybrid enrollment in this group. Less than one-third of respondents reported flat online enrollment for traditional undergraduates, while 36% reported growth or strong growth, and only 9% reported decline or sharp decline.

The shift towards hybrid learning was also significant, though not as marked, with 42% of schools reporting flat traditional-age undergraduate enrollment, and 20% reporting growth and strong growth in contrast to only 9% reporting decline or sharp decline. Note that hybrid growth includes a component of on-campus instruction, reflecting that students are combining elements of traditional instruction with the newer modes, as predicted in CHLOE 7.

The pattern observed for traditional undergraduates in 2021-2022 was even more pronounced for adult undergraduates (Figure 7).



**Figure 7. 2021-2022 Enrollment Shifts Among Adult Undergraduates  
(Sample = 292)**



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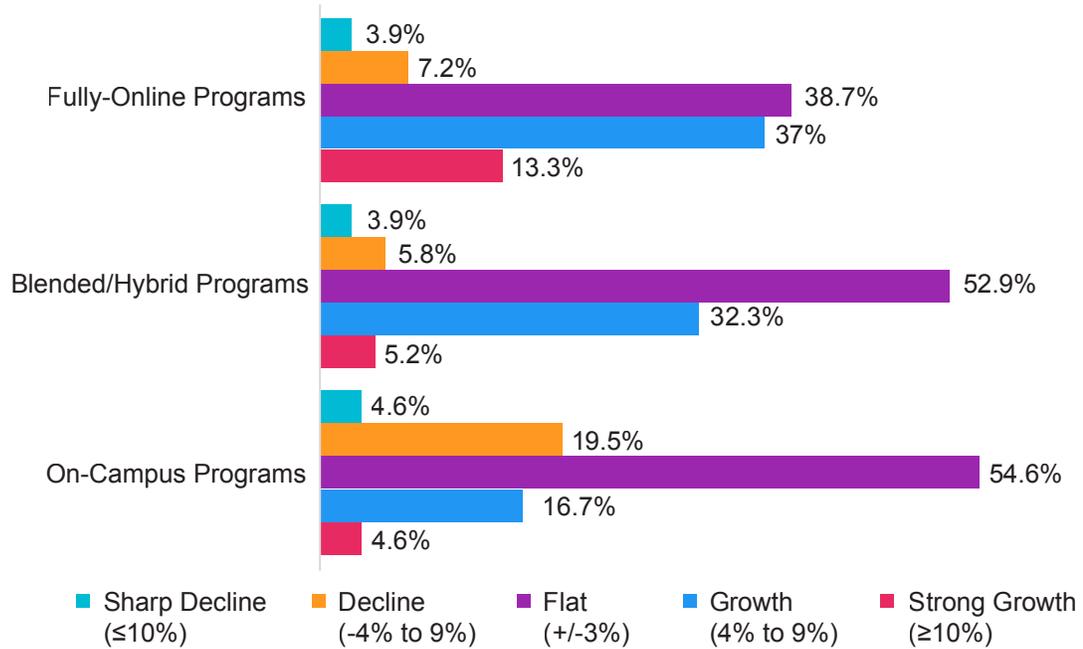
Online learning has long had a greater appeal to adult undergraduates, 25 years and older, who are typically more time constrained than their traditional-age counterparts. The latest data in Figure 7 shows a significantly greater shift away from on-campus programs for adult undergraduates than is the case for their younger counterparts and a correspondingly greater shift toward fully online and hybrid programs. Over half of schools (51%) reported growth or strong growth in online programs, and more than a quarter (28%) reported growth or strong growth in hybrid programs.

The bottom line is that movement over the last year toward digital modes of undergraduate instruction is consistent with the trend noted in CHLOE 7. However, we need to keep in perspective that in-person learning is still the dominant mode for undergraduate students, and that the real significance of the trends noted here is their long-term impact on the balance of undergraduate instruction by mode of delivery.

The data for graduate students and their programs shows similar shifts to those noted above for undergraduates but reflects a more mature, pre-existing, market for online and hybrid learning at the graduate level (Figure 8).



**Figure 8. 2021-2022 Enrollment Shifts Among Graduate Students (Sample = 292)**



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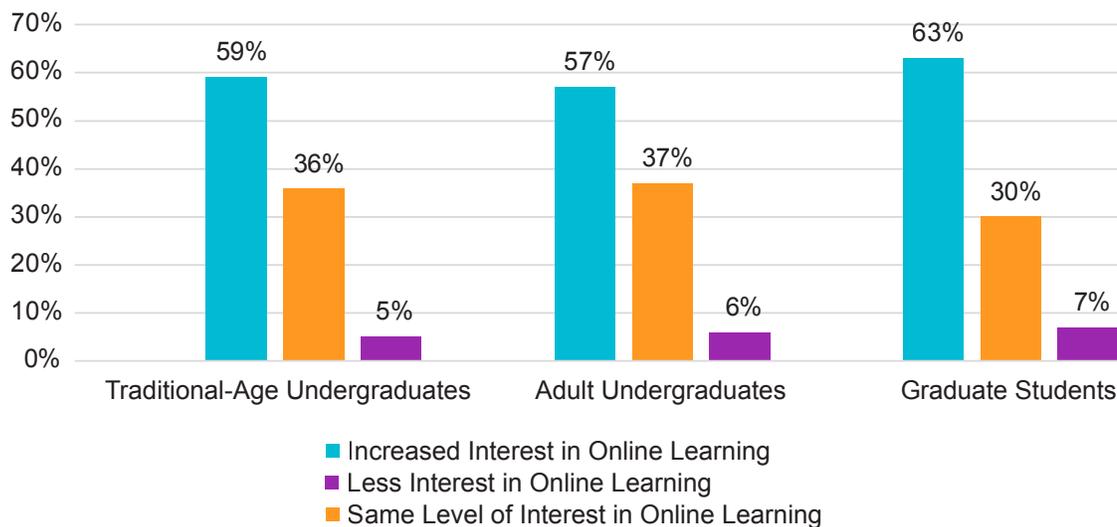
In Figure 8, more than half of reporting institutions show declining or flat on-campus graduate programs, which mirrors the traditional-age and adult undergraduate shift. At the same time, half of COOs indicate a corresponding increase in fully online programs and 37.5% see growth and strong growth in hybrid programs.

Analysis of the data by governance (public, private), by level of institution (two-year, four-year), and size of preexisting fully and partly online enrollment (low, mid-sized, and high) all corroborates the patterns noted above for student types with some modest variation. Building on last year’s findings, these shifts reconfirm a trend that is fundamentally changing the balance of instruction across the spectrum of U.S. higher education. Further evidence comes from the additional data and anecdotal evidence available to COOs in assessing whether student interest in online and hybrid learning has grown in the past year.

When COOs were asked to assess growth or slackening student interest in three distinct modes of instruction – in-person, online, and hybrid – the results were consistent with the pattern reflected above in actual enrollment (Figure 9).



**Figure 9. Rising Student Interest in Online Learning by Institution, 2021-2022  
(Sample = 183-257)**



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This assessment suggests an ongoing pattern likely to lead to further shifts toward online and hybrid learning environments in the coming years. But, there are headwinds to be overcome to satisfy this rising demand. Both the reputation and success of the newer modes of instruction will depend on schools' ability to overcome problems we can already see through the lens of CHLOE 8 data.

Depending on how strong and widespread these obstacles and challenges prove to be at a given institution, the possibility exists that students seeking alternatives to in-person instruction may become frustrated or worse. Should current trends continue, a shortage of online and hybrid courses could delay completion of their academic course of study; compel reversion to time and place-bound, on-ground alternatives; or lead students to drop out or transfer to more accommodating schools.

#### IV. STRATEGIC AND RESOURCE IMPLICATIONS OF RISING ONLINE DEMAND

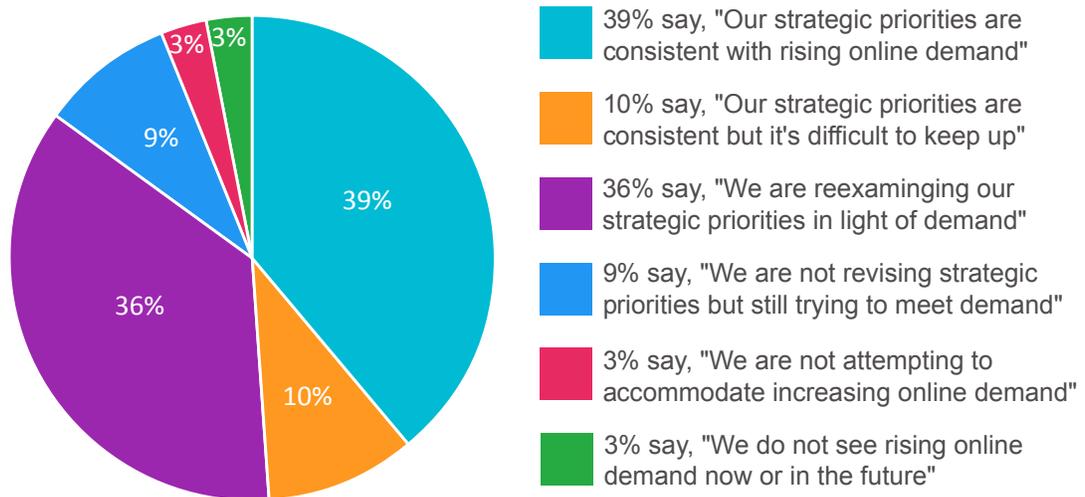
A list of issues to be addressed to meet this rising wave of demand for alternative modes to on-campus learning involves adjustments to institutional culture, which is typically embodied in mission and strategic planning documents. Will institutions whose history, reputation, faculty and staff culture, and alumni and community support are tied to a high-touch, place-bound, mode of education, be able to flourish unchanged? Alternatively, will they need to modify and expand how they define themselves, whom they serve, and how they impart knowledge to their students? Each path likely will have some adherents, while others will seek to find a middle ground.

For those institutions that strive to meet the rising demand for online options, a second set of challenges involves finding the resources in a typically steady or declining revenue environment to: (1) incentivize and retrain their workforce, including the faculty, to work and teach in different modes with different expectations; (2) build an infrastructure to support a multi-modal learning environment; (3) overcome the technical, pedagogical, and logistical problems of mixed-mode instruction; and (4) actively engage in quality assurance measures to ensure that new modalities can deliver on student expectations.



These issues were explored in depth through a key question in the CHLOE 8 Survey: **“Is your institutional response to the current/anticipated demand for online modalities consistent with your institutional strategic and resource priorities?”** The overall response of COOs speaking for their institutions is charted in Figure 10.

**Figure 10. Strategic and Resource Implications of Growing Demand for Online Learning by Institution (Sample = 287)**



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Two responses dominated the COO feedback. One was an unequivocal statement that the institution’s current strategic and resource priorities are consistent with the rising demand for online modalities (fully online or hybrid). Almost 40% of respondents indicated this for their institution, and another 10% did so with the caveat that meeting these priorities was straining available resources.

The second most common response (36%) was that the institution was engaged in reexamining strategic priorities in light of the new reality, with the implication that plans were being discussed to revise priorities to address increased online demand. An additional 9% indicated that they were trying to meet online demand, but without fundamentally altering somewhat inconsistent strategic and resource priorities.

The implication was that the institution was resisting redefining itself but was making concerted efforts to meet student desire for online modalities. In some cases, this may be interpreted as resistance to making fundamental change in order to address a current surge of demand for online options that they believe to be temporary. The language here and in the open-ended comments makes clear that this effort is not without strain, both in terms of resources and culture.

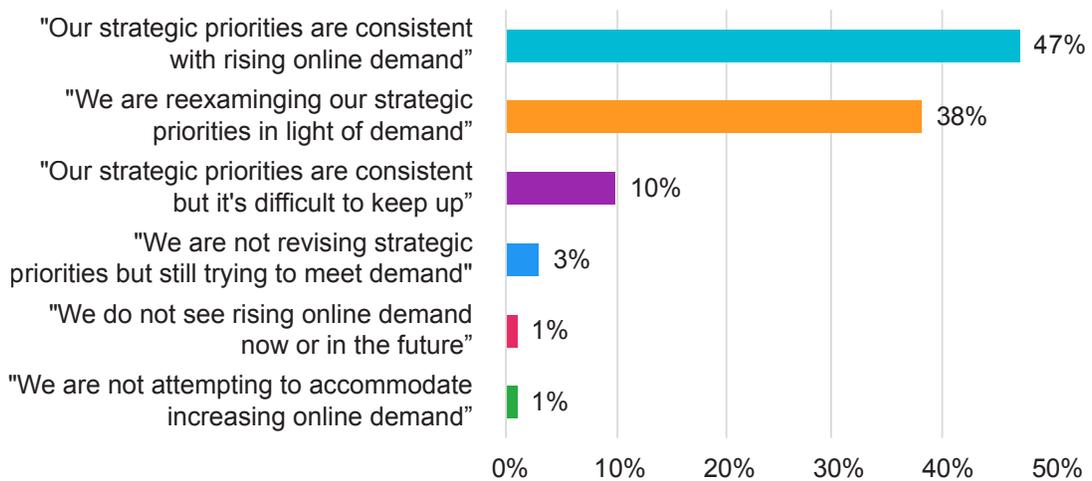
One of the two small wedges (3%) in Figure 10 indicates a minority of respondents who reported a quite different view – one that maintains the pre-COVID institutional mission and strategic objectives. This view typically assigns priority to sustaining a high-touch, in-person form of education, regardless of acknowledging and attempting to accommodate current student demand for flexibility and online alternatives.



The second 3% wedge reflects even more determined adherence to in-person learning among a segment of higher education that does not see evidence of a rising demand for online options among its current students, nor anticipates finding it in the future. We take this to reflect institutions that consider the classroom and other forms of in-person instruction to define them and the preferences of students who naturally gravitate to them. This is undoubtedly a substantial segment of higher education, and likely an underrepresented one in the CHLOE 8 Survey results. The CHLOE survey seeks the perspective of the chief online officer – a role that, by its very nature, champions the development of online learning – but, reading between the lines, it is clear from their responses that many institutions are internally divided on strategic issues that hold the potential to fundamentally redefine them.

When we break down the responses to the question on strategy, there are differences by enrollment size or governance, but only a few that deviate enough from the overall result to be worthwhile illustrating. Thus, Figure 11 indicates the perspective of public two-year institutions.

**Figure 11. Strategic and Resource Implications of Growing Demand for Online Learning at Public 2Y Institutions (Sample = 287)**



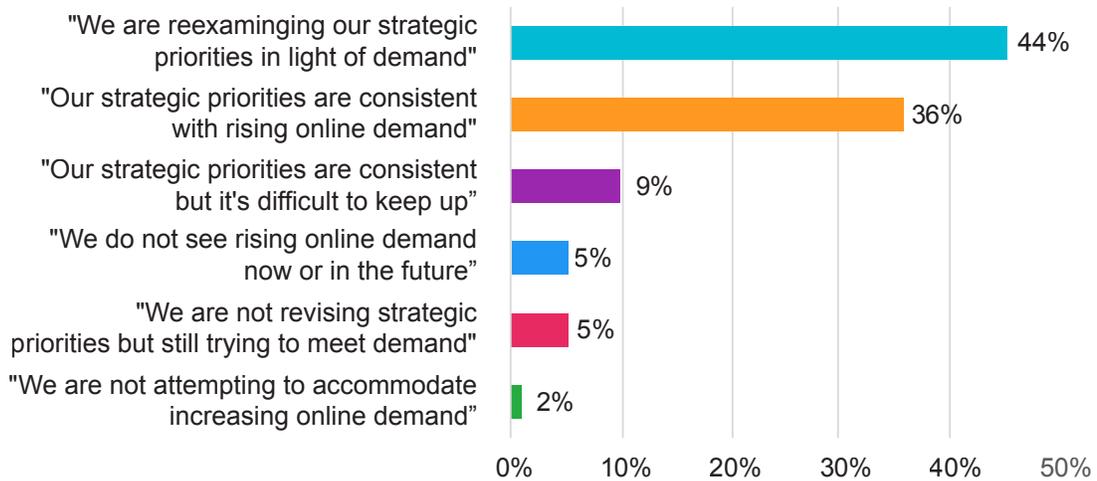
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These mostly community colleges chose strategic and resource consistency with the rising demand for online options by the widest margin of any group – 47% – and augmented by another 10% who cited the challenges of meeting the level of demand, for a total of 57%. An additional 38% chose the reexamination of strategic priorities option, which, as noted earlier, implies an intent to make changes necessary to meet rising online demand.

Thus, adding these figures together, 95% of community colleges that responded to CHLOE 8 appear to be on board or doing whatever they can to get there. Given their mission, their history of adaptability, and the leadership role they have played in the spread of online learning over the past 25 years, this is hardly surprising.

Another group with which we may profitably spend a moment is the low-OE schools (Figure 12).

**Figure 12. Strategic and Resource Implications of Growing Demand for Online Learning at Low-OE Institutions (Sample = 287)**



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This group of institutions placed the reexamination of strategic priorities first at 44% – the highest of any group – indicating that there is a widespread division of opinion in this sector regarding the future role of traditional in-person learning versus the newer modes of instruction. It also indicates that many low-OE schools are in transition and may well transition to mid-OE in future CHLOE surveys.

Due to the broad implications of this question about strategic and resource priorities, the invitation to make open-ended comments produced a flood of insights, caveats, and strongly held views. These centered on the situation in which higher education finds itself due to the impact of the COVID-19 lockdown, advancing technology, and exposure to online tools and methods by the vast majority of students and faculty over the past three years. Here is a condensed overview of opinion and local experience from the 40% of chief online officers surveyed in CHLOE 8 who chose to share their thoughts.

More than half of the responses reflected institutions that are strategically in accord with the increased demand for online and hybrid learning. Their comments indicate a wide range of conditions and challenges they face in order to make this happen. Some see an opportunity created by the erosion of demand for in-person learning. One respondent observed that their institution currently has “Extra capacity to serve more online students, due to overall enrollment decline.” Another reported “dramatically increased resources” to meet online demand and attract out-of-state students. Others expanded on their strategies to recruit new audiences of online students, with one observing that “Current online programs are directed toward residential students, [but] our new initiative is ‘globally focused.’” Another cited “Online demand for degree completion and licensure programs, and a ready opportunity.”

Several affirming respondents focused on hybrid programs as a particular growth area, with one adding, “We have applied for HLC accreditation to offer hybrid majors, but only three for now. We have more planned.” Some supporters of expanded online learning identified current in-person students as potential recruits into blended programs. “We are piloting online courses to increase flexibility for in-person students.” One HyFlex champion noted, “We have begun using HyFlex as a model, and growth indicates student interest.” A few said their schools are “...beginning to market online programs ‘aggressively,’” as a shift in institutional strategy.



Some evident supporters are still in the process of working through inconsistent institutional priorities: “Our existing strategic plan envisioned [students’] return to campus. It is now being reevaluated,” said one. Others are still trying to determine what works in their environment by “offering many modalities and working to understand which are most in demand and why.” One stressed the issue of quality in this context and reported that “We are fortunate that we launched our online program in 2019 and are committed to quality, not quantity. Our growth is thoughtful, intentional, and controlled.”

Despite the preponderance of assertions of strategic alignment with online learning growth, about 10% of commenters on this question express frustration with the obstacles they face in meeting online learning demand. One problem is the pushback from units that see favoritism in the distribution of resources: “Demand surges in different areas requiring an ongoing tactical response. This complicates the response since it requires target investments from central to specific units, which can be seen as preferential treatment.” Some cited specific resources needed to serve an online population: “Infrastructure (such as immediate registration/payment) is proving challenging for us.” A few COOs cited faculty resistance, which may take different forms. One respondent noted, “Faculty have been slow to respond to meet that demand without monetary incentives.” Many simply reiterated the substance of their response to the original question, stating, “We are reevaluating priorities because our ability to respond is outpaced by demand.” One respondent noted that concerns about quality limit the speed and sweep of accommodations to online demand: “In conversations with learners, they would like more programs but we cannot roll out high quality courses and programs that quickly.”

Some comments focus on shifting demand by formerly on-campus students; as this respondent put it, “We’ve had to change funding models because of the rise in demand for online courses from traditional students.” Another added, “The undergraduate online courses tend to fill up with f2f program students faster than the online program students (mostly adults) can get them.” This phenomenon is a matter of frustration among the minority of respondents whose institutions seek the robust return of in-person learning at their institution. One wrote that they are dealing with “sharply declining [in-person] enrollment,” and worried that more online sections will “siphon” students away from in-person.

This last reaction provides a useful segue to the views of those who represent institutions seeking a return to pre-COVID, predominantly or exclusively, campus-based enrollment. As we might expect, given their portfolios, this perspective is a matter of frustration to many COOs.

A few respondents referred vaguely to “institutional barriers to developing online programs.” Others were more explicit: “[This] university has little to no interest in offering online education to undergraduates of any age.” “Our undergraduate program is committed to the in-person, residential experience,” said another. “The drive from top [administration] is for in-person/on-campus enrollment,” said a third. “The response to earlier questions has less to do with demand, but [rather, to] our fixation on the students that we have always served.” “Our institution is pushing for a local experience across the board, despite student interest in online learning opportunities.” “We have slashed online offerings after COVID as a marketing tool.” One respondent reported that only one subcommittee in their strategic planning process is “... focused on online. But no resources [are] aimed at the problem.”

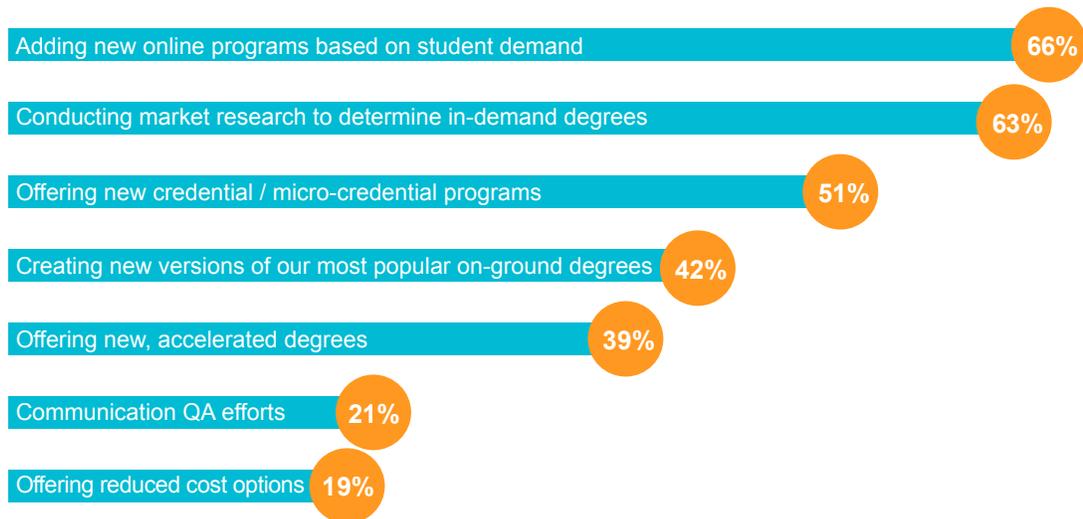
A few respondents challenged the premise of the question altogether, asserting that at their institutions, “If anything, demand for traditional classroom learning is expanding.” On the other hand, they expressed frustration that they are “Trying to bring back in-person, but online sessions are first to fill.” At some institutions – perhaps a higher proportion than is reflected in the CHLOE sample – a conflict is playing out between traditionalists, seeking a return to predominantly in-person learning and those who accept student demands for flexibility and online alternatives at face value and are prepared to alter strategic priorities and resource allocations accordingly. A number of COOs cited leadership changes made recently to move their institution in one direction or the other or simply to facilitate the resolution of this critical issue.

## V. STRATEGIES FOR ONLINE DEVELOPMENT AND GROWTH

### How Institutions Are Pursuing Future Online Students

With in-person program enrollment flat or declining, the majority of schools are focused on finding the best ways to take advantage of the surging popularity of online learning to grow online and sustain overall enrollment (Figure 13). High on the resulting list of strategies (63%) is conducting market research to determine the most in-demand online degrees among current and prospective students. But many institutions have already adopted strategies that rely on assumptions about student demand. Thus, the most frequently reported priority is to add new online programs “based on student demand” (66%).

**Figure 13. New Online Degrees Is Top Focus for New Online Students**  
(Sample = 264)



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A slight majority of institutions (51%) are also pursuing new online credential/micro-credential programs, while 42% are creating new online versions of popular on-ground programs, assuming the risk of potentially cannibalizing their on-ground counterparts. Offering new, accelerated degree options was a top focus for 39% of institutions, while 21% said they are relying on quality being an important factor by marketing the quality of their online offerings to new audiences, and 19% saying they are planning to offer lower-cost online options (Figure 13).

Focusing first on online degree programs seems wise given CHLOE 7’s data that forecasted the highest online demand from adult undergraduates and graduate students – two audiences who historically have gravitated more to fully online degrees than have traditional undergraduates. It is also not surprising that COOs are additionally looking for flexible alternatives to traditional options by investing in micro-credential programs and accelerated degree programs, which are highly prized by those same student audiences. Institutional strategies around creating new online versions of popular on-ground degrees, cited by over 40% of COOs, can be a risky strategy, however, as it can be difficult not to cannibalize those on-ground programs. Institutions that are pursuing a strategy of “online counterparts” would be wise to ensure that enrollment patterns can sustain two parallel programs.

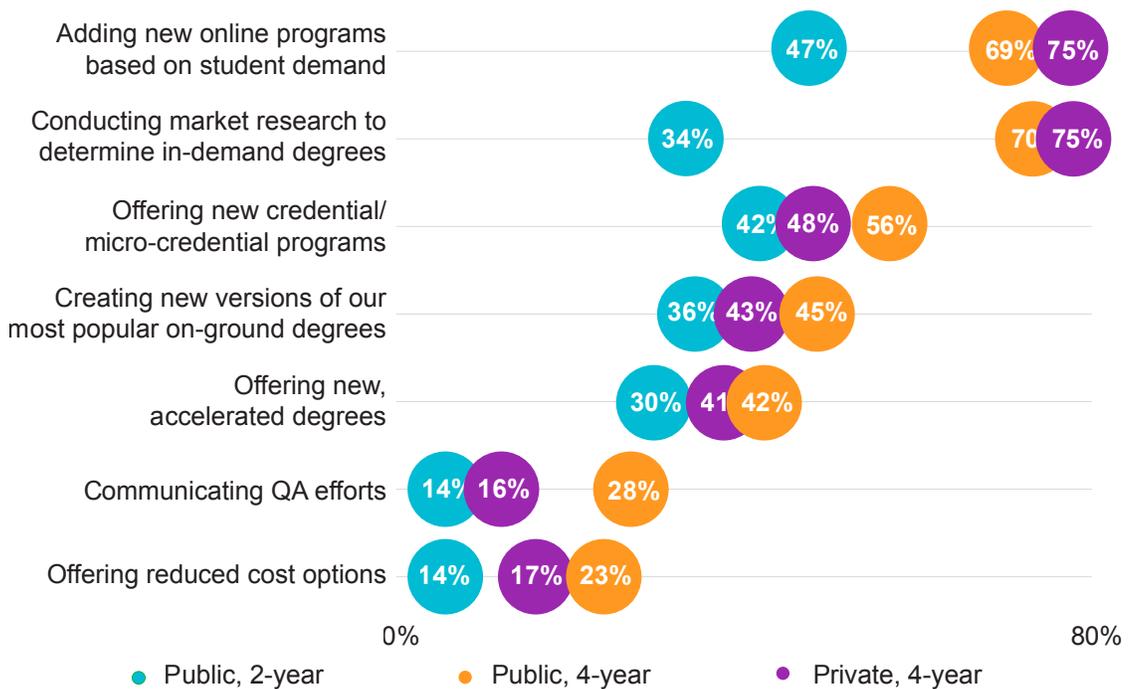
Open-ended comments from chief online officers reveal dramatically different approaches to pursuing



new online enrollment. Some COOs indicated that they do not specifically pursue online students or that they were not planning any new online offerings, while others were concentrating on better communicating existing options. Other senior leaders commented that new online development was a departmental, rather than institutional, decision. Additionally, many COOs confessed that they were in the process of developing a new, approach for online enrollments but cited uncertainty and lack of faculty buy-in as impediments.

However, some differences emerged when looking at how different institutional types were pursuing new online audiences. Regarding new online programs, 75% of private four-year institutions and 69% of public four-year institutions listed this, as compared with just 47% of community colleges (Figure 14).

**Figure 14. How Different Institutional Types Are Pursuing New Online Student Audiences (Sample = 264)**



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Similar patterns were seen in the second overall choice: conducting market research to determine in-demand degrees. Three-fourths of COOs at private four-year schools listed this, as did 70% of those at public four-year schools, but only about one-third of public two-year institutions said the same.

In general, community colleges are not engaging as highly in any of the listed pursuits for new online students, though they are somewhat on par with other institutional types in pursuing new credential and micro-credential programs, creating new online versions of on-ground degrees, and offering reduced cost options. However, this aligns with typical public, community college characteristics, such as serving a defined and nearby geographic region, serving a specific student population, and/or having limited or focused degree offerings. Additionally, as CHLOE has shown over time, public two-year institutions are typically more mature operators than many four-year schools, perhaps explaining their reduced interest in developing new online programs.

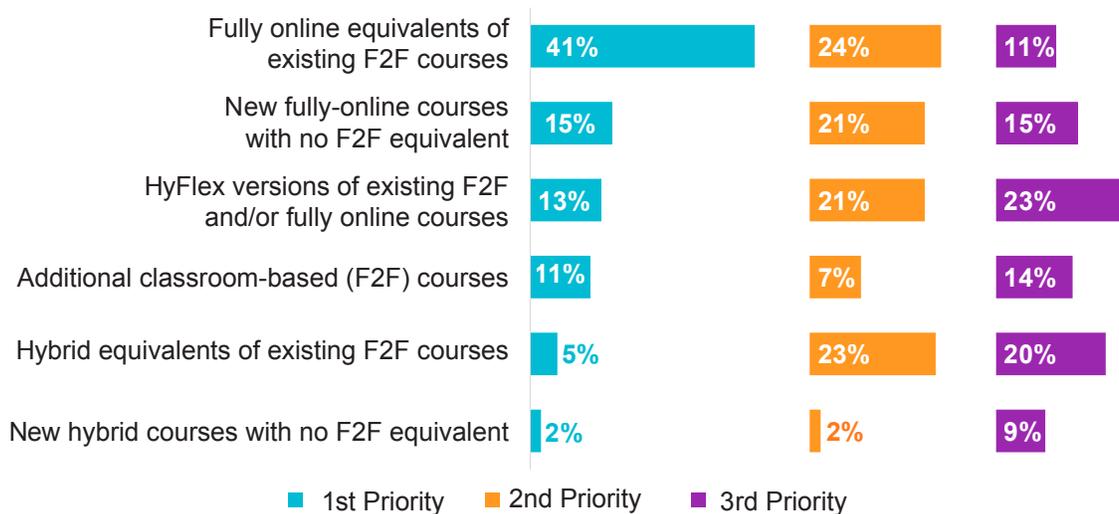


## Priorities for New Online Course Development

Last year, CHLOE 7 reported that approximately 70-80% of online leaders believed students at all levels at their institutions were more interested in online learning, as compared with pre-pandemic years. Additionally, approximately 80-90% of COOs expected interest in online learning to grow, especially for graduate students. In fact, for the first time ever, the majority of online leaders predicted that, by 2025, the typical student experience would reflect a “balance” of on-campus and online learning, with adult undergraduates and graduate students having a greater proportion of their educational experience online.

Given the picture that chief online officers painted last year, CHLOE 8 followed up to inquire how they were meeting their predicted, increased demand for online learning. This year, we asked online leaders what their top three priorities, stated or implicit, were for new online course development. Results showed that, while there were some competing secondary priorities among institutions, creating fully online equivalents of existing face-to-face (F2F) courses was the number one priority for 41% of institutions and the top priority overall for all options combined, regardless of institution type or level of online enrollment (Figure 15).

**Figure 15. Online Equivalents of F2F Courses Is Top Priority for New Course Development (Sample = 276)**



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In fact, fully online equivalents of F2F courses as a top priority eclipsed all other options. Just 15% of COOs ranked developing new, fully online courses with no F2F equivalent as their first priority; 13% listed HyFlex versions of F2F courses; and even fewer COOs cited additional classroom courses (11%), hybrid versions of F2F courses (5%), and new hybrid courses (3%).

Online versions of existing on-campus courses were also cited as the second-highest priority by 24% of COOs, followed closely by hybrid equivalents (23%), new fully online courses and HyFlex course equivalents (both 21%), with additional F2F courses (7%) and new hybrid courses (2%) trailing far behind. Relative to the hybrid modality, an interesting finding is that developing hybrid equivalents of F2F courses was a low “top priority” but a high second priority (23% of COOs) and third priority (20% of COOs).



However, new hybrid courses were not cited as a high priority at all, despite public conversations on the “best-of-both-worlds” appeal of hybrid learning. Surprisingly, only 2% of COOs listed new hybrid course development as a first or second priority. Despite the additional complexities involved with designing, developing, and teaching HyFlex and other types of multi-modal courses, developing HyFlex versions of F2F courses was the third-ranked top priority (13%) but also the top-ranked third priority (23%). Only 8% of COOs reported having no clear priority or pattern for new course development.

Consistent with the earlier-noted priority assigned to developing online versions of popular on-ground degree programs, developing online versions of existing on-campus courses is the top priority for a substantial plurality of institutions. The same concerns expressed about mounting competing versions of degree programs apply to creating online and/or hybrid versions of popular in-person courses. Is demand sufficient and varied enough to sustain viable enrollment in competing versions of the same courses? Is enough thought and study focusing on determining the most effective mode(s) of delivery for different types of subject matter or differentiating the offerings in different modes?

This echoes the CHLOE 7 message of “the future is flexible,” with institutions responding to increased online demand by offering students the flexibility to engage with a course in the modality that works best for their educational preferences (and scheduling needs). In terms of new course development, however, only fully online courses seem of interest, far outpacing planned development for new F2F or hybrid courses.

Combining this data with other data on student preferences, predicted demand, and similar metrics, there appear to be several distinct interpretations of the term “hybrid,” and the lack of a common definition is clouding discussion of the topic. There is “hybrid” as a course modality, traditionally meaning that the course is taught partially in person and partially online. However, there is also the idea of a “hybrid experience” as in when an on-campus student takes a mix of in-person, fully online, and hybrid courses. When students demand hybrid courses and the flexibility they bring, are they primarily seeking a blend of in-person and online learning *within* individual courses, or a mix of modalities at the program level?

## VI. FACULTY READINESS FOR ONLINE DESIGN AND TEACHING

### Faculty Training in Online Pedagogy – Required or Optional?

As one of CHLOE 8’s trend topics, we explored policies and levels of experience related to online teaching. Since trend questions will be repeated in future years to provide greater insight into historical trends, it is vital to first ground this topic in past CHLOE data. CHLOE 6 revealed that, pre-pandemic, most institutions (54%) offered, but did not require, faculty preparation for online teaching, raising the prospect of potential unreadiness for the initial pandemic shift to remote teaching. Likely recognizing this, a majority of COOs (81%) also reported in CHLOE 6 that faculty development for online teaching was a high priority.

After Spring 2020, COOs reported an 11% increase in required faculty development for online teaching. CHLOE 7 saw similar levels of required training, with 47% of COOs reporting that they require foundational professional development for online teaching for all faculty and 15% reporting that it was required only for some. In CHLOE 7, with more institutions both offering and requiring training to teach online, 56% of COOs continued to report it as a high priority for faculty development, while 41% of COOs indicated that they planned to maintain their current levels of faculty professional development rather than prioritize future investment.

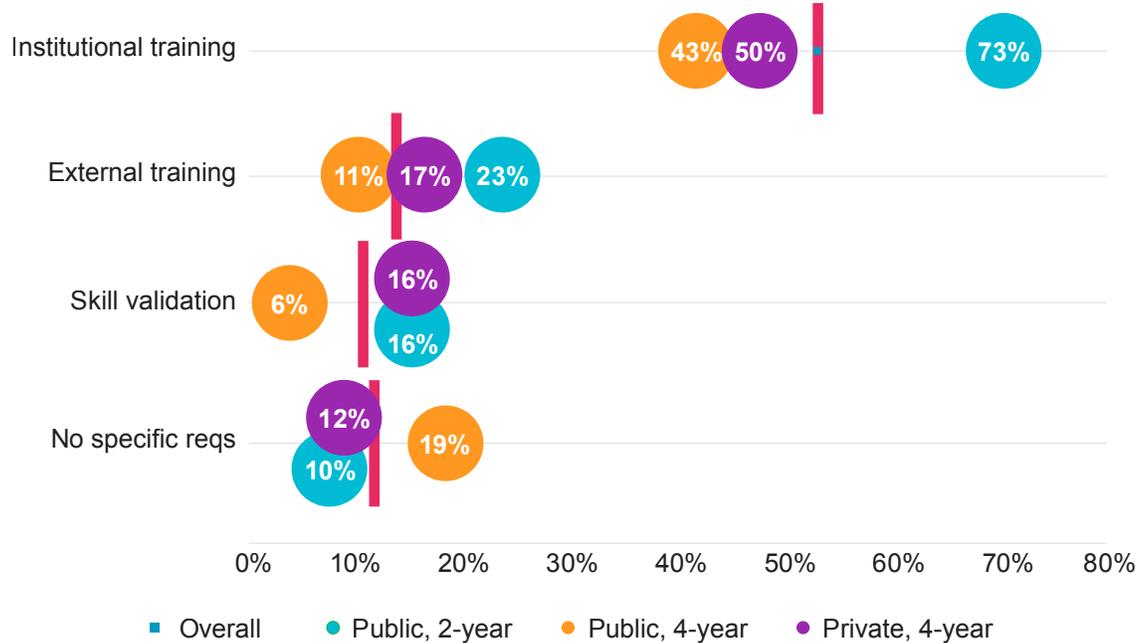


CHLOE 8 asked about institutional requirements for faculty to teach online, and a majority (54%) of COOs reported that formal training by the institution was required – the same percentage who, in 2020’s CHLOE 6 revealed that training was optional. A small percentage (16%) indicated that formal training from a recognized, external source was required, and 13% said they required testing for online teaching skills. A small minority (14%) of COOs indicated that their institution had no specific standards or process that was required for faculty to teach online. Additionally, 46% of COOs indicated that any such requirements were decisions made by the department or school; 48% of private four-year institutional COOs and 50% of public four-year COOs said the same, with only 37% of community college COOs in agreement.

Notable differences were seen by institutional type, however, especially public two-year institutions and public four-year institutions (Figure 16), while private four-year institutions closely mirrored the overall sample. Community colleges were much more likely (73%) to require formal, institutional training than private four-year institutions (50%) or public four-year institutions (43%). Public two-year institutions were also more likely (23%) to require third-party training, compared with 16% for the combined sample, 17% for private four-year institutions, and just 11% of public four-year institutions. Public four-year institutions were the least likely (6%) to require testing or screening for online teaching and learning skills, with both private four-year institutions and community colleges reporting in at 16%.

This follows an historical CHLOE trend of public four-year institutions shying away from faculty training requirements in favor of optional participation, with the opposite pattern seen for community colleges. In CHLOE 6, 63% of community colleges required training for online teaching, compared with just 36% of public four-year institutions. Future years may reveal how these readiness differences impact institutional online strategy and enrollment.

**Figure 16. Faculty Training Requirements for Online Teaching: Overall Sample (vertical bars) + Institutions by Sector (circles)**



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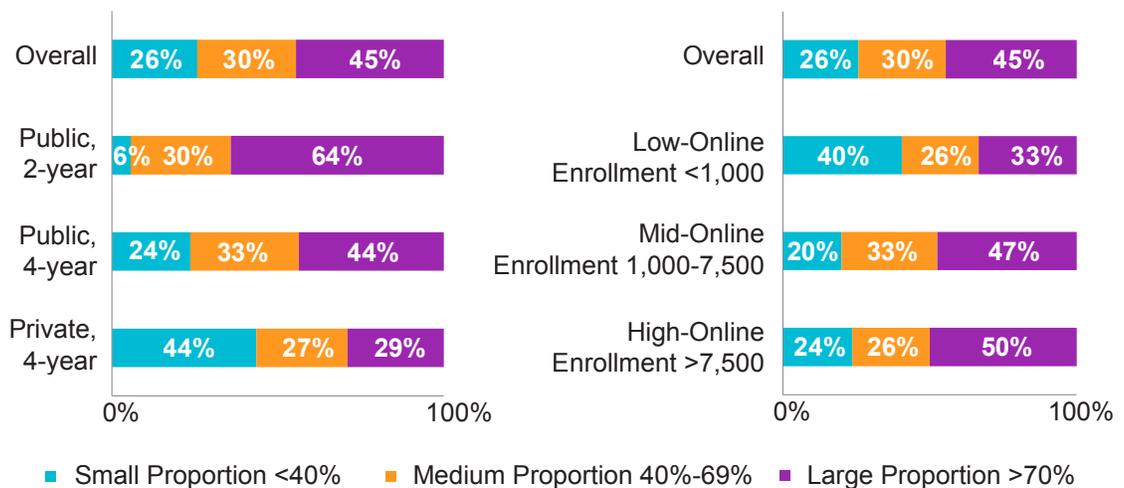


### The Proportion of Full- and Part-Time Faculty Approved for Online Teaching

For schools that do have an approval process for online teaching, however, we see some notable differences by both institutional type and online enrollment size when looking at the proportion of full-time (FT) faculty who are approved to teach online. For this question, while public four-year institutions closely mirror the overall sample, there are some large differences for private four-year institutions, and again some differences for public community colleges.

Overall, 26% of COOs reported that less than 40% of their FT faculty are approved to teach online, 30% reported that between 40% and 69% of faculty were approved to teach online, and 45% of COOs reported that 70% or more of their faculty were online teaching-approved. At a macro view, less than half of responding higher ed institutions have a high proportion of their FT faculty approved to teach online, with higher proportions trending at public two-year institutions and high-OE schools, and lower proportions trending at private four-year institutions (Figure 17).

**Figure 17. Proportion of FT Faculty Approved to Teach Online Vary by Sector and Online Enrollment (Sample = 175)**



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Notably, 44% of private four-year COOs reported that only a small proportion of faculty were approved to teach online, and a 64% majority of public two-year COOs reported that a large proportion of their faculty were approved to teach online. Looking at the same data by online enrollment size, low-OE schools stood out, with 40% of their COOs reporting that only a small proportion of faculty are approved to teach online, while 20% and 24% of mid- and high-OE COOs, respectively, reported the same.

Conversely, 50% of high-OE COOs reported a large proportion of FT faculty approved to teach online, compared with just 33% of low-OE institutions. In many cases, this reflects institutional strategy for online learning, with a greater number of FT faculty prepared and approved to teach online at institutions with current high levels of online enrollment or those with goals for future online growth. It also likely reflects differences in required training and approval processes, with public two-year institutions leading the way to ensure faculty readiness for a greater proportion of their FT faculty. However, unlike FT faculty, the pattern for PT faculty showed consistent proportions across both institutional type and size of online enrollment.

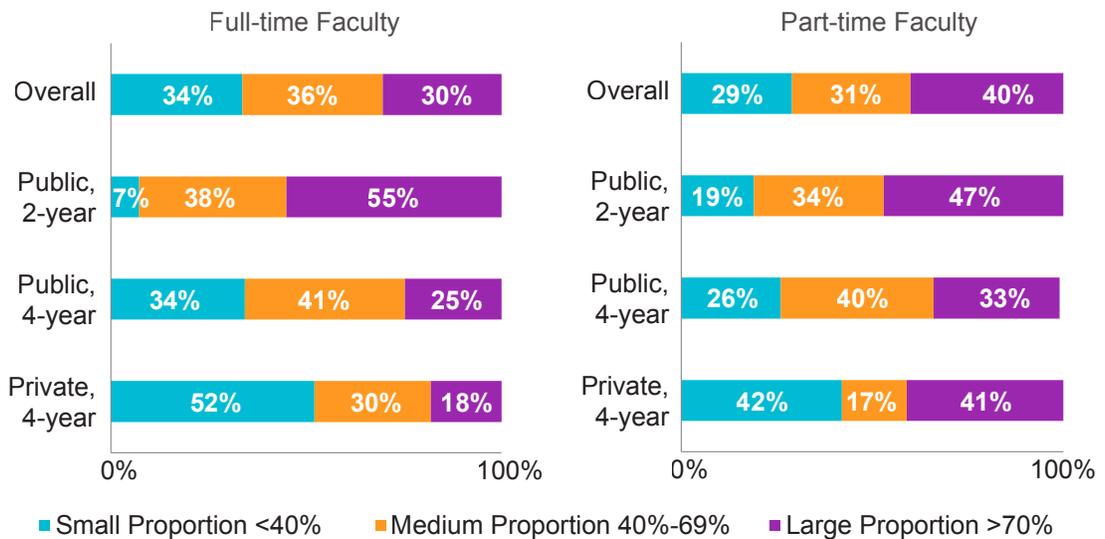


### Faculty Experience in Online Teaching and Design

Regarding experience with online teaching, CHLOE 5 reported that 50% of FT faculty and 52% of PT faculty had online teaching experience prior to the pandemic. Over two years later, CHLOE 8 asked COOs to estimate the proportion of faculty who had online teaching experience, excluding the emergency remote teaching during the early days of the pandemic. All COOs were invited to answer this question, whether or not they had an approval process for online teaching. COOs responded with an average value of 51% of FT faculty and 55% of PT faculty – not much higher than pre-pandemic levels.

Looking at discrete faculty groups, however, 30% of COOs reported that a large proportion (70% or greater) of their FT faculty had online teaching experience, and an even higher percentage (40%) reported having a large proportion of online-experienced PT faculty. Some notable differences were found by institutional type, however, especially for community colleges. A majority (55%) of COOs from public two-year institutions reported a large proportion of FT faculty with online teaching experience, compared with 30% overall, 25% of public four-year institutions, and just 18% of private four-year institutions. Conversely, a majority (52%) of private four-year institutions and a near majority (45%) of low-OE schools reported a small proportion (less than 40%) of FT faculty with online teaching experience. Similar patterns were seen for PT faculty (Figure 18).

**Figure 18. Highest Proportions of FT and PT Faculty with Online Teaching Experience Found at Public Community Colleges (Sample = 175)**



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After the shock of a pandemic quick pivot to remote learning and subsequent investments in faculty training and support, it is surprising that institutions are comfortable with at least half of their faculty not having online teaching experience. Coupled with the present demand for online learning by students and, of course, the possibility of events forcing a return to remote learning, it seems not only practical, but also perhaps imperative, that faculty develop online teaching acumen.

Of course, effective teaching is only one part of assuring quality online learning, with design being another vital component. Turning now to faculty experience with designing online courses, CHLOE 6 revealed that prior to spring 2020, most institutions (54%) offered, but did not require, faculty development in designing online courses. In that same report, a large majority (70%) of COOs reported that faculty development for designing online courses was a high priority.



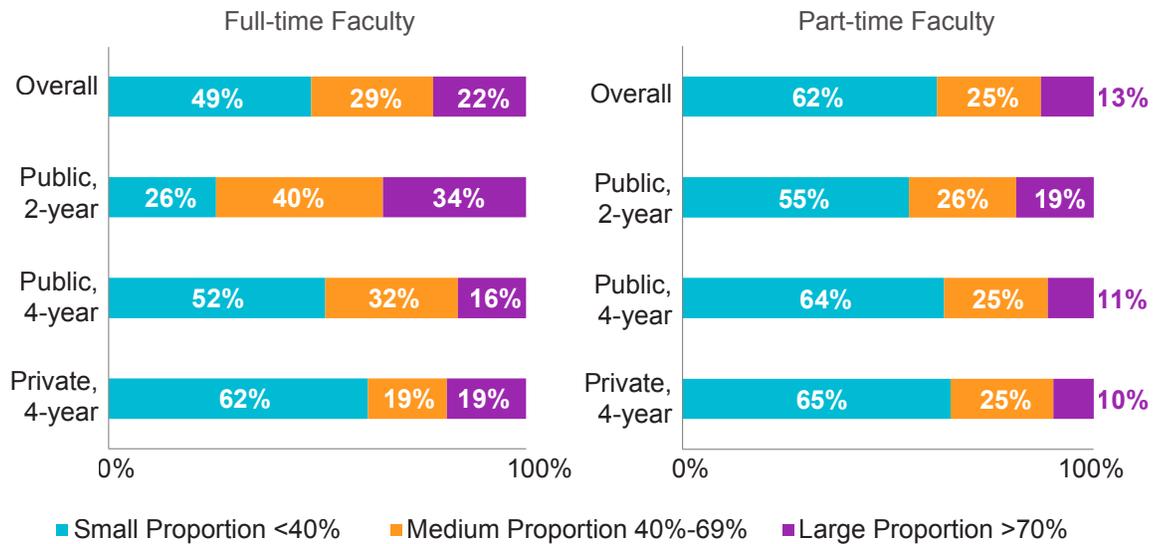
In CHLOE 7, 53% of COOs reported that faculty professional development for designing online courses was still a high priority, with most of the remaining COOs (44%) indicating that they planned to maintain their current levels of faculty professional development rather than prioritize future investment. Understandably, with increased online offerings and demand, the pandemic had prioritized a need for faculty who know how to effectively design online courses.

CHLOE 8, therefore, asked a slightly different question about designing online courses – instead of looking at faculty training options, we asked about actual online design experience as a way to examine faculty readiness to implement an institutional strategy around online growth. Nearly half (49%) of COOs reported that only a small proportion of FT faculty have experience with designing online courses. However, a much higher percentage (62%) of COOs from private four-year institutions and just 26% of community college COOs said the same, again showing the often dramatic differences in levels of faculty experience across institutional types.

Notably, only 22% of COOs reported that a high proportion of their FT faculty have experience with designing online courses (Figure 19). This is another data point that calls into question how institutions are going to design and teach the additional online courses that they have, for two years now, said that they plan to offer.

The situation looks similar, but slightly more dire, for PT faculty. A majority of COOs (62%) reported that only a small proportion of PT faculty have online design experience, with a similar pattern seen across institutional type. Nineteen percent of public two-year institutions reported higher proportions of PT faculty with design experience, as compared with only 11% of public four-year institutions and 10% of private four-year institutions (Figure 19).

**Figure 19. Proportion of Faculty with Online Design Experience (Sample = 274)**



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It is possible that some institutions are hiring design support, however, rather than relying solely on faculty. CHLOE 7 reported a 20% increase since 2019 of instructional design staff, who are a prime support for designing online courses, and showed that 92% of private four-year institutions had established instructional design support prior to the pandemic compared with 86% of public two-year institutions. Private four-year institutions also reported the highest growth (62%) in instructional design (ID) support, slightly higher than the growth reported by 59% of public two-year COOs. Differing levels of instructional design staff support is likely one influential factor affecting online design experience; other factors include outsourcing design to third-party providers and using previously designed versions of online courses.

However, the question remains as to whether faculty overall are skilled enough (or supported enough by institutional IDs) in quality online design to meet the growing demand for more online courses, regardless of institutional type. There are, of course, other ways that institutions support design. Many institutions are relying on Teaching and Learning Centers (see Section VIII), looking to online program managers and other external contractors, or using a core group of faculty SMEs to develop all online courses within a program or major. There are, in fact, several benefits to limiting online design to fewer faculty or outsourcing design: courses can be branded more consistently for the institution, more uniformly reflect its quality standards and policies, and may provide a cost savings for course development.

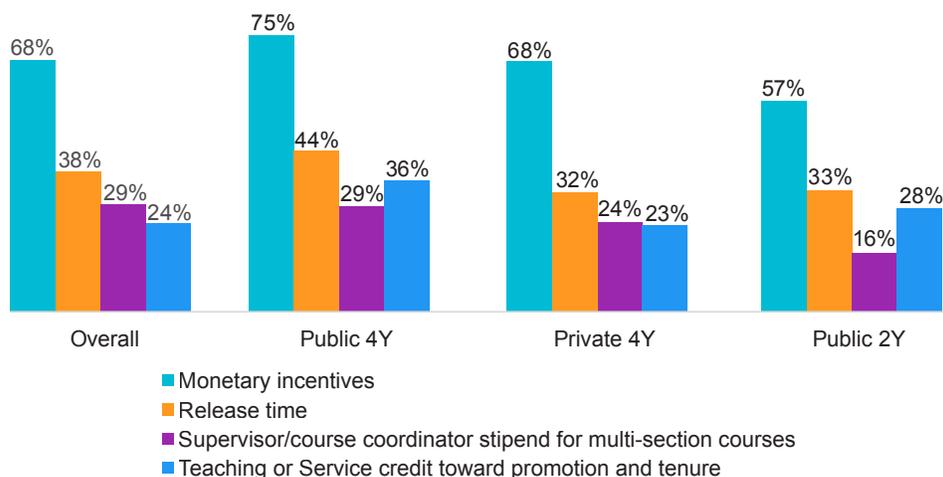
## VII. SUPPORT FOR FACULTY ENGAGEMENT IN ONLINE DESIGN AND TEACHING

The vital role of faculty cannot be overestimated or over-supported. CHLOE 8 catalyzed a new line of inquiry for faculty support, namely how institutions were supporting faculty as they engaged with online design and teaching. The role of incentives becomes increasingly critical as the need to expand online and hybrid courses and programs to meet rising student demand grows.

### Online Incentives for Current Faculty

When asked about institutional incentives for course development, by far the highest-ranking response was monetary, reported by 68% of institutional COOs. Release time was second at 38%, and teaching or service credit toward promotion and tenure was third at 29% (Figure 20).

**Figure 20. Institutional Incentives for Online Course Development by Sector (Multiple responses allowed) (Sample = 274)**



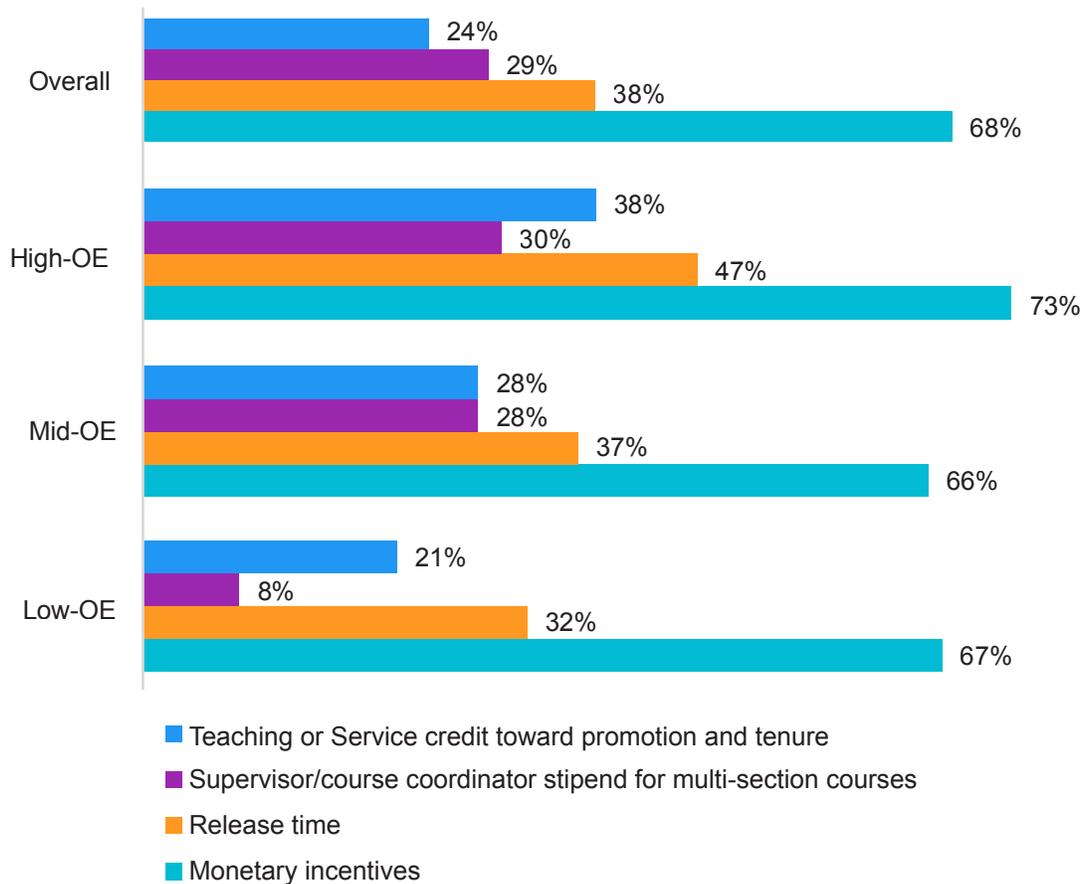
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However, some clear distinctions emerged when examining responses by institutional type. Public four-year COOs were more likely to cite incentives across these four areas than their private four-year school and public two-year school colleagues. A review of the comments from COOs reveals a rich tapestry of approaches. They shared a variety of practices from connecting incentives for course development to online teaching, payments for sharing intellectual property (IP), differences according to faculty rank, a great deal of dependency on individual departments, and even recognition based on QM certification.

We also analyzed course development incentives based on online enrollment (Figure 21).

**Figure 21. Institutional Incentives for Online Course Development by Online Enrollment**  
(Multiple responses allowed) (Sample = 274)

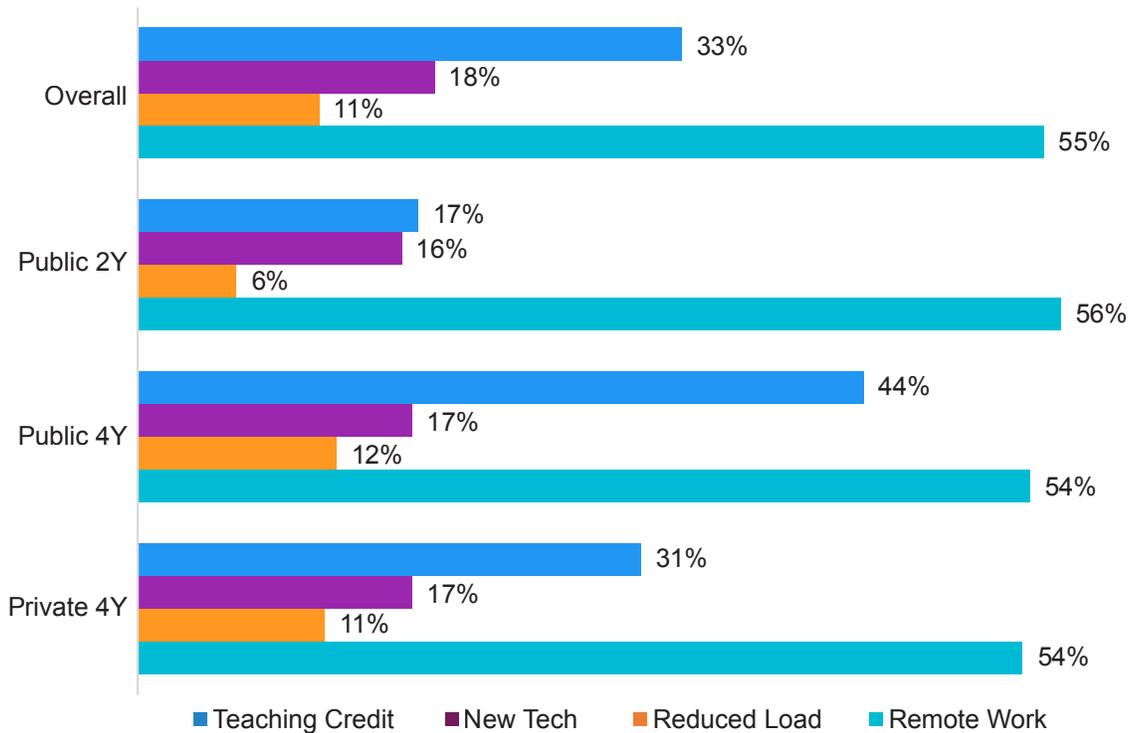


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Results were more consistent across this dimension with a few exceptions. Low-OE schools were less likely (8%) to identify supervisor/course coordinator stipends for multi-section courses as compared to 28% of mid-OE and 30% of high-OE schools. High-OE schools were more likely (47% vs. 32%) to provide release time and more likely (38% vs. 21%) to provide credit toward promotion and tenure than low-OE schools. Unsurprisingly, high-OE schools tend to provide more faculty incentives for course development.

Incentives for online teaching, as contrasted with course development, were also investigated in CHLOE 8 (Figure 22).

**Figure 22. Institutional Incentives for Online Teaching by Sector  
(Multiple responses allowed) (Sample = 278)**



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The highest-ranked incentive was the approval to work remotely or with reduced on-campus hours. This seems well aligned with broader work from home (WFH) efforts across numerous industries because of the pandemic. The second most frequently noted incentive was teaching credit toward promotion and tenure, cited by a third of chief online officers, and third was new computer equipment and software listed by 18% of institutions. A reduced course load was only identified by 11% of the schools.

Examining online teaching incentives through an institutional-sector lens reveals a few subtle differences. Working remotely is well supported across all sectors, but public four-year schools are more likely (44%) to provide teaching credit toward promotion and tenure than their private four-year (31%) and public two-year colleagues (17%). Moreover, public four-year schools (12%) are twice as likely to provide a reduced course load as public two-year institutions (6%).

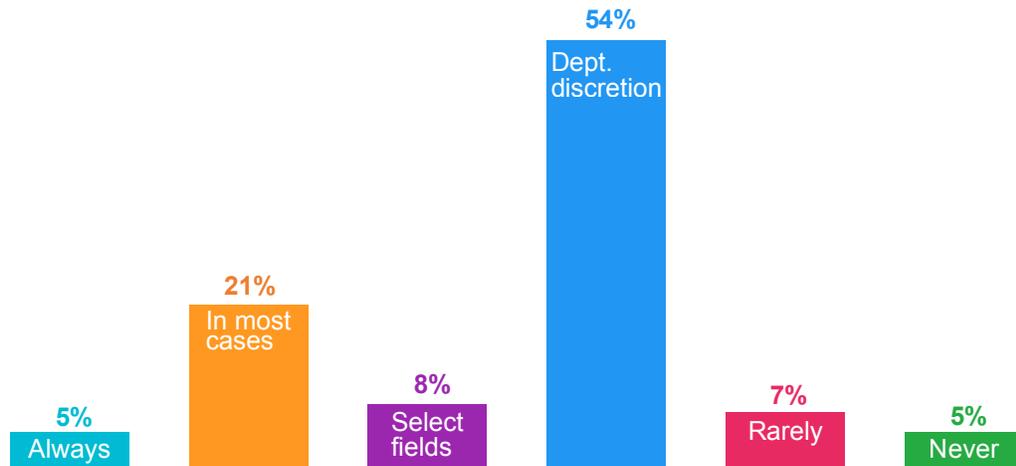
Breaking down online teaching incentives according to online enrollments indicates some consistency of results, with one exception. High-OE schools are more likely (44%) to provide teaching credit toward promotion and tenure than mid-OE schools (31%) and low-OE schools (23%). Once again, the general tendency is that institutions with the most online enrollments tend to provide more faculty incentives for teaching online. Once again, a review of COO comments indicates a variety of practices. Like course development, many noted a dependency on individual departments. In addition, some indicated that faculty who develop the course get the first option to teach it. And, another COO shared that they have an institutional budget to cover costs of QM training for faculty, so there are no out-of-pocket costs for the instructor.



### Online Incentives for New Faculty Hires

Recognizing that many institutions are under increasing pressure to staff more online and hybrid courses, CHLOE 8 asked COOs about whether newly hired faculty are expected to teach such courses (Figure 23). Roughly one-fourth (26%) of COOs said that faculty recruits are always, or in most cases, expected, to do so, and an additional 8% indicated that some departments require it – likely those facing the greatest online demand. But, more than half of COOs (54%) reported that online assignments are at the discretion of the department, presumably on a case-by-case basis. Only 12% of institutions indicated that this is a rare expectation or that new faculty are never expected to teach fully or partially online.

**Figure 23. Expectations of Online or Hybrid Teaching by New Faculty Hires (Sample = 278)**



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Investigating this question in the context of institutional online enrollment levels shows some modest differences. Low-OE schools are more likely to report “rarely” or “never” (22%) requiring faculty to teach online as compared to 10% of mid-OE schools and 7% of high-OE schools. Understandably, it seems the more online students an institution has, the more likely that online teaching is an expectation on hiring. That being said, it is equally important to recognize that the most cited response across all levels of enrollment is that online teaching requirements are at the discretion of the department. This is twice as likely at high-OE schools (64%) as it is at low-OE schools (32%).

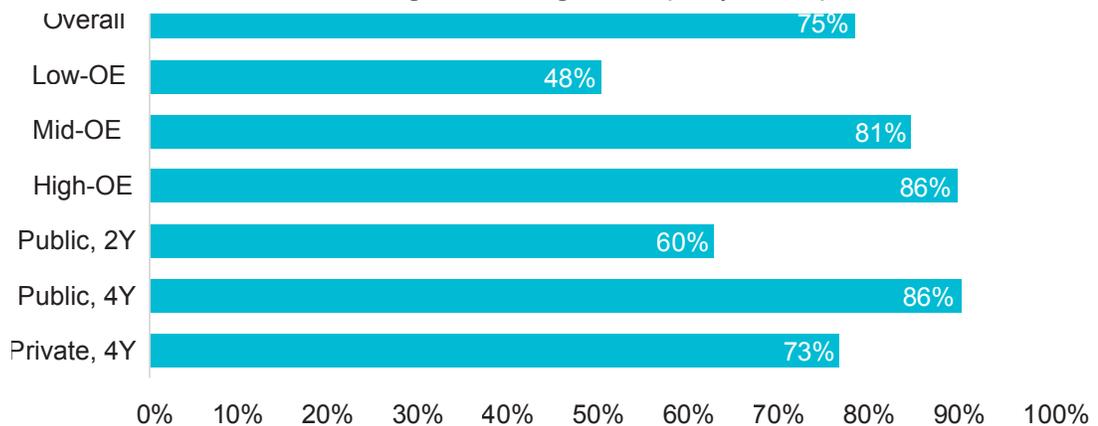
When analyzing teaching policy for new hires by institutional sector, private four-year schools are least likely (19%) to require online or hybrid teaching, as compared to the 11% of public two-year schools and 7% of public four-year schools that said they are least likely to require online or hybrid teaching. We do not have the evidence to determine whether this discrepancy is due to greater faculty discretion regarding teaching assignments at private institutions or less priority given to online instruction. But, in any case, the main story here is that departmental discretion online is the dominant response regardless of sector.



### The Role of Teaching and Learning Centers in Supporting Online Learning

The last faculty engagement area that CHLOE 8 explored related to Teaching and Learning Centers (TLC). These organizations commonly provide instructional support to faculty. We first asked COOs if they have one (or more) TLCs at their college or university, and most (75%) reported having such a center. However, only 48% of low-OE schools have a TLC, as contrasted with 81% of mid-OE schools and 86% of high-OE schools. We wonder if this is a chicken-or-egg situation. Do these schools have smaller online enrollment because they do not have a TLC? On the other hand, do they not have a TLC because they have smaller online enrollment?

**Figure 24. COOs Reporting Presence of One or More Teaching and Learning Centers (Sample = 277)**

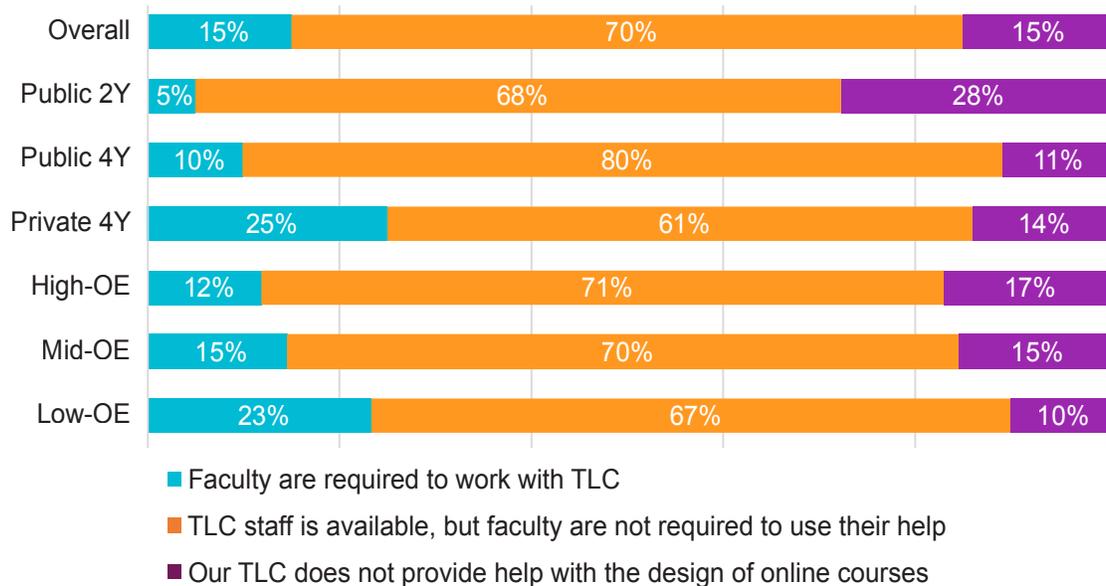


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CHLOE 8 did see some differences regarding TLCs by institutional sector. Public four-year schools were more likely (86%) to have a TLC as compared to 73% of private four-year schools and 60% of public two-year schools.

CHLOE 8 asked COOs reporting the presence of one or more TLCs about their role in assisting with online course design (Figure 25). In most cases (70%), TLC course design assistance to faculty is available, but its use is optional. Only 15% of respondents indicated that the TLC involvement is required in online course design, and another 15% explicitly noted that their TLC is not tasked with supporting faculty with online course design.

**Figure 25. The Role of a TLC, When Present, in Online Course Design  
(Sample = 276)**



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When online enrollment of the institution is considered, CHLOE 8 did see a modest difference. Low-OE schools were more likely (23%) to require their faculty to work with the TLC than mid-OE schools (15%) and high-OE schools (12%). This is an interesting finding given that the majority (52%) of schools with less than 1,000 online enrollments did not have a TLC.

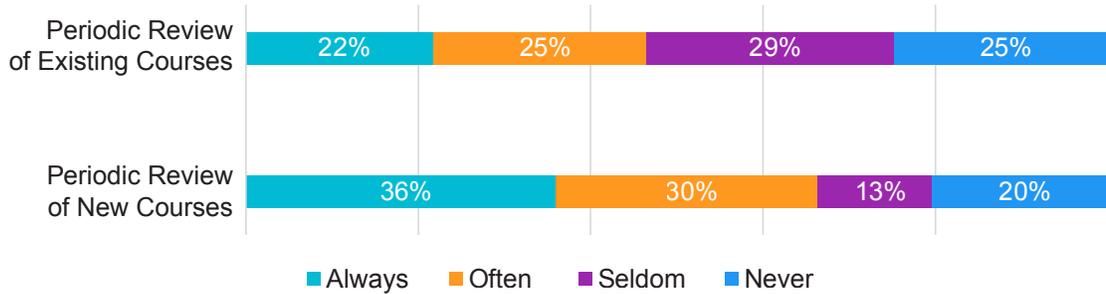
When CHLOE 8 explored the role of TLCs based on institutional sector, additional differences were noted. Private four-year schools are more likely (25%) to require faculty to work with their TLC as compared to public four-year schools (10%) and public two-year schools (5%). And, public two-year schools (28%) were twice as likely to indicate that their TLC does not support faculty with online course design as compared to private four-year schools (14%).

The extent to which TLCs are or are not being used to support the development of online and hybrid courses is interesting from the perspective of whether this pre-existing resource is being fully used to help institutions meet increasing student demand for online. However, it is important to remember that some schools may be providing or requiring online course development support through other institutional approaches. As reported in CHLOE 7, for example, many institutions provide instructional designers to support faculty in designing online courses, so examining TLC involvement is both a new lens, and not the entire picture of design support that an institution might provide.

Moving from course design to review, CHLOE 8 also asked whether TLCs are involved in the review of new and/or existing online courses. COOs noted that their TLCs were more involved with reviewing new courses (36% always and 30% often) as compared to periodically reviewing existing courses (25% always and 22% often). One out of four are never involved with existing courses, and one out of five are never involved with new courses (Figure 26).



**Figure 26. TLC Involvement in Review of New and Existing Online Courses (Sample = 128)**

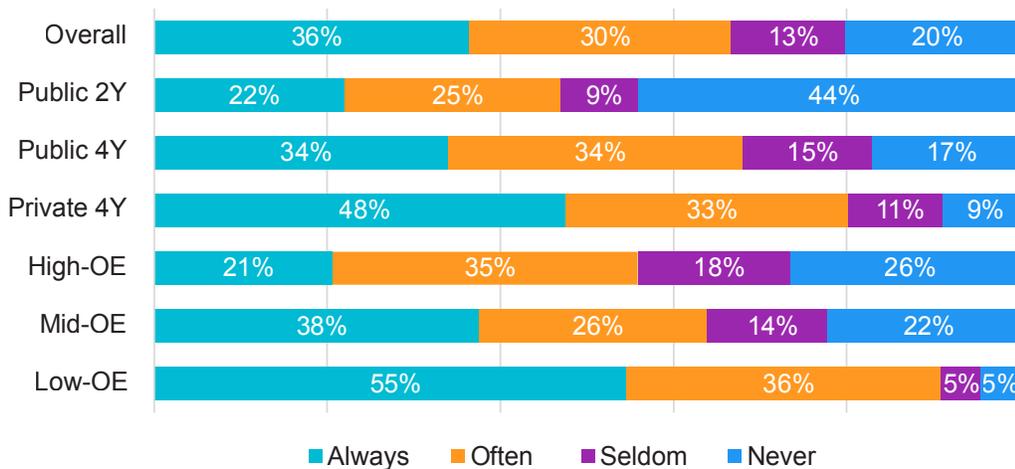


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There were differences in this relationship when broken down by size of online enrollment (Figure 27). Low-OE schools were much more likely (55% always and 36% often) to have their TLCs review new online courses as compared to mid-OE schools (38% always and 26% often) and high-OE schools (21% always and 35% often).

Perhaps schools may be more inclined to have a review of new online courses as they are growing and developing in this area. Once they have achieved some level of online enrollment, they may be deferring more to their faculty who have developed some experience. We should note that there was more parity across online enrollment when we asked about schools always or often reviewing existing courses. Nevertheless, high-OE schools were more than three times as likely to report they never have their TLC review existing online courses as compared to low-OE schools.

**Figure 27. TLC Involvement in New Online/Hybrid Course Review (Sample = 129)**



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An institutional sector breakdown shows the four-year schools (81% private and 68% public) were more likely to have their TLCs involved with the review of new online courses as compared to 47% of public two-year schools. The TLCs at public two-year schools were significantly less likely to be involved (22% seldom and 56% never) with a review of existing online courses as compared to public four-year schools (29% seldom and 17% never) and private four-year schools (35% seldom and 13% never).



## VIII. SUPPORT FOR ONLINE STUDENTS

While higher education institutions have long touted the importance of supporting students, support for online students has long been lagging, although notable gains were made since the pandemic. Most institutions needed to add some flexibility into online student support during the pandemic, including introducing new services.

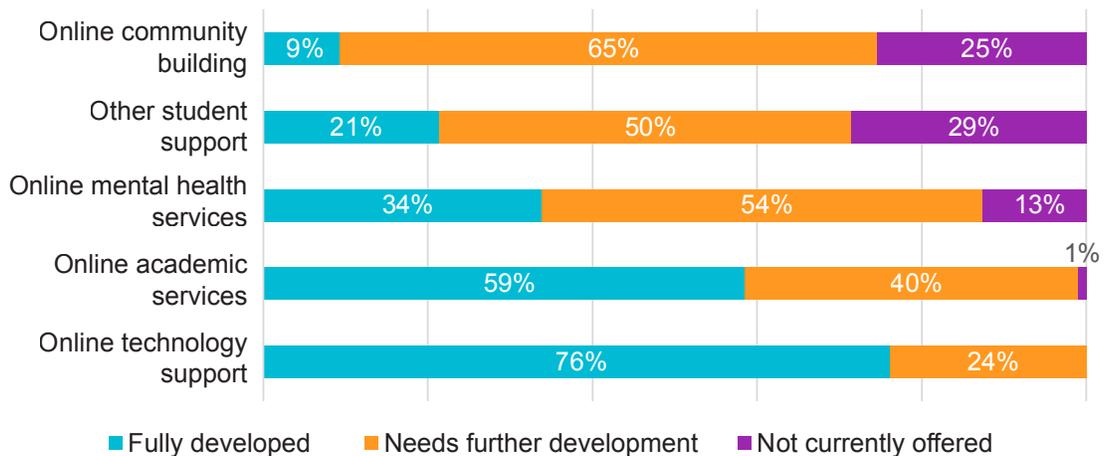
It is important to note that colleges and universities expanded these services for all their students, not just certain segments. In CHLOE 7, we explored several categories and whether they were growing, stable, or shrinking. While the majority of COOs reported no change in resources for student services in CHLOE 7, a significant number (18-37%) did report growth in targeted areas – with the biggest gain in mental health services.

In CHLOE 8, we expanded our coverage of student services because they are now so widely recognized as vital to student success in an increasingly complex post-COVID higher education environment and, because of that, to the success of a college or university.

### Online Student Services

A broad foundation of services for online students is critical to the success of online students. One dimension to CHLOE 8 student services coverage was to assess the level of development in five categories of service. We captured whether the services were fully developed, in need of further development, or not offered at all, as presented in Figure 28.

**Figure 28. Maturity of Online Student Services (Sample = 278)**



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Online technology support continues to be the most fully developed form of student support of online learning. We think this makes sense, as LMS and other core hardware and software support have been necessary since the beginning of online learning. More than three-quarters of COOs said they consider it to be fully developed, with the remaining 24% reporting efforts to enhance it further. Online academic services rank second in maturity. Online mental health services rank third, with 54% needing further development.

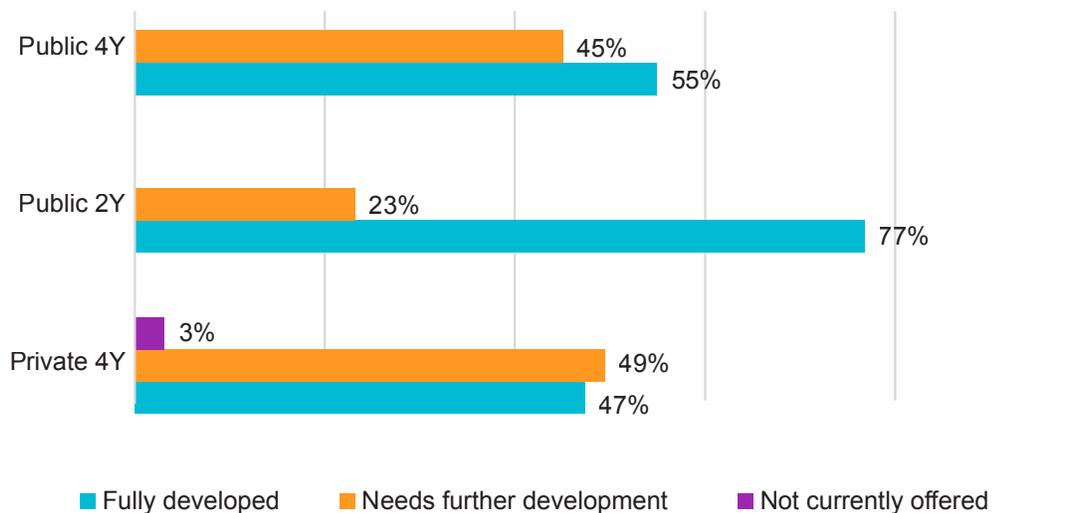


As noted above, this specific area was highlighted in CHLOE 7, with 37% of institutions indicating that it was a growth area last year. Colleges and universities are recognizing the essential value and importance of student mental health support, given the pandemic and post-pandemic challenges today's students face. Online community building reflected the lowest percentage of institutions with fully developed services, but the highest proportion of schools (65%), indicating this as an area for further development, and, even so, a quarter of them not yet offering anything in this category.

CHLOE 8 also captured other forms of online student support with varying levels of development. A review of the open-ended responses to this category reveals that career services for students is another area in which colleges are either fully developed or recognize the need for further development.

CHLOE 8 examined responses about these academic student services, broken down by institutional sector. Through this lens, we did notice some differences (Figure 29).

**Figure 29. Academic Student Services by Sector (Sample = 280)**

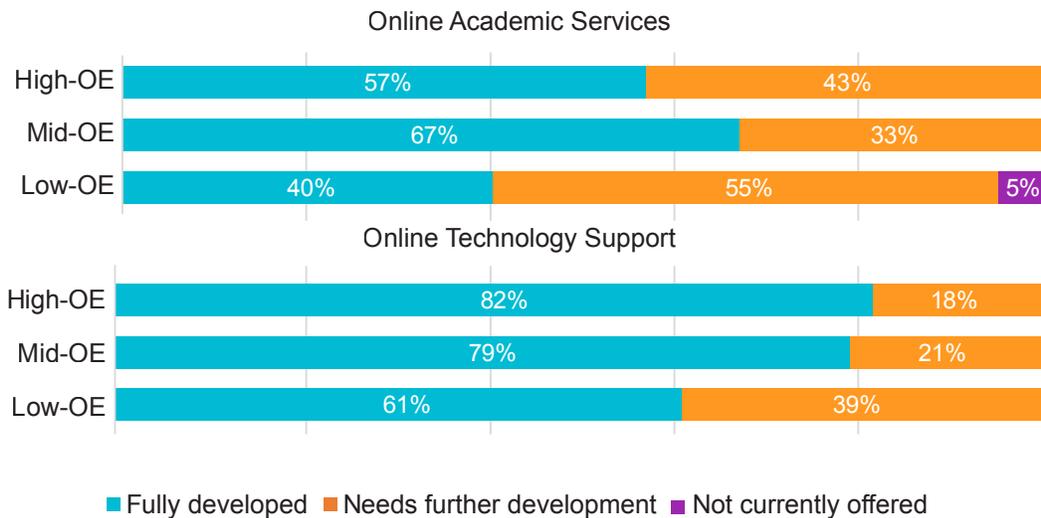


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With respect to online academic services, the public two-year schools are significantly more likely (77%) to have fully developed services as compared to their public and private four-year counterparts (55% and 47%).

CHLOE 8 also analyzed the responses about online academic services in the context of the online enrollment of the institution, and this revealed some modest differences. In contrast to their development of technology support, low-OE schools were more likely (55%) to identify online academic services as needing further development than mid-OE (33%) and high-OE schools (43%). A similar story could be told about online technology support (Figure 30).

**Figure 30. Academic Student Services and Online Technology Support by Online Enrollment (Sample = 280)**



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On the other hand, low-OE schools were less likely (48%) to identify online mental health services as needing further development as compared to mid-OE (55%) and high-OE (56%) schools. We might interpret this finding as the larger-enrollment schools realizing the timely need of this service given the volume of students. It is important to remember that this was a key area in CHLOE 7 last year, where 32-42% of institutions were growing resources dedicated to online mental health services.

We did see a difference by enrollment level in efforts to foster a sense of community for online students, with 6% of low-OE schools having this service fully developed, compared to 8% of mid-OE and 14% of high-OE schools. Starting from such a low base, it is encouraging that approximately two-thirds in all online enrollment categories cited this as an area for further development. As online student numbers grow in traditionally residential schools, we anticipate greater efforts to integrate fully and primarily online students into the life of the institution.

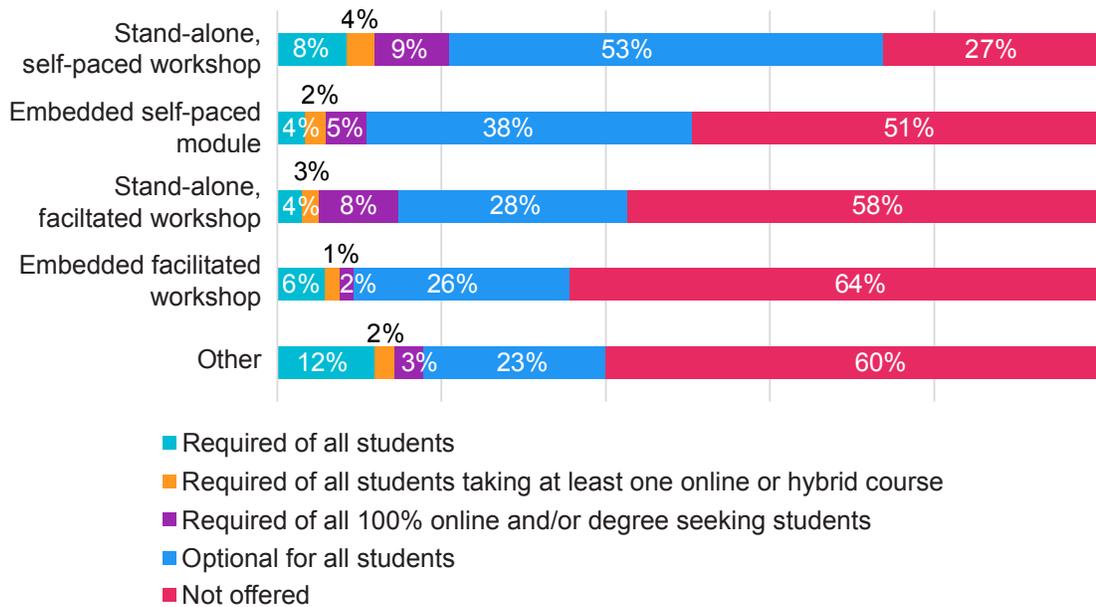
### Online Student Readiness

Another dimension to student support that was investigated in CHLOE 8 related to institutional efforts to prepare students for online success. Specifically, chief online officers were asked about approaches to online student orientation – either through a stand-alone workshop or course (facilitated or self-paced) or some type of online orientation module that is inserted in other courses (facilitated or self-paced). This topic was also highlighted in CHLOE 7, with most colleges and universities providing some orientation but few institutions making it a requirement. Based on the specific student-readiness offering, institutions reported an optional approach ranging from 49% to 68% of colleges and universities in CHLOE 7.

CHLOE 8 produced similar results. COOs were asked to specify whether any of four types of student online orientation are available, required, or optional (Figure 31).



**Figure 31. Institutional Approaches to Online Student Readiness (Sample = 276)**



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Virtually all respondents indicated that their institution provides one or more of these formats for online orientation, but few require students to complete orientation prior to or during online study. Combining all schools requiring online orientation for their students or any subset of students, the percentage of schools doing so ranges from 21% for a self-paced, stand-alone workshop, to 9% for an embedded, facilitated module within online courses.

The low percentages of institutions that require a basic online student orientation is perhaps alarming, as higher ed has only recently undergone an emergency pivot to remote learning that caught many students unprepared. Widely reported findings suggest that training in navigating an institution’s online learning environment and tools, familiarity with resources to assist online students, time management strategies, and online etiquette increase the prospects of online student success.

It is clear that many students choose an online path to expedite completion of their academic program, and may wish to avoid any activity that could extend their time to degree. But the majority of schools appear to be missing an opportunity to increase the performance, retention, and graduation of online students by permitting them to avoid online orientation.

When student orientation results were broken down by sector and level of online enrollment, the optional approach dominated the responses across the board, but CHLOE 8 found some differences within the smaller number of cases where such offerings are required. For example, a stand-alone facilitated workshop or course is more likely to be required for some student categories at private four-year schools (23%), as compared to public four-year (9%) and public two-year schools (8%).

Regarding some type of required stand-alone online student orientation workshop or course, low-OE colleges are more likely to offer those as facilitated (24%) versus mid-OE (13%) or high-OE institutions (9%). A facilitated online student orientation module yielded similar results with low-OE schools more likely to offer those as some type of requirement for some subset of students (13%) versus mid-OE (10%) or high-OE schools (3%). In comparison, self-paced offerings were more likely to be required with the largest enrollment institutions. Yet, while there are some disparities among sectors and by online enrollment, the overall picture suggests that there is substantial scope for expansion of institutional efforts to make *required* orientation more widespread.



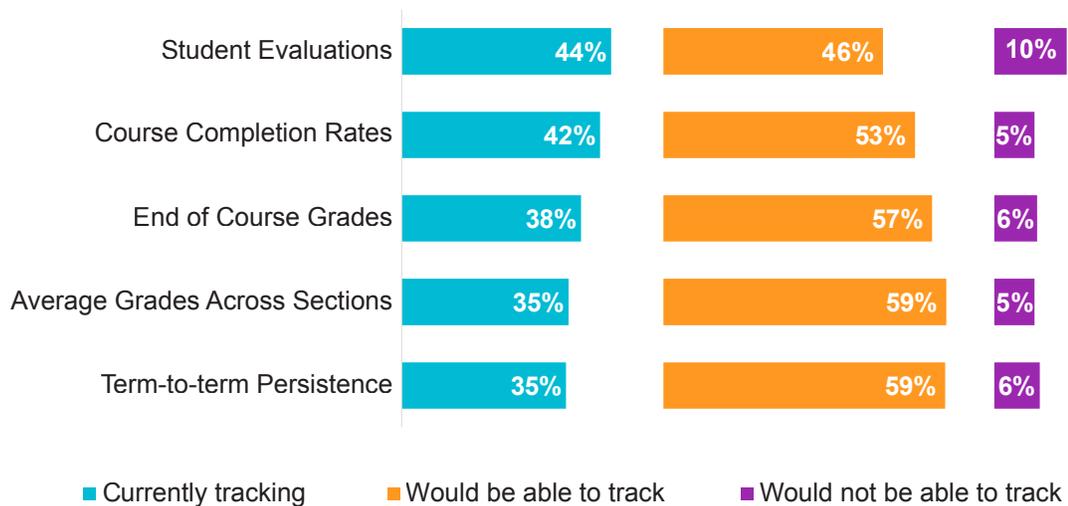
## IX. REALITIES AND OPPORTUNITIES OF ONLINE QUALITY ASSURANCE

### Online Quality Assurance: Data Tracking and Communication

Last year, CHLOE 7 explored how U.S. higher education institutions were addressing quality assurance (QA) in online learning, including the adoption of QA standards and policies for evaluating whether institutional standards have been met. Additional questions examined how robustly higher education institutions were practicing quality assurance (i.e., whether it was limited solely to course design, or if they assured other aspects as well, such as teaching, faculty development, and student support). Subsequent public conversations during CHLOE 7 presentations revealed that while additional measures of quality might be practiced, both data collection and campus or public discussions around those QA efforts were lagging.

CHLOE 8 returned to this topic to ask COOs if they currently track, or could track, specific QA-related data comparison points between F2F and online students or course sections. Notably, no single QA measure comparing F2F and online is currently being tracked by even half of reporting institutions. The most frequently tracked data for quality assurance, however, is student satisfaction/evaluation of primarily online versus in-person instruction. Forty-four percent of COOs reported tracking this, 46% said they would be able to track but currently are not, and a full 10% reported not being able to track at all. Similar results were seen for course completion (42% reported tracking) and end-of-course grades (38% track this). Thirty-five percent of COOs reported tracking both section averages of course grades across F2F and online modalities and term-to-term persistence for online versus F2F students (Figure 32).

**Figure 32. QA Across Modalities: Potential for Tracking QA Comparison Points Online vs. F2F (Sample = 276)**



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Data tracking and data governance in general might be one barrier to comparing QA metrics across online and F2F modalities. In open-ended responses, many COOs reported that they simply do not have the staff (or potentially the expertise) to pull, analyze, and report on these data points, or a related plan or process even if they had the staff. Additionally, many reported that their administration does not support or attend to data collection and analysis for quality assurance, choosing only to focus on data reporting for compliance. In general, lack of institutional interest or infrastructure, as well as absence of capable staff, were identified by the majority of COOs as the reason they do not track or report on QA-related data that compares online and F2F learning.



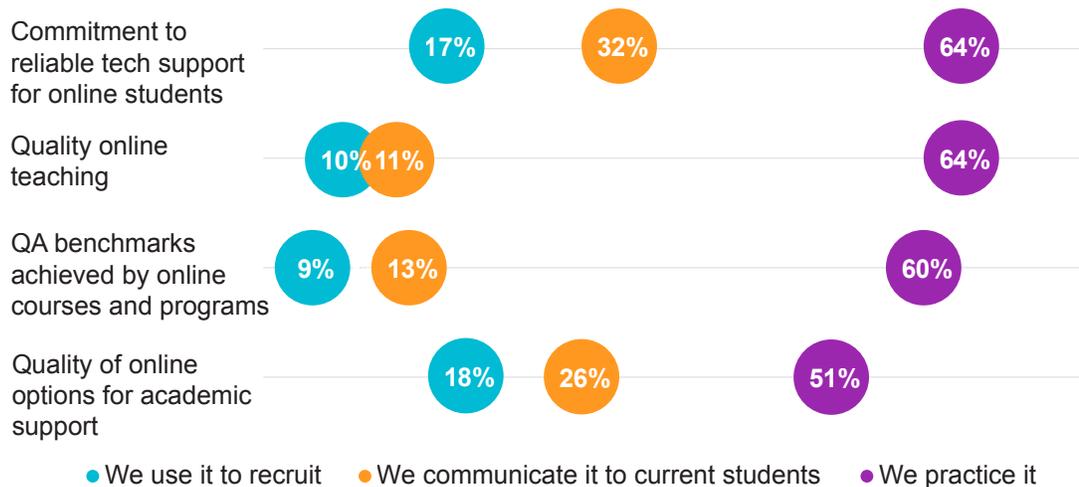
Additional reasons cited relate to impacts of decentralization or siloed systems of reporting (e.g., it is challenging to collect data across departments and with unique processes). However, dozens of COOs reported that they are currently developing new strategies and approaches to not only collect, but also to communicate, these data points. It is likely that increasing demand for online options and proposals for increased online development have renewed the intent to assure quality across modalities.

Communicating quality assurance was an additional conversation that originated in CHLOE 7. Last year’s report inquired about QA facets of online programs, including whether or not they were communicated to internal and/or external stakeholders. CHLOE 7 revealed that less than half (47%) of institutions reported measures of online program QA to stakeholders, and only 21% of COOs said they reported highlights of QA efforts to prospective students. These were surprising revelations: Online learning has emerged as one of the few areas of current and potential enrollment growth, while higher ed overall continues to experience enrollment declines, so one wonders why an institution *wouldn’t* market the quality of their online degree programs to compensate for on-ground enrollment losses.

Communicating quality assurance efforts seems a crucial practice, so the fact that many institutions are practicing “quiet” quality assurance was a vital topic to re-examine in more detail in CHLOE 8. This year, we asked chief online officers about which QA efforts they practice and which efforts they additionally communicate out (and to whom). Figure 33 reasserts a portrait of QA in practice ... without communicating such practice to current or future students.

Over half of reporting COOs (51%) practice QA for online student academic support, 60% practice QA benchmarking for online courses and programs, and 64% practice QA for reliable tech support for online students. However, only about one-third of COOs report communicating the quality of online tech support to current students, and about one-fourth communicate the quality of online academic support; quality design benchmarks and quality teaching were only reported to be communicated to current students at 13% and 11% of institutions, respectively.

**Figure 33. Keeping Quiet About Quality:  
Institutional QA Practice vs. Communication (Sample = 266)**



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It is puzzling why institutions would not want to communicate to their current online students the availability of quality online learning and related supports, but it is even more confusing why they would withhold this information from prospective students. Even with the current enrollment challenges and increased demand by students for quality online offerings, only 18% communicate online academic support quality to prospective students, 17% communicate technical support quality, and even less discuss their online learning quality. In fact, just 10% of COOs reported using the quality of their online teaching to recruit new students, and only 9% reported using achieved QA benchmarks for courses and programs to attract new students.

It could be that communicating online quality is simply overlooked by many institutions, as it is not a common practice to communicate the quality of F2F courses. However, the current higher ed landscape displays varying degrees of online student support and online course quality; given the current context, it might benefit institutions to use online quality as a differentiating factor, especially when pursuing new enrollment.

Ostensibly, institutions practice QA both to assure the quality of their educational offerings but also to communicate an institutional commitment to, and association with, quality. Why, then, especially when confronted with substantial enrollment challenges, would institutions choose to keep quiet about quality? In some instances, they may have very limited or sporadic QA implementation, and fears arise that calling attention to QA in one area might raise difficult questions about the status of other quality assurance measures, or whether QA is practiced throughout the institution.

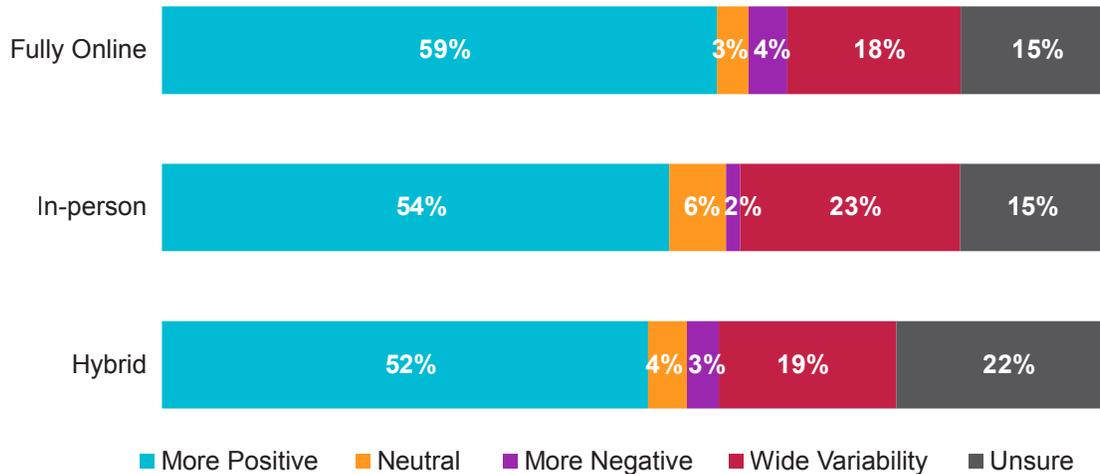
Additionally, looking at the percentages of those who practice the surveyed factors, approximately 35%-50% of responding institutions reported they do not engage in some of the most common QA practices at all. Furthermore, there is the previously mentioned issue of a general lack of data collection, analysis, and reporting, stemming from a lack of qualified staff to assist and a lack of institutional focus or importance, among other issues. Time will tell whether the practice of “quiet QA” is a lost opportunity to positively impact online enrollment. At the very least, schools with exemplary QA practices may be missing an opportunity to establish a competitive advantage.

### Undergraduate Satisfaction and Performance: F2F and Online

Whether or not institutions are practicing or communicating quality assurance, it does seem as though higher education is moving further toward a full integration, rather than “othering,” of online learning. In past years, reluctance to offer or increase online courses was frequently undergirded with assumptions that online was of lower quality, and students would therefore have lower levels of satisfaction and performance, as compared to F2F courses.

However, that does not appear to be the current reality in U.S. higher education. When asked to rate typical undergraduate experience/satisfaction with course structure/format (distinct from teaching), most COOs reported that students are slightly more satisfied with online courses. Nearly 60% of COOs reported that students are satisfied with their online course experience, 54% have positive satisfaction with their in-person courses, and slightly less – 52% – are satisfied with hybrid courses. While only a small percentage of COOs reported neutral or negative satisfaction with the three modalities, approximately one-fourth of COOs reported wide variability across modes. Reported variability was lowest (18%) with online courses, followed by 19% for hybrid courses, and a slightly higher 23% for in-person.

**Figure 34. COOs' Perceptions of Undergraduate Satisfaction with Course Format/Modality (Sample = 265)**



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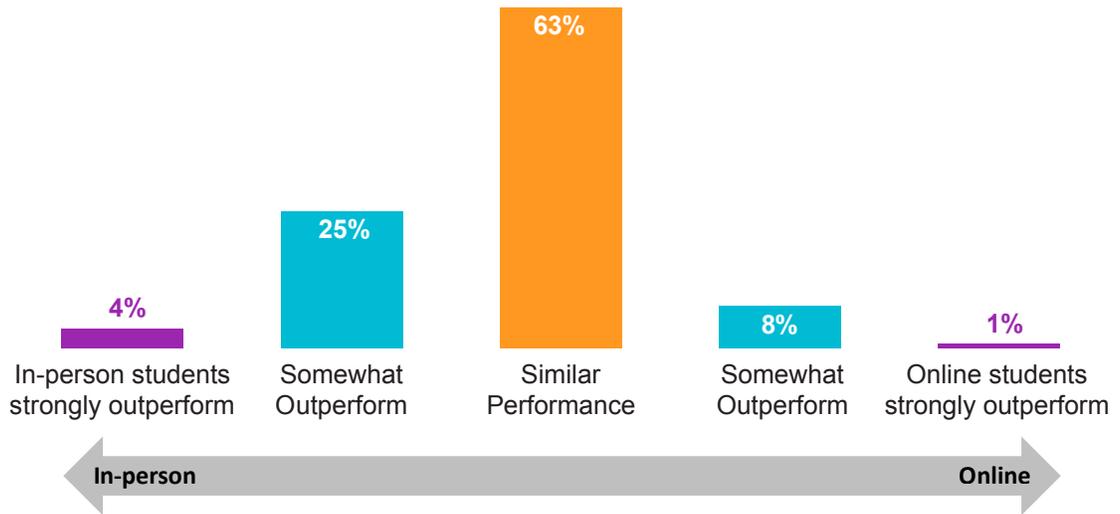
Additionally, roughly one-fourth of COOs were unsure of students' perception of hybrid courses, and 15% were unsure of how students feel about fully online or in-person courses. As these are not entirely insignificant numbers, institutions who are unable to answer this question might consider connecting with existing student data or specifically collecting data on student satisfaction and perceptions of course quality across modality. Such information might prove vital for institutional strategy related to online faculty development and support as well as course development and evaluation policies.

Last year, CHLOE 7 reported that, compared with hybrid and online modalities, F2F courses frequently do not have QA standards (38% reported not having standards for in-person courses, as opposed to only 5% reporting the same for online asynchronous, and 17% for hybrid). Over the past quarter century, F2F has been smugly assumed to be the very definition of educational quality. QA standards and practices for online were developed to defend its quality from this ingrained prejudice. However, it could be that years of focusing QA efforts largely (or exclusively) on online modalities neglected those same practices for campus-based courses, ironically resulting in a wider variability of quality for in-person courses.

Student satisfaction aside, however, student *performance* is an additional keystone of quality assurance. CHLOE 8 asked chief online officers how they would rate the relative performance of primarily online undergraduate students versus primarily in-person students. Here we find another indication of the "disappearing difference of modality," with the majority (63%) reporting a similar level of performance across modes of instruction (Figure 35).

In terms of whether primarily on-campus students outperform primarily online students, however, on-campus seems to fare better. Nearly 30% of COOs report that in-person students somewhat or strongly outperform their online counterparts, while only 9% of COOs report the opposite. There are many potential explanations for this, including less support for online students (i.e., issues with student preparedness) and lower quality of online design and instruction (i.e., issues with design quality and faculty preparedness for online teaching).

**Figure 35. Data Tracking for Online Quality Assurance (Sample = 246)**



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The impact of the variability of course structure was frequently cited, along with goals to increase faculty support for online design. Online teaching variability was mentioned less than design, but a few COOs reported that it is the teaching, not the modality that makes the difference for students and accompanied that with comments regarding quality teaching and related faculty development. Others reported that the variance of quality was too great, even between sections of the same course, and they were considering design or training requirements to enforce minimum standards and promote educational equity.

Chief online officers' freeform comments about quality assurance provided additional insight. COOs remarked on the disparity in tracking F2F versus online, implying that past scrutiny for online quality might have spurred data tracking for that modality without similar tracking of companion data for in-person courses. One COO reported that there was simply no F2F data to compare with online completion and satisfaction. Many said they relied primarily or entirely on student evaluations of instruction, though several added that these are not required and may not yield accurate or enough data.

Several COOs took the opportunity to say that online courses that have gone through institutional processes for QA evaluation yielded higher satisfaction and performance from students, and yet there was no stated intention to assure a minimum level of institutional quality for all courses, regardless of modality. Yet again, it is likely we are seeing the effects of the long-standing incorrect assumption that F2F courses are inherently of high quality and therefore need no QA practices – a misconception that persists even when institutions see the benefits of quality assurance and continuous improvement practices for online courses.

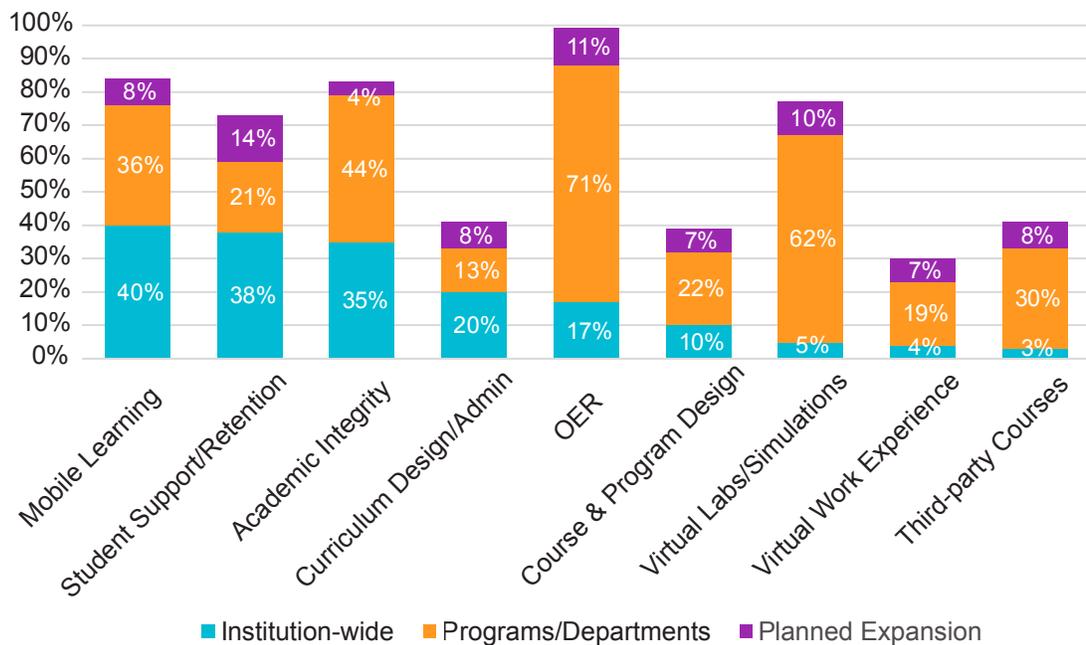


## X. ONLINE LEARNING TECHNOLOGIES AND CAPABILITIES

The CHLOE 6 Survey, conducted in early 2021, included questions about online learning technology and services infrastructure in U.S. higher education, chronicling emergency investments during the pandemic. Two years later, CHLOE 8 revisited the topic.

The CHLOE 8 Survey put aside the most pervasive technologies (e.g., LMS, video conferencing) asked about previously to focus on those that seemed to have momentum during the pandemic (assessment integrity, virtual labs and simulations) or more generally (student support and retention, open educational resources [OERs]), some nascent areas (third-party courses), and some new ones. The new areas inquired about are course and program design, curriculum design and administration, virtual internships and work experience, and mobile learning technology. Figure 36 sets out institutional use—distinguishing institution-wide use by some programs/departments and planned institutional expansion—as of Fall 2022.

**Figure 36. Online Learning Technologies and Capabilities (Fall 2022)**  
(in order of highest “institution-wide” ratio) (Sample = 274)



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As of Fall 2022, none of these nine technologies/capabilities was used institution-wide by a majority of the sample. Of course, aside from inconsistent adoption, this reflects uneven distribution of online courses and programs by institution, as well as bottom-up online learning development and localized technology implementation. At most schools, there are also blurred lines between online learning technology and technology more generally, just as there is overlap between online and other students. Nonetheless, it is notable that even post-pandemic, after the scramble for technology-enabled academic continuity, the typical institution is not characterized by institution-wide adoption of any of the technologies and capabilities listed in Figure 36.

Consistent with prior CHLOE surveys, technology adoption tends to be higher when constituting a general or administrative capability. The closer functionality gets to academic matters, the lower it is on the scale of adoption. For example, mobile learning and student support technology have the highest enterprise adoption ratios in Figure 36 but are some distance from academic fundamentals. By contrast, third-



party courses and virtual work experience — the two capabilities with the lowest enterprise adoption — embody non-standard learning experiences that imply modified faculty roles and tight integration into course and program flow.

Two other technologies/capabilities in Figure 36 (course/program design, open educational resources), showing modest enterprise adoption, also challenge faculty norms concerning academic design and ownership. Academic integrity (including remote proctoring) and curriculum design/administration — exhibiting greater enterprise adoption — are academically related but more administrative.

In six out of the nine technologies and capabilities in Figure 36, departmental and program adoption outstripped institution-wide. At many schools, online learning remains a patchwork of bottom-up, faculty and department-led initiatives, and administrative semi-standardization.

How does Figure 36 compare to CHLOE 6? The implantation of student support/retention enterprise-wide appears to have increased versus pre-pandemic, from 32% of the sample to 38%. Similarly, assessment integrity moved from 29% to 35%. However, there is also evidence that some mid-pandemic investment and adoption has subsided. CHLOE 6 found that 43% of schools either had adopted student support/retention technology institution-wide pre-2020 or had made recent investments. This is higher than the 38% reported in CHLOE 8. The gap is wider for assessment integrity: 49% of the CHLOE 6 sample said that such technology was either implemented institution-wide pre-COVID or was subject to major investment. CHLOE 8 had only 35% of schools claiming enterprise-wide adoption (plus another 4% pointing to investment).

Incremental gains are associated with open educational resources (OERs), tracking from 15% institution-wide adoption pre-2020 to 17% as of Fall 2022. Planned institutional expansion rates are similar: 10% of CHLOE 6 schools said as much versus 11% of those in the CHLOE 8 sample.

Virtual labs and simulations are another case of ebbing post-pandemic scaled adoption and investment. The CHLOE 6 report found that while only 11% of schools characterized pre-2020 adoption as enterprise-wide, another 17% pointed to recent investment in that direction. By CHLOE 8, the current institutional adoption level dropped to 5% with only another 10% in the midst of concerted institutional expansion. Now institutions are no longer forced to find scaled technology substitutes for otherwise in-person or decentralized activities, some edtech segments appear to be going backwards at least in terms of institutional ambition. However, more localized virtual lab and simulation adoption appears to be on the rise. In CHLOE 6, 45% of schools pointed to sub-institutional adoption pre-pandemic; by Fall 2022 in CHLOE 8 that had climbed to 62%.

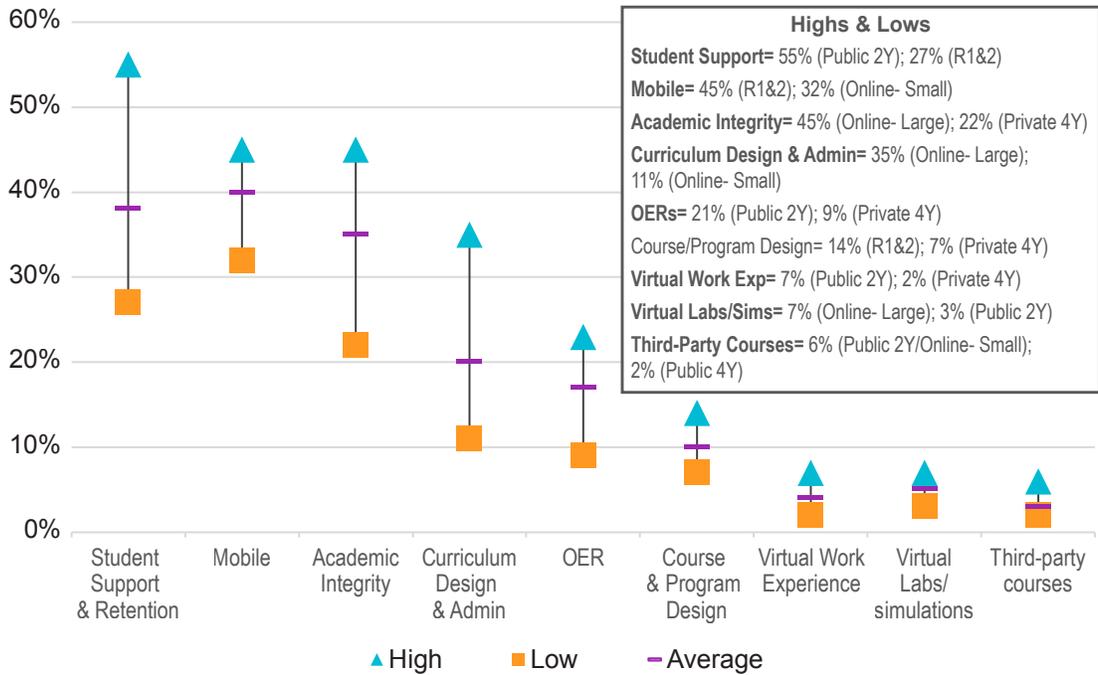
It is a similar story for third-party courses. Mid-crisis, the purchase of large, off-the-shelf online course libraries looked attractive to some institutions: CHLOE 6 found that 7% of schools had adopted such courses enterprise-wide. CHLOE 8 reported only 3%. On the other hand, more schools cited expansion plans: 8% of the CHLOE 8 sample versus only 1% for CHLOE 6. Greater program and departmental activity are also visible. In CHLOE 6, only 14% of the sample said that some parts of the institution were active with third-party courses, rising to 30% in CHLOE 8.

In CHLOE 8, it is perhaps surprising that few institutions — typically less than 10% — point to technology investment plans. Student support/retention scored highest at 14% of the sample citing such plans, followed by 11% for OERs and 10% for virtual labs/simulations. Modest investment levels may reflect post-pandemic edtech exhaustion and a desire to make the best use of existing solutions, many acquired in haste during the COVID emergency. Many schools may consider themselves to be too immature online to justify certain technologies or regard their online operations as too sprawling to accommodate such standardization.

What about patterns by sector, Carnegie classification, and online enrollment size? Figure 37 features the highest and lowest enterprise-wide adoption.



**Figure 37. Online Learning Technology and Capabilities by Sector, Carnegie Classification and Online Enrollment Size (Percentage of schools citing institution-wide adoption in Fall 2022) (Sample = 274)**



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Most of the online learning technologies and capabilities assessed in CHLOE 8 exhibit significant differences of enterprise-wide adoption by school type and circumstances. Nevertheless, patterns vary by segment. Public two-year schools were most likely to cite the widespread adoption of student support and retention solutions, OERs, virtual work experience, and third-party courses. This aligns with a less traditional and well-prepared student body, a strong career orientation in many programs, and less faculty sensitivity about course content.

Scale and resources favor other technologies. Either research-intensive institutions or schools with large online enrollment are adoption leaders when it comes to mobile, academic integrity, curriculum design and administration, course/program design, and virtual labs and simulations. This suggests an opportunity for large institutions to reinforce their advantage, assuming enterprise-wide adoption of particular technologies has sufficient impact on operational efficiency and the student experience. There is some evidence of correlations between enterprise-wide adoption of certain technologies and enrollment growth outperformance, but in many cases, sample sizes are too small to warrant confidence. Scaled adoption of course and program design solutions and OERs suggest the strongest correlations, but further analysis is needed, and there are always counter-examples.

The relationship between technology adoption and enrollment is likely multi-directional. Strong enrollment can provide the resources needed to invest in new technology and the momentum to justify such a strategy. Equally, lack of enrollment may prompt tech investment designed to turn things around. Technology may help or hinder enrollment depending on implementation and other factors.



To summarize this section, outside of mainstream technology such as the LMS and video conferencing, the typical school has not implemented other online learning technology and capabilities institution-wide. Program or department-level adoption is often more common. Mobile learning, student support/retention, and academic integrity are most commonly adopted across the institution, and virtual labs/simulations, virtual work experience, and third-party courses least so. There is evidence of sustained adoption momentum post-pandemic but also examples of retreat as emergency pressures fade.

## XI. THE CHLOE 8 SAMPLE

The CHLOE 8 Report is based on an online survey of chief online officers at colleges and universities in the United States. The survey was fielded in January and February 2023.

The survey invitation was sent to the chief online officer or closest equivalent at a large majority of public, private, and for-profit two- and four-year schools in the country, drawn from existing CHLOE contacts, past survey completers, and purchased lists of relevant titles.

The term “chief online officer” was coined by the CHLOE team to capture the growing incidence of online learning leadership roles in higher education institutions. Specific online leaders have many different job titles, and some occupy positions that span online learning and other responsibilities.

The CHLOE 8 Survey invitation was sent to chief online officers at some 4,700 colleges and universities. A total of 317 responses were received (including some usable partial responses), for a response rate of 6.7%.

Review confirmed that the profile of responding institutions for partially completed surveys matched that of those who responded to the survey completely. With that reassurance, the addition of partial responses boosted the scale and reliability of the CHLOE 8 sample. The report notes each question-specific response size.

The margin of error for the CHLOE 8 sample, allowing for question-specific sample variation between the high 200s and low 300s, is 5-6% (95% confidence interval), depending on the question. This is similar to past CHLOE surveys.

The CHLOE 8 sample closely resembles that of prior CHLOE surveys and the profile of U.S. higher education. Table 1 compares the CHLOE 8 sample to U.S. higher education institutions (degree granting), overall enrollment, and online enrollment.

**Table 1. The CHLOE 8 Sample vs. U.S. Higher Education (Fall 2021 or 2022)**

Sector	Public 2Y	Public 4Y	Private 4Y	For-Profit
Institutions	22%	18%	37%	20%
Total Enrollment*	25%	47%	22%	5%
Online Enrollment**	27%	49%	17%	7%
Fully Online Enrollment*	32%	37%	19%	11%
CHLOE 8 Sample	26%	38%	35%	2%
DIFFERENCE between CHLOE 8 Sample and Online Enrollment	-1 percentage point	-11 percentage points	+18 percentage points	-4 percentage points

*N.B. Row totals exclude the small number of degree-granting institutions that fall outside these sectors.*

*\*Undergraduate and graduate students combined (Fall 2022). \*\*Fully online students and those taking one or two online courses as part of an otherwise campus-based experience—undergraduate and graduate combined (Fall 2021).*

*Source: IPEDS 2021 and National Student Clearinghouse 2022 are the sources of the institutional and enrollment data.*

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The representation looks similar to past CHLOE samples and depends on the metric of choice. At the institutional level, the CHLOE 8 sample overcounts public institutions, undercounts for-profits, and is close on public two-year and private four-year schools. Public four-year schools and for-profits look underrepresented in the CHLOE 8 sample when total or online enrollment ratios are considered, and private four-year institutions overrepresented.

For comparison, the CHLOE 4 sample, conducted pre-pandemic in 2019, counted 27% public two-year, 36% public four-year, 34% private four-year, and 2.2% for-profit institutions, very similar to the CHLOE 8 distribution.

The CHLOE Survey continues (with the exception of for-profits) to offer reasonable representation of U.S. higher education as a whole and online higher education in particular. As in years past, the for-profit school sample is too small to be reliable and, therefore, is rarely broken out in the report.

The CHLOE 8 sample captures the state-of-play from the largest to the smallest institutional online operations (Table 2).



**Table 2. The CHLOE 8 Sample by Online Student Headcount (Fall 2021)  
(CHLOE 4, 2019, sample ratios are shown in parentheses)**

CHLOE 8 Sample	High-OE >7,500	Mid-OE 1,000-7,500	Low-OE <1,000
Schools by Number of Fully Online Students	39	133	145
% of CHLOE 8 Sample	12% (3%)	42% (33%)	46% (64%)
Schools by Number of Partially Online Students	67	126	124
% of CHLOE 8 Sample	21% (6%)	40% (39%)	39% (55%)
Schools by Number of Fully and Partially Online Students	82	162	73
% of CHLOE 8 Sample	26% (9%)	51% (54%)	23% (37%)

*The low-OE category includes a few schools reporting zero online enrollment.  
Source: IPEDS Fall 2021.*

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Table 2 uses Fall 2021 enrollment data by modality—the most recent available. That semester many colleges were still in the midst of emergency remote learning, which may mean inflated “online” activity relative to Fall 2022 (the focus of the CHLOE 8 Survey) or today. The high-OE and mid-OE ratios in Table 2 are certainly higher than the pre-COVID CHLOE 4 sample. But there is no doubt that underlying online enrollment expansion also plays a role, which aligns with the perceptions of chief online officers in CHLOE (see Section III). What remains the case is that the CHLOE Survey spans institutional online activity across the enrollment scale spectrum.



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