

THE CHANGING LANDSCAPE OF ONLINE EDUCATION (CHLOE)

Quality Matters & Eduventures Survey of Chief Online Officers, 2017

Ron Legon, Ph.D.

Senior Advisor for Knowledge Initiatives, Executive Director Emeritus, Quality Matters

Richard Garrett

Chief Research Officer, Eduventures







TABLE OF CONTENTS

EXECUTIVE SUMMARY	5
INTRODUCTION	7
THE CHANGING LANDSCAPE	10
MARKET CONDITIONS	12
ORGANIZATION AND MANAGEMENT OF ONLINE PROGRAMS	17
TEACHING, LEARNING, AND TECHNOLOGY	33
QUALITY ASSURANCE AND OUTCOMES OF ONLINE PROGRAMS	39
FUTURE TOPICS: CHLOE IN THE YEARS AHEAD	45
METHODOLOGY	47
The CHLOE Sample	47
Job Titles and Report Lines of Chief Online Education	48
IPEDS Data on Distance Learning Scale and Growth - Context for CHLOE	49
ABOUT OUALITY MATTERS AND EDUVENTURES	51







List of Figures

Figure 1. The Chief Online Education Officer's Role	8
Figure 2. CHLOE 2017: Online Higher Education – Stability more apparent than innovation	11
Figure 3. Fully Online Programs: Student Headcount Growth (Spring 2016 v. Spring 2015)	13
Figure 4. Fully Online Programs vs. Students Undergraduate 500+*	14
igure 5. More Competition	15
Figure 6. Change in Competitive Environment for Online Programs by Sector	16
Figure 7. Management of Online Programs – All Sectors Combined	18
Figure 8. Centralized vs. Distributed Management by Sector and Size	19
Figure 9. Online Programs: Revenue Generators or Net Cost to Institution	19
Figure 10. Online Programs: Revenue Generators or Net Cost by Program Size	20
Figure 11. Tuition Rates for Online Students	21
Figure 12. Distribution of Revenue from Online Programs	22
Figure 13. Distribution of Online Program Revenues by Program Size	23
Figure 14. Most Decisive Factor in Allocation of Resources by Sector	24
Figure 15. Most Decisive Factor in Allocation of Resources by Program Size	25
Figure 16. Online Course Development Practices by Program Size	26
Figure 17. Online Course Development Practices by Sector	27
Figure 18. OPM Services in Use	29
Figure 19. Course Ownership Patterns by Sector	30
Figure 20. Course Ownership Patterns by Program Size	31
Figure 21. Faculty Compensation for Online Course Development by Sector	32
Figure 22. Faculty Compensation for Online Course Development by Program Size	32
Figure 23. Online Program Enrollment at Scale Demands Asynchronous Delivery	34
Figure 24. The Search for Balance: Consistency vs. Variation	35
Figure 25. The Search for Balance- Consistency vs. Variation by Sector	36
Figure 26. Change is coming?	36
Figure 27. How to teach and learn online?	37
Figure 28. So Many Choices	38
Figure 29. Quality Metrics Adopted and Applied Internally	39







Figure 30. Provide Training Based On Quality Metrics	40
Figure 31. Online Programs Seeking External Certification – All Sources	41
Figure 32. Use Consultants to Develop and/or Achieve Quality Metrics	42
Figure 33. Chief Online Officer Report Lines	48
List of Tables	
Table 1. How Online Programs are Managed and Budgeted	17
Table 2. Fees for Online Students	21
Table 3. Strategic Priorities Affecting Online Programs	24
Table 4. Internal vs. External Online Course Development	27
Table 5. Partnerships with Online Program Management Companies	28
Table 6. Quality Metrics Most Frequently Included Among the Top Five	43
Table 7. Access to Complete or Adequate Data on Quality Metrics	44
Table 8. The CHLOE Sample 2017	47
Table 9. Chief Online Officer Report Lines by Sector	48
Table 10. Undergraduate "Exclusive" Distance Learning Student Headcount (Fall 2012-15)	49
Table 11. Graduate "Exclusive" Distance Learning Student Headcount (Fall 2012-15)	50







THE CHANGING LANDSCAPE OF ONLINE EDUCATION (CHLOE) 2017

EXECUTIVE SUMMARY

This is the first *CHLOE Survey* of chief online officers at community colleges, four-year public, and four-year private, nonprofit colleges and universities. CHLOE focuses on the management of online education as it becomes a mainstream activity in a growing number of U.S. institutions. Concerns about achieving stability and reliability are overtaking earlier-stage innovation as online learning moves from an experimental phase to an established institutional function.

At many institutions, management of online-related activities and responsibilities is being consolidated under the leadership of a single institutional officer, whom we designate as the chief online officer. Support functions are typically centralized while academic planning and curriculum remain decentralized. In larger online programs the tendency toward centralization of functions is greater. As a group, four-year, public institutions show the widest internal variation or inconsistency in policy.

Many institutions now address online education in their strategic plans, stressing a range of objectives, such as enrollment growth, student completion, and quality enhancement. The budgeting process, however, favors investments with enrollment growth potential. Although online enrollment is still a growth engine in U.S. higher education, the rate of increase is slowing and competition is increasing, as evidenced by plans to substantially expand the number of online programs at a majority of the institutions surveyed. At some point, institutions, particularly smaller ones, need to be concerned about over-extension if supply exceeds demand. Institutions must ensure online learning serves core programs and students, not only a desire for new market growth—something that may become less realistic as competition heats up.

The majority of our study's sample view online programs as revenue generators rather than drains on resources. Online tuition is commonly the same as campus tuition with differential fees covering the perceived additional costs of online development and delivery. A significant segment (37%) of private nonprofits charge online students lower than campus tuition. Most institutions distribute online revenue to meet overall institutional needs.







Wholly asynchronous delivery of online instruction dominates higher education, except in very small programs. The larger the program, the less likely there is variation in delivery tools and methods. Most institutions anticipate supplementary, not transformative, changes in online learning in the coming years. Interest in new tools and learning strategies is diffuse and non-committal. Faculty remains central to online course development. Instructional design support is widely available, but most often is optional at the faculty member's discretion. In enterprise-level programs and many private nonprofits, however, design support is required.

Less than quarter of institutions use online program management (OPM) providers to support online program promotion and development, and for many, such partnerships are supplemental. Larger programs and private nonprofits are likely to own their online courses, while shared or faculty ownership is more common in two- and four-year public institutions. In 40% of community colleges, faculty do not receive compensation for course development, while compensation is nearly universal among larger programs and private nonprofits.

The majority of online programs have adopted quality standards for course design, program design, online faculty development, and student outcomes. Quality assurance for support services lags behind. The most commonly used input metrics are program reputation, faculty training, and faculty credentials. The most commonly used outcomes metrics are student retention/graduation rates, student academic achievement, and post-graduation student employment. There is less focus on a wider range of outcomes measures that may be of increasing interest to stakeholders, including student debt, graduate earnings, employer feedback, and alumni feedback.

Online learning's place in the mainstream of higher education is assured, but many questions remain about its long-term scope and direction. Future *CHLOE Surveys* will explore these themes in more detail and track the evolution of institutional policy and activity.







INTRODUCTION

We are pleased to present the findings of the inaugural *CHLOE Survey* on *The Changing Landscape of Online Education*. It is the first product of a newly formed partnership between Quality Matters (QM), a leading online learning quality assurance organization, and Eduventures, the leading higher education research and advisory firm. We believe that circumstances call for a new annual survey of issues related to the structure and management of online education and we are excited by the opportunity to provide useful information to those who develop, support, participate and benefit from it.

One factor in the decision to launch CHLOE is the recent expansion of IPEDS reporting that has provided official, if flawed, data on enrollment in online education. Related to this development is Babson Research Group's announcement in February 2017 that it is discontinuing its annual survey, *Online Report Card: Tracking Online Education* in the United States, which tracked the growth of online education. CHLOE will take on some of these issues, and expand into other areas in the future.

We also recognize the value of the many other surveys that help deepen our understanding of online education. Some of these surveys focus on individual sectors in higher education, e.g., the Instructional Technology Council's focus on community colleges. Others cast a wide net for opinions of faculty, administrators at various levels, and outside observers. CHLOE's approach will ultimately include the breadth of online education providers, but focus on the knowledge and views of an emerging class of chief online education officers

This focus reflects our shared belief that online education has been moving from an experimental and provisional status to a mainstream component at an increasing number of colleges and universities. This requires changes in leadership, management, finance, and strategic objectives. As of Fall 2015, the IPEDS numbers tell part of this story:

- **Bigger Scale:** A total of 595 two- and four-year schools reported more than 1,000 fully distance students, with most studying online, up 19% since 2012. Almost 2,000 two- and four-year schools reported more than 100 fully distance students.
- **Undergraduates:** There are more than 2.1 million fully distance undergraduates (12% of total); plus another 2.8 million partially distance undergraduates (17% of total).
- **Graduate Students:** There are about 770,000 fully distance graduate students (26% of total), plus another 243,000 studying partially at a distance (8% of total).
- **By Sector:** At public, four-year schools, one in 14 students are now fully distance. At private, four-year schools it's one in seven; and at public, two-year schools it's one in 19.
- **Programs:** 13% of Associate's programs, 9% of bachelor's programs, 18% of master's programs, and 5% of doctoral programs are fully distance.







We see the emergence at many colleges and universities of a permanent administrative position that draws together the functions and responsibilities of online education

Numbers alone do not tell the whole story. We see the emergence at many colleges and universities of a permanent administrative position that draws together the functions and responsibilities of online education, unless the institution is entirely or predominantly online. This is the individual whom we have called the "chief online education officer" (COEO), or, for convenience, the "chief online officer."

This individual is at the center of institutional planning and decision-making related to online course and program operations, and, in some cases, with oversight of online academics as well. The work of Eric Fredericksen, Associate Vice President for Online Learning at the University of Rochester, has helped define the COEO job and has surveyed the individuals fitting this description at four-year colleges and universities around the U.S. Fredericksen identified 820 such individuals out of about 1,100 institutions (75%).

While the emergence of the chief online officer is itself evidence of the mainstreaming of online education, we also believe that these individuals are in the best position to tell us how their online efforts are organized and their strategic direction. The chief online officer sits at the center of the issues and influences that determine present and future policy (see Figure 1).



Figure 1. The Chief Online Education Officer's Role

Through the experience and perspective of chief online officers, we hope to gain insight into current practices and trends in management, resource allocation, emerging tools, instructional innovations, quality assurance measures, regulatory issues, and more.







This first *CHLOE Survey* received responses from the chief online officer at over 100 colleges and universities nationwide, 104 of which were usable. The sample offered solid coverage of public two-year, public four-year, private, nonprofit four-year institutions, and a range of institutions by size and scope of online learning operations. Please see the Methodology section at the end of the report for more detail on the sample.

The first year of the *CHLOE Survey* has established baseline data that we will track going forward. It was also a learning experience for our team. The responses we tallied led to more questions and the need to define some terms more concisely. CHLOE 2018 will dig deeper to answer those questions and sharpen responses that were unclear.

We also found respondents to our first survey were concentrated among smaller and midsized online operations. In future *CHLOE Surveys* we hope to expand coverage to include a representative number of the largest online operations and the for-profit sector. We look forward to your feedback as we seek to refine our survey and make it more useful.







As online
education
becomes a fixture
of mainstream
higher education,
the pace of
change may slow.
The majority of
Chief Online
Officers see
their institutions
as focused on
achieving stability

THE CHANGING LANDSCAPE

Online learning is growing up. No longer the new innovation of 20 years ago, poised to revolutionize conventional assumptions about access, cost, and quality, online learning in higher education today has a more complicated profile. Online courses and degrees are now commonplace, offered by colleges and universities of all shapes and sizes. Each year over a third of students at all institutions enroll in online courses. The fact that online enrollment has continued to grow in an otherwise declining higher education market is evidence of the prevalence and appeal of online courses and programs. It is rare nowadays in any higher learning setting for online resources of some kind not to play a role.

The early growth of online learning was characterized by rapid innovation compared to the general pace of change in higher education. Innovative ideas to move online learning forward still abound, but as online education becomes a fixture of mainstream higher education, the pace of change may slow. What can we say about the *balance* between innovative and conventional providers in the mainstream, and what does this lead us to expect in the years ahead? Is the online learning mainstream more concerned with innovation or stability?

Figure 2 is the CHLOE team's summary of the survey findings mapped on a stability-innovation spectrum. Of course, Figure 2 is a generalization, and individual institutions and programs may depart from the norm.

A majority of chief online officers paint a picture of online learning as focused on stability. Amid development of new online programs and enrollment growth objectives, chief online officers describe conservative pricing strategies, and seek a workable balance between centralized and decentralized control of such critical elements as curriculum and course development, online support services, and budgeting.

Mainstream institutions continue to rely on well-established input and outcomes metrics to judge their online programs, and embrace now-familiar quality assurance standards. The primary driver in their resource allocation decisions is enrollment growth rather than improved student completion or quality enhancement. Investments in new tools and techniques to deliver online educational strategies are expected to play only a supplemental role in the years immediately ahead.

Typically, mainstream institutions are risk averse; they move cautiously, and resist committing to the latest tools and strategies in favor of adopting well-tested and successful ones. They embrace tried and true practices, tools, and standards, since the consequences of failure are too dire. This approach reduces risk, makes year-over-year planning more reliable, and honors institutional history and precedents.







Figure 2. CHLOE 2017: Online Higher Education -Stability more apparent than innovation Stability < Innovation **OPERATIONAL MODELS: Centralized Services, Decentralized Academics.** This most common model respects departmental autonomy but risks uneven provision and quality of online learning. Institutions with larger online operations reported greater centralization, which may favor such institutions in a crowded market. ONLINE STRATEGY: Overemphasis on Growth, Under-Emphasis on Innovation. Enrollment growth was by far the most prominent driver for an institution's online learning strategies and revenue allocation models. Student completion gains, quality enhancement and cost reduction get relatively little attention. **QUALITY ASSURANCE: Quality Assurance is Well-Established.** Most institutions have adopted quality standards for faculty preparedness, course/program design and student outcomes, although in many cases this is not institution-wide. Quality standards for student support are less evident. Quality standards may inhibit or encourage innovation. PEDAGOGY & TECHNOLOGY: Limited Pedagogic and Technology Innovation. Chief online officers characterized innovation in recent years as supplementary and anticipate modest change over the next five years. Interest in specific new tools and techniques is highly fragmented. **COURSE DESIGN: Voluntary Faculty/ID Partnerships Dominant.** Relatively few institutions require faculty to partner with instructional designers to build or revise online courses. This may help mainstream adoption but suggests uneven quality outputs and inefficient use of resources. **OUTCOMES METRICS: Mismatch on Online Outcomes?** Chief online officers' standard and preferred outcomes metrics are assessed against course objectives, retention/graduation rates and faculty training/credentials. More market-facing measures, such as post-graduation employment, salary, and feedback, are rarely tracked. **COSTING & PRICING: Unclear Costing, Conservative Pricing.** The majority of institutions view online learning as a revenue opportunity. Online tuition in line with campus tuition is typical, and special fess are common. Some private institutions lower tuition online and waive fees but most schools do not pass infrastructure savings along to students.







An important question is whether fully online student headcount will continue to grow for the foreseeable future, and when online program supply growth might outpace enrollment growth.

This description of online higher education is a compliment—it is evidence that online learning has entered the mainstream and a large number of institutions have run successful online operations over time. Yet as mainstream institutions become increasingly dependent on online enrollments and revenues, they need to continue to monitor new tools, pedagogical models, and organizational strategies, sift out those that fade or fail, and be poised to adopt those that catch fire before their institutions lose their competitive edge. Equally, the full promise of online learning—to expand access, enhance the student experience, and control costs—is unattained. Transformative change will always depend on a small number of risk takers.

Online learning's place in the mainstream of higher education is assured, but many questions remain about its long-term scope and direction. Future *CHLOE Surveys* will explore these themes in more detail and track the evolution of institutional policy and activity.

MARKET CONDITIONS

What is the online enrollment growth trend?

The *CHLOE Survey* asked chief online officers to report the number of fully online degree and certificate programs, and the percentage of year-over-year growth or decline in fully online students, from spring 2015 to spring 2016. Respondents were also asked to forecast the number of new fully online programs the institution would launch over the next one to three years. Combined with IPEDS data, these three data points offer some insights into the average number of students per online program, the associations between current online programs and enrollment scale, and new program plans.

Fully distance enrollment continues to grow strongly in the U.S., particularly at the graduate level. Inevitably, enrollment growth has persuaded more colleges and universities to launch online programs. An important question is whether fully online student headcount will continue to grow for the foreseeable future, and when online program supply growth might outpace enrollment growth. Even if the overall online market continues to grow, not every institution is guaranteed comparable growth.

The *CHLOE Survey* asked institutions to report the percentage of year-over-year growth or decline in their spring 2016 online student headcounts compared to the prior year. Figure 3 points to still strong growth for the majority of CHLOE respondents (median 9% growth in spring 2016, year-over-year) alongside a significant minority reporting flat or negative growth. The situation is particularly complex among community colleges where growth, stability, and decline are reported in roughly equal proportions. For this segment, reported growth was typically in the 1-2% range.

This may reflect the wider downturn in enrollment at many public, two-year institutions, as the sector tackles the twin headwinds of falling demographics in much of the country and weaker demand in the face of a strengthening economy. Moreover, most community colleges are focused on a limited geography, and unlike many four-year schools, tend not to view online programs as a way to conquer new markets.

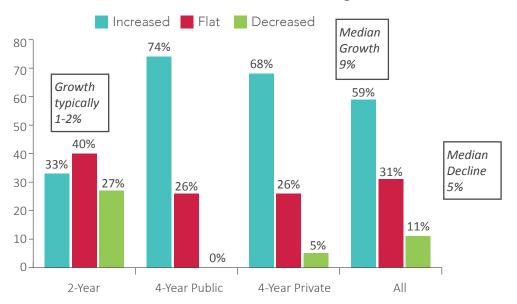






Figure 3. Fully Online Programs: Student Headcount Growth (Spring 2016 v. Spring 2015)

Is the Online Growth Rate Slowing Down?



In future *CHLOE Surveys*, it will be interesting to see whether the share of institutions reporting year-over-year growth remains stable, whether growth rates moderate from current levels, and whether a growing number of schools face declining online enrollment as bigger players take share. A key dynamic in the online higher education market is whether the future favors a small number of institutions with an outsized commitment to online or the mass of colleges and universities.

What is the relationship between online student volume and number of online programs? Figure 4 shows CHLOE institutions that reported more than 500 fully online undergraduates and adds online program volume. The trend line suggests that among institutions with larger numbers of fully online undergraduates, there is no relationship between the number of fully online undergraduate programs and the number of fully online enrollments in those programs.

For example, one institution reported 35 fully online undergraduate programs with 1,381 fully online students (an average of 39 students per program); while another school cited 5,273 students in only 13 programs (an average of 401 students per program).

In theory, institutional efficiency increases with more students enrolled in each program. A lower average enrollment implies higher costs to the institution, bearing in mind the outlay to design, develop, market, and service each program. Figure 4 suggests that some institutions have achieved much better economies of scale than others, and that some schools rely too much on launching new programs to drive growth and fail to get sufficient return from their existing online efforts.

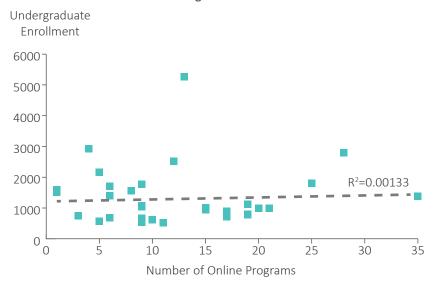






Some institutions have achieved much better economies of scale than others, and some rely too much on launching new online programs to drive growth and fail to get sufficient return from their existing portfolio.

Figure 4. Fully Online Programs vs. Students
Undergraduate 500+*



* One institution with a very large online program enrollment, which skewed averages, was omitted from Figure 4.

Among respondent institutions with a smaller online program student enrollment (<500), a somewhat stronger association exists between total online enrollment and program size. This group averaged 80 fully online students per undergraduate program (median of 47). One institution reported 194 undergraduate fully online students across 30 online programs, while another reported 367 students in a single program.

Some differences may be due to inconsistent definitions of a "program" or inaccurate reporting of student numbers, but that is unlikely to explain the bulk of variation among these institutions. As national and local online markets become more crowded, and online programs in numerous fields are more commonplace, institutions may be prompted to pay renewed attention to program ROI.

Another possible explanation for seemingly low average enrollment per fully online program at many schools could be the use of individual online courses to serve both fully online and other students. The charge of under-enrollment in online programs as such is not answered, but at some institutions course-level participation may make the overall situation more viable.

At the graduate level, the average number of fully online students per program (40) is lower than at undergraduate (median of 27). This is in line with more specialized programming at the graduate level and a much smaller graduate market overall. Among larger players with over 500 fully online graduate students, the average enrollment per program is 72, with a high of 182.







A large majority of CHLOE respondents considered the online market to be more competitive than a few years ago, and the most common answer was "much more competitive."

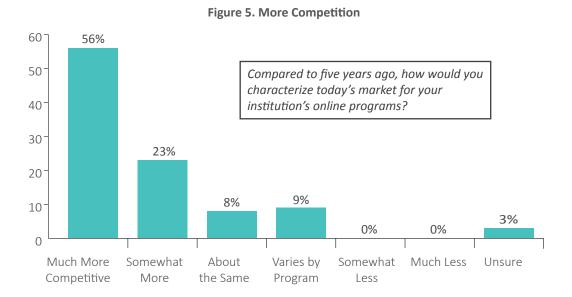
As the fully online market continues to mature, it is possible that the rush to launch online programs will outstrip demand in many fields and regions, and a period of program rationalization may lie ahead. In most fields, simply offering an online program is no longer a differentiator. It will be interesting to see whether particular online programs develop a superior student experience and strong outcomes, resulting in greater market share.

The year in which an institution launched its fully online program may be positively correlated with the scale of online student headcount today. Some institutions began online 10 or even 20 years ago but their online operation remains small, while a few quite recent starts have already generated over 1,000 fully online students. Of course, "more" online students is not necessarily the best outcome or every institution's goal, but CHLOE data serves as a reminder that ambitious growth plans can go awry.

What is the Competitive Environment for Online Programs?

Chief online officers were asked about their perceptions of the competitiveness of the online higher education market. A large majority considered the market to be more competitive than it was a few years ago, and the most common answer was "much more competitive" (see Figure 5).

Chief online education officers from institutions in the sample with the largest fully online student headcount (>2,500) all reported that they perceived today's online market to be more competitive than five years ago. Half said "somewhat more" and half said "much more." By contrast, of the smaller players with fully-online enrollment between 500 and 2,499, 59% said "much more competitive," but about 20% pointed to wide variation by program or a sense of stability. This more complex picture may indicate that some mid-sized institutions are looking for strong growth and therefore feeling more competitive pressure, while others may be focused on a specific geography or program mix and have more modest growth goals.









Among institutions with fewer than 500 fully online students, 55% saw "much more" competition, but almost a third noted stability, variation by program, or too little experience to judge.

By sector (Figure 6), chief online officers at four-year, private universities were most likely to mention "much more" competition (66%), closely followed by four-year publics at 64%. Nearly half of all community college chief online officers see only a modest increase in competition (29%) or no increase at all (20%). This may be a reflection of the highly local role of many community colleges. In contrast, four-year institutions that tend to draw students from a wider or unbounded area, may feel greater pressure from a wide array of competitors

80 Public 2Y Public 4Y Private 4Y 64% 66% 70 Compared to five years ago, how would you 60 characterize today's market for your institution's online programs? 50 40% 40 29% 30 20% 18% 17% 20 9% 7% 7% 10 5% 4% 0 Much More Somewhat About Varies by Competitive More the Same Program

Figure 6. Change in Competitive Environment for Online Programs by Sector

Ninety-five percent of respondents who perceive a "much more" competitive fully online program market compared to five years ago also indicated plans to launch more online programs in the next one to three years. The 10 institutions that reported competitive stability cited plans for only modest increase in online program volume.

An important strategic question for institutions is whether the best route to online student growth is an ever-larger online program portfolio, or whether institutions should pay closer attention to their online student experience and differentiation in a crowded market. Too many under-performing online programs may slow growth and endanger financial viability.







ORGANIZATION AND MANAGEMENT OF ONLINE PROGRAMS

This section of the report explores chief online officers' perspectives on the management of online programs, the sources and distribution of revenue, the process for online course development, compensation, and ownership, and the engagement of external online program management (OPM) companies.

Table 1 summarizes the prevailing management structure for online programs reported by chief online officers. Because the respondents could choose more than one management structure, the percentage totals are skewed. Nevertheless, the results for public institutions show a distinct tendency toward distributed management and budgeting through the academic units offering online programs in their discipline. In contrast, more than half of the chief online officers in private institutions indicated management and budgeting through a central unit—either an online "campus" or their continuing education unit. Responses in the "Other" category specified the various ways management was split between academic units and campus-level administrative units.

Table 1. How Online Programs are Managed and Budgeted*

Management of Online Programs	Public 2Y	Public 4Y	Private 4Y
Distributed Among Academic Units	69%	71%	44%
Controlled by an Online "Campus" Unit	14%	21%	37%
Controlled by Continuing Education	3%	14%	24%
Fully Online Institution	3%	0%	0%
Other	14%	18%	12%

^{*} Multiple responses were permitted.

With all sectors combined in Figure 7, it is evident that, while distributed management is more prevalent (47%), a substantial number of institutions (24%) favor more centralized management. Since blended management (29%) includes both centralized and decentralized elements, more than half of reporting institutions incorporate elements of both.

Based on the comments offered by some chief online officers, the most common pattern may actually be a hybrid: control of curriculum distributed among the academic units, coupled with centralized management of infrastructure, marketing, and pricing. One such response stated, "online learning coordinates administrative functions of online learning including budgeting, marketing, recruiting, advising, and meeting regulations and accreditation requirements, but departments manage instruction, program development, and faculty."

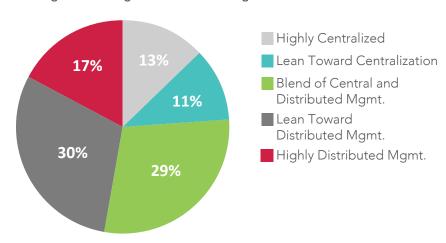






The most common management pattern may be distributing control of curriculum across the academic units and centralized management of infrastructure, marketing, and pricing.

Figure 7. Management of Online Programs - All Sectors Combined



This practice may show the practical limits of chief online officers' authority in most institutions. Future *CHLOE Surveys* will separate program management into the academic and the business components to further refine our understanding of control of online programs.

Figure 8 compares responses regarding centralized vs. distributed management in the various sectors to the responses of larger online programs in all sectors. The differences were striking. Forty percent of the larger programs in the sample reported a high degree of centralized management with another 20% leaning toward centralization. This contrast between the larger programs and all others leads us to single out enterprise level—larger and more centralized—online programs sharing a number of other characteristics typical of large enterprises.

Budgeting of Online Programs

Chief online officers were asked whether online programs were considered a net cost to their institutions or a generator of net revenue. Figure 9 shows that the majority of four-year institutions, both public and private, view online programs as a source of net revenue. A substantially greater percentage of private institutions report taking this position, whereas community colleges are more likely to see it as a necessary cost to fulfill their mission.

The larger online programs in our sample were even more emphatic. Figure 10 shows that fully 80% of larger programs view online programs as revenue generators.

It makes sense that leaders of larger online programs consistently regard them as revenue generators. This is likely a reflection of their success in elevating online education to an enterprise level with substantial enrollments and a positive revenue stream through careful planning, investment, and effort. Even in smaller programs, at least 45% of chief online officers also viewed online programs as revenue generators.







Figure 8. Centralized vs. Distributed Management by Sector and Size

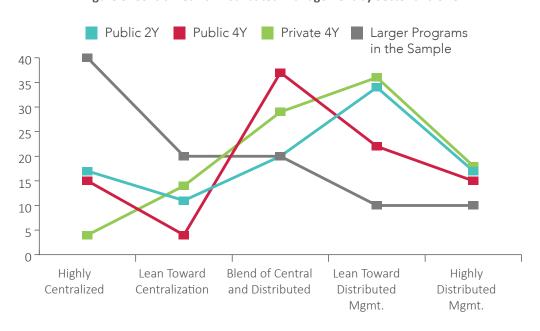
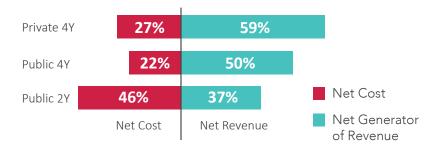


Figure 9. Online Programs: Revenue Generators or Net Cost to Institution



Remaining institutions indicated a self-support principle or variable results by unit.





of Revenue



 >2,500
 80%

 500- 2,499
 36%
 46%

 <500</th>
 40%
 45%
 Net Cost

 Net Cost
 Net Revenue
 Net Generator

Figure 10. Online Programs: Revenue Generators or Net Cost by Program Size

Remaining institutions indicated a self-support principle or variable results by unit.

A recently published WCET (Western Interstate Commission for Higher Education Cooperative for Educational Technologies) study, The <u>WCET Price and Cost Report</u>, February 2017, reports near unanimity among 197 administrators that the cost of delivering online programs is substantially greater than the cost of campus-based programs, justifying differential tuition and fee levels.

How do we interpret the CHLOE data in Figure 9 in light of the WCET conclusions? Costs and offsetting revenue can be defined in many different ways, as illustrated in the debate prompted by the recent WCET report, leading to widely divergent estimates of the true cost of launching and supporting online programs.

Regardless of an institution's interpretation of online program costs, revenues can be adjusted through differential tuition and fees designed to recover assumed costs and produce a positive bottom line. We can assume that institutions reporting online programs as revenue generators manage to recoup the perceived additional costs of delivering online programs through tuition and fee structure.

The practice of adjusting tuition and fees to cover or exceed assumed costs may account for much of the variation in tuition and fee policy reported by chief online officers in Figure 11 and Table 2. The majority of respondents reported that online students were paying standard tuition rates. Higher tuition rates ranged from 12% of private institutions to 29% of four-year public institutions, and lower than standard tuition rates ranged from 3% of community colleges to 37% of private institutions. None of the larger online programs report tuition rates for online students that are lower than standard tuition rates, and 20% report higher tuition rates for online study.

Table 2 indicates that most public institutions rely on special fees levied on their online students to cover some of the technology and other costs directly associated with online education. This reliance may reflect legislative and other constraints that do not exist in private institutions in setting tuition levels.

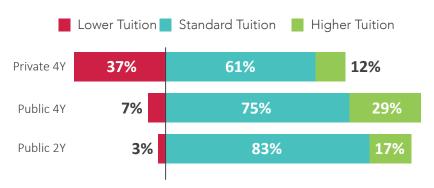






Some higher cost private institutions are engaging in competitive pricing strategies to access the common market for online students by charging lower online tuition

Figure 11. Tuition Rates for Online Students



In contrast, 20% of private nonprofits report that online students pay no additional fees. This tendency, combined with a significant percentage of private nonprofits that charge online students lower than standard tuition, suggests that some higher cost private institutions are engaging in competitive pricing strategies to access the market for online students. These institutions still manage to generate a revenue surplus.

Larger online programs in our sample seem to rely more heavily on unique online student fees to generate revenue dedicated to support online education. These fees include credit hour fees, course fees, and proctoring fees. Sixty percent report using such fees compared to 21% of mid-sized programs and 33% of small programs.

Table 2. Fees for Online Students

Fees for Online Students*	Public 2Y	Public 4Y	Private 4Y	Larger Programs
Technology Fee Paid by All Students	63%	54%	46%	40%
Technology Fees Paid Only by Online Students	14%	43%	24%	10%
No Technology or Other Fees for Online Students	0%	0%	22%	10%
Online Course or Credit Hour Fee	20%	7%	0%	30%
Other Fees Paid by Online Students – Distance Ed Fee, Proctoring Fee, Varies by Unit	17%	14%	7%	60%

* Multiple responses were permitted







Future *CHLOE Surveys* will attempt to identify particular institutional pricing strategies to succeed in today's online education market.

CHLOE asked how institutions distribute the revenue generated by online programs. In Figure 12 the first two answer choices—dedicated to online support and split between online support & academic units—suggest that resources generated by online programs are being used exclusively to support online education costs. But the modest combined percentages of these two responses by sector—9% in two-year institutions, 29% in four-year publics, and 9% in four-year privates—indicate that while this is more likely to be the case in four-year public institutions, this is not the prevailing pattern overall.

The remaining three answer choices involve the distribution of some or all online program revenue to meet general institutional needs. This reflects practice in more than 90% of two-year institutions and four-year, private nonprofits, and in more than 70% in four-year, public institutions.

This pattern is indicative of online education becoming more mainstream, i.e., an expectation that online revenues will contribute to institutional costs. We believe this is partly because the line between online students and other students is blurring.

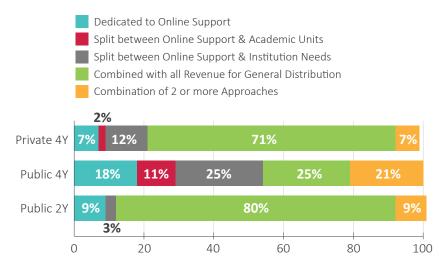


Figure 12. Distribution of Revenue from Online Programs

Turning to the effect of online program size on distribution of revenue, Figure 13 shows little difference between smaller and larger programs. Eighty percent or more report revenue distributed to meet institutional needs or a blend between institutional and online program needs. In the smallest programs, 90% of reporting institutions follow this pattern.







Few institutions explicitly identify institutional cost reduction as a priority in their strategic plans. This issue deserves greater attention in light of the potential for greater technical efficiencies, economies of scale, etc.

Figure 13. Distribution of Online Program Revenues by Program Size





Future *CHLOE Surveys* will attempt to understand the dynamics of revenue and investment in institutions of varying size and in the different sectors of higher education.

CHLOE asked which priorities for resource allocation affecting online programs are specifically referenced in respondents' institutional strategic plans. Here, chief online officers could choose as many of these factors as are identified in their strategic plans. Table 3 shows that, apart from a greater willingness of private institutions to cite revenue generation in their strategic plans as compared to public institutions, the results are strikingly similar across all sectors. Enrollment growth is most likely to appear as a strategic goal, followed closely by student completion gains, and, further down, quality enhancement of online programs.

Few institutions, regardless of sector, explicitly identify institutional cost reduction in their strategic plans. We might question whether, in light of the potential for greater technical efficiencies, economies of scale, etc., this issue deserves greater attention. We did not ask whether reducing the costs of attendance for students is specifically noted in strategic plans, though growing open educational resources (OER) usage and various strategies to accelerate progress toward degrees and credentials clearly show this intention

When chief online officers were asked about the most decisive factor among these priorities in the competition for resources within their institutions, some significant differences emerged. The results put the strategic objectives in perspective vis-à-vis the harsh realities of resource allocation. In Figure 14, enrollment growth is twice as likely to be the decisive factor as any other factor. From a financial perspective, enrollment growth and revenue generation are complementary goals, since enrollment growth generally results in increased tuition revenue. Combining the results for these two factors, it appears that growth and revenue are the driving factors in four-year institutions, both public and private.







Table 3. Strategic Priorities Affecting Online Programs*

Strategic Priorities for Allocation of Institutional Resources	Public 2Y	Public 2Y	Private 4Y
Enrollment Growth	49%	61%	76%
Student Completion Gains	49%	50%	41%
Quality Enhancement of Online Programs	40%	25%	39%
Revenue Generation	14%	18%	54%
Cost Reduction	9%	7%	17%
None of these are noted in a strategic plan	17%	21%	12%

^{*}Multiple responses were permitted

While these factors weigh heavily in community colleges as well, several other factors—student completion gains and quality enhancement—match strategic objectives more closely and appear to play significant roles in the allocation of resources. This may reflect their concern about many students that leave their institutions without an earned credential. Four-year institutions would be wise to pay greater attention to strategies that increase student completion.

Figure 14. Most Decisive Factor in Allocation of Resources by Sector

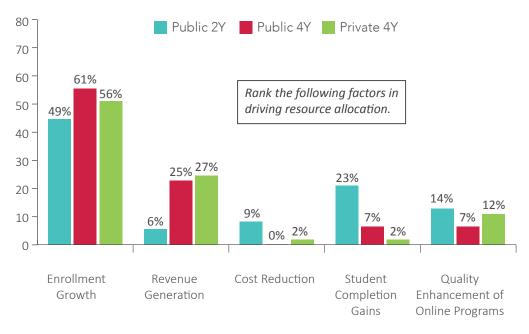








Figure 15 indicates that 20% of larger programs share a higher level of concern about student completion with the community college sector. It is also worthy of note that the larger online programs may not be as singularly focused on enrollment growth as small and medium-sized programs. These responses suggest that institutions with larger online programs, may be more inclined to devote resources to quality enhancements and student completion gains to take their enrollments to the next level. This may be yet another characteristic of enterprise level online programs.

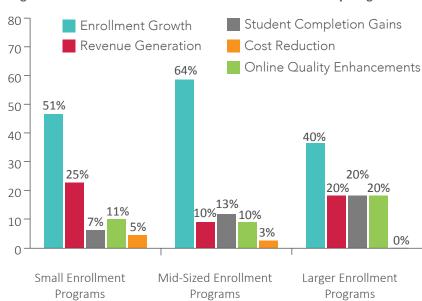


Figure 15. Most Decisive Factor in Allocation of Resources by Program Size

Course and Program Development and Related Faculty and OPM Issues

CHLOE asked chief online officers to identify the primary online course development model in use at their institution. Figure 16 plots their responses by online program size. Among larger programs, 40% require the use of instructional design support, another 30% use a team approach to online course design, and 10% outsource course design. This contrasts sharply with the practices of mid-sized and smaller programs. Fully 80% of the larger programs require the use of instructional design expertise in some form, which is likely to lead to greater consistency and quality of design and support institutional branding of online programs. This pattern is understandable in enterprise level and aspiring enterprise level online operations.

Of the smallest programs we surveyed, 18% expect faculty to develop online courses independently and 53% treat instructional design support as a faculty option. Together, this means that a combined 71% of these smaller programs do not mandate the use of instructional







design specialists. Similarly, in 13% of mid-sized programs, faculty are expected to develop courses independently, and in 64% of programs, they are free to choose whether or not to involve instructional design specialists, yielding a combined 77% of programs that do not require the use of instructional design expertise. Online courses at these institutions will inevitably sacrifice consistency for greater variation in the design and quality of their online courses.

Private institutions are far more likely to require the use of instructional design support for online course development, while public institutions are more likely to adopt a laissez faire approach.

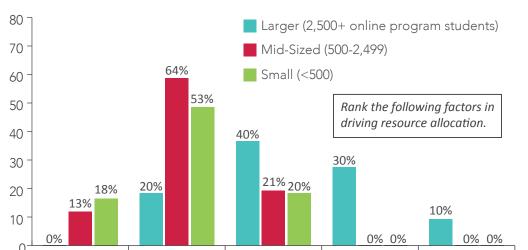


Figure 16. Online Course Development Practices by Program Size

Figure 17 indicates that private institutions are far more likely to require the use of instructional design support for online course development. Public institutions are more likely to adopt a laissez faire approach, which may lead to inconsistency of course design and greater variability in course quality.

Faculty with

Required

Design Support

Faculty

Participating

in Design Teams

Course Design

Outsourced

Future *CHLOE Surveys* will seek to identify trends and best practices in this critical component of online course quality and success.





Faculty Working

Independently

Faculty with

Optional

Design Support



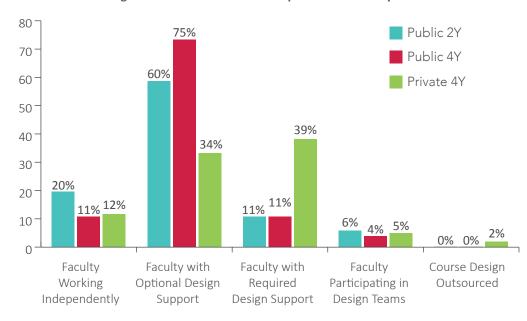


Figure 17. Online Course Development Practices by Sector

Table 4 indicates that, on average, less than a quarter of the institutions in our sample outsource online course design. These responses suggest that outsourcing may have been more common in an earlier stage of program development. While chief online officer comments point to its continued use as a supplement to internal resources, institutions of all types seem to be developing most online courses internally.

Internal vs. External Online Course Development	Public 2Y	Public 4Y	Private 4Y
We built all online courses entirely in-house	60%	71%	78%
Many of our online courses were custom built working with third parties	3%	0%	0%
Some of our online courses were custom built working with third parties	14%	25%	17%
Many of our online courses were purchased off the shelf from third parties	0%	0%	2%
Some of our online courses were purchased off the shelf from third parties	11%	7%	0%
Other – rare use of external, use course packs, etc.	11%	4%	2%

Table 4. Internal vs. External Online Course Development*





^{*}More than one response was possible



Is course design an area where OPM companies are inevitably losing a market as institutional resources mature, or is there an opportunity for growth in this service as online courses become more technically and pedagogically sophisticated?

CHLOE explored this issue further by asking whether chief online officers whether their institutions have or have had contractual relationships with OPM companies in any capacity. Table 5 indicates almost no such partnerships in community colleges, and only 4-5% of four-year institutions with current partnerships.

Table 5. Partnerships with Online Program Management Companies

Frequency of Online Program Management (OPM) Usage*	Public 2Y	Public 4Y	Private 4Y
Current partnerships with one or more OPMs for all online programs	0%	4%	5%
Current partnerships with one or more OPMs for some online programs	3%	7%	7%
Partnership with an OPM is under consideration	0%	7%	7%
Prior OPM partnership has expired	0%	11%	12%
Not currently engaged with an OPM and no plans to do so	97%	71%	68%

^{*} Only one response was permitted.

Only one of the larger online programs responding to the *CHLOE Survey* indicated a current OPM engagement, two indicated a prior OPM partnership, and the rest asserted that they have never worked with an OPM. Is the 7% of four-year schools contemplating an OPM partnership in the future a hopeful sign for these organizations, or so low as to question their long-term viability?

A follow-up question asked nine chief online officers who had indicated a current engagement with one or more OPMs to list the services their OPM partners are providing. Figure 18 indicates that the most frequently named services are marketing, enrollment management, and learning management system (LMS) support, followed in private nonprofits by technical support, and by course design across all sectors. Student support and retention efforts are also significant OPM services in four-year institutions.







Public 2Y Public 4Y Private 4Y Technical Support Student Support/ Retention Marketing LMS Hosting/ Support Enrollment Management Course Design Compliance/ Regulation 2 3 5 6 1 Number of Institutions Reporting Use

Figure 18. OPM Services in Use

Future *CHLOE Surveys* will explore the factors that limit the use of OPM companies by the great majority of online programs. Eduventures has published in-depth studies on the OPM market in recent years, and is working on an update.

Figure 19 displays the dominant patterns of online course ownership by institutional sector. Multiple responses to this question were permitted, leading to totals above 100%, which makes it more challenging to identify the prevailing patterns of online course ownership. There is, however, a greater tendency toward institutional ownership at private institutions, and, when considered by program size by larger programs (see Figure 20). This approach makes sense as a policy in enterprise level online programs.







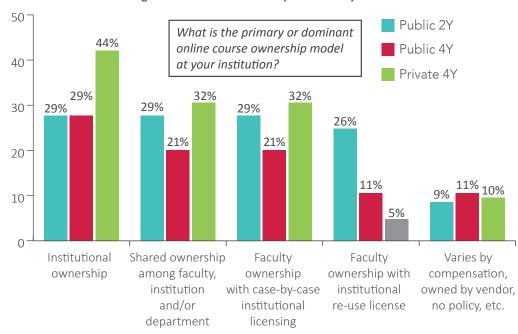


Figure 19. Course Ownership Patterns by Sector

Another question explored the issue of how faculty are compensated for online course development. Figure 21 shows that a high proportion of private institutions compensate faculty for online course development. This approach may be related to the higher frequency with which private institutions assert ownership of online courses. Two-year, public institutions are more likely than the other sectors to consider online course development a standard faculty responsibility.



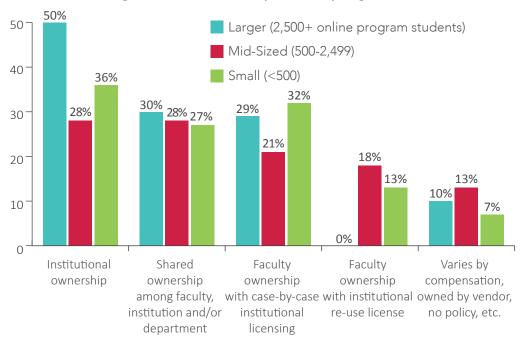


^{*} One private institution indicated departmental ownership of online courses.



The tendency toward institutional ownership of online courses is greatest in private institutions and larger online operations in all sectors

Figure 20. Course Ownership Patterns by Program Size



The CHLOE Survey also explored compensation practices. The highest proportion of chief online officers indicating a mix of approaches to compensation is indicative of a lack of consistent overall policy in this area. This appears to be the case in the majority of four-year, public institutions—arguably part of a pattern of wider variability within these institutions and in this sector of higher education as a whole. Is the four-year, public institutions' relative lack of consistent policy toward online programs a strength or a vulnerability?

When considering online program size, Figure 22 shows that faculty stipends are substantially more common in larger online programs than in small- and mid-sized programs. 100% of the larger programs report faculty compensation for developing online courses, whereas nearly 30% of smaller programs do not offer faculty any special compensation. This difference may be related to the enterprise model in larger online programs, which depends upon greater control of online courses, curriculum development, and scalable course availability. Institutions that see themselves in an enterprise mode seem more willing to compensate faculty development efforts in order to strengthen claims.







Figure 21. Faculty Compensation for Online Course Development by Sector

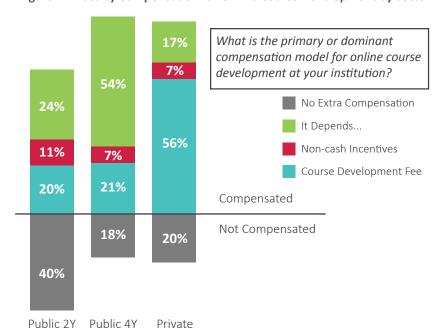
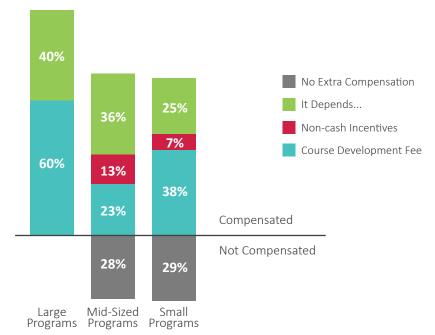


Figure 22. Faculty Compensation for Online Course Development by Program Size









TEACHING, LEARNING, AND TECHNOLOGY

The CHLOE Survey explored how "online learning" technologies and approaches to teaching and learning are evolving. Online learning is characterized by both a stable core of technologies (e.g., conventional learning management systems) and pedagogical approaches (e.g., threaded discussions) used by the majority of institutions, and by a swirl of innovations that aspire to enhance the status quo.

One reason online learning has thrived in higher education is the ubiquity and relative simplicity of core technologies, as well as the scope for individual faculty to craft a version of online learning that suits their subject and preferences. Most institutions adhere to some external model of online learning quality assurance and provide faculty with appropriate guidance and assessment, but it is far less common for a college or university to require faculty to use only specific tools and teach only in specific ways.

Chief online officers must respect traditions of faculty autonomy and bottom-up innovation, cut through the noise of competing claims about new technologies and techniques, and clarify and pursue online learning good practice. This is a tricky balancing act. The *CHLOE Survey* asked chief online officers to assess online learning at their institutions based on a number of scales, and to address the question of stability versus innovation.

The vast majority of respondents (see Figure 23) characterized their online programs as predominantly, and often exclusively, asynchronous. Threaded discussions remain the standard method for students to communicate with each other and the instructor. A correlation between scale of online program enrollment and use of asynchronous delivery is clear. An average of 95% of online programs at respondents with more than 2,500 online program students are wholly asynchronous, compared to only 62% among respondents with fewer than 500 online program students.

Small- and mid-sized institutions are more likely to employ "majority asynchronous" and "balanced" approaches. Very few online programs, regardless of scale, were cited as wholly or majority synchronous. The scheduling commitments inherent to programs with significant synchronous components may be seen to undermine the convenience and flexibility of online programming. On the other hand, some schools with smaller online operations may view some use of synchronous delivery as a way to align online programs with campus norms, and, in the eyes of some, to offer a higher quality learning experience.

CHLOE respondents were less definitive when it comes to the role of non-virtual, face-to-face sessions in online programs. About a third said face-to-face sessions played no role, but the rest cited occasional required (18%) or voluntary (16%) face-to-face sessions as part of the mix. Thirty-five percent said there is wide variation by program. None of the larger online programs noted required face-to-face sessions, but some said such opportunities are voluntary. Smaller operations are much more likely to mention wide variation by program, suggesting pockets of online programming led by faculty and departmental enthusiasts rather than an enterprise level, institution-wide effort with program volume and enrollment scale.







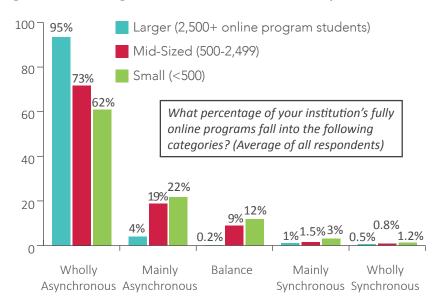


Figure 23. Online Program Enrollment at Scale Demands Asynchronous Delivery

Respondents were asked, over the past few years, whether teaching, learning, and assessment technologies have experienced major, supplementary, or few changes. About 20% reported few changes, and about a fifth of this group traced online programming back more than a decade. Online operations characterized by supplementary changes were more common (43%) than those with major changes (36%). Schools with larger enrollment in online programs (>2,500 students) were the exception, and were most likely to cite major changes in recent years.

When asked to name the "three technologies or tools you consider most important or innovative for your institution's fully online programs," 81% first mentioned an LMS. Blackboard and Canvas were most visible, as well as Moodle, Brightspace, and Sakai. Audio and video conferencing came in a distant second, and lecture capture, authoring tools, video platforms, and online proctoring were noted by one or two institutions.

For their second and third named technology or tool, conferencing (e.g., Adobe Connect, WebEx, Zoom, and LMS-related tools), video (e.g., Kaltura, Panopto), and lecture capture software (e.g., Camtasia, Echo 360) were prominent. Remote proctoring tools and anti-plagiarism tools were also visible.

These findings serve as a reminder that the mainstream LMS remains at the center of online programming. This is consistent with the prior results suggesting the relative stability of online models and operations at respondent institutions. There was no sign of much-hyped innovations like adaptive learning, competency-based education LMS solutions, or simulation or game-based learning tools. Such tools may be in use for specific courses or programs but based on responses to CHLOE, these have yet to achieve institution-wide adoption at any scale. Larger and more







enduring online operations were just as likely to prioritize standard online tools, suggesting both the perceived effectiveness of conventional arrangements and the challenges of change management.

Alongside dependence on a few mature technologies, many respondents also point to widespread variation in tools and technologies used across courses and departments (see Figure 24).

Larger (2,500+ online program students) Mid-Sized (500-2,499) For your institution's fully online programs, in terms of teaching, learning and assessment Small (<500) technologies and tools, how diverse are arrangements by program or department? 50% 47% 44% 41% 30% 29% 24% 20% 15% Little Variation Some Variation Widespread Variation

Figure 24. The Search for Balance: Consistency vs. Variation

Variation between online programs is much more evident than standardization. This is particularly true for institutions with a mid-sized online student headcount (500-2,499). At these institutions, online programming has evolved beyond early experiments but has not yet coalesced into a coherent, institution-wide strategy. At smaller operations, modest adoption may limit variation, while at larger players greater consistency may have aided scale.

Figure 24 also cautions that central adoption of particular tools or technologies, suggesting commonality, may mask divergent local practice. The extent to which variation is a matter of resources, discipline-specific needs, faculty preference and habit, or legacy installations, is something for future *CHLOE Surveys* to explore.

Figure 25 allows us to explore the consistency versus variation issue from the perspective of institution type. The data suggests that two-year institutions are most likely to allow widespread variation in online teaching and learning approaches (49%), whereas private institutions are least likely to do so (17%).

These findings may be consistent with the fact that online learning may be most integral at two-year institutions, spanning a greater proportion of faculty, and most distinctive and separate at private, four-year institutions.

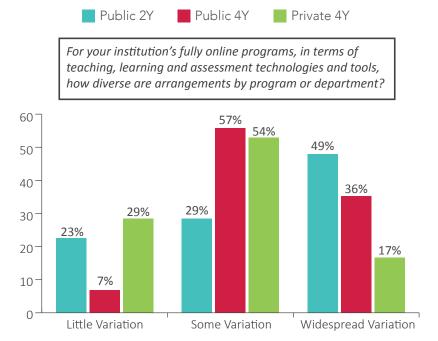






When asked about anticipated technology changes in connection with online programming at their institution, most respondents anticipate incremental development.

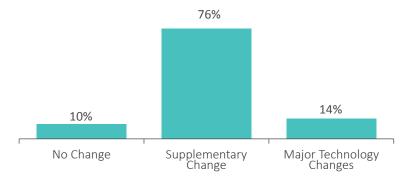
Figure 25. The Search for Balance - Consistency vs. Variation by Sector



When asked about anticipated changes in technology, most respondents anticipate incremental development (see Figure 26).

Figure 26. Change is coming?

Over the next few years, what level of teaching, learning and assessment technology change do you anticipate for your institution's fully online programs?









Eighty-one percent (81%) of respondents, when asked to name the "three technologies or tools you consider most important or innovative for your institution's fully online programs," first mentioned a learning management system.

Despite the range of new technologies in and around online higher education, CHLOE respondents tend to anticipate only supplementary change in the coming years. From this perspective, the LMS foundation for the contemporary model looks secure. Bigger and older online operations are somewhat more likely to forecast major technology change but a large majority is more circumspect in its predictions. Responses to this question may speak to challenges of picking winners among novel tech products, as well as the slow and complex reality of institutional change.

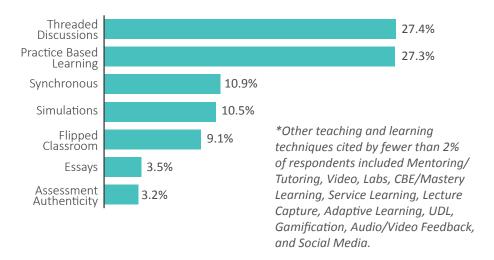
The CHLOE Survey also asked about common teaching, learning, and assessment techniques used in online programs (see Figure 27). Figure 28 suggests both commonality and diversity in online teaching, learning, and assessment techniques. Threaded discussions emerged as the most commonly-cited technique, consistent with the dominance of asynchronous, LMS-based online learning, but only accounted for 20% of techniques cited.

Other common techniques reported by CHLOE respondents, and shown in Figure 28, emphasize live interaction and forms of practice and case study. Reference to "flipped classrooms" might imply blended rather than fully online courses, but could be employed with a combined synchronous and asynchronous online model.

Figure 28 emphasizes both the convenience of conventional asynchronous online study and ways to add live interaction and practice-based learning. Some categories in Figure 27, such as problem-based learning (PBL) and practice-based/experiential learning, may overlap at many institutions.

Figure 27. How to teach and learn online?*

Name the three teaching and learning techniques you consider most important or innovative among your institution's fully online programs.









Some respondents made general references to things like "group work," "authentic assessment," "learner-centered teaching," and "interaction," making it hard to understand the specifics of the activities involved. Additionally, novelties and well-publicized techniques such as online labs, competency-based education (CBE), adaptive learning, and gamification each constituted less than 1% of techniques reported. There were no patterns by size or age of online operations.

Eighty-eight percent of respondents pointed to "some" (45%) or "significant" (43%) diversity in online teaching, learning, and assessment approaches at their institutions, with similar ratios by institutional type, experience, or scale. Private, four-year institutions cited the least diversity, which may reflect widespread organization of online learning in a dedicated unit rather than spread across the institution.

Finally, respondents were asked to look ahead and name some tools or techniques they plan to or would like to adopt. CHLOE respondents named over 40 technology and techniquetypes, about twice as many as listed under "most important" current tools. At the same time, respondents made about 50% fewer individual selections for new tools compared to current ones (186 for new tools versus 285 for current). This emphasizes the diversity of the "new" list and the fact that many respondents named only one or two tools.

Figure 28 lays out the most commonly cited new tools and techniques. All others accounted for less than 2% of individual tools and techniques reported.

From the array of tools, technologies and techniques available in today's market that might be applied to fully online programs, name up to three you would most like to explore or adopt. 12.4% **Analytics** 9.1% Synchronous 8.6% Proctoring 7.0% Assessment 6.5% Simulations 6.5% Adaptive Learning 5.9% **CBE** 4.3% Gamification 3.2%

3.2%

Figure 28. So Many Choices





OER

Authentication



Chief Online Officers face a plethora of technology options, and a relative lack of direction in terms of fit and value. Schools with larger and long-established online operations did not present a distinct technology and technique horizon

Only "analytics" commanded more than 10% of responses, suggesting a desire to better understand the efficacy of current operations. Synchronous tools and models, as well as simulations, were also relatively prominent, consistent with a desire to round out the typical online program experience, in terms of both class communication and course content. Adaptive learning, combining enhanced courseware and analytics, ranked fifth. Assessment tools and techniques (including proctoring and authentication) were also visible, speaking to a desire to increase authenticity and security.

Figure 28 speaks to the plethora of options chief online officers have in front of them, and a relative lack of direction in terms of fit and value. Schools with larger and long-established online operations did not present a distinct technology and technique horizon.

QUALITY ASSURANCE AND OUTCOMES OF ONLINE PROGRAMS.

CHLOE asked what online learning quality assurance (QA) activities are currently in place, or are planned within the next year. In Figure 29 it is clear that quality standards for online faculty development, course design, and program design have been widely adopted across the different sectors of higher education. Nearly half the chief online officers who responded indicated that all their online programs have adopted quality standards, and most of the remaining officers indicated plans to create such standards. Only 4-5% reported no intention to adopt quality standards in these areas. Quality standards for student outcomes seem to be on the same development path, though not yet as widely adopted.

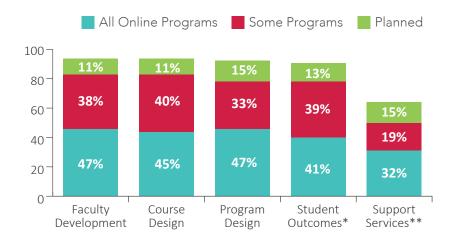


Figure 29. Quality Metrics Adopted and Applied Internally





^{*}No specific outcome metrics were identified in the question or the responses.

^{**}Specific support services were not identified in the question or the responses.



The adoption of quality standards for online support services stands out. More than one third of chief online officers have no plans to establish quality standards for these services. This contrast may reflect a lack of oversight or control by chief learning officers of support services, a lack of recognition of the critical contribution these services make to student and faculty success, or simply a lack of resources. Future *CHLOE Surveys* will explore chief online officers' views of the role of support services in greater depth.

These expectations for quality assurance are likely to increase, even as online education becomes mainstream. Online education remains subject to greater scrutiny and more rigorous quality standards than are typically applied to classroom-based education. There is also little doubt that systematic application of quality standards to online education has spurred continuous quality improvement. More in-depth coverage of quality assurance in future *CHLOE Surveys* will seek to identify the sources and substance of quality standards being adopted in each of these five areas.

Figure 30 points to the prevalence of training in these quality standards in proportion to their adoption. When quality standards have been adopted, training for faculty and staff goes hand in hand. We see support services lagging behind the other areas for a variety of reasons that need to be explored in greater depth in future *CHLOE Surveys*.

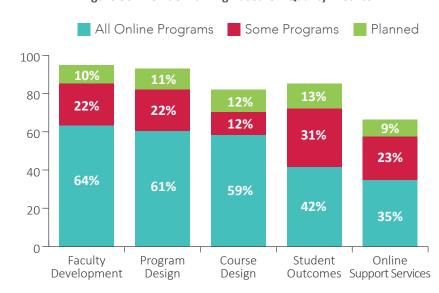


Figure 30. Provide Training Based On Quality Metrics

The application of external validation of quality standards is a major step for online programs, indicating not only their aspirations to be recognized for their quality assurance efforts, but a high degree of confidence in the efficacy of those efforts. CHLOE asked chief online officers separately







about QM certification of quality in each area and other external certifications obtained or sought by online programs. Since many of the respondents affirmed the use of both, we have calculated the combined unduplicated percentages in Figure 31. More than one third of QM members have already taken this step. Half of responding four-year, public programs indicate that they currently engage in seeking external certifications of quality compared to 57% of two-year publics that are doing so. Those not seeking external validation report no intention of doing so in the immediate future. The figure is only 27% for private nonprofits, but an additional 17% report plans to seek external certification in the current year.

Currently Using Planned in 2017 Not Doing Private 4Y 27% 17% Public 4Y 50% Public 2Y 57% 0 20 60 40 80 100

Figure 31. Online Programs Seeking External Certification – All Sources

Future *CHLOE Surveys* may explore further the range of organizations from which online programs seek validation of their quality, and, given the large percentages of programs not seeking external certification, what value chief online officers do or do not see in this activity.

Results of the final quality assurance aspect queried by CHLOE, the use of external consultants to develop and/or apply quality standards, are reflected in Figure 32. Depending on the QA area in question, only 14-24% of chief online officers currently use or plan to use external consultants to develop or implement quality standards for their online programs in the near future.

These percentages represent a significant market for consultants. Future *CHLOE Surveys* may explore the reasons why a higher percentage of chief online officers does not currently engage or plan to engage external consultants to enhance quality assurance, e.g., cost, skepticism about effectiveness, reliance on institutional personnel to provide such services, etc.







All Online Programs Some Programs Planned 25-20 15-15% 10-11% 10% 8% 5% 5 4% 4% 0 Faculty Program Course Student Online Development Design Outcomes Support Services Design

Figure 32. Use Consultants to Develop and/or Achieve Quality Metrics

Quality Metrics for Online Learning

Respondents were provided a list of 14* possible quality metrics for online programs:

- Cost of attendance
- Employer feedback
- Expenditures per student
- External rankings
- Faculty credentials
- Faculty training
- Graduate earnings
- Loan repayment statistics
- Post-graduation placement/employment in related fields
- Program reputation
- Student achievement of program objectives
- Student debt burden
- Student performance on standardized tests
- Student retention and graduation rates

*Four respondents suggested that results of student evaluations be added to the list of quality metrics. Future CHLOE Surveys will include this metric.







The CHLOE Survey asked chief online officers to select the quality metrics in use to evaluate online programs. They were asked separately to identify (see Table 6):

- 1) the metrics in use internally
- 2) the metrics most important to accreditors and regulators
- 3) their preferred metrics for the future

Several metrics in these tables were not defined clearly enough to ensure that all respondents were addressing the same issues. For example, it is unclear which activities chief online officers believe their online programs are using to measure the extent of student engagement, (e.g., end-of-term student surveys, and frequency of activity on discussion boards, or some other means). Future *CHLOE Surveys* will define quality metrics more explicitly.

Table 6. Quality Metrics Most Frequently Included Among the Top Five

Current Program Metrics	Current Metrics of Accreditors & Regulators	Chief Online Officers' Preferred Metrics
Student achievement of program objectives – 83%	Student achievement of program objectives – 87%	Student achievement of program objectives – 87.5%
Student retention & graduation rates – 77%	Student retention & graduation rates – 73%	Student retention & graduation rates – 86%
Program reputation – 48%	Faculty credentials – 70%	Program reputation – 62.5%
Faculty training – 47%	Faculty training – 47%	Faculty Training – 52%
Student engagement measures – 41%	Student engagement measures – 33%	Student engagement measures*
Faculty credentials – 38%	Post-graduation placement/ employment – 33%	Post-graduation placement/ employment – 50%
Post-graduation placement/ employment – 26%		Employer Feedback – 34%
		Faculty credentials – 31%
No other metric was preferred by more than 14% of chief online officers	No other metric was identified by more than 16% of chief online officers	No other metric was identified by more than 18% of chief online officers

^{*&}quot;Student engagement measures" was inadvertently omitted from our list of choices for preferred metrics. Based on its high ranking in current metrics and accreditors/regulators metrics, it would likely have ranked high among preferred metrics as well.







They were also asked to indicate the relative priority assigned to these metrics by accreditors and regulators, and to express their preferences for which metrics should count the most in the future. Table 6 summarizes the results of these three related questions. There was little variation in the most commonly used metrics between these three lists.

The correspondence between the first and second column is not surprising. Institutions understandably strive to meet the expectations of accreditors and regulators. More unexpected, however is that the chief online officers' wish list, i.e., their preferred metrics, differs very little from the first two lists. The only additional metric cited frequently enough to be included in the top group is employer feedback.

The metrics favored in all three lists reflect a balance between input metrics (Program Reputation, Faculty Training and Credentials) and outcome metrics (Student Retention, Achievement, and Post-Graduation Employment).

A follow-up question focused on whether online programs are collecting and analyzing sufficient data on each of the 14 quality metrics listed above. The red percentages in Table 7 indicate metrics for which fewer than 50% of chief online officers believe they have complete or adequate data.

Table 7. Access to Complete or Adequate Data on Quality Metrics

Does your institution have adequate data to demonstrate performance on each of the possible quality indicators for online programs listed below?	Public 2Y	Public 4Y	Private 4Y
Faculty Credentials	88%	92%	87%
Cost of Attendance	82%	82%	76%
Retention/Graduation Rates	86%	72%	85%
Faculty Training	77%	79%	81%
Expenditures Per Student	71%	67%	61%
Student Achievement of Program Objectives	60%	61%	73%
Loan Repayment Statistics	57%	57%	66%
Program Reputation	29%	43%	61%
External Rankings	20%	43%	71%
Standardized Test Performance	34%	46%	59%
Student Engagement	31%	39%	63%
Student Debt	46%	50%	63%
Post-Graduation Employment	37%	39%	54%
Graduate Earnings	34%	32%	46%
Employer Feedback	40%	25%	34%
External Certifications	51%	39%	49%
Alumni Feedback	26%	43%	49%







A comparison of the rankings of quality metrics favored by chief online officers and their institutions with the lack of available information suggests that many online programs (and their institutions) are not ready to provide accountability on a number of outcomes metrics. If pressure from the Department of Education, regional accreditors, major foundations, and the general public to report meaningful student outcomes continues to grow, there may be trouble ahead for institutions that have neither paid sufficient attention to these measures nor have developed either rationales to defend their performance. Future *CHLOE Surveys* will continue to focus on this issue to better understand how institutions are positioning themselves for the possibility of greater outcomes accountability.

FUTURE TOPICS: CHLOE IN THE YEARS AHEAD

Our long-term objectives for CHLOE are:

- 1) to serve as a reliable picture of current practices and emerging trends
- 2) to gradually identify a range of successful models for online program policy, structure, and management as a guide to institutions seeking to align their programs with particular sets of goals

To further these objectives, we anticipate that the scope of CHLOE 2018 will expand to include the for-profit sector and a representative sample of the largest online enrollment programs.

CHLOE 2018 and beyond will continue to cover the major topics addressed in CHLOE 2017, but will expand and refocus on issues where the 2017 responses raised new questions and demanded more in-depth exploration. Areas under consideration include:

Competitiveness:

- Quality vs. Quantity in Online Program Success. An important strategic question for
 institutions is whether the best route to online student growth is an ever-larger online
 program portfolio first and foremost, or whether institutions should pay at least as much
 attention to their online student experience and differentiation in a crowded market.
 CHLOE will attempt to track how some programs are developing and marketing a superior
 student experience and strong outcomes, and whether this drives market share.
- Online Program Pricing Strategies. Future CHLOE Surveys will attempt to identify
 institutional pricing strategies designed to succeed in today's competitive online
 education market.







Management Models:

- Management and Policy Flexibility/Variation. CHLOE will query the extent to which variation within institutions is a matter of resources, discipline-specific needs, faculty preference and habit, or legacy installations. Is tolerance or encouragement of multiple approaches and lack of consistent policy toward online education a strength or a vulnerability, e.g., within many four-year public institutions?
- **Control of Online Program Infrastructure vs. Curriculum.** CHLOE will look separately at the academic and business components of online program management to further refine our understanding of control.
- Revenue Allocation Models. CHLOE will more closely examine the dynamics of revenue allocation.

Program Development:

- Course Development Practices. CHLOE will track trends and best practices in providing faculty with instructional design support: a critical component of online course quality and success.
- **Course Development Practices.** CHLOE will study the effect of faculty collective bargaining on course development and quality assurance.
- **Consultant and OPM Usage.** CHLOE will study why the use of consultants and OPM organizations is limited among the most online programs.

Quality Assurance:

- Outcomes Measures and Accountability. CHLOE will continue to focus on the adoption of outcomes measures of quality by online programs to shed light on whether institutions are positioning themselves for the possibility of greater outcomes accountability.
- **Certification of Quality.** CHLOE will explore the range of organizations from which online programs are seeking certification and what value chief online officers see in attaining such external recognitions.

ACKNOWLEDGMENTS

The CHLOE team would like to thank the staff of Quality Matters and Eduventures for their support of this project, and all the chief online officers and other institutional staff who completed the survey and offered feedback.







Is the best route to online student growth an ever-larger online program portfolio, or should institutions pay at least as much attention to their online student experience and differentiation in a crowded market?

METHODOLOGY

The CHLOE Survey, a collaboration between Quality Matters and Eduventures to study online learning in U.S. higher education, was drafted over the first half of 2016, taking into account past and present surveys in this area. The target respondent was the chief online education officer, a catch-all term for the most senior person responsible for online learning at an institution. The title and position of this individual vary widely by institution, and, in some instances, the majority of online learning decision making is decentralized. Quality Matters and Eduventures contacts were used to identify a suitable survey recipient at over 1,000 colleges and universities.

The CHLOE Sample

In its first year, the *CHLOE Survey* received 104 usable responses from college and universities nationwide. The three main categories of respondent were public two-year, public four-year, and private, four-year schools. The number of for-profit respondents was too small for the purposes of analysis.

% of Total % of Total Institution **Number of** % of CHLOE Higher **Distance** Respondents **Education Type** Sample Enrollment* **Enrollment*** Public 2Y 34 33% 31% 25% Public 4Y 30 29% 42% 26% Private 4Y 40 38% 20% 23%

Table 8. The CHLOE Sample 2017

* IPEDS 2015 data

The CHLOE 2017 sample is a good match in terms of public two-year institutions, both for overall and distance enrollment. The distance enrollment ratio is close for public four-year schools while private four-year schools are over-represented in the sample. This is in line with the large number of institutions in this segment.

The CHLOE sample is representative by geography and range of online enrollment scale across institutions, as well as by institutional type. However, the largest programs, with online enrollments in the 10,000–100,000 range as reported in IPEDS, are not represented in CHLOE 2017, nor are the for-profit institutions. We hope to add these segments in the 2018 *CHLOE Survey*. In summary, the CHLOE 2017 sample is a reasonable proxy for the bulk of the nonprofit online learning market in the United States.







Job Titles and Report Lines of Chief Online Officers

Respondents to the *CHLOE Survey* indicate more than 25 distinct titles for chief online officer. Nearly 10% have titles reporting directly to the institutional president, but more than 72% are placed within the academic affairs administration of their college or university with titles such as dean or associate dean, director, assistant, or associate vice president for academic affairs or provost.

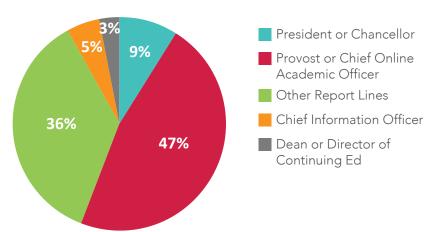


Figure 33. Chief Online Officer Report Lines

Table 9. Chief Online Officer Report Lines by Sector

Chief Online Officer Reports to:	Public 2Y	Public 4Y	Private 4Y	Overall Percentage
President or Chancellor	9%	7%	10%	9%
Provost or Chief Online Academic Officer	49%	36%	54%	47%
Other Report Lines*	40%	43%	27%	36%
Chief Information Officer	3%	7%	5%	5%
Dean or Director of Continuing Ed.	0%	4%	5%	3%
Chief Online Financial Officer	0%	0%	0%	0%

^{*} At least 26 of the 36 other report lines fall within academic affairs.

The presence of such titles reflects a shift away from the management of online learning under an institution's chief information officer, or chief financial officer, at an earlier stage of online program development. This shift is indicative of the trend toward mainstream status for online







education, subordinating the ongoing technical, structural, and funding challenges in delivering online learning to the academic priorities of the institution.

IPEDS Data on Distance Learning Scale and Growth-Context for CHLOE

Since Fall 2012, the federal government has required all colleges and universities that participate in federal student aid to report the number of "exclusive" distance education students they enroll, at the undergraduate and graduate levels. This data is made available as part of the IPEDS database.

IPEDS tracks "distance learning" enrollment, and does not distinguish particular delivery modes, but it is safe to say that online learning encompasses 95% or more of the total.

Tables 10 and 11 provide some context for a discussion of online enrollment, using this IPEDS data.

Table 10. Undergraduate "Exclusive" Distance Learning Student Headcount (Fall 2012-15)*

Institution Type	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Growth from 2012	Growth from 2014	% of All Undergraduates (Fall 2015)
Public 4Y	366,675	398,616	445,303	474,105	29%	6.4%	6.9%
Private Nonprofit 4Y	255,072	281,493	334,071	364,712	43%	9.2%	13.4%
For-Profit 4Y	682,415	621,096	605,291	536,398	-21%	-11.4%	60.1%
Public 2Y	657,117	662,821	690,151	717,537	9%	4%	11.4%
Private Nonprofit 2Y	798	822	814	1,204	51%	48%	2.4%
For-Profit 2Y	21,681	19,322	21,600	10,514	-52%	-51%	3.8%
TOTAL	1,983,758	1,984,170	2,097,230	2,104,470	6%	0.3%	12.3%

^{*} Source: IPEDS. "Exclusive" is used by the federal government to mean students who study entirely at a distance from the institution. "Exclusive" may include short and infrequent periods of time on an institutional campus.

A number of large, for-profit institutions became nonprofit during this period. For the sake of comparability, the CHLOE team continued to treat all such enrollment as for-profit. This has the effect of showing a somewhat less rapid decline in for-profit enrollments, and a smaller increase in private, nonprofit enrollments over this period of time.







Nevertheless, undergraduate level, nonprofit institutions have grown steadily over the period, while for-profits have suffered decline. This resulted in modest net growth of 6% from fall 2012 to fall 2015, and almost no growth between 2014 and 2015. Overall, fully distance undergraduates made up 12% of all undergraduates in fall 2015. Across all delivery modes, U.S. higher education enrollment has been slightly down post-recession. The fact that online enrollment has continued to grow means that the modality constitutes an ever-greater share of total enrollment. Excluding the small, private, two-year sector, the distance ratio ranged from a low of 6.9% for public, four-year schools to 60% among for-profit, four-year institutions.

At the graduate level, a somewhat different picture emerges in Table 10. Distance graduate enrollment has also climbed over the period, but much faster than at undergraduate level—20% from 2012 to 2015 compared to 6%. This may reflect the good match between online learning and graduate education, particularly at the master's level. Graduate students bring age and experience to what is often an unfamiliar delivery mode, and place particular value on the convenience of online study as they seek to balance work and family.

Table 11. Graduate "Exclusive" Distance Learning Student Headcount (Fall 2012-15)*

Institution Type	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Growth from 2012	Growth from 2014	% of All Graduates (Fall 2015)
Public 4Y	208,334	221,585	242,551	265,277	27%	9.4%	19%
Private Nonprofit 4Y	203,940	228,781	255,749	277,583	36%	8.5%	22%
For-Profit 4Y	226,864	226,714	226,871	226,008	-0.02%	-0.04%	82%
TOTAL	639,138	677,080	725,171	768,868	20%	6%	26%

^{*}Source: IPEDS. "Exclusive" is used by the federal government to mean students who study entirely at a distance from the institution. "Exclusive" may include short and infrequent periods of time on an institutional campus.

At the graduate level, for-profit universities are falling behind nonprofits but have held enrollment steady rather than having experienced significant decline. In 2015, the three institutional types enjoy roughly equal share of the online graduate market.

The *Digital Learning Compass* report from BSRG, WCET and eLiterate offers an overview of IPEDS distance education data.







ABOUT QUALITY MATTERS

Quality Matters is an international nonprofit organization comprised of a dedicated staff that works together virtually—from cities all over the United States—to support everyone's quality assurance goals. To achieve the mission of defining and maintaining quality assurance in online learning, we rely on our larger community of QM Coordinators, workshop facilitators, peer and master reviewers, program reviewers, conference presenters, and all the other individuals and groups who are champions for QM and help everyone deliver on the promise of online learning.

For more information, visit us at qualitymatters.org









ABOUT EDUVENTURES

Eduventures is the leading research and advisory firm focused exclusively on analyzing the forces transforming higher education. Building on twenty years of success in working with education leaders, Eduventures provides forward-looking, actionable research based on proprietary market data and advisory services that support both strategic and operational decision-making. Our recommendations and personalized support enable clients to understand the top traits of leaders in critical disciplines and to evaluate the opportunities presented by new technologies.

Eduventures is part of the NRCCUA family. More information can be found at eduventures.com and nrccua.org.











