

In the following report, Hanover Research explores trends in online higher education from a variety of key perspectives. First, this report examines the educational landscape for online content including a review of microcredentials and the broader competitive environment. Then, this report addresses labor market perceptions of degrees earned via distance education before briefly investigating policy considerations for offering online programs.



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## **EXECUTIVE SUMMARY AND KEY FINDINGS**

#### **INTRODUCTION**

After several years of reliable growth, online higher education programs are beginning to experience slowing enrollments, causing many online education providers to seek new ways to appeal to these students. In turn, "the definition of online higher education is becoming increasingly broad as new models incorporate more real-time instruction, turn coursework into competition, or rethink how student learning is assessed." However, even as higher education institutions pursue innovative online learning models, some experts continue to question the quality of distance education. Many cite, for example, the fact that student retention is approximately 8 percentage points lower in online courses than in face-to-face courses. Nonetheless, experts predict that online education enrollments will continue to be high in the coming years, and most academic leaders still "foresee online education as crucial for their institutional long-term strategy."

To this end, this report examines recent trends in online education from a variety of perspectives, including student and labor market demand as well as political and market-based implications. By broadly investigating the literature on distance education programs among colleges and universities, Hanover Research (Hanover) aims to inform higher education institutions' continued provision of online education services for students across award levels and demographic groups. The report is presented in three sections:

- Section I: Trends in the Educational Landscape for Online Delivery explores recent trends in online higher education, focusing on enrollment patterns, student preferences, and the emergence of microcredentials as key competitors in the online market.
- Section II: Labor Market Perceptions examines the changing opinions that employers have toward candidates with online credentials. This section also reviews the major skills gaps that many employers cite between desired competencies and those possessed by recent graduates.
- Section III: Political and Policy Changes and Implications for Online Education shows how policy has evolved in tandem with the increases in online enrollments, including ways that institutions must authorize and regulate distance education. This section also addresses potential implications of New York's recent Excelsior Scholarship program.

<sup>3</sup> Ibid.

<sup>&</sup>lt;sup>1</sup> Quillen, I. "Discover Emerging Trends in Online Higher Education." U.S. News & World Report, May 2015. https://www.usnews.com/education/online-education/articles/2015/05/04/discover-emerging-trends-in-online-higher-education

<sup>&</sup>lt;sup>2</sup> "Trends in Online Learning in Higher Education: How Online Learning Will Shape Higher Education." Center for Educational Innovation, University at Buffalo. p.8. https://www.buffalo.edu/content/dam/www/ubcei/publications-white-papers/CEI-White-Paper-Trends-of-Online-Learning-in-Higher-Education.pdf

#### **KEY FINDINGS**

- Most students who pursue online education *first* select what type of program they want, *then* look for specific institutions that match their preferences. This represents a departure from traditional students, many of whom may make selections based more heavily on institutional reputation than specific program. Thus, institutions that offer a comprehensive catalog of programs and courses have an advantage in the online market. Institutions can further market themselves by making key information (e.g., financial aid, program requirements, or contact information for real people) easily accessible on their websites.
- Microcredentials represent an emerging delivery format that allow students to quickly and inexpensively earn additional skills that can bolster their workforce opportunities. Often, these programs (e.g., Massive Open Online Courses, or MOOCs) are closely linked with key competencies espoused by industry leaders. Importantly, these offerings are increasingly provided by providers outside the traditional education sector, which are partnering with technology companies to design courses of study that make graduates more attractive job candidates for example, Coursera's recent partnership with Google and Instagram. Institutions that offer online programs or courses should look for ways to emulate these providers' success, such as creating microdegree pathways or developing local partnerships with top employers.
- The clear majority of online higher education students cite the labor market as their primary reason for pursuing online programs. For many, this includes a desire to start a career in a new field, a need to develop additional skills for their current job, or a need to acquire new skills to end their unemployment. As the labor market plays such a central role in online education, distance education providers should offer programs that directly connect with job outcomes, requirements, and competencies, and demonstrate the value of online programs in preparing students for career-readiness, earning potential, and publishing graduate outcomes such as job placement rates.
- Students in distance programs need institutional support in translating aspects of their coursework to employers that convey the value of their online education. Indeed, graduates from online programs need to be prepared to discuss the legitimacy of their program and connect it to broader skills such as teamwork, time management, critical thinking, and problem solving. Institutions that offer online programs should thus tailor career counseling services differently between traditional and distance students.
- Institutions that offer online programs are encouraged to partner with businesses to develop and promote programs that address essential labor market needs. These partnerships ensure that colleges and universities are designing programs that fill any major workplace gaps (in both hard and soft skills), and can help reduce the costs of marketing and outreach. Additionally, experts in online education assert that one of the best ways to pursue additional credentials is through students' current employers.

- There is a growing preference among online students to enroll in a program with a local campus near their homes. Despite taking most or all coursework online, more students appreciate the option of going to an area campus as needed. Further, the name recognition of local schools among local employers and peers increasingly encourages distance education learners to enroll locally. As such, experts recommend that institutions focus marketing efforts within a 100-mile radius.
- New York is highlighted as having a robust regulation and authorization process for online education providers and students. Because many online education providers are unregulated, and given the ambiguities surrounding state authorization for online students who reside in other states, New York adheres to a more stringent policy than many other states. In the state, all institutions that offer online courses must either join the State Authorization Reciprocity Agreement (SARA) or be individually reviewed and approved by state officials. This ensures that all institutions that enroll New York residents, regardless of where their physical campus is located, meet certain standards.
- New York's Excelsior Scholarship program, which aims to provide free tuition for New York residents to the state's public university systems, may be particularly detrimental for small private institutions. These institutions, based on an independent analysis by the Commission on Independent Colleges and Universities, are slated to see an enrollment drop of between 7 and 15 percent (equivalent to a revenue loss of \$1.4 billion). Experts urge all private institutions in the state to closely evaluate their strategies for the future considering this new policy. In the long run, there is some skepticism over whether the public New York university systems can handle the influx of additional students, and some predict that the state will be unwilling to subsidize the additional expenditures required to maintain the Excelsior Scholarship.

# SECTION I: TRENDS IN THE EDUCATIONAL LANDSCAPE FOR ONLINE DELIVERY

In this section, Hanover explores key trends and emerging practices in delivering online higher education. This section assesses broad student demand preferences, and discusses ways that institutions of higher education are responding to these preferences. It should be noted that this report refers to "online learning" as any form of content delivery that includes a large portion of online delivery – i.e., blended/hybrid programs as well as fully online (Figure 1.1).

Figure 1.1: Overview of Traditional Online Learning Models

PROPORTION OF CONTENT DELIVERED ONLINE	Type of Course	DESCRIPTION
0%	Traditional	Course where no online technology is used and content is delivered in writing or orally.
1% to 29%	Web Facilitated	Course that uses web-based technology to facilitate what is essentially a face-to-face course. May use a course management system (CMS) or web pages to post the syllabus and assignments.
30% to 79%	Blended/Hybrid	Course that blends online and face-to-face delivery.  Substantial proportion of the content is delivered online, typically uses online discussions, and typically has a reduced number of face-to-face meetings.
80% or More	Online	A course where most or all of the content is delivered online, and there are typically no face-to-face meetings.

Source: Babson Survey Research Group and Pearson<sup>4</sup>

#### STUDENT ENROLLMENT TRENDS

Across higher education in general, statistics show that the total number of students enrolled in postsecondary programs has every year for the past five years, as reported by the Babson Survey Research Group. This declining enrollment across delivery formats may be concerning, but experts find that these declines have not been unilateral. For example, graduate enrollments have grown since 2012, while undergraduate enrollments at four-year institutions have remained largely steady. The largest decreases in enrollment have occurred at two-year colleges. These findings indicate that student demand is shifting away from associate's-level credentials relative to the interest in other higher education programs.

However, student interest in online education continues to rise across award levels. In Fall 2015, more than 6 million students were enrolled in at least one distance education course –

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<sup>&</sup>lt;sup>4</sup> Adapted from: Allen, I.E. and J. Seaman. "Changing Course: Ten Years of Tracking Online Education in the United States." Babson Survey Research Group and Pearson, January 2013. p.7. https://www.onlinelearningsurvey.com/reports/changingcourse.pdf

<sup>&</sup>lt;sup>5</sup> Allen, I.E. and J. Seaman. "Digital Learning Compass: Distance Education Enrollment Report 2017." Babson Survey Research Group, May 2017. pp.8–9.

https://onlinelearningsurvey.com/reports/digtiallearningcompassenrollment2017.pdf

an increase of 3.9 from Fall 2014.<sup>6</sup> In 2012, data show that 12.6 percent of postsecondary students were enrolled exclusively in distance education programs or courses, and 13.3 percent were enrolled in a combination of distance education and traditional courses. By 2015, those proportions had risen to 14.3 percent and 15.4 percent, respectively (Figure 1.2). Despite this general growth, enrollment experts find that "distance education enrollments remain highly concentrated in a relatively small number of institutions. Almost half of the distance education students are concentrated in just 5 percent of the institutions."<sup>7</sup>

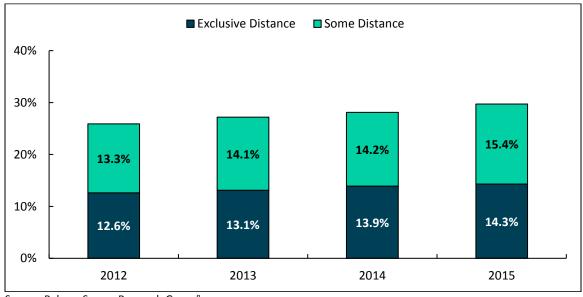


Figure 1.2: Percentage of Students Taking Distance Courses, 2012-2015

Source: Babson Survey Research Group<sup>8</sup>

According to the *U.S. News & World Report*, online higher education is slated to experience continued demand and innovation in the coming year. For example, the organization notes that more institutions are offering alternative credentials (e.g., digital badges and non-degree options) and more employers are accepting online degrees from job candidates, which speaks to the sustained demand for online options in higher education. Indeed, as new models of online delivery continue to emerge, institutions of higher education are accessing new cadres of potential students, such as working professionals and non-traditional students.

Despite these new online education models (explored in additional detail later in this section), most students enrolled in online courses in higher education matriculate into a public institution (67.8 percent), with slightly over half of those individuals enrolled at a four-year university (rather than a two-year institution).<sup>10</sup> As seen in Figure 1.3, private not-for-profit

<sup>&</sup>lt;sup>6</sup> Ibid., p.3.

<sup>&</sup>lt;sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> Adapted from: Ibid., p.11.

<sup>&</sup>lt;sup>9</sup> Friedman, J. "5 Online Education Trends to Watch in 2017." U.S. News & World Report, January 2017. https://www.usnews.com/higher-education/online-education/articles/2017-01-05/5-online-education-trends-to-expect-in-2017

<sup>&</sup>lt;sup>10</sup> Allen and Seaman, "Digital Learning Compass," Op. cit., p.13.

institutions enroll approximately 17.8 percent of all online students, while for-profit institutions—despite the perception that they are a main purveyor of distance education—matriculate the smallest share of online students. Indeed, experts in the field conclude that "while the public perception has often equated distance education with the for-profit sector of higher education, **public institutions actually command the market**." <sup>11</sup>

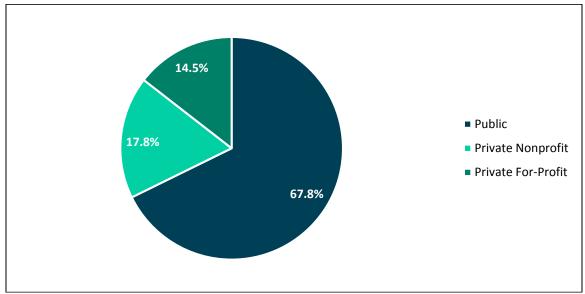


Figure 1.3: Students Enrolled in Distance Education Courses by Type of Institution, 2015

Source: Babson Survey Research Group<sup>12</sup>

Further, not only do for-profit institutions command the smallest market share of online students, but these institutions have seen their total distance education matriculation fall each year since 2012 (Figure 1.4). Data reveal that "the declines among for-profit institutions have been overwhelmingly at the undergraduate level; whereas private non-profits have shown substantial growth for both undergraduate and graduate levels." <sup>13</sup> Indeed, by contrast, private not-for-profit institutions experienced the largest relative increases in online enrollments since 2012, with increases of more than 11 percent each year. Finally, because of the enrollment of online students at public institutions, despite mediocre growth over the previous four years, "the net effect has been an increase every year in the overall number of students taking at least one distance course." <sup>14</sup>

The overall increases in online enrollments, particularly among public and private nonprofit institutions, has lead experts in higher education to conclude that "distance education is no

<sup>&</sup>lt;sup>11</sup> Ibid. Emphasis added.

<sup>&</sup>lt;sup>12</sup> Adapted from: Ibid.

<sup>&</sup>lt;sup>13</sup> Ibid., p.16.

<sup>&</sup>lt;sup>14</sup> Ibid., p.14. Emphasis added.

longer an institutional accessory."<sup>15</sup> To this end, by 2014, almost 70 percent of chief academic leaders at institutions across the United States reported that online learning was a critical element of their institutions' long-term strategic planning—representing the highest rate over the previous decade—while the percentage of colleges and universities that did not prioritize online learning in their strategic plans fell to 11.2 percent. As such, institutions that do not offer, or prioritize, online learning, may be less competitive in the marketplace.

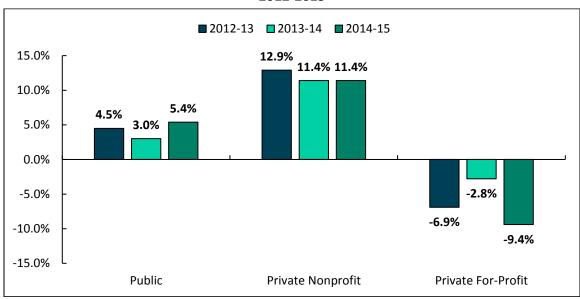


Figure 1.4: Year-to-Year Percentage Change in Distance Enrollments by Type of Institution, 2012-2015

Source: Babson Survey Research Group<sup>17</sup>

#### **STUDENT LEARNING OUTCOMES**

One of the biggest debates in online education is whether online delivery is comparable to face-to-face delivery in terms of student outcomes and preparedness. Although there is limited empirical evidence that suggests distance education students differ considerably from their in-person peers, <sup>18</sup> many faculty and other educational professionals maintain negative views of the outcomes produced by online programs.

By 2012, for example, roughly 23 percent of stakeholders still viewed online education as "inferior" or "slightly inferior" to face-to-face instruction; however, the majority of respondents indicated that the two delivery methods produced the same learning outcomes

<sup>&</sup>lt;sup>15</sup> Poulin, R. and T.T. Straut. "WCET Distance Education Enrollment Report 2016: Utilizing U.S. Department of Education Data." WICHE Cooperative for Educational Technologies, 2016. p.1. http://wcet.wiche.edu/sites/default/files/WCETDistanceEducationEnrollmentReport2016.pdf

<sup>&</sup>lt;sup>16</sup> Allen and Seaman. "Changing Course," Op. cit., p.4.

<sup>&</sup>lt;sup>17</sup> Adapted from: Allen and Seaman, "Digital Learning Compass," Op. cit., p.15.

<sup>&</sup>lt;sup>18</sup> See, for example: Xu, D. and S.S. Jaggers. "Adaptability to Online Learning: Differences Across Types of Students and Academic Subjects Areas." Community College Research Center, Columbia University, February 2013. http://ccrc.tc.columbia.edu/media/k2/attachments/adaptability-to-online-learning.pdf

(56.4 percent), an increase from 44.9 percent in 2003 (Figure 1.5). Further, 20.5 percent of surveyed stakeholders in 2013 perceived online education to be "superior" or "slightly superior" than traditional face-to-face instruction, demonstrating that online education is becoming increasingly accepted.

Institutions can leverage these positive changes in perceptions of online learning to convince faculty, administrators, employers, and prospective students about the value that distance education can have for both student and institutional outcomes. Note that researchers provide an important caveat: "It remains unclear [...] if it is that institutions with a positive opinion towards online are more likely to implement online courses, or if it is that institutions with experience with online develop a more positive attitude as their experience grows." Institutions with significant online program delivery experience might consider touting this longevity in the marketplace as indicative of its quality and effectiveness.

100% 80% 60% 40% 20% 0% 2003 2004 2006 2009 2010 2011 2012 ■ Superior 0.6% 1.0% 1.8% 2.1% 3.4% 2.7% 3.7% ■ Somewhat Superior 11.7% 10.0% 15.1% 12.4% 14.2% 13.8% 16.8% 44.9% ■ Same 50.6% 45.0% 53.0% 48.4% 51.1% 56.4% ■ Somewhat Inferior 31.1% 28.4% 30.3% 23.0% 24.3% 22.7% 17.7% 9.5% 9.7% ■ Inferior 10.7% 10.1% 7.8% 9.8% 5.3%

Figure 1.5: Perceptions of Learning Outcomes in Online Education Compared to Face-to-Face Instruction, 2003-2012

Source: Babson Survey Research Group and Pearson<sup>20</sup>

Empirically, researchers generally find that "overall, the research on the impact of student characteristics on online success indicates that patterns of performance in online courses mirror those seen in postsecondary education overall: women and White students are likely

 $<sup>^{\</sup>rm 19}$  Allen and Seaman. "Changing Course," Op. cit., p.25.

<sup>&</sup>lt;sup>20</sup> Adapted from: Ibid., p.39.

to perform more strongly online than their counterparts."<sup>21</sup> This suggests, on the other hand, that males, minority students, and students with lower levels of academic preparation often experience significantly stronger "negative coefficients" for online learning across indicators of persistence and course grades. This shows that "performance gaps between key demographic groups already observed in face-to-face classrooms [...] are exacerbated in online courses."<sup>22</sup>

These findings suggest that colleges and universities that offer online courses need to provide specific academic supports for students enrolled in distance education programs. In particular, these supports can be geared toward traditionally at-risk student groups to help ensure success in online courses. Strategies such as screening, scaffolding, and early warning systems, for example, can help institutions identify students who may be at risk in distance settings and either provide adequate support or recommend alternative course delivery options.<sup>23</sup>

#### **EMERGING STUDENT PREFERENCES**

Students who enroll in online education are beginning to trend younger. For example, in 2012, only about one-quarter of online, undergraduate students were between the ages of 18 and 24 years, but by 2016, that proportion had risen to 44 percent. Similarly, the average age of these students dropped from 34 years old to 29 years old over the four-year span. As more institutions offer these distance education courses, it "helps to increase the reputation of online learning. Consequently, more (and younger) students are choosing online as a first choice for their higher education experience."

The evolving demographics enrolled in online courses will necessarily change how and why students matriculate in these programs. For example, in a survey of over 1,500 students and 300 institutional administrators, researchers found that the state of online learning in 2017 revolves around two key outcomes: *career readiness* and *affordability*. Indeed, respondents indicated that:

Students care about careers: 72 percent of online students report job and employment goals as a reason for enrolling, including transitioning to a new career field (36 percent) and earning academic credentials in a current field of work (32 percent).

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<sup>&</sup>lt;sup>21</sup> Xu and Jaggers, Op. cit., p.4.

<sup>&</sup>lt;sup>22</sup> Ibid., p.23. Emphasis added.

<sup>&</sup>lt;sup>23</sup> Ibid., p.25.

<sup>&</sup>lt;sup>24</sup> Clinefelter, D.L. and C.B. Aslanian. "Online College Students 2016: Comprehensive Data on Demands and Preferences." The Learning House, Inc. and Aslanian Market Research, July 2016. p.9. http://www.learninghouse.com/wp-content/uploads/2016/07/OCS-2016-Report.pdf
<sup>25</sup> Ibid.

Cost is the most prominent concern: Students report their biggest challenges in making decisions about online education related to cost estimates, finding funding sources, and navigating the financial aid process.<sup>26</sup>

Perhaps because of these preferences, researchers note an increasing prominence of online students who enroll in an institution with a local campus near their homes. That is, despite the flexibility and increased choice offered by online programs, more and more students are choosing locally-based programs (Figure 1.6). Research suggests this stems from two primary reasons; "one reason people may choose a program close to home is the ability or desire to visit campus, despite studying primarily online [...] In addition, the name recognition of area schools among nearby employers, friends, and family members may lead prospective online students to enroll in these institutions."27 This shows that online students today still want to feel connected to a campus and it is important for institutions to foster local relationships and brand their local reputation. Indeed, "unless [an] institution offers a niche program with broader appeal, focus marketing efforts within a 100-mile radius."28 In considering student preference, institutions should evaluate students' perceptions of and satisfaction with program support services to maximize student success and retention.

**■** 2012 **■** 2016 57% 60% 47% 50% 40% 30% 25% 19% 17% 20% 16% 12% 7% 10% 0% Less than 50 miles 50 to 100 miles away More than 100 miles Not sure away away

Figure 1.6: Distance to Closest Campus/Service Center for Online, Undergraduate Students, 2012 and 2016

Source: The Learning House, Inc. and Aslanian Market Research<sup>29</sup>

In examining the types of online degrees students prefer, several subject areas emerge as most appealing to distance learners. In a study that examined nearly 500,000 course

<sup>&</sup>lt;sup>26</sup> Bullet points taken verbatim from: "2017 Online Education Trends Report." Best Colleges, 2017. p.2. http://www.bestcolleges.com/wp-content/uploads/2017-Online-Education-Trends-Report.pdf

<sup>&</sup>lt;sup>27</sup> Clinefelter and Aslanian, Op. cit., p.10.

<sup>&</sup>lt;sup>28</sup> Ibid., p.11.

<sup>&</sup>lt;sup>29</sup> Adapted from: Ibid.

enrollments, data revealed that there is strong variation across subjects studied in online programs – that is, some subject areas enjoy relatively higher matriculation through distance courses (e.g., humanities and social sciences have above-average online enrollment, with engineering and English as a second language typically noting below-average online enrollment; see Figure 1.7).<sup>30</sup> The researchers at the Community College Research Center at Columbia University used the course enrollment data to identify three general patterns in online education preferences:

- Online courses in arts and humanities subject areas are more popular compared to STEM fields;
- With a few exceptions, the proportion of online enrollments is fairly consistent among the subjects within each subject-area category – for example, social science subjects (e.g., anthropology, philosophy, and psychology) fluctuated within a narrow range between 18 and 24 percent; and
- Online enrollments are much more prevalent within college-level courses than within "pre-college" courses (i.e., developmental and ESL education).<sup>31</sup>

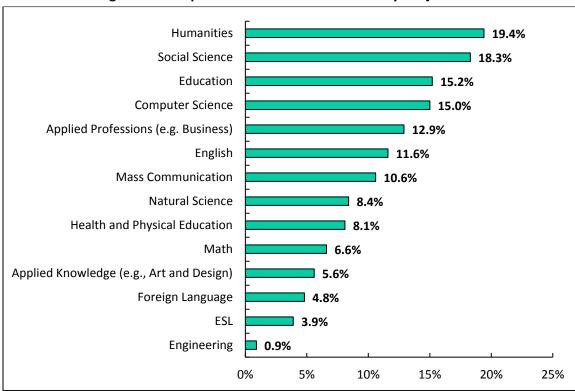


Figure 1.7: Proportion of Online Enrollments by Subject Area

Source: Community College Research Center at Columbia University<sup>32</sup>

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<sup>&</sup>lt;sup>30</sup> Xu and Jaggers, Op. cit., p.12.

 $<sup>^{\</sup>rm 31}$  Bullet points taken almost verbatim from: Ibid. Emphasis added.

<sup>&</sup>lt;sup>32</sup> Adapted from: Ibid., p.13.

Data from other sources support findings of student preferences, with fields in the humanities, business, and computer science often topping the list of popular fields of online study. At the undergraduate level, researchers from Learning House find that preferences have remained relatively stable in recent years – for example, 28 percent of undergraduate, online degrees were awarded in business in 2014 compared to 26 percent in 2016.<sup>33</sup> In fact, no field of study experienced significant changes in relative enrollment at the undergraduate level during this period.

On the other hand, data reveal more profound shifts in degree preferences among online graduate programs. As shown in Figure 1.8, there was a sharp decrease in enrollment in education and teaching programs at the graduate level, which fell from 22 percent of all distance programs in 2014 to only 14 percent by 2016. Conversely, computer and information technology programs enjoyed substantial increases in student demand over the same time frame, with programs making up 20 percent of all online graduate offerings by 2016 (up from only 9 percent in 2014).<sup>34</sup>

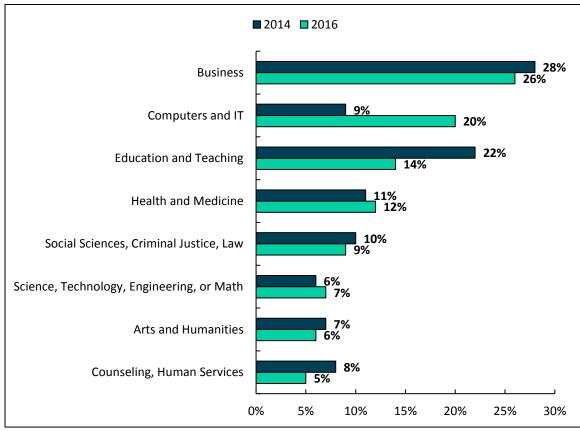


Figure 1.8: Graduate Fields of Study in Online Programs, 2014 and 2016

Source: The Learning House, Inc. and Aslanian Market Research<sup>35</sup>

<sup>33</sup> Clinefelter and Aslanian, Op. cit., p.17.

<sup>34</sup> Ibid.

<sup>35</sup> Adapted from: Ibid., p.18.

Because online students know what field they want to study before they apply, schools that offer a comprehensive suite of online programs have an advantage. Most often, these students first select what degree they want and then look for institutions with the best match. Unlike traditional students, who may be motivated to attend a specific college or university, online students are more likely to choose institutions based on which programs they

offer. Indeed, more than half of all these students decide what they want to study before consider their institution preference. As such, experts posit that "because online students know what field they want to study before they apply, schools that offer a comprehensive suite of online programs have an advantage. If a particular school does not offer the major of interest, the student will look elsewhere." <sup>36</sup> Based on these findings, institutions with extensive online program and degree offerings are well-positioned in the marketplace. Ensuring prospective students are aware of or can easily locate these programs is important to maximize the size of institutions' prospective student pool.

Beyond program options, it is perhaps unsurprising that researchers find that most online students highly value flexibility in selecting distance education providers. This flexibility allows students to take classes outside of firm meeting times or traditional hours – an argument for asynchronous delivery. Moreover, it also contributes to students being able to complete their degrees and reenter the workforce more quickly, another reason students pursue online education. Indeed, "messages such as 'speed to degree' likely resonate well with this audience as they are seeking the quickest path to completion. Accelerated course offerings, year-round course scheduling, and a generous transfer credit policy can all factor into the length of time require for students to complete their program."<sup>37</sup>

Finally, many students find that it can be difficult to access information needed to make the best decision possible. In one survey, data showed that online students frequently cited challenges in finding information about financial aid, costs, program requirements, and typical graduate outcomes:

Figure 1.9: Top Challenges Faced by Students Making Decisions about Online Education

- Estimating actual costs;
- Applying for financial aid and identifying sufficient funding sources;
- Finding sufficient information about academic requirements;
- Contacting a real person to ask detailed questions about specific programs;
- Finding information about how graduates fared in the workplace; and
- Finding a program that met their needs and interests.<sup>38</sup>

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<sup>&</sup>lt;sup>36</sup> Ibid., p.23. Emphasis added.

<sup>&</sup>lt;sup>37</sup> Ibid., p.26.

<sup>&</sup>lt;sup>38</sup> Bullet points taken verbatim from: "2017 Online Education Trends Report," Op. cit., p.7.

As most students (41 percent) rely on an institution's website to gather information about potential programs or courses, it is imperative that colleges and universities maintain up-to-date and easy-to-access webpages. Marketing experts recommend that institutions "ensure their websites are updated regularly as well as easy to navigate for key pieces of information around programs, policies, and procedures." <sup>39</sup>

#### MICROCREDENTIALS IN ONLINE HIGHER EDUCATION

Microcredentials are a new opportunity in higher education that allow students to acquire new skills on a more *ad hoc* basis than traditional coursework (e.g., certificate programs). Importantly, these credentials are often geared toward "working adults who change jobs and

[...] create an alternative credentialing process that would provide students with credentials that are much shorter and cheaper than conventional degrees.

careers frequently [and] who often do [not] need to go through an entire degree program to learn different skills. However, they do need a flexible way to earn credentials that are recognized by employers and that demonstrate their ability to

**apply the skills they learn.**"<sup>40</sup> The most widely-recognized microcredential currently being offered are Massive Open Online Courses (MOOC).

The emergence of microcredentials in higher education has been spearheaded by educational technology companies and other alternative providers of online education—such as Coursera, edX, FutureLearn, and Udacity—rather than by traditional colleges and universities. More traditional higher education institutions that are beginning to pursue microcredential opportunities say that the idea is "to create an alternative credentialing process that would provide students with credentials that are much shorter and cheaper than conventional degrees." Of note, however, both traditional institutions and dedicated MOOC providers can issue these microcredentials. For example, Coursera offers "Specializations" that bundle several online, microcredential courses that lead to a certificate like one conferred at a traditional university. 42

Nonetheless, institutions of higher education are increasingly developing microcredential opportunities. For example, the University Learning Store is an experimental group of seven institutions—including the Georgia Institute of Technology, the University of California-Davis, and the University of Washington, among others— that offers students different

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<sup>&</sup>lt;sup>39</sup> Clinefelter and Aslanian, Op. cit., p.30.

<sup>&</sup>lt;sup>40</sup> Roscorla, T. "Micro-Credentials Offer Universities an Opportunity to Bridge Skill Gaps." Center for Digital Education, March 2016. Emphasis added. http://www.centerdigitaled.com/higher-ed/Micro-Credentials-Offer-Universities-an-Opportunity-to-Bridge-Skill-Gaps.html

<sup>&</sup>lt;sup>41</sup> Fain, P. "Establishment Goes Alternative." *Inside Higher Ed*, August 2015. https://www.insidehighered.com/news/2015/08/14/group-seven-major-universities-seeks-offer-online-microcredentials

<sup>&</sup>lt;sup>42</sup> Ibid.

microcredential products from different providers all in one central space.<sup>43</sup> According to representatives from the group, "students will be able to use online content and assessments—with pieces from different universities—to prove what they know and can do."<sup>44</sup> The University Learning Store highlights two main opportunities:

- Some of the online content features **modular instruction**, where instructors will interact with students as they progress through the material similar to a traditional online course, but for a shorter duration.
- Other opportunities hinge on direct assessment, where students demonstrate their mastery in predetermined areas solely by completing tests, papers, and projects.<sup>45</sup>

This group of institutions consults with industry professionals to create short courses and certificate programs, based on the MOOC model, that allow students to cluster these microcredential opportunities into more focused areas of study. Currently, the working group clusters courses into three groups: (1) power skills (i.e., soft skills like communication and critical thinking); (2) technical skills; and (3) career advancement skills.<sup>46</sup> According to the Center for Digital Education,

These competency-based, self-paced online courses cost between \$50 and \$150 and include two assessments that reveal whether students can apply what they learned. When students complete a course, they earn a downloadable micro-credential from the institution. By taking a sequence of three courses, students can earn certifications in business communications and global business communication.<sup>47</sup>

Thus, "the goal here is to allow consumers to really customize the shopping experience as much as possible so they can meet their own individual needs." <sup>48</sup> Overall, the University Learning Store and other individual efforts by higher education institutions to develop and offer microcredential courses is changing the way that students pursue online education. Indeed, "the explosion of interest in digital badging and microcredentials is changing the landscape of higher education." <sup>49</sup> Education practitioners claim that these types of credentials increasingly serve as a supplement to more traditional information, and show potential employers different sets of certification or competency skills. Additionally, students may use microcredentials to explore higher education or graduate education, and eventually pursue a full degree program.

<sup>43 &</sup>quot;Partners." University Learning Store. http://universitylearningstore.org/partners/

<sup>44</sup> Fain, Op. cit.

<sup>&</sup>lt;sup>45</sup> Bullet points adapted from: Ibid.

<sup>&</sup>lt;sup>46</sup> Roscorla, op. cit.

<sup>&</sup>lt;sup>47</sup> Ibid. Emphasis added.

<sup>&</sup>lt;sup>48</sup> Ibid.

<sup>&</sup>lt;sup>49</sup> Netzer, M. and C. Reynolds. "How Microcredentials are Changing the Landscape of Higher and Technical Education." *The Evolllution*, July 2016. https://evolllution.com/programming/credentials/how-microcredentials-are-changing-the-landscape-of-higher-and-technical-education/

In most cases, pursing a microcredential can seem "less daunting" than enrolling in a full degree program, making it well-suited for working adults.<sup>50</sup> Moreover, institutions planning to pursue microcredentialing explain that they mostly intend to use a "Freemium" model. This allows most of the content to be accessed for free, "but students would have to spend money with the universities do [e.g., for additional resources or content]. Assessments would come at a price."<sup>51</sup> Combined, the schedule and cost flexibility offered by MOOCs and other microcredential opportunities is increasing their prominence across the sector.

In a survey of over 35,000 students conducted by the University of Pennsylvania, researchers found that, overwhelmingly, students enrolled in MOOCs have a college degree and are employed. This suggests that these types of microcredential opportunities "are serving the world's haves more than its have-nots." However, it also demonstrates that working adults are interested in these types of short-course, microcredentials that can enhance their marketability without large investments in time or money. Most students who enroll in MOOCs, in fact, are over 31 years old, with the largest population of such students in the "51 and over" age bracket (Figure 1.10). Similarly, the largest segment of MOOC students are pursuing credentials in business, economics, and social science (Figure 1.11), again suggesting that microcredentials are well-suited for, and predominately enjoyed by, working professionals.

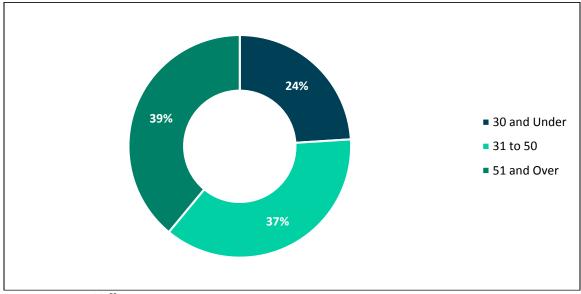


Figure 1.10: U.S. Students Enrolled in MOOCs by Age Group

Source: New Republic<sup>53</sup>

<sup>&</sup>lt;sup>50</sup> Ibid.

<sup>&</sup>lt;sup>51</sup> Fain, Op. cit.

<sup>&</sup>lt;sup>52</sup> Alcorn, B., G. Christensen, and E.J. Emanunel. "Who Takes MOOCs?" *New Republic*, January 2014. https://newrepublic.com/article/116013/mooc-student-survey-who-enrolls-online-education

<sup>53</sup> Adapted from: Ibid.

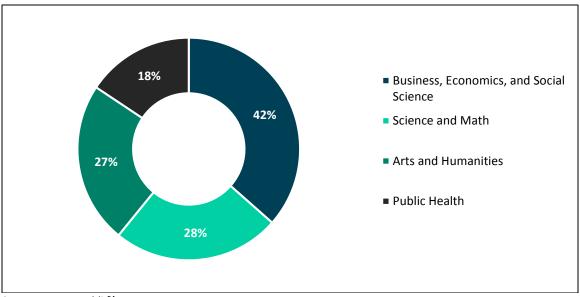


Figure 1.11: Types of Classes Taken by MOOC Students

Source: New Republic<sup>54</sup>

#### **COMPETITIVE LANDSCAPE**

Many of the anticipated trends in online higher education relate to how the market is expanding as more and more players enter the space (Figure 1.12). For example, a greater emphasis on nontraditional credentials and an increasing desire for specialized courses have contributed to the rise of MOOCs, and therefore online education providers outside the higher education sector (e.g., Coursera). Likewise, the field, which was once dominated by for-profit institutions, is diversifying as nonprofit institutions (e.g., Southern New Hampshire University) experience growing enrollments relative to their for-profit peers. 56

Despite growth in the higher education sector, most of the main providers of MOOCs and other microcredentials remain in the private sector. For example, the largest MOOC providers such as Coursera and edX offer more than 900 active courses to choose from. Importantly, "the largest providers are moving toward credentials, which provides both monetization and, hopefully, valuable recognition for learners' efforts." <sup>57</sup>

<sup>54</sup> Adapted from: Ibid.

<sup>&</sup>lt;sup>55</sup> Friedman, Op. cit.

<sup>&</sup>lt;sup>56</sup> Straumsheim, C. "'Volatile' but Growing Online Ed Market." *Insider Higher Ed*, May 2017. https://www.insidehighered.com/news/2017/05/02/report-finds-growth-volatility-online-education-market

<sup>&</sup>lt;sup>57</sup> Shah, D. "By the Numbers: MOOCs in 2016." Class Central, December 2016. Emphasis added. https://www.class-central.com/report/mooc-stats-2016/

Figure 1.12: Key Trends in Online Higher Education Anticipated for 2017

#### **Greater Emphasis on Nontraditional Credentials**

• Companies in recent years have started offering credentials other than degrees to online learners, ranging from digital badges to showcase achievements to various certificate programs that highlight skills. In 2017, many experts predict colleges and universities will become more involved in granting what are often referred to as "microcredentials."

#### **Increased Use of Big Data to Measure Student Performance**

•As online students complete their coursework virtually, course providers and universities are collecting data in remarkable quantities. This year, faculty are expected to increasingly analyze real-time data to measure, improve, and predict how their students perform.

#### **Greater Incorporation of Artificial Intelligence into Classes**

•Some experts foresee artificial intelligence becoming more widely used to provide student assistance and improve support.

#### **Growth of Nonprofit Online Programs**

• Prospective students will have more nonprofit online program options this year as an increasing numbers of well-known universities offer more and different kinds of programs. Enrollment in for-profits will probably continue to fall. Given that trend, more students will be able to get an online degree from a well-respected nonprofit institution, which many employers prefer over for-profit degrees.

#### **Online Degrees in Surprising and Specialized Disciplines**

• Fields such as business, nursing, cybersecurity, and data analytics, among others, will probably remain among the more popular in online education. As online learning continues to attract career changers, some experts say more degrees offered online in 2017 will focus on specialized areas - such as a bachelor's in real estate or marketing rather than business administration.

Source: U.S. News & World Report<sup>58</sup>

As shown in Figure 1.13, most of the top MOOC platforms offer verified certificates (except for FutureLearn and Saylor Academy), which can further attract students by providing a tangible credential after a series of MOOC courses. For example, edX recently expanded its MicroMasters credential to 14 different institutions across the United States, while Coursera expanded its Specializations options to 160 different pathways and developed another master's program with the University of Illinois. Moreover, "some providers [...] have trademarked their credentials, likely in the hope of establishing the recognition and credibility of their credentials." <sup>59</sup>

<sup>&</sup>lt;sup>58</sup> Adapted from: Friedman, Op. cit.

<sup>&</sup>lt;sup>59</sup> Shah, D. "MOOC Trends in 2016: College Credit, Credentials, and Degrees." Class Central, December 2016. https://www.class-central.com/report/mooc-trends-credit-credentials-degrees/

Figure 1.13: Top MOOC Platforms in 2017

MOOC PLATFORM	USERS	# OF COURSES	FREE COURSES?	PAID COURSES?	SUBJECTS	CERTIFICATES	Pathways	COLLEGE CREDIT?	TYPE OF LEARNING
Coursera	23,000,000	1,800+	Yes	Yes	Varied	Verified	Specializations	Yes	On- Demand
edX	10,000,000	950+	Yes	Yes	Varied	Verified	Xseries	Yes	Scheduled, On- Demand
FutureLearn	5,300,000	450+	Yes	No	Varied	Non- Verified	Programs	Yes	Scheduled
Udacity	4,000,000	160+	Yes	Yes	Technology	Verified	Nanodegrees	No	On- Demand
Saylor Academy	Unknown	100+	Yes	No	Varied	Non- Verified	Diplomas	Yes	On- Demand

Source: MOOCLab<sup>60</sup>

Non-institutional MOOC providers continue to expand their offerings and legitimacy in the education sector. For example, Coursera recently entered into a new agreement with Google, Instagram, and other technology companies to launch a new set of "micro-degrees." These are a "set of online courses plus a hands-on capstone project designed in conjunction with top universities and leading high-tech firms [...] the Coursera announcement could be an important step in a radical shakeup of higher education." <sup>61</sup> Experts from the Brookings Institute identify four key ways that the increasing availability of MOOC and other credential providers outside of the traditional education sector is slated to shakeup the traditional pathway to higher education:

■ MOOCs are moving from novel sideshow to serious competition. Similar to other new ventures and technologies, MOOC developers have struggles with quality—such as high drop-out rates from huge class enrollments—in addition to developing a viable business model. But through partnerships with employers and sometimes with prestigious universities (e.g., Udacity's \$7,000 master's program with Georgia Tech), MOOCs and other online education developers are on the verge of sustainable business models.

<sup>60</sup> Adapted from: "MOOC Platform Comparison Table – 2017." MOOCLab, 2017. https://www.mooclab.club/pages/mooc\_platform\_comparison/

<sup>&</sup>lt;sup>61</sup> Butler, S.M. "How Google and Coursera May Upend the Traditional College Degree." The Brookings Institute, February 2015. https://www.brookings.edu/blog/techtank/2015/02/23/how-google-and-coursera-may-upend-the-traditional-college-degree/

- The partnership between online education and employers is likely a game-changer. MOOCs and other online education developers recognize that many college degrees are disconnected from the needs of employers, reducing the value of those traditional degrees. By forming partnerships and designing programs in conjunction with employers, ventures with new business models are offering their students programs and degrees that will make them more attractive job candidates.
- Accreditation as a restriction on competition is eroding. The cumbersome and expensive accreditation process has served as an obstacle to new business models, protecting existing colleges and universities. Partnerships like Coursera's include employers actually certifying groups of courses as meeting industry's standards for skills and knowledge essentially an end-run around traditional accreditation as a measure of quality.
- Microdegrees are likely the pathway to customized degree programs. Specialized microdegrees are certainly of interest to both undergraduates and graduates looking for enhanced and marketable qualifications at an affordable price. But with the emergence of employer-credentialed multiple-course programs, it is only a matter of time before enterprising colleges or other entrepreneurs start assembling comprehensive degree programs consisting of microdegrees supplemented by other experiences, such as a semester abroad and time at a small liberal arts college. 62

Thus, institutions providing online education face increasing competition not just from the growing number of private, nonprofit institutions offering these courses (as shown earlier in this section), but also from actors outside of the traditional education sector. In fact, many experts believe that organizations like Coursera and edX represent a serious threat to U.S. colleges and universities. Higher education institutions that offer online programs are thus encouraged to adopt many of the successful policies pursued by these providers—such as close working partnerships with employers—to compete in the changing online education market.

<sup>&</sup>lt;sup>62</sup> Bullet points taken almost verbatim from: Ibid.

<sup>63</sup> Lucas, H. "Can the Current Model of Higher Education Survive MOOCs and Online Learning?" Educause Review, October 2013. http://er.educause.edu:81/articles/2013/10/can-the-current-model-of-higher-education-survive-moocs-and-online-learning

### SECTION II: LABOR MARKET PERCEPTIONS

In this section, Hanover examines labor market trends as they relate to online higher education. This section reviews employer perceptions of online education credentials, as well as where gaps may exist between graduate skills and labor market need. Finally, this section explores areas in the labor market where veterans and other military service members may require specific training.

#### **EMPLOYER PERCEPTIONS OF ONLINE DEGREES**

Online programs offer many students the opportunity to enhance workforce credentials and bolster their success in the labor market. Indeed, in a survey of over 1,500 online college students, researchers found that the labor market played a central role in most of their decisions to pursue distance education (Figure 2.1). Aside from a general desire to complete a postsecondary degree, all online students' primary motivations are grounded in the labor market – for example, the most common motivation for enrolling in continuing online education is a career in a new field (20 percent), with large populations of online students also citing developing relevant job skills (14 percent) and acquiring more education to get a new job (12 percent) as top priorities. <sup>64</sup> As such, in marketing to prospective students, institutions should demonstrate the value of their education programs, such as career readiness, job placement rates, increased earning potential, and other graduate success data.

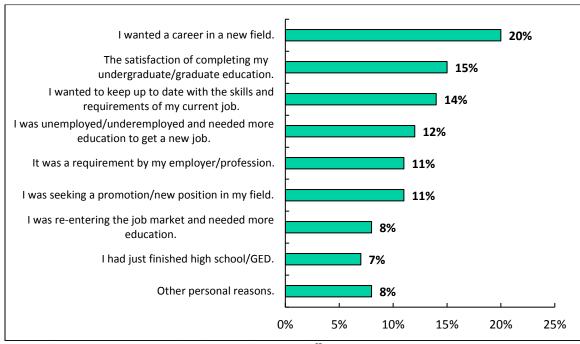


Figure 2.1: Online Students' Primary Motivation for Enrolling in Further Education

Source: The Learning House, Inc. and Aslanian Market Research<sup>65</sup>

<sup>&</sup>lt;sup>64</sup> Clinefelter and Aslanian, Op. cit., p.21.

<sup>65</sup> Adapted from: Ibid.

Although workforce outcomes factor largely in students' decision to pursue online education, research is less clear regarding the labor market receptiveness of credentials earned via distance learning programs. Over the last decade, perceptions of online degrees have fluctuated and only recently have these types of credentials been more widely accepted as valuable and suitable indicators of competence. For example, in 2009, a research paper published by Cleveland State University found that human resources managers and other employment gatekeepers had strongly negative perceptions of online degrees. Today, though, as the number of candidates with online credentials continues to grow, employers are becoming more accepting of these types of awards.

Despite shifting perceptions of online postsecondary education, however, when competing with a candidate who earned a degree through a more traditional, campus-based program, many employers still give the edge to traditional graduates. This perception may be a product of the "for-profit" classification, though, rather than a negative association with online education in general. In fact, one study found that applicants are 22 percent *less likely* to get called back from an employer if they have an online degree from a *for-profit* institution. Many experts suggest that this negative stigma that is often associated with online degrees stems specifically from the reputations of these for-profit institutions, such as the University of Phoenix. However, some recruiters argue that even "the negative perception of undergraduate, for-profit education that some employers have held in recent years may be starting to shift, and not all are skeptical." Nonetheless, it may be helpful for institutions of higher education in other sectors (e.g., private and public not-for-profit colleges and universities) to distinguish themselves from the for-profit alternatives.

Sometimes an online bachelor's degree can be an advantage in the eye of an employer [...] Entrepreneurs favor students [...] who have juggled multiple commitments while earning their degree.

As employers discard their negative perceptions of online programs, they are beginning to consider the benefits of distance education. In fact, as views continue to evolve regarding online higher education, "sometimes an online bachelor's degree can [actually] be an advantage in the eye of an

employer [...] In some cases, entrepreneurs favor students [...] who have juggled multiple commitments while earning their degree." <sup>70</sup> Further, recruiters and brand consultants suggest that students enroll in online programs at colleges and universities that may have brand recognition in the field of their degree, regardless of delivery modality. This can help

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<sup>&</sup>lt;sup>66</sup> Haynie, D. "What Employers Really Think About Your Online Bachelor's Degree." Daily News, July 2013. http://www.nydailynews.com/news/national/employers-online-degrees-article-1.1372092

<sup>&</sup>lt;sup>67</sup> Ibid.

<sup>&</sup>lt;sup>68</sup> [1] Friedman, J. "How Employers View Online, For-Profit Bachelor's Degrees." U.S. News & World Report, August 2016. https://www.usnews.com/education/online-education/articles/2016-08-15/how-employers-view-online-for-profit-bachelors-degrees

<sup>[2]</sup> Deming, D.J. et al. "The Value of Postsecondary Credentials in the Labor Market: An Experimental Study."

American Economic Review, 106:3, March 2016. http://pubs.aeaweb.org/doi/pdfplus/10.1257/aer.20141757

 $<sup>^{69}</sup>$  Friedman, "How Employers Value Online, For-Profit Bachelor's Degrees," Op. cit.

<sup>&</sup>lt;sup>70</sup> Haynie, Op. cit.

"to avoid having an online degree discounted [...] If you are looking to pursue an online bachelor's degree in engineering, for example, enroll in a well-regarded program such as Purdue University." In short, students who pursue online education are encouraged to prepare for interviews proactively to respond to many of the critiques of online programs and discuss the value of both their specific degree programs and their skills.

An executive at a top client acquisition firm echoed these findings, stating that "employers, generally speaking, are getting more inclined, more receptive, to looking at people with online degrees – especially in experienced roles that they [are] looking to fill."<sup>72</sup> As shown in Figure 2.2, graduates from online programs should be prepared to discuss the legitimacy of their coursework, and connect it to broader skills and attractive labor market competencies (e.g., collaboration).

Figure 2.2: Common Employer Questions About Online Credentials

#### Is the online program accredited?

•An employer will likely be most concerned with whether an online degree comes from a reputable institution with an established brand. A major part of a program's legitimacy comes down to whether it is either **regionally or nationally accredited**.

#### Why did you choose to pursue a degree online?

•Some employers may wonder **why a job candidate chose to pursue a degree online**, and answering that question can help reveal the candidate's decision-making skills.

# Did you develop skills in teamwork and group collaboration through the program?

•One of the perks of taking a class in-person is the ability to **easily work with peers** on group assignments. Many online programs also involve collaborative learning, but it may take a bit more effort to convince an employer that this was indeed the case.

# To what extent were you able to interact with the program's other students?

•Just as important to employers is an online learner's **ability to understand and interpret a range of perspectives on different issues.** Employers, if they really understand online education, can see that it is a smart use of time and can bring a lot of exposure to global ideas.

Source: U.S. News & World Report<sup>73</sup>

<sup>71</sup> Ibid

<sup>&</sup>lt;sup>72</sup> Friedman, J. "4 Questions Employers Ask About Job Applicants With Online Degrees." U.S. News & World Report, February 2016. https://www.usnews.com/education/online-education/articles/2016-02-05/4-questions-employers-ask-about-job-applicants-with-online-degrees

<sup>&</sup>lt;sup>73</sup> Adapted from: Ibid.

#### STUDENT PREPAREDNESS TO ENTER WORKFORCE

One important factor that influences how employers view students with online credentials is their perceptions of the skills acquired during those programs. Broadly, across all delivery formats, employers identify skills gaps that can impede graduates' chances of receiving a job offer. Whereas almost all (90 percent) of recent graduates consider themselves well-prepared to enter the workforce, less than half of employers believe that they possess the needed

[...] recent college graduates feel prepared to enter the workforce, [but] only half of hiring managers agree with them; managers feel crucial skills in recent graduates are frequently lacking or absent.

competencies for success.<sup>74</sup> Sixty percent of companies in a recent PayScale survey believed that recent graduates had neither adequate critical thinking skills nor the attention to detail. Overall, these findings show that "even though their education may make recent college graduates feel prepared to enter the workforce, only half of hiring managers agree with them; managers feel crucial skills in recent graduates are frequently lacking or absent."<sup>75</sup>

For instance, the largest "hard" skill gap identified by managers between proficiencies needed to do a job well and deficiencies in recent graduates' preparedness is in *writing proficiency*, whereby 44 percent of managers indicated that new graduates possessed insufficient writing skills to perform adequately. *Public speaking* (39 percent) and *data analysis* (36 percent) were other hard skills that regularly demonstrate gaps in preparedness. <sup>76</sup> In fact, many experts cite data science and analytics as a key competency that students can acquire to become more marketable in the labor market in the coming years (see Figure 2.3, on the following page). While only 23 percent of educators say that graduates will have data science skills, more than two-thirds of hiring managers say that they would prefer job candidates with these skills over others without them. <sup>77</sup>

Soft skill gaps also exist, and 60 percent of managers report that new hires lack *critical* thinking and problem solving skills that are necessary for the job. Moreover, 56 percent say that recent graduates do not pay attention to detail and 46 percent believe that communication skills need to be prioritized more in schools.<sup>78</sup> This speaks to the need for institutions of higher education, regardless of delivery format, to examine labor market needs and design academic programs to fill them.

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<sup>&</sup>lt;sup>74</sup> Berr, J. "Employers: New College Grads Aren't Ready for Workplace." CBS News, May 2016. http://www.cbsnews.com/news/employers-new-college-grads-arent-ready-for-workplace/

<sup>75</sup> Ibid.

<sup>&</sup>lt;sup>76</sup> Strauss, K. "These Are The Skills Bosses Say New College Grads Do Not Have." Forbes, May 2016. https://www.forbes.com/sites/karstenstrauss/2016/05/17/these-are-the-skills-bosses-say-new-college-grads-do-not-have/#1ea82a4d5491

<sup>&</sup>lt;sup>77</sup> Mirza, A. "Students Graduates With Mediocre Skills for the Workplace." U.S. News & World Report, April 2017. https://www.usnews.com/news/stem-solutions/articles/2017-04-03/study-most-students-graduate-with-mediocre-skills-for-the-workplace

<sup>&</sup>lt;sup>78</sup> Strauss, Op. cit.

Figure 2.3: Recommendations for Developing a Workforce with Key Data Skills



Source: Business-Higher Education Forum<sup>79</sup>

Experts in online education propose that one of the best ways to pursue online education that is geared toward workforce improvement is to earn the degree through their current employers. Indeed, many jobs in today's economy offer tuition reimbursement or education sponsorships, which indicate that employers take online credentials seriously.<sup>80</sup> This suggests that colleges and universities with robust online catalogs can seek partnerships with local employers to develop and promote programs that address essential needs and grow important hard and soft skills.

Finally, students who earn degrees or other credentials through online programs need to be prepared to speak to the value of their experiences during the job-seeking process. It is important for these students to be able to answer any questions potential employers have about the online program (e.g., accreditation status) to give additional legitimacy to the degree. For example, students can describe "how completing an entire program through an independent study format is a testament to [their] ambition, self-discipline, organization, and ability to set and achieve goals." Again, this discussion should connect how the distance education program contributes to the development of soft skills, such as communication and critical thinking, in a unique way that employers may not have previously considered.

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<sup>&</sup>lt;sup>79</sup> Adapted from: "Investing in America's Data Science and Analytics Talent." Business-Higher Education Forum and PriceWaterhouseCoopers, 2017. http://www.pwc.com/us/dsa-skills

<sup>&</sup>lt;sup>80</sup> Lungu, M. "Entering the Job Market with Your Distance Degree." Distance Learning Portal, March 2016. http://www.distancelearningportal.com/articles/140/entering-the-job-market-with-your-distance-degree.html
<sup>81</sup> Ibid.

#### **VETERANS AND THE LABOR MARKET**

Over the next decade, experts estimate that approximately 4.2 million veterans will enter the labor market, many of whom will need help matching skills and experiences acquired during military service to the civilian job market. Indeed, this transition—sometimes referred to as going from the "battlefield to the boardroom"—can be difficult for veterans as they navigate the civilian sector. Educators and employers can work with this population, and "veterans and civilian employers must look [together] beyond the technical skills gained through military service to other attributes, frequently referred to as soft skills."<sup>82</sup>

Veterans most often look for ways to transfer skills learned in the military to the labor market, so institutions of higher education may look for ways to develop programs that can bridge the gap between the application of military skills to civilian settings. For example, according to an Indeed.com analysis, job postings within *Management* and *Protective Services* occupations receive a higher share of "clicks" from veterans than other types of job seekers. <sup>83</sup> This is perhaps unsurprising, as management and protective services roles align closely with military organization. As shown in Figure 2.4, most veterans look to apply common military competencies (e.g., logistics) to traditional civilian roles (e.g., transport services).

Warehouse -**Logistics -Security -**Transportation and Transportation and **Protective Services Material Moving Material Moving Human Resources -**Manager -**Customer Service -**Office and Administrative Personal Care and Service **Administrative Assistant -**Information Technology -**Aviation -**Office and Administrative Installation, Maintenance, Computer and Mathematical and Repair

Figure 2.4: Veterans' Top Job Search Queries, 2014

84 Adapted from: Ibid.

Source: Indeed.com84

<sup>82</sup> Hall, K.C. "from the Battlefield to the Boardroom: Transferring Veterans' Skills to the Civilian Labor Market." RAND.

https://www.rand.org/blog/2016/08/from-the-battlefield-to-the-boardroom-transferring.html <sup>83</sup> "Veterans Bring Unique Skills to the Labor Market." Indeed, November 2014. http://blog.indeed.com/2014/11/11/veterans-bring-unique-skills-to-the-labor-market/#main

#### **CHANGES IN THE MARKET**

In April 2017, Purdue University and Kaplan, Inc. announced Purdue University's acquisition of the test-prep and online education servicer. With the announcement, experts considered the various implications this action would have on regulation, accreditation, the role of institutions in the private education market, and the likelihood of similar acquisitions or mergers in the future. *Inside Higher Ed* reports that while Purdue and Kaplan are unlikely to encounter difficulties at the state level, thanks to recently passed legislation that laid groundwork for this buy-out and anticipated cooperation in state accreditation, it is likely that Purdue will face many challenges with the Higher Learning Commission (HLC) and at the federal level, as well as scrutiny from experts and other stakeholders.<sup>85</sup>

The Purdue-Kaplan deal places HLC in the forefront of the role of public institutions' role in for-profit education, a familiar territory for the accrediting body. Not only has HLC received Purdue faculty concerns, but it has faced scrutiny in its role in "sector-crossing partnerships and attempts by for-profit institutions to convert to non-profits." Specifically, HLC was

"[...HLC] in a position where they feel very vulnerable and they're working with these anomalous institutions that nobody had in mind when regional accreditation was put together." criticized for granting for-profit institutions accreditation despite documented flaws, <sup>86</sup> but it has also come under in the past for tampering innovation in higher education, as with its role in Georgia Tech's partnership with Udacity. <sup>87</sup> As such, most experts agree that regardless of HLC's decisions in the future of the Purdue-Kaplan partnership, it will be a controversial one.

In addition to speculation regarding regional accreditation, the "New University" (as currently named

by Purdue) will not be a 501(c)(3) organization (i.e., a non-profit organization required to publicly disclose financial information). Yet, it will "be a type of public benefit corporation, a nonprofit business that values societal returns...as well as revenue" despite receiving some of the financial benefits provided to public universities. 88 The nebulous status of New University's status further complicates the already multifaceted nature of relationships between traditional higher education institutions and non-traditional education servicers.

It is too soon to determine the impact of partnerships between colleges and universities and non-institutional actors in the education marketplace. **Some experts view Purdue's buy-out** 

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<sup>85</sup> Fain, P. "Fine Print and Tough Questions for the Purdue-Kaplan Deal." Inside Higher Ed, May 30, 2017. https://www.insidehighered.com/news/2017/05/30/regulators-and-accreditor-begin-review-purdues-boundary-testing-deal-kaplan

<sup>86</sup> Lederman, D. "Scrutiny for an Accreditor." Inside Higher Ed, December 18, 2009. https://www.insidehighered.com/news/2009/12/18/hlc

<sup>&</sup>lt;sup>87</sup> Fain, P. "Helpful or a Hindrance?" Inside Higher Ed, September 19, 2013. https://www.insidehighered.com/news/2013/09/19/congress-hears-about-role-accreditation-and-online-partnerships

<sup>&</sup>lt;sup>88</sup> Fain, "Fine Print and Tough Questions for the Purdue-Kaplan Deal," Op. cit.

of Kaplan as paving the way for future acquisitions and mergers, while others cite the numerous complexities as hindrances to additional institutions following suit. Regardless of the success of Purdue-Kaplan partnership, future, similar acquisitions or mergers will certainly face challenges as they related to resistance from faculty and other stakeholders, obtaining accreditation, navigating the political landscape, and complexities associated with public/private status.<sup>89</sup>

<sup>89</sup> Ibid.

# SECTION III: POLITICAL AND POLICY CHANGES AND IMPLICATIONS FOR ONLINE EDUCATION

In this section, Hanover discusses online higher education from a political/policy perspective. This includes a review of how online education impacts broader institutional operations (e.g., authorization), and the implications of recent policy developments across the sector.

#### REGULATING ONLINE HIGHER EDUCATION

As discussed in previous sections, the economy is increasingly demanding an educated workforce that possesses critical hard and soft skills, and students face growing pressure to pursue postsecondary education to find workforce opportunities after graduation. Likewise, institutions of higher education are trying to expand access to degree and certificate programs while limiting expenditures as costs for both students and universities continue to rise. This climate is "forcing states to consider a range of options for cost-effectively expanding their capacity to meet workforce needs, including greater use of online programs from all types of in-state and out-of-state institutions." The changing landscape in higher education, and specifically online education, requires that policymakers and stakeholders across institutions pursue "policies and regulations regarding online programs [that] protect consumers while promoting greater access, particularly for working adults."

But when a school in one state enrolls an online student who lives in another state, which state is watching out for the interests of the student? Too often, the answer is no one.

At the federal level, the U.S. Department of Education (DOE) is working to ensure that online higher education is regulated to the same degree as traditional programs. Prior to July 2016, a

loophole existed in the Higher Education Act that overlooked distance education in states where the college or university was not located. Typically, "institutions must be authorized in the state in which they are located in order to be eligible for Title IV federal student aid." As explained by the DOE, however, "while all higher education institutions must have state authorization in the states in which they are physically located, there are no federal requirements for distance education providers in states where the institutions are not located." Thus, federal lawmakers proposed the following regulations to protect distance education students in non-residence states:

<sup>90</sup> Reindl, T. "Regulating Online Postsecondary Education: State Issues and Options." National Governors Association, January 2013. p.1.

<sup>&</sup>lt;sup>91</sup> Ibid. Emphasis added.

<sup>&</sup>lt;sup>92</sup> Ravipati, S. "Federal Government Seeks to Regulate Online Education Programs." Campus Technology, July 2016. https://campustechnology.com/articles/2016/07/26/federal-government-seeks-to-regulate-online-education-programs.aspx

<sup>&</sup>lt;sup>93</sup> "Education Department Proposes Rule on State Authorization of Postsecondary Distance Education, Foreign Locations." U.S. Department of Education, July 106. https://www.ed.gov/news/press-releases/education-department-proposes-rule-state-authorization-postsecondary-distance-education-foreign-locations

- Requiring institutions offering distance education or correspondence courses to be authorized in each state in which the institution enrolls students, if such authorization is required by the state;
- Requiring institutions to document the state process for resolving student complaints regarding distance education programs; and
- Requiring public and individualized disclosures to enrolled and prospective students in distance education programs, including adverse actions taken against the school, the school's refund policies, and whether each program meets applicable state licensure or certification requirements.<sup>94</sup>

Despite the potential benefits of a standardized authorization process for institutions that provide online education to students across states, as of December 2016, the DOE's proposed regulations faced considerable hurdles along the approval process. <sup>95</sup> **As such, many states are developing independent policies to address the state authorization issue in higher education.** This is because, as explained by researchers at the Century Foundation, "when it comes to consumer protection in higher education, states are the first line of defense. But when a school in one state enrolls an online student who lives in another state, which state is watching out for the interests of the student? Too often, the answer is no one."

The State Authorization Reciprocity Agreement (SARA) is an interstate compact that "allows institutions to abide by a single set of regulations, rather than those of each state in which they operate."<sup>97</sup> As reported by *Inside Higher Ed*, SARA is based on the premise of mutual buy-in and colleges and universities can elect to join and become authorized to offer programs to students in other member states. However, state laws will ultimately dictate how online students are regulated, and "member states of reciprocity agreements will need to address any conflicts that arise prior to admitting any state into the reciprocity agreement, and ensuring that states make any necessary changes to their laws before entry."<sup>98</sup> Given the ambiguities surrounding federal, state, and reciprocity policies regarding state authorization, though, online institutions are finding that they can simple "opt out" – for example, only 10 percent of for-profit institutions have joined SARA.<sup>99</sup>

To ensure that in-state online students are protected, both New York and California are developing their own regulation and authorization policies that consider DOE proposed regulations and the SARA partnership. In other states, institutions not approved by SARA can still offer programming that is, for the most part, unregulated. However, in New York and

<sup>&</sup>lt;sup>94</sup> Bullet points taken verbatim from: Ibid. Emphasis added.

<sup>95</sup> Straumsheim, C. "Is Distance Ed Rule DOA?" Inside Higher Ed, December 2016. https://www.insidehighered.com/news/2016/12/21/state-authorization-rule-long-works-faces-opposition-new-congress

<sup>&</sup>lt;sup>96</sup> Mattes, M. "States 'Opt Out' of Online Higher Education Regulation, Leaving Students Behind." The Century Foundation, June 2016. https://tcf.org/content/commentary/states-opt-online-higher-education-regulation-leaving-students-behind/

<sup>&</sup>lt;sup>97</sup> Ibid

 $<sup>^{\</sup>rm 98}$  Straumsheim, "Is Distance Ed Rule DOA?," Op. cit.

<sup>&</sup>lt;sup>99</sup> Mattes, "States 'Opt Out' of Online Higher Education Regulation, Leaving Students Behind," Op. cit.

California, lawmakers and education policy analysts "took the important step of regulating out-of-state online schools that are *not* approved through SARA [...] **New York is joining SARA and requiring, for all non-SARA schools, New York reviews and approves all degree-granting online schools wishing to enroll New Yorkers." The New York regulations ensure that all institutions that enroll state residents—not just those that operate physical campuses in the state—meet certain standards; if they do not, then New York can revoke their permission for that college or university to enroll any New York residents. 101** 

The National Governors Association (NGA) also recently released a response to the issue of authorization in online education, predominately addressing ways that states can provide distance education students with quality assurances. The NGA stated that "the rapid rise of online postsecondary education has sparked debate about quality assurance. There is an ongoing debate in the academic community about whether online learning is superior or inferior to the classroom-based model, with two-thirds of academic leaders maintaining that

States are responsible for the integrity of the postsecondary education provided within their borders, including online programs.

online education is at least as good as face-to-face instruction." <sup>102</sup> However, given the debate, it is critical for states to work with local institutions to ensure certain standards are upheld for all matriculated students, regardless of residency.

The NGA points to the U.S. Higher Education Act which, along with individual state statutes, specifies that "states are responsible for the integrity of the postsecondary education provided within their borders, including online programs." <sup>103</sup> In other words, state-level policy is expected both **to encourage access to online programs** and **to ensure quality by working with the federal government, accreditation agencies, and local institutions.** Policymakers are thus tasked with reviewing regulations and legislation to authorize locally-based online programs around three key areas:

- Purpose: What is the state trying to accomplish through the authorization process?
- **Requirements:** What is required of institutions seeking authorization? How do the requirements relate to the purpose(s) of authorization?
- Capacity and Cost: Does the state have a sustainable model for authorization, assuming that the number of online institutions and programs seeking authorization will continue to grow? Could economies of scale be realized by joining with other states to authorize online institutions and programs?<sup>104</sup>

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Mattes, M. "California and New York Lead the Way on Regulating Online Education." The Century Foundation, October 2016. https://tcf.org/content/commentary/california-new-york-lead-way-regulating-online-education/
101 lbid.

<sup>&</sup>lt;sup>102</sup> Reindl, Op. cit., p.1.

<sup>&</sup>lt;sup>103</sup> Ibid., p.2.

<sup>&</sup>lt;sup>104</sup> Bullet points taken verbatim from: Ibid.

Regulating online higher education, in many ways, requires a more collaborative approach between states, institutions, and policymakers than traditional programs. The nebulous role of a student's home-state policies versus their institution-based policies require both states and universities to find ways to integrate various considerations (Figure 3.1). 105 Institutions with clear policies and guidelines for authorizing students that meet state and accrediting body requirements and that structure costs fairly can be attractive to students and ensure compliance with relevant statutes.

• Typically different entities are responsible depending on whether an institution seeking authorization is for-profit or not-for-profit, or whether or not the institutions offers degree programs. Most states require out-of-state institutions offering certain professional programs, such as nursing or teacher education, to seek

Figure 3.1: Overlapping Regulations and Policies That Online Programs Must Consider

**Authorizing Agencies** approval from the state's professional licensure body. • In 34 states, non-public and out-of-state institutions providing online education are required to seek authorization only if they have a physical presence in the state. Requirements and Some allow institutions to seek exemptions based on accreditation or Exemptions lack of physical presence, and others have multiple authorizing agencies with different requirements depending on the type of •Several states charge no fees for authorizing online programs, but in some states fees exceed \$10,000 for a single institution, not counting the cost of items such as surety bonding to cover liabilities in the Cost event of institutional closure. • Complexity is another issue when it comes to fees, as a number of states assess several separate fees for the same institution and make certain fees contingent on specific institutional characteristics. • In more than half of the states, accreditation is a requirement for authorization, and for most of those states, the accreditation must Accreditation be from one of the nation's six accrediting agencies. Requirements • This raises the question of possible overlap and even duplication between the accreditation and authroization process in many states, since both focus on many of the same things.

Source: National Governors Association 106

#### **REGULATION ISSUES FOR MOOCS**

Although MOOCs provide a cost-effective way for students to acquire important skills from university faculty, they do not provide official degrees and therefore may not afford their participants with increased labor market prospects. Additionally, these types of microcredential programs have been subjected to questions about their rigor, academic

<sup>&</sup>lt;sup>105</sup> Willcox, K.E., S. Sarma, and P.H. Lippel. "Online Education: A Catalyst for Higher Education Reforms." Online Education Policy Initiative, Massachusetts Institute of Technology, April 2016. p.viii. https://oepi.mit.edu/files/2016/09/MIT-Online-Education-Policy-Initiative-April-2016.pdf

<sup>&</sup>lt;sup>106</sup> Adapted from: Reindl, Op. cit., p.3.

quality, and overall value, all of which impact their ability to be regulated, accredited, and/or authorized. Important to note is that "with all of the interest in MOOCs, one critical factor received very little attention – the regulatory implications of offering them. It is as though the regulations regarding offering online courses did not exist." <sup>107</sup>

There is considerable debate surrounding the requirements for authorization for these types of offerings, particularly when MOOCs and other microcredentials are provided free of charge. Indeed, policy is vague about the consumer protections required when receiving a free product – a key question is "whether or not charging tuition makes a difference when it comes to needing state authorization. If a course is free, one could surmise there is no consumer to protect, therefore state authorization would most likely not be required." Beyond the financial considerations, different authorization policies may impact how MOOCs can be offered, meaning that an MOOC that leads to a certificate will typically have different regulations than one that is offered as a standalone course. Thus, in short,

[...] it is important that institutions be aware of the current state regulations before offering online courses. This includes MOOCs, especially those that charge tuition, culminate in a certificate or credential, or are for-credit. And because of all the confusion that exists about state authorization, institutions would be wise to seek advice from a seasoned professional before deciding what steps to take.<sup>109</sup>

Given the new issues that arise as alternative approaches to online education emerge, it is important for institutions that offer distance programs to ensure compliance with a wide, and often ambiguous, range of policies. That is why many leaders in higher education continue to argue for a simpler process for institutions to offer online courses to students who reside in other states. <sup>110</sup> As it currently stands, the regulatory and fee structures faced by many community colleges and four-year institutions for establishing an online presence in another state is prohibitory, while MOOC providers that are not accredited, degree-granting institutions can often avoid these requirements altogether. <sup>111</sup>

#### **NEW YORK'S EXCELSIOR SCHOLARSHIP**

New York legislators recently agreed on a \$153 billion state budget plan, part of which aims to cover the cost of postsecondary tuition for any state resident that meets certain income thresholds. 112 While other areas offer free community college, New York is the first state to

<sup>&</sup>lt;sup>107</sup> Thompson, S.J. "State Authorization and MOOCs." State Authorization Network, May 2017. p.1. http://wcet.wiche.edu/sites/default/files/MOOC-final.pdf

<sup>&</sup>lt;sup>108</sup> Ibid., p.2.

<sup>&</sup>lt;sup>109</sup> Ibid., p.5.

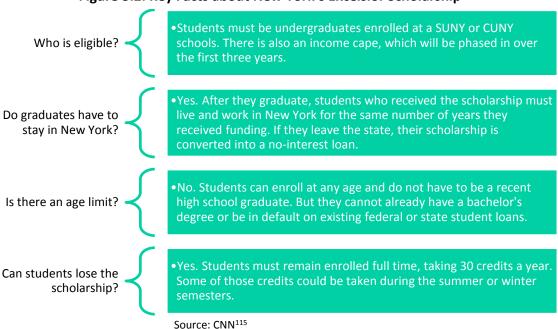
Lewin, T. "State Lines May Ease for Classes Held Online." The New York Times, April 2013. http://www.nytimes.com/2013/04/12/education/online-courses-should-be-easier-to-offer-out-of-state-panel-says.html

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Douglas-Gabriel, D. "New York Could Become Largest State to Offer Tuition-Free Public Higher Education." The Washington Post, April 2017. https://www.washingtonpost.com/local/education/new-york-to-become-the-largest-state-to-offer-tuition-free-public-higher-education/2017/04/08/3fe0563a-1c8b-11e7-9887-1a5314b56a08\_story.html?utm\_term=.3e2d322aebea

make tuition free at four-year institutions as well – predominately spearheaded by the State University of New York (SUNY) and the City University of New York (CUNY) systems. The Excelsior Scholarship, which was initially proposed in January, "will be phased in over three years, beginning for New Yorkers making up to \$100,000 annually in the fall of 2017, increasing to \$110,000 in 2018, and reaching \$125,000 in 2019. Nearly one million families will qualify for the scholarship." 114





Of note, recipients of the Excelsior Scholarship are required to stay in-state after graduation for two years if they graduated from a community college, or four years if they graduated from a state university. This residency stipulation is "alarming some student aid experts, including advocates for free public college tuition [...] Indeed, historically, many scholars of aid policy have said that trying to 'tether' students to states [will not] work, and that graduates will follow jobs elsewhere."<sup>116</sup>

Colleges and universities outside of the SUNY/CUNY systems are also concerned about the Excelsior Scholarship, fearing that enrollment may fall as students pursue the tuition-assisted state programs. Two additional measures in the budget deal further contribute to this skepticism outside of SUNY and CUNY schools:

<sup>113</sup> Lobosco, K. "What You Need to Know About New York's Tuition-Free Scholarship." CNN, June 2017. http://money.cnn.com/2017/04/10/pf/college/suny-cuny-tuition-free-college/index.html

<sup>114</sup> Douglas-Gabriel, Op. cit.

<sup>&</sup>lt;sup>115</sup> Adapted from: Lobosco, Op. cit.

<sup>&</sup>lt;sup>116</sup> Jaschik, S. "New York Adopts Free Tuition." *Inside Higher Ed*, April 2017. https://www.insidehighered.com/news/2017/04/10/new-york-state-reaches-deal-provide-free-tuition-suny-and-cuny-students

- \$8 million will be provided for promoting and distributing open educational resources (free online education materials) for SUNY and CUNY students. The systems have been urged to focus on high-enrollment courses, with the goal of minimizing or eliminating textbook costs for these courses.
- A new grant program will be created for students who attend private colleges in the state, with a maximum award of \$3,000; however, **private colleges would be required** to match the grants and to freeze tuition for the duration of a student's grant. 117

Based on the reactions to the program from institutional administrators outside of the SUNY and CUNY systems, "the program poses a significant challenge for New York's many small private institutions, which suddenly find themselves facing a new kind of competition and increasing inter-sector warfare in the state." <sup>118</sup> Indeed, as shown in Figure 3.3, private institutions are projected to see enrollment fall by between 7 and 15 percent. Experts across the sector further warn that "all private institutions in New York should take this moment to evaluate their strategies for the future. Some will have to find ways to keep the doors open in a suddenly more competitive landscape." <sup>119</sup>

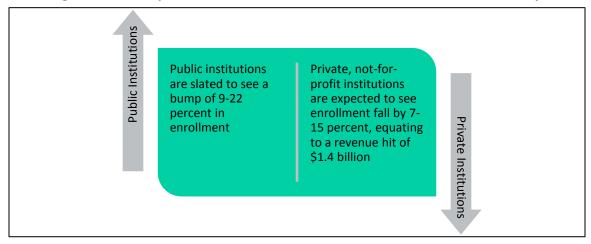


Figure 3.3: Anticipated Enrollment Effects of New York's Excelsior Scholarship

Source: The Commission on Independent Colleges and Universities in New York 120

Beyond the potential enrollment effects on private colleges and universities in New York, the Commission on Independent Colleges and Universities anticipates the Excelsior Scholarship program having additional detrimental effects across the state economy. First, the expected

<sup>&</sup>lt;sup>117</sup> Bullet points taken verbatim from: Ibid.

<sup>&</sup>lt;sup>118</sup> Seltzer, R. "A Marketplace in Confusion." *Inside Higher Ed*, April 2017. https://www.insidehighered.com/news/2017/04/13/new-yorks-free-tuition-plan-leaves-private-colleges-uncertain-about-future

<sup>&</sup>lt;sup>119</sup> Ibid. Emphasis added.

<sup>&</sup>lt;sup>120</sup> Adapted from: "Report: Effects and Consequences of the Excelsior Scholarship Program On Private, Not-for-Profit Colleges and Universities." The Commission on Independent Colleges and Universities, March 2017. pp.2–3. https://cicu.org/sites/default/files/2017-04/Report%20-

<sup>%20</sup>Effects%20and%20Consequences%20of%20the%20Excelsior%20Scholarship%20Program%20-%20Final.pdf

influx of new students to the SUNY and CUNY systems is projected to cost the state over \$1 billion in hidden costs, if matriculation reaches the additional 116,000 forecasted students because of the plan. Other potential adverse effects of this plan for private institutions include:

Figure 3.4: Other Anticipated Detrimental Effects of New York's Excelsior Scholarship on Private, Not-for-Profit Institutions

- Nearly 90 independent colleges and universities in the state enroll fewer than 2,000 students. Independent sector institutions that enroll high percentages of New York State resident students would be especially vulnerable.
- While more selective private colleges and universities would suffer less from the plan, less selective private institutions—those with a mission to serve a more diverse enrollment—would see the highest number of students leaving to enroll in public institutions.
- Lost opportunity is an intangible but very important cost. Many students who would otherwise thrive at an independent college would feel compelled to go to school for "free" even if the SUNY or CUNY school does not provide the best fit for them. 122

<sup>&</sup>lt;sup>121</sup> Ibid., p.1.

<sup>122</sup> Adapted from: Ibid., p.2.

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