The Next Wave of Online Education

How Three Markets Promise to Remake Digital Learning in the Decade Ahead

Authored by Scott Lomas and Elyse Ashburn

entangled.solutions
The first distance education courses were offered in the United States in the late 1800s when students in correspondence courses received class materials through the mail and sent their completed work back to the professor. The advent of radio and television in the 20th century shifted distance education to the airwaves, and, by the late 1960s, even Stanford was offering classes on closed-circuit television to employers in Silicon Valley.

For much of their modern life, however, distance education courses have suffered from an image problem. In the 1970s and 1980s, they were seen as cheap knockoffs of on-campus offerings. In the late 1990s, the introduction of online learning coincided with the expansion of for-profit providers. The two trends were often conflated in the media, and the quality concerns that frequently dogged the for-profit industry rubbed off on online education. Columbia University tried to change public perception in 2000, by launching a high-profile, online learning portal called Fathom that aggregated content from other top-ranked institutions. It was an idea ahead of its time, by a decade. The site went dark in 2003, after failing to turn a profit. By 2011, in a survey by the Pew Research Center, only 29 percent of American adults said that online courses offered equal value to learning in traditional classrooms.

And then Massive Open Online Courses (MOOCs) came along. The image of the online student shifted from a working-class high school graduate going back to school to a college-educated professional looking to gain a piece of knowledge to get ahead in her job. MOOCs did what millions of dollars in advertisements from online providers never achieved: they legitimized virtual education. While MOOCs didn’t reform higher education in the way the headlines about them suggested they would, the intense focus on pedagogy, online education, and access that came with their introduction have contributed to major shifts in the online marketplace in the last five years.

Now, online education is on the precipice of another major revolution. As this report lays out, a new generation of students are coming to college interested in a blended learning experience, one neither entirely online nor face-to-face. Meanwhile, changes in the economy and workforce are requiring further education for those who stopped short of a degree or hold outdated credentials. Online education holds the promise to serve all of these students in new and different ways.

But to take advantage of what’s next, colleges and universities can’t simply take what they’re doing on the ground and put it online. As this paper outlines, a detailed and dedicated online strategy is required to recruit the next generation of online students and compete with the biggest players in the space.

The future of work, indeed the future of our country, depends on our higher education system thinking differently about how to prepare the next generation of talent. The decade ahead will require institutions to ask the right questions about online education, to experiment, and attempt new approaches. This paper is an excellent start for institutional leaders as they begin that journey.

Jeffrey J. Selingo
Senior Strategist, Entangled Solutions
The Four Waves of Online Education

When Florida Atlantic University opened in 1964 it was designed to be a pioneer in distance learning. The entire institutional structure and physical campus were intended to reach far-flung students through technology, such as broadcast courses and later videotape. And yet, as higher education began to move onto the internet, Florida Atlantic—like so many other public and non-profit colleges and universities—watched from the sidelines.

The first wave of online higher education was populated by non-credit offerings and a host of degree-granting, for-profit institutions that quickly became household names—University of Phoenix and American Public, Kaplan, and Walden Universities. Buoyed by demand for online programs and aggressive marketing, for-profit institutions joined and then surpassed the ranks of the largest universities in the country. The University of Phoenix alone reached a peak enrollment of 475,000 degree-seeking students in 2010.

“Online education started at the margins of higher education,” says Rebecca M. Stein, Executive Director of the Online Learning Initiative at the University of Pennsylvania.

In the second wave, the fortunes turned for for-profit institutions as they faced lawsuits, federal investigations, heightened regulation, and a changing marketplace. As online learning technology advanced, and early entrants proved the market for online programs, nonprofit institutions, like Florida Atlantic, began to enter the market in a real way. The early part of this decade saw the rapid rise of online enrollment at institutions such as Western Governors University, Southern New Hampshire University, and Arizona State University as they heavily marketed their nonprofit status to set themselves apart from for-profit institutions and the unfolding scandals in that sector.

The third wave was the era of the MOOC, a time when free, open, noncredit courses provided by the nation’s most prestigious universities—Harvard University, MIT, Stanford University, and the like—caused many in the mainstream media to wax poetic about their potential to democratize elite education and revolutionize the whole system of learning and credentialing in the process.

Years later, we can see that the most dramatic predictions—that MOOCs would exponentially expand access to higher education, especially for less advantaged populations—haven’t played out. The vast majority of people who actually complete MOOC courses (and only a small proportion do) already have college degrees. And the free business model proved predictably unsustainable.

But Coursera, EdX, and Udacity are still with us, and they are shaking up the market, just not in the way many thought. In the fourth wave, the MOOC platforms are now the backbone for a growing number of online master’s degrees, from Georgia Tech’s low-cost engineering degree to a whole host of micro-master’s—which typically certify a core of learning (for example, in data science), grant test-based credit for a fee, and can be transferred into full master’s programs. An innovation meant to bring elite education to the masses may, in fact, end up bringing true lifelong learning—and credentialing—to the already educated. This much is clear though: two decades after the first college went online, MOOC platforms have finally brought elites into the market. And they’re here to stay.
The Three Major Online Education Markets

Graduate and Professional Online Education

This segment is the most mature of the three and is highly competitive. About one-third of students in graduate programs are fully online. Online program managers (OPMs) are most focused on this space, many exclusively so. Top university brands were the first movers into this market and are continuing to add programs. Disruptive models, such as the Georgia Institute of Technology’s low-cost online master’s degree in computer science and the introduction of micro-master’s degrees could cause upheaval in the market.

Online Courses for Traditional Undergraduates

This market is the least developed, and the strategy to serve them the most scattered. For many institutions, the primary goal for offering online courses to traditional undergraduates is to ensure on-time graduation, typically by offering online classes over the summer. Such courses are key to building institutional support, as well as retain tuition revenue from existing students. More of a focus in this segment on innovation in the classroom rather than new revenue. Because OPMs are largely absent from this space, students are served through an internal operation.

Fully Online Undergraduates

This market almost exclusively serves adult degree-completers, as well as some older adults entering college for the first time. This market is well-established, served by institutions with a wide range of approaches, but still has significant room for growth. Institutions looking to break into this market—or ramp up enrollments—will likely take a range of approaches, with no clear consensus on whether they will rely on OPMs or develop programs in-house. Whatever the strategy, to be a significant player in this market, institutions must be prepared to offer a relatively large portfolio of programs. Fully-online undergraduates want choice.

Online Education: Getting Bigger and More Competitive

As we come to the end of the second decade of the new millennium, the online education market looks a lot like the higher education market broadly. It’s varied and crowded, with 60 percent of the colleges with online enrollments reporting in a recent Eduventures survey that the marketplace is “much more competitive” than it was five years ago.
To compete, many institutions are turning to online program managers—such as 2U, Pearson, Wiley-Learning House, and Academic Partnerships—which provide upfront capital in exchange for around 50 to 60 percent of revenue. These companies focus almost exclusively on the graduate and professional market, where programs have the potential to scale quickly. The OPM marketplace expanded rapidly in the past decade and is already seeing consolidation—a trend market watchers expect to continue as colleges place downward pressure on the revenue-sharing arrangements.

Enrollments online have continued to grow steadily, even as overall enrollment in higher education has declined. Online education’s reputation has improved, albeit somewhat slowly, alongside growing enrollments.

Among both graduate and undergraduate students, 33 percent studied at least partially online in 2017—up from 31 percent the year before.

A Gallup-Lumina poll in 2015, the most recent conducted, found that 46 percent of Americans believe that “online colleges and universities” offer a high quality education, up from 30 percent the first year the question was asked in 2011.

One can’t help but wonder if the Gallup poll were conducted now—just three years later—whether it would draw such a stark line between online institutions and others. Many colleges and universities, after all, are both online and brick-and-mortar.

As the market has matured, however, the easy wins have become increasingly hard to find. Long gone are the days when you could put up an online program and just expect a respectable number of students to find their way to you. The market has bifurcated: online enrollment, in general, continues to grow—but large institutions that are truly national in scope dominate the market (see box). Many lack an institutional strategy for online and dedicated resources, which are required for growth in today’s market. It’s no longer enough to simply be online.

### Concentrated Growth in Online Education

The 10 institutions with the largest fully online enrollments—such as the University of Phoenix, Southern New Hampshire, and Western Governors University—enroll one out of every five students in fully online programs. The top 100 institutions account for almost half of all fully-online enrollments, while the other half are spread across a couple thousand institutions that have at least one fully online program but relatively low enrollment numbers. Hundreds of those institutions have reached some degree of scale—with around 1,000 fully-online students—but have seen their enrollments flatline or decline in the past five years.
Growth among the largest online institutions also is uneven, with non-profits making gains, while for-profits generally continue to shrink. And newer entrants with strong local brands have demonstrated real strength in their regions. The market beyond fully-online programs—where students are in blended programs or are taking at least a few courses online—also is much broader. Using that broader definition of online, institutions like Brigham Young University-Idaho and the University of Central Florida jump into the top 10—and more than two-thirds of students taking at least some courses online are enrolled at institutions outside the top 100. The University of Wisconsin, for example, has seen its online course enrollment take off just by emphasizing summer enrollment.

As the market matures, online education is no longer a distinct offering but increasingly resembles higher education writ large. “Online education,” in other words, is fast becoming just “education.” And that means that the strategies that work will be deeply rooted in institutional identity.

At the same time, online education is becoming increasingly place based—with both geographic region and physical space for students becoming more important. Three-quarters of fully online students are enrolled at an institution within 100 miles of their home, and 44 percent are attending one less than 25 miles away.

For many institutions, the major gains from the next wave of online education may not be in driving large enrollment increases, but in improving the effectiveness of their overall model by, for example, improving time to degree or using facilities more strategically. In other words, online may no longer be a strategy for major growth, but rather for incremental gains. We may have seen our last Southern New Hampshire transform from a small private college to a national brand. Any college that attempts it will need a model that is a vast departure from offerings in the marketplace today.

That said, even in a more mature market, there is plenty of room for institutions with strategy and financial commitment to join the 100 largest online institutions—and especially to become a regional powerhouse.

**Two major trends open up new opportunities across the degree-granting market—an increasing move toward blended learning and the blurring of the lines between for-credit and noncredit with microcredentialing.** This paper looks at how those trends are playing out in the three major market segments: traditional undergraduate students, degree-completers, and master’s. One thing is clear, if you want to be a player at all, you need to have a strategy.

---

**What is blended learning?**

This paper defines blended learning to include both the curriculum and related academic experiences, such as networking, peer study groups, and advising. As such, blended learning runs a broad range of programs. It includes programs with an intentional mix of fully-online and in-person courses, such as at the University of Central Florida. It also includes programs where all coursework may be online, but students come to a physical campus to meet with other students, for networking events, or for staff support, such as the Georgia Institute of Technology’s online master’s degree in computer science.
Since education moved online, the majority of undergraduates enrolled in online courses were those already taking in-person courses on campus. And their course-taking pattern was driven largely by a need to fill in gaps in their schedules or pick up a course while away over the summer. Institutions wanted students to have those options, but it was not a strategic offering. Institutional strategy around undergraduate education online, when it exists, has largely focused on expanding enrollment—bringing in working adults and other students who otherwise wouldn’t have shown up on campus.

But institutions are taking a fresh look at creating an online strategy around traditional-age students, including the ones already sitting on their campuses. Campuses such as Wake Forest University and the University of Wisconsin have seen significant growth in online credit hours by encouraging students to take online courses over the summer. In the summer of 2018, Wisconsin offered 236 courses online, up from 96 in 2015—and enrollments have grown from about 3,000 to almost 7,500 in that same timeframe. And students are satisfied: 82 percent report that they liked taking an online course and 92 percent say they would recommend taking an online course to a friend.

An approach like Wisconsin’s will not necessarily drive significant growth in overall enrollment, but it can increase flexibility for students and address critical needs around the use of space, course scheduling, time-to-degree, student debt and, in the case of public institutions, state demands.

In-person and online education can also work in tandem to not only speed up students’ progress, but more broadly improve educational quality. Florida Atlantic University has seen the number of online courses it offers explode in the past few years, in large part because of faculty evangelists. Faculty who were teaching online courses saw their overall pedagogy improve, along with their students’ outcomes—and they told others. The University’s Center for eLearning now experiences so much faculty demand that it holds open labs two days a week, and its staff regularly provides more intensive coaching and training. All told, about 50 percent of the University’s faculty have participated in some form of professional development through the center. The ultimate beneficiaries are its undergraduate students.

**Blending the Best of Online and Face-to-Face**

The University of Florida’s recent experience is a cautionary tale about the undergraduate niche of the market. At the state legislature’s behest, the university built and heavily marketed an entirely new online college offering bachelor’s programs designed to attract large numbers of first-time first-years, including those from other states. The university expected fully 43 percent of the new online programs’ students, both first-years and transfers, to come from out of state.

Enrollment fell well short of projections. The lesson: most students coming straight out of high school—especially those qualified to get into an elite four-year institution through first-year admission—still are not interested in attending college fully online. Recent high school graduates with their hearts set on the University of Florida want the full Gator experience.

The real promise of online for traditional students is a blended approach, either courses that combine online and in-person class meetings, or entire degree programs built around a mix of online and in-person classes. Both approaches take what students are already doing—showing up for some classes, but not others; adding an online course to their schedule each semester or over the summer—and bakes it into their degree plan.
This allows both the institution and the student to be more intentional. For institutions, this means creating a strategy around time-to-degree, focusing on which courses students take online, the sequence, use of faculty, use of space, and a concerted effort at time-to-degree. A blended approach allows students and institutions to take advantage of what each of the mediums, in-person and online, does best.

Another Florida institution—the University of Central Florida—illustrates the potential. None of its 5,000 fully online students, who receive a special fee status, are first-time, full-time undergraduates. The institution knows of only one in the entire time they’ve offered online programs. But in any given semester, 10,000 to 15,000 students are only taking online courses—and many of those are its traditional undergraduates. The next semester, those same students may take only in-person classes or a mix of in-person and online. Eighty-two percent of UCF’s students take at least one online course, and more than 40 percent of its credit hours are in blended or online courses. Students in its online courses have a higher success rate than those in face-to-face courses, and students in mixed-mode courses have still higher success rates.

**Dual Enrollment Online: Try Before You Buy**

Colleges and universities are also looking to online education as a recruitment tool for traditional-age students, by leveraging high school dual enrollment programs that give both the student and the institution a chance to “try before you buy.” Dual enrollment programs allow students to take college courses while still enrolled in high school, with students typically receiving both high school and college credit for the same course. The programs have grown in popularity as a way to provide high school students with more challenging coursework, raise college-going aspirations, and help students earn college credits early to speed time to degree. For public institutions, online offerings can help them meet critical state demands around serving the dual enrollment population and increasing college-going. Montana State University-Billings, for example, uses its University Connections online program to meet demand for dual enrollment opportunities and reach students who can’t make it to campus or don’t have a program in their high school.

Thirty-five states now provide for online dual enrollment, and many of those allow both public and private institutions to participate. A recent survey by the American Association of Collegiate Registrars and Admissions Officers found that 35 percent of colleges offered at least some dual enrollment courses fully online, and 12 percent offered whole programs, such as an early college high school online. About a quarter offer blended courses, where students meet both virtually and on the college or high school campus. For most institutions, recruiting was the top function of dual enrollment.
Colleges as Course Curators and Certifiers

MOOCs didn’t upend traditional higher education, but they did change our ideas about how to package and certify learning. They opened the market’s eyes to the potential of unbundling and then repackaging education. The move to microcredentialing—along with the push for “badging” for specific competencies—recognizes what data have long shown us: college education below the degree level matters, that “some college” has economic returns. What microcredentialing and badging aim to do is to make that benefit much more concrete for students, employers, and even institutions themselves.

Colleges and universities—particularly those with a relatively small faculty—could vastly expand their course offerings by allowing students to take open courses taught by another institution, either as a group or individually, while meeting with an on-campus faculty member for discussion and, ultimately, to grade a final project for credit. Students, especially those in traditional liberal arts settings, increasingly want a deeply personalized curriculum that constraints on faculty size don’t readily allow. A tutorial model that incorporates other institutions’ online content could change that. IMS Global is working with colleges across the country on standards for open badges, digital credentials, and competencies that could supercharge this type of learning.

At the graduate level, micro-master’s are already leading to partnerships where one institution does the teaching, and another certifies and issues credit. The Council of Independent Colleges recently launched an Online Course Sharing Consortium to do a version of this with institutions’ regular online courses, rather than open enrollment ones. The group, which has more than 650 private college members, partnered with the technology company College Consortium to allow students at participating institutions to easily enroll in and receive credit for courses taken at another institution. The students’ home institution determines which courses it will allow students to take and makes recommendations based on their academic programs. The approach relies on the consortia model, and further streamlines the process and allows for tuition revenue sharing among colleges.

A new partnership between Make School, a coding academy, and Dominican University of California shows another model of what curation and certification might look like at the undergraduate level. The university partnered with the non-accredited program to share accreditation and collectively offer a bachelor of applied computer science, as well as a minor in computer science for Dominican students. The programs are face-to-face, but there’s great potential to replicate such a partnership online. Rather than sending students to last-mile providers after graduation, institutions may soon be bringing these providers in-house.
Degree completers—either returning adults or community college transfers—are, and will likely remain, a large portion of the online undergraduate market. And this market is where the large institutions that are national in scope—University of Phoenix, Southern New Hampshire, Western Governors, and the like—dominate. There are regional players with large enrollments in this market as well, particularly in high growth states such as Arizona, Florida, and Texas. To join those ranks, an institution needs to be able to offer 10-to-20 high-quality, fully-online options, along with the full complement of general education courses. This is a go big, or go home play—and whether developed in-house or done with the assistance of an OPM, it requires a major institutional investment.

Increasing enrollment, while maintaining or improving completion, remains a real challenge in this area of the market. That creates an opportunity for institutions that can offer a hybrid program model to stand out regionally.

The catch 22 of the degree-completer market has long been that, generally, students who have struggled with higher education in the past do not perform as well in an online environment as they do in an in-person setting. But those same students often have life circumstances—work schedules, family responsibilities, or other time constraints—that prevent them from attending classes in person. Online programs that provide intensive advising and other support to keep students engaged and on-track can mitigate this, and more programs are being intentional about building those supports.

But the sweet spot may actually be a blended model. At the two-year colleges in the State University of New York, many students take a mix of in-person and online courses. And one of the system’s researchers recently identified the ideal mix for its students’ success: two online to three in-person. If a full-time student takes more than 40 percent of courses online, degree completion starts to be negatively affected.

**Location, Location, Location**

Institutions are also doubling down on location without actually bringing students to campus. Rather, they are focusing heavily on needs in the local marketplace and working to enhance connections with employers. Many of the community colleges in the State University of New York, for example, are going head-to-head with Southern New Hampshire, which markets heavily in New York, by focusing their online programs on highly local employer demand in fields such as energy.

At the four-year level, the University of Illinois-Springfield is looking at a number of options to increase its online enrollment, but is planning to recommit to its land grant mission and pay close attention to regional needs. To the south, the University of Central Florida’s online enrollment has grown rapidly because of its close working relationship with local community colleges and the relative ease of its transfer process.

Amid the college completion push, many institutions are reaching out to students who stopped out but lack just a few credits for their degree. Online courses could be a particularly powerful tool to get those students to complete a degree. Traditionally, tracking down students once they stop out has been expensive and time consuming, but new services like ReUp Education have reduced the investment required, and online programs can make it much more possible for students to come back and complete. ReUp leverages technology and coaching to bring stopouts back to the institutions they left, and many of the more than 4,000 students it’s re-enrolled in the past two years have taken advantage of online options.
Lifelong learning may have finally arrived with micro-master’s degrees and the proliferation of online master’s. This part of the market, arguably, is the most primed for continued enrollment growth. At the high end of the market, a master’s may soon replace the bachelor’s as the standard currency for employment. And, as automation and technological innovation continue to transform the labor market, expect demand for skills taught by the broad liberal arts—coupled with technical proficiency—to grow. That is a recipe for a broad bachelor’s degree, topped off with a micro-master’s or full master’s in a more technical field. This is, in fact, the niche that coding academies and other last-mile providers, such as General Assembly and FlatIron, are filling now.

**Credential Laddering**

Expect major, national brands to have a big footprint in this area. In just the past year, the University of Pennsylvania, the Massachusetts Institute of Technology, and the University of California at San Diego have rolled out new micro-master’s. All are centered on core strengths of the institutions and allow them to extend their brand. Such programs also can keep alumni who want additional training deeply connected to their undergraduate institution, without requiring them to attend in-person, full-time.

If demand for post-baccalaureate training does continue to proliferate, that doesn’t mean recent graduates are necessarily going to go straight into full-time graduate programs. Micro-master’s allow them to continue their training while working full time—with an eye toward eventually laddering those courses into a full degree.

For example, students who successfully complete the micro-master’s in data science offered by UC-San Diego are then eligible to receive credit for the courses from Rochester Institute of Technology or Curtin University if they are accepted into comparable master’s degree programs at those institutions. This approach has the twin advantages of allowing students to “try before they buy” and allowing institutions to test out students’ preparation. Both are especially critical in the case of career switchers or other students who are interested in a master’s in a field unrelated to their undergraduate education.
National vs. Deeply Local

There’s much debate about how much of the master’s market will be cornered by the large national institutions. MOOC-enabled degrees from brand names, such as Georgia Tech’s low-cost master’s in cybersecurity, computer science, and analytics or UPenn’s master’s degree in computer and information technology, will continue to draw large numbers. But admissions standards are still highly competitive, and the large course enrollment approach may not work for a wider range of disciplines.

Other institutions are betting that there’s opportunity in being deeply local, but online. They’re betting on their read of the regional market, employer connections, and potential for networking. The University of Maryland, Baltimore County, for instance, has decided to move more of its professional master’s programs online. The university expects that will help enrollment grow, but overwhelmingly among people in its immediate region. That’s where the university’s brand carries the most weight and where it has deep connections with employers. Students like being connected to the campus, but increasingly, they can’t work and make it to class on time because of traffic in the Baltimore-Washington corridor.

Institutions also are experimenting with a lightly blended model, with a few in-person meetings baked into a course at the beginning of the program, or a capstone course that meets at least partially in-person. Both have the potential to elevate face-time with faculty and encourage peer-to-peer support and networking, while still freeing students from a regular commute to campus.
Three decades after the first college program went online, the market for online degrees is crowded. Gone are the days when a college could launch an online program without much of a plan or a marketing budget. Just being online is no longer a differentiator.

In this more mature market, the most successful institutions will be those that adeptly navigate the twin trends of (1) blending online and in-person and (2) unbundling and repackaging of education. At the same time, an effective online strategy must now be deeply rooted in institutional identity and, for many institutions, geography.

What works in this new era of online depends very much on where an institution sits regionally and in the broader higher education marketplace.

**College and universities must be especially clear about which of three distinct populations—traditional undergraduates, degree-completers, and graduate and professional students—they aim to serve online.**

Each requires its own specific strategy and dedicated resources. In particular, institutions must be clear about their ultimate goal in pursuing any of the three student populations, whether it’s growth, efficiency, or pedagogical innovation.

Having clarity around your institutional strategies and goals is critical to compete in the online market. Not clear where you sit today or where is best to start? Entangled Solutions is happy to talk to you about your campus’s unique needs and discuss options to build a strategy that will be effective for you.

Contact us at scott@entangled.solutions.