Online Learning 2.0: Strategies for a Mature Market

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INTRODUCTION

It is an exciting time for online education. Lately, there has been breathless talk of a "revolution" and massive "disruption," largely based on Massively Open Online Course (MOOC) models pioneered by universities such as MIT and Stanford, and headline-grabbing start-up companies such as Udacity and Coursera. Meanwhile, university professional and continuing education units have long been pioneers in online education and have been evolving their course, certificate, and degree offerings for more than a decade.

While the world awaits the impact from MOOCs and the emergence of sustainable business models and evidence of student learning, the demand for online degree programs and courses from universities remains very strong. Online education has now passed the tipping point in credibility in the mind of the consumer public, university faculty and administrators, and importantly, employers. Other developments are adding to the momentum. According to research organizations such as Eduventures and the Sloan Consortium, thousands of colleges are now active in online education, enrollment now stands at millions of students, and the online market now represents $25 billion in annual tuition revenue—and one-third of all adult

student headcount. Where the 2000s saw experimentation and continued penetration, online education today can be characterized as a mainstream and mature market.

A MORE COMPETITIVE AND COMPLEX LANDSCAPE

Mature markets bring new dynamics and business models, and various developments are making the online education landscape more competitive and complex, creating a need for new strategic thinking and tactics. Where it was once primarily public universities and a selected set of private university innovators that were offering online degrees, the most elite and well-branded institutions in American higher education have now steadily begun to tiptoe—and in some cases move aggressively—into online degree programming. For example, Columbia University, Johns Hopkins, Georgetown, the University of Southern California, and the University of North Carolina at Chapel Hill are all offering new hybrid or fully online graduate degrees. This development does at least three things. First, it endorses the credibility of online education in the mind of the public; second, it attracts great attention from peers at all levels of the higher education food chain; and third, it means that these institutions now become competitors in student markets—all increasing complexity.

Interestingly, the entry of these selective institutions into online education has been enabled by another important development: the emergence of "turnkey" vendor models—companies such as 2Tor, Embanet, Deltak, Academic Partnerships, etc.—that provide a full value chain of services to bring institutions' programs online and market them in a span of as few as 6-12 months. This means that the lack of a distance-education unit and its infrastructure and know-how is no longer a barrier to entry in the online education game. These turnkey players also create new opportunities for institutions to selectively outsource aspects of their activities—e.g., marketing, student coaching, learning management system administration, or even curriculum development—for a best-of-breed approach.

A CASE STUDY IN NEW APPROACHES TO ONLINE EDUCATION

Northeastern University—a top-ranked, private, urban research university based in Boston—has long been an innovator in online education, beginning with microwave-based distance courses in 1974 and online courses in 1995. Today, Northeastern has more than 6,000 fully online students across 48 states and more than 60 online programs at all levels, having experienced

annual growth rates in the high double digits in online education over the last 7 years. This has been achieved through a purposeful and nuanced approach to embracing online-education leadership and innovation in institutional strategic planning, and experimenting with new business models, partnerships, and marketing and market development approaches. The process principally emerged out of two academic colleges, the College of Professional Studies and the College of Business Administration. Each elected quite different delivery strategies and both achieved considerable success in reaching new audiences. The College of Professional Studies developed and built out an in-house online delivery unit, while College of Business partnered with a vendor to deliver its MBA program.

Based on Northeastern's extensive experience, we argue that the new dynamics of the online education landscape demand focus on and new approaches in the following four areas:

- Strategic use of analytics.
- Tailored hybrid and blended approaches in regional settings.
- Strategic faculty models and enhanced quality management.
- Measuring and investing for online enrollment management.

Strategic use of analytics

The strategic use of data, analytics, and multi-faceted market evaluation has been at the core of Northeastern's approach to online education. The key is that strategy and analysis—built on evidence and data—is not a "siloed" activity embedded in a specialized research function, but rather an institutional approach to program design and implementation.

At the highest level, the university's strategy is built on analysis and data. This includes continually assessing enrollment trends, changing labor market demands, evolving employer needs, and the competitive landscape. These types of analytical inputs inform online program design with a heightened level of intentionality. When online program ideas or opportunities rise to the surface, market assessment becomes a key activity. Evidence of employer demand and value-added for students is documented; the competitor landscape and everything from branding to price positioning must be measured and considered; surveys are conducted to tailor the program to student and industry needs. Data and analytics also play a role in program assessment and enrollment management, from the use of dashboards that

allow leadership to make decisions on key performance indicators, to embedded assessment matrix within the course structure itself. Data are also collected on an ongoing basis related to regional needs, specific employers and audiences, and the response to marketing campaigns.

One innovative analytic approach that Northeastern has employed is using real-time labor market data and analytics tools. Software systems that mine millions of publicly posted job openings on employer web sites can be leveraged in at least three areas: program and curriculum development; market selection and geo-targeting; and marketing and partnership development. These data can be used to shape and target courses and offerings by specific and real-time industry needs. Data can also be used to identify needs that are unique to geographic regions, and in making decisions about marketing in or developing those regions (e.g., Washington, DC versus Atlanta). At a third level, data and analytics can inform marketing and partnership development by identifying the specific employers with the most job openings related to a given credential, and further drill down into skill needs and hiring trends within a single, specific employer.

Collecting customer intelligence (e.g., student surveying, secret shopping) has also been essential to Northeastern's strategies. Frequent surveying of current students, prospective students, lost leads, and alumni can identify opportunities or problems, improve educational quality, better align resources, and inform marketing messages and program development plans. With competition only a click away, continual customer and market intelligence are critical. This is achieved by outsourcing research as well as having a number of staff embedded within college enrollment-management research functions. Northeastern has invested significant resources in this area. Recently, this infrastructure and approach have been vital to identifying and developing remote markets and siting graduate campus operations in Charlotte, NC and Seattle, WA. Core to these unique branch campuses is the hybrid/blended educational approach.

Hybrid and blended approaches

Northeastern has for many years uniquely embraced hybrid/blended approaches within its online education portfolio. Rather than simply appending online courses to a face-to-face program, Northeastern has taken its fully online programs and offered face-to-face courses alongside them as well as offering hybrid courses that blend face-to-face meetings with online study. The hybrid format creates a level of student convenience but also maximizes student learning by optimizing cognitive in-class student

learning. A hybrid approach is a core attribute of Northeastern's extension into new regions with a national network of graduate campuses, and a differentiating element relative to its local competition in these markets. The regional physical presences provide a platform for hybrid delivery and local service delivery to in-region students, as well as putting a local brand and face to the institution.

Hybrid offerings are underdeveloped in higher education. This is unusual given the evidence of demand for and interest in this model, acceptance among students and employers, and growing documentation of the pedagogical benefits. Where online education was once a distance-focused market, the world is becoming more blended and diverse, with a spectrum for all contexts and student types. National surveys from groups such as Eduventures as well as Northeastern's own proprietary national surveys have documented that the majority (about 60 percent) of prospective students prefer some blend of face-to-face instruction and online learning. Northeastern has built programs such as its doctor of education degree around a hybrid model in Boston and intensive summer residencies for the national audience. The model serves students' needs but also serves faculty interest in interacting on a human scale to maximize cognitive learning and student socialization. Perhaps most interestingly, evidence continues to emerge that hybrid modes deliver high quality outcomes—from the 2009 US Department of Education meta-study on online education to the more recent, 2012 ITHAKA S+R report on randomized trials of interactive learning online. The emphasis is increasingly on student learning over faculty teaching, and new opportunities are continually emerging to experiment with "flipped classrooms" and peer-to-peer learning.

Strategic faculty models and a quality imperative

The strategic use of data is also informing Northeastern University's approach to instructional models and the student experience. To some degree, the data collection and use of contemporary cognitive learning theory—as well as course and student level assessment—are informing the way faculty are supported. In other cases, the geographic targeting and tailoring of certain programs referenced earlier can inform where instructors are hired.

Traditionally, universities—professional and continuing education units included—have focused their faculty hiring in their home region/service area, limiting the talent pool geographically or absorbing the costs of moving faculty to the home base. This has largely been a function of traditional modes of instruction. In many cases, especially in the field of

adult continuing education, adjunct instructors have been the rule of the day, particularly in smaller markets where full-time instructors were unavailable or unsustainable. This has led to critical instruction delivered by occasional faculty who may not necessarily feel a loyalty to the program, students, or school.

In a new model of online instruction, faculty no longer need to be place-bound but can be networked into a nationwide educational system. In fact, it may even be desirable to have faculty located where the student population is. In the fields of education or project management, for example, various state and regional differences are often lost on a geographically remote faculty. A nationally networked faculty can deliver "on-the-ground" perspectives of regional relevance to the student population. In many cases, since faculty and instructors may be working out of their home, resources can be diverted to bringing them periodically together in a central location.

This ability to hire faculty from around the country is very attractive on a number of fronts. It allows an institution to scale its operation even in those areas where it would not necessarily have a deep pool of instructors. It allows a program to be highly flexible while also providing faculty a great deal of flexibility in their own personal lives. Instructional quality can be managed and monitored electronically, making sure that quality is always foremost. This model allows faculty removed from the campus in Boston to participate, inform, and craft a new style of faculty culture.

The notion of a geographically dispersed faculty may be anathema to those who believe that faculty are the core of a university and that proximity is the basis of creating faculty culture. The model may appear administratively heavy handed and isolating to individual faculty members. This need not be the case if academic governance structures account for geographic dispersion and if quality remains an imperative. The concept of a networked faculty is in fact not new, as many faculty are more familiar with their respective discipline's colleagues at other institutions than they are with faculty from other fields on their own traditional campuses—and technology is increasingly allowing research collaborations to take place across great distances. Academic quality and our faculty's ability to create and disseminate new knowledge should not be lost in these new models.

The development of master teachers can also be an effective tool in maximizing instructional quality. Master teachers can design core courses that can then be delivered by instructors who are supervised or trained by the master teacher. This model ensures consistent content delivery and qual-

ity assessment, while easing—to a degree—faculty teaching loads. Rather than adjunct instructors crafting core curriculum, master-teacher courses can effectively deliver consistent university-quality content. Master teachers can be research faculty, seasoned teaching faculty, or a team of faculty. A "best-in-class" faculty member designing a course enabled by well-trained and supported instructors and facilitators can leverage academic resources while ensuring quality instruction.

This model also needs to be supported with a team of qualified instructional designers, technologists, videographers, and graphic designers to ensure the online experience is effective and student-centered. Increasingly important for instructional designers is a deeper understanding of cognitive learning theory and teaching pedagogy so that students can maximize learning.

This notion of instruction is not inexpensive—quite the contrary. A well-designed course will have staying power and over time become cost effective. It is also not always an easy transition for faculty to make. For example, using cognitive task analysis to break down processes to facilitate student learning may be a foreign exercise for faculty. Professional development for faculty teaching online needs to be available. Working with qualified instructional designers and pedagogical experts can be key to developing a strong educational experience. Consequently, faculty initially spend considerable time and energy developing courses and elucidating concepts. The effort yields a higher quality course and builds in a sustainable teaching platform that can eventually enable faculty to explore more subject matter with their students than they might otherwise be able to in a traditional face-to-face environment.

To gain initial faculty buy-in, traditional incentives can be used. These may range from additional compensation for course design or teaching buy-outs. The incorporation of this form of instruction also needs to be recognized in more formal faculty review, merit, and promotion protocols. This becomes increasingly important for faculty not located on the home campus, as colleagues will need to rely on electronic teaching records to evaluate peer performance. For the academic department or college, the benefits can also be great as it provides clear outcomes-based instruction that can be monitored and enhanced over time.

A keen awareness of industry alignment is also critical in a quality online professional education curriculum. At Northeastern, where this is an important differentiating element, the alignment of the curriculum with

industry needs is facilitated by the data and market research mentioned earlier. The use of industry advisors as well as faculty drawn from a given sector can keep a professional program aligned with its industry of focus. The regional variations within industry sectors can also be addressed through developing the regional campus network, with high tech emphasized in one region and energy systems in another, for example.

Enrollment management for an online audience

Finally, the quality imperative for the curriculum is multifaceted and pervasive. Instructional designers are tasked with coaching faculty to develop courses that are optimized for the learner. Course objectives are aligned with student assessments. Here, data and measurement complete the data analysis loop. Data analysis begins with an eye toward identifying student markets and program design and ends with a program-level assessment, which then informs student markets and curriculum in a finer detail.

The final aspect of measurement is student-centric in nature. Enrollment-management processes are well established for undergraduate four-year degree programs. Measures of retention, completion, and graduation rates are well defined. In the online market, these traditional measures often fall apart. Programs vary in length. Working students progress at their own pace and not necessarily with their admission cohort. Students enter professional master's programs at various points within their own career. Some students enter a few years out of formal education while others enter after decades of being away from formal education. The challenges in measurement are vast.

For Northeastern University's College of Professional Studies, the answer came in the form of an enrollment management dashboard that was created for our fully online programs. Rather than measure and benchmark according to national averages (which do not exist in a meaningful form), measurement is relative to the campus' suite of programs. Using the dashboard, performance goals are set to address problem areas (i.e., conversion rates, persistence rates.) that are identified as low within the program groupings. Work and effort are focused on improving the performance matrix at all levels. The performance dashboard and other data collection on student performance inform our approach to enrollment coaching, marketing messaging, and technical support available to students in an online format. It has also led to the development of virtual writing labs and, in the future, virtual math tutoring labs.

CONCLUSION

Within the context of a maturing online market, institutions will face a new set of challenges as they identify strategy and market differentiation for their online programs. This article has elucidated aspects of one institution's approach to these new market forces. Northeastern University, through the pervasive use of market and program data, is crafting strategies that drive approaches as diverse as geographically tailored marketing, new processes for online course development, and hybrid teaching and learning models that build on the strategic positioning of physical university assets in a nationwide network. This case can be informative for others thinking about their own online program strategy as it presents a unified framework that can serve as a model of strategy integration across an institution.