

**THE FUTURE OF THE UNIVERSITY: COMMONALITIES BETWEEN RESEARCH 1
INSTITUTIONS WITH SIGNIFICANT GRADUATE-LEVEL ONLINE
ENROLLMENTS**

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Abstract

The purpose of this research study is to identify the shared characteristics for developing and administering online learning initiatives among leading nonprofit higher education institutions. By conducting qualitative, in-depth interviews with university leadership at 12 of the 15 institutions enrolling the greatest amount of online graduate students, the researcher identified the commonalities present in regard to developing and administering online graduate courses for their respective institution.

The findings revealed that graduate-level online learning helps expand access to the institution for an alternative type of learner. University leadership prioritized online learning by promoting its virtues and looked for avenues to strategically grow online learning opportunities on their respective campuses. These schools largely developed and administered online learning through a centralized unit that works to build relationships with faculty members across their campuses. The findings conclude as leaders considered the future of online learning at higher education institutions and how it will evolve over time.

This research is meant for leadership at higher education institutions who are interested in mobilizing and scaling online learning opportunities at their respective campus by adapting and implementing the commonalities gleaned from leaders in the field in a way that is authentic and fits within the mission and vision of each individual institution.

Introduction

Distance education, defined as “education that uses one or more technologies to deliver instruction to students who are separated from the instructor,” (Allen & Seaman, 2017) has been an alternative of *face-to-face classroom instruction*—courses taught in a traditional classroom setting, with the instructor and students present in a classroom atmosphere (Allen & Seaman, 2017) since the 18th century. The growth of distance education has mirrored the growth of technology throughout the 20th and 21st centuries. From radio to television to the internet, students have participated in distance education more abundantly as the technology has improved, creating greater interaction between classmates and the instructor, as well as enhancing learning outcomes (Kentnor, 2015).

With the advent of *online education*—distance education courses offered by higher education institutions (HEIs) using the internet—the line is becoming increasingly blurred between “alternative” distance education and traditional face-to-face courses. In the most recent report on distance education, as of the fall 2016 semester, more than 6 million students took at least one *distance education course*, defined as “a course in which the instructional content is delivered exclusively via distance education” (Seaman, Allen, & Seaman, 2018) in the United States, comprising 31.6% of all higher education enrollments. Of that 31.6%, more students are taking a combination of distance courses and traditional courses (16.7%), than students taking exclusively distance courses (14.9%) (Seaman et al., 2018). Over time, distance education has grown as a legitimate option for postsecondary students to work toward their degree, rather than as a last resort for students to continue their studies. While it’s impossible to know the future segment of higher education enrollments occupied by distance education, distance education will be intrinsically linked with higher education moving forward.

Abundant research has been conducted studying the origins of distance education, perceptions of distance education from various viewpoints (societal, student, instructional, etc.), retention in distance education, communication preferences in distance education courses, persistence strategies of distance learners, and online course pedagogy, among others.

However, gaps in the research exist. Online education is in its infancy. Over the past two decades, the medium has morphed considerably from an alternative of face-to-face instruction to a strategic initiative at institutions, due to the growth of distance enrollments, allowing distance education to fit securely within the overarching structure of higher education. One area the research fails to cover is the administration of graduate-level online education at the institutional level, answering the question why some colleges and universities have a robust graduate online presence while others are more hesitant to build their online portfolio of courses and programs.

In the new digital learning environment, public and private nonprofit, degree-granting HEIs with an aligned, strategic vision for building graduate-level online courses and programs have benefited from institutional foresight and occupy the majority of the online graduate population. Nearly half of all distance education students are enrolled in just 5% of the HEIs in the United States (Seaman et al., 2018). However, many other HEIs are looking to play “catch up,” recognizing the opportunity for additional revenue streams and the expanded access online learning can provide for graduate students. These institutions are looking to scale online learning but often fail to properly develop and allocate the resources necessary for sustained success.

The purpose of my research is to explore the shared characteristics that public and private nonprofit, graduate degree-granting higher education institutions with the largest number of enrolled graduate students taking online courses possess. By identifying and disseminating the best practices used within the schools with the most graduate-level online enrollments, this thesis

will provide nonprofit institutions looking to build their online portfolio a road map for successful implementation of their graduate course offerings online. Certainly, every HEI looking to scale graduate-level online learning opportunities has nuances and organizational needs that differ from institution to institution. Arming HEIs with the overarching, collective factors necessary for mobilizing and scaling graduate-level online learning options will allow institutions to grow these enrollment figures organically, in a way that fits within their respective institutional mission and vision.

In the following section, I will review the existing pertinent literature including the history of distance education, the current status of distance education, issues associated with distance learning, as well as predicting the future of distance education. These varied topics will be reviewed to gain both a better historical and current understanding of the medium, as well as to grasp the importance of the medium as an initiative in higher education.

Literature Review

History of Distance Education

The earliest known opportunities for distance education originated in the 18th century. On March 20, 1728, Caleb Phillips placed an advertisement in the *Boston Gazette* offering shorthand lessons through correspondence (Smith, 2016). However, Isaac Pitman is considered the “pioneer of distance education” as he taught shorthand writing methods by correspondence in England in 1840 by mailing postcards to students instructing them to transcribe passages from the Bible into shorthand and to return the passages on a postcard back to Pitman (Verduin & Clark, 1991).

Various individuals worked to expand Pitman’s novel idea of offering classwork by correspondence. Anna Eliot Ticknor is credited with starting the first correspondence school in

the United States in 1873, as she founded the *Society to Encourage Studies at Home*, allowing all women regardless of financial ability, educational background, race, geographical location, or physical ability the opportunity to grow their scholarship and understanding (Cole, 2012).

Subsequently, William Rainey Harper, the president of the University of Chicago, was the first to offer correspondence courses for college credit in the United States (Scott, 1999).

As new technologies emerged, the avenues for distance education expanded. With the advent of regional radio stations in the United States in 1920, a new method for consuming course material was born, decreasing reliance on a sluggish United States Postal Service. In 1921, the first educational radio licenses were granted. Over the next 25 years, the Federal Communications Commission (FCC) would grant educational radio licenses to over 200 colleges (Casey, 2008).

Improving on radio technology, the emergence of television allowed students to use multiple senses to comprehend information; not only could aural learners digest information, visual learners could do the same. In 1934, the University of Iowa became the first school to use television broadcast as an instructional medium (Casey, 2008). Distance education evolved throughout the 20th century as the technology improved and instructors became more comfortable using the various mediums available for educational purposes.

However, these mediums were predominantly seen as supplementary to classroom instruction as well as limiting, since college degrees couldn't be obtained by simply watching educational television. Furthermore, the limitations of the technologies used for distance education meant communication between instructor and student was inefficient and unwieldy. It would take a singularly brilliant invention for distance education to grow to a modern method of instruction and increase the speed, ease of use, and popularity of distance education courses.

In the 1980s, what started with corporations using computer programs to train new employees grew to utilizing online learning in higher education. Online programs began in 1989, when the University of Phoenix used CompuServ, one of the world's first online services. Two years later, Tim Berners-Lee unveiled the World Wide Web, and the University of Phoenix became one of the first universities to offer courses available online (Kentnor, 2015). A for-profit establishment, the University of Phoenix prompted nonprofit institutions to conjecture if they could build similar programs (Carlson & Carnevale, 2001). Various HEIs, specifically for-profit institutions, began to grow their online course portfolio as the medium became more ubiquitous in homes across the country and around the world. This process started slowly, but in a short amount of time, the online delivery of courses vastly replaced the alternative distance methods described previously and continues to dominate the distance education platform today. Twenty-two percent of institutions used the internet for course delivery in 1995, and that number jumped to 60% during the 1997-1998 academic year (Dobbs, del Carmen, & Waid-Lindberg, 2017). Seeing the growth and opportunity available, online courses at nonprofit institutions began to increase, although the popularity didn't surge until 1998, when New York University offered NYU Online, becoming the first large nonprofit institution to build an online educational school for its students (Arenson, 1998; Kentnor, 2015).

In the years that followed, various for- and nonprofit universities grew their online course offerings. Not all were successful, however. Many universities had to close their online programs for several reasons including a lack of understanding of online pedagogy and online learning styles, dwindling faculty support from professors unwilling to teach online courses, and a lack of buy-in from leadership at traditional universities who worried the quality of online education would be a detriment to an institution's brand (Kentnor, 2015).

Online Education Today

While online education has grown over the past 20 years, so too has a need to record the state of online education. The official data of record for online education in the United States is provided by the National Center for Education Statistics' *Integrated Postsecondary Education Data System* (IPEDS), where HEIs self-report their online learning enrollments year-over-year. Building on the raw data found in IPEDS, Allen and Seaman provide yearly reports, revealing trends in online education, such as growth by type of institution, region, and age of students, while showing patterns evolving and shifting over time.

What follows is an assortment of statistics from the most recent study (Seaman et al., 2018) detailing fall 2016 semester data for all 4,717 degree-granting higher education institutions that were active and open to the public in the United States:

Total online enrollments. Of paramount importance, 6,359,121 students took at least one distance education course, comprising 31.6% of all higher education enrollments, a 5.6% increase year-over-year. This follows a trend, as the proportion of higher education students taking distance education courses has increased each year since IPEDS began capturing data in fall 2002, when the proportion of students taking at least one online course was 9.6% (Allen & Seaman, 2014). In total, of the 4,717 degree-granting higher education institutions active and open to the public in the fall of 2016, 3,354 (69.3%) of institutions had at least one distance education student.

From an institutional level, public schools educate the largest proportion of distance learners, comprised of 4,380,420 students (68.9% of online learners) followed by private nonprofit institutions (18.0%) and private for-profit institutions (13.1%). As stated previously, while distance education began with private for-profit institutions, nonprofit institutions now

control over 85% of the market for distance education. Further, the enrollment decline has been notable at for-profit institutions, with a 32.3% decrease in the total market from 2012-2016.

Interestingly, the increase in distance education enrollments is paired with the decrease of students studying exclusively on campus. In the fall 2012 semester, 20,928,443 total students at the undergraduate and graduate level were enrolled across all degree-granting institutions in the United States. In the fall 2016 semester, four years later, the number of total students enrolled decreased by 3.8% to 20,124,203. This is a change from the 10 years previous (2002-2012) which averaged a 2.7% compound annual growth rate for overall enrollments. Additionally, between 2012 and 2016, students not taking any distance courses or taking a combination of distance and non-distance courses decreased by 6.4%, meaning more than one million fewer students studying on campus than in 2012, translating into 250 fewer on-campus students for each HEI in the United States.

Graduate online enrollments. In the fall 2016 semester, 1,105,124 students were taking distance courses at the graduate level. While this accounts for only 17.4% of total distance enrollments for the fall 2016 semester, the rate of change in graduate distance education enrollments is growing more rapidly than the rate of change in undergraduate distance education enrollments. Between 2012 and 2016, graduate distance education enrollments grew 21.7%, compared to 13.2% for undergraduate distance education enrollments over the same time span. Additionally, the year-over-year growth in graduate distance enrollments between 2015 and 2016 (7.4%) is the highest since IPEDS began collecting distance enrollment data, outlining an increased progression from 2014 to 2015 (6.0% growth), 2013 to 2014 (5.9%), and 2012 to 2013 (4.3%).

Comparatively, overall undergraduate enrollments in the United States have decreased 4.8% between 2012 and 2016 and graduate enrollments in the United States have grown 2.1%. With healthy growth in online enrollments over this same time period (13.2% for undergraduate, 21.7% for graduate) outstripping the overall undergraduate and graduate enrollment numbers, the patterns observed in the IPEDS data and by Allen and Seaman point toward a bright future for distance education, with nearly all of distance education enrollments being of the online variety.

Barriers to Online Education

Distance education, and more recently, online education, has grown in scope and stature over time. However, certain hesitations have led some colleges and universities to question the legitimacy of developing and administering online courses and programs on their respective campuses. Many of these fears have waned over time due to increased comfort with the technology and an improved perception of the quality of online educational outcomes more closely mirroring traditional classroom outcomes, but the issues are still salient to the overall perception of online courses. As stated earlier, online education is still in its infancy, only being widely used as a teaching and learning medium for two decades. The rapid improvement of the technology, coupled with increased familiarity of the medium's potential, means the record for online education is still being written.

A common issue cited in online education is whether it offers the same quality of education found in face-to-face courses (Allen & Seaman, 2013; Benton, 2009; McCarthy, 2009). As more is known about the capabilities and opportunities to use new technology in online courses, the narrative is changing. As part of a longitudinal annual study on the state of distance education in the United States, Allen and Seaman (2016) noted in 2014 that 71.4% of academic leaders rated the learning outcomes in online education as the same or superior to those

in face-to-face instruction, up from 57.2% in 2003, the first year of the study (Allen & Seaman, 2016). Moreover, recent research shows while online education does not offer all of the same communication methods of face-to-face instruction, the learning seems to be unaffected, with recent research finding no significant differences in knowledge acquisition between online and campus courses (Mitchell, Parlamis, & Claiborne, 2015). As the medium has become more widespread, so has its acceptance.

Historically, another issue cited in online education is the hesitation of faculty to teach courses online for a variety of reasons (Allen & Seaman, 2013; Benton, 2009; McCarthy, 2009). These reasons can include a lack of understanding the technology, an unwillingness to adapt to new teaching methods, and a perception of online courses as a time-consuming medium upsetting the balance of teaching, research, and service in higher education (Mitchell et al., 2015). A lack of understanding of the technology can be mitigated with training strategies for teaching online. Further, a longitudinal case study of time spent for online teaching-related tasks (email, discussion board, and assignments) found it was comparable with face-to-face courses (Lazarus, 2003).

Although there are still issues related to online education, the familiarity with the medium and growth of online courses are helping to mitigate some of the perceived issues associated with online education.

The Future of Online Education

As seen in the official IPEDS data and reports from Allen and Seaman, online education is an increasingly large proportion of higher education enrollments. What was once seen as an alternative method to taking traditional, face-to-face courses, the future of online education may not be seen as a secondary option, but rather, another viable option to face-to-face instruction. As

discussed previously, the majority of students taking distance courses are also taking face-to-face courses. Moreover, the number of students taking at least one distance course is up 3.9% in the past three years while the overall enrollments in higher education is down 3.6%. As universities increasingly master the technology associated with online education and have a greater understanding of online pedagogy and the needs of online learners, online education will certainly expand.

MOOCs. One such technological development that has piqued interest and garnered attention in online education over the past several years are *Massive Open Online Courses* (MOOCs). Varying from traditional higher education online courses offered by individual institutions, MOOCs offer open enrollments, where enrollment figures aren't capped to keep class sizes low. In contrast, MOOCs are scalable to large audiences, with many courses enrolling over 50,000 students worldwide (Billington & Fronmueller, 2013). While MOOCs began as early as 2007, 2011 was the year where MOOC awareness and growth began with an "Introduction to Artificial Intelligence" course offered by Stanford Professor Sebastian Thrun, which enrolled more than 150,000 students worldwide (Pappano, 2012). The success of the course led to the formation of Udacity, a third-party online program manager (OPM), in 2012. Since then, MOOCs have grown rapidly, and the marketplace has become more saturated. Coursera, edX, and Udemy, among others, are OPMs that are leading the way in building online courses (Billington & Fronmueller, 2013).

As the platform has become more understood, universities are partnering with these OPMs to sponsor MOOCs. Historically, MOOC completion didn't typically equate to college credit, but that trend has recently shifted. Schools like Georgia Tech, The University of Texas at Austin (UT-Austin), The University of California, San Diego, and Indiana University have

partnered with edX to create master's programs in cybersecurity, analytics, data science, and marketing, among others ("Master's Degrees on edX," 2018). Since these offerings provide class sizes much larger than the traditional degree program, edX is able to offer a dynamic pricing model for its programs. For example, a master's degree in cybersecurity from Georgia Tech costs \$9,920 and a master's degree in computer science from UT-Austin costs \$10,000 ("Master's Degrees on edX," 2018).

Considering the average cost of a master's degree ranges between \$30,000-40,000 ("Is the Cost of a Graduate Degree Worth It?," 2018), edX master's degrees are offered at a fraction of competing programs. However, their role in higher education is still being understood over time. To combat increasingly rising tuition costs, MOOCs and master's degrees managed by OPMs on behalf of HEIs may be seen as a viable alternative to expand access worldwide to university resources and teaching without physically being on campus (Billington & Fronmueller, 2013).

Technological advancements. While it's impossible to say for certain what the future of online learning looks like, there is no doubt the proliferation of technology will play a central role. Online courses are becoming more social thanks to wikis, audio/video conferencing, chat rooms, and virtual classrooms. These technologies allow students to interact with their peers and with their instructors more easily, bridging a historically limiting factor of online education (Cunningham, 2017). Human-machine communication including technologically augmented persons (robots, A.I. teachers), machine learning (virtual students, teachable machines), and simulated worlds (virtual and augmented reality) are just a few of the possible technologies online courses could adopt for a richer course experience in the future (Edwards & Edwards, 2017).

Various HEIs are experimenting with simulated worlds in online courses. For example, Drexel University has created an internal online repository with more than 250,000 pieces of virtual reality content that can be used across disciplines for instructors to implement in their online courses (Lieberman, 2018). OPMs and corporations are also experimenting with simulated worlds in the classroom. Coursera is one of many OPMs that has created a series of online courses teaching the fundamentals of augmented reality and how to build augmented reality experiences (“Introduction to Augmented Reality and ARCore,” n.d.) to teach the next generation of instructional designers how to replicate augmented reality experiences in the online courses they design.

Reimagining the student journey. Traditionally, the purpose of students attending HEIs was to receive a degree and use that degree credential (as well as the learning outcomes from their coursework) to make themselves competitive applicants for employers. Since the modality’s inception, online courses have largely mimicked the cadence of their classroom counterparts by being offered on a semester schedule and mirroring the classroom curriculum. However, shifts in labor market demand and the qualified workforce dictate the need for a sequence of credentials accumulated over time to move an employee along a career pathway (Lakin & Underwood, 2017). With only 30% of young adults earning a bachelor’s degree by age 27 (Carnevale, Smith, & Strohl, 2010), industries such as information technology and health care are turning to educate the workforce via boot camps and professional certifications in lieu of traditional academic degrees.

Historically, these certifications have been offered by private, for-profit education companies and OPMs. HEIs looking for increased enrollments and alternative tuition sources have recently encroached on these professional certifications and boot camps traditionally

offered by for-profit companies. These HEIs have been growing their noncredit professional credentialed certificates internally, providing a value proposition that can't be matched by private, for-profit education companies: the marketability of the institution's brand.

One institution pioneering the development of online non-credit professional certificates is the University of California, Los Angeles (UCLA) Extension School. With over 150 online professional certificates ranging from early childhood education to real estate, developed by industry experts which "balances theory and real-world practice," UCLA certificates help transform a career by offering intensive, specialized courses that can be completed quicker than postgraduate degrees ("Certificates at UCLA Continuing Education," n.d.). Because of their non-credit status, these certificates offer open enrollment for any learner, thereby lowering the enrollment barrier for interested students to grow their skills and develop in their careers. While credentialed certificates are alternatives to traditional degrees, graduates average \$15,459 in salary increase after completing the program (UCLA Extension, 2019), showing the rising value of professional certifications in lieu of traditional degrees in certain industries.

The adoption of these online, stackable credentials could be seen as a viable alternative to traditional degrees, especially within industries relying on technical education and nuanced processes. Employers are increasingly seeing more value in online credentials, as 61% of human resource leaders believe "credentials earned online are of generally equal quality to those completed in person" (Gallagher, 2018). As individuals in the workforce look to train for promotions or to pivot to a new career, stackable credential programs can fill a need and provide an opportunity to rapidly develop new skills in a more pragmatic way than traditional degrees may be able to provide.

In summary, the existing literature describes the history and growth of distance education as an authentic and growing segment of higher education. It also describes the issues associated with distance education from a variety of viewpoints. It prognosticates what distance education looks like in the future, although only as a conjecture due to rapidly evolving technology and undetermined future technologies that will affect distance education.

Although the existing research is abundant, there is a critical piece missing: the decision-making process of universities and colleges. Specifically, why some institutions have a robust offering of graduate online courses while other institutions are more hesitant to build their online portfolio of courses. Understanding these factors is of great importance, as online education continues to grow and converges more fully with the strategic mission of higher education institutions moving forward. Additionally, by building centralized resources for online learning, including instructional design, marketing, videography, enrollment, and advising staff, while generating buy-in from faculty and administration, HEIs can be well-positioned to organically grow their resources for online learning.

My research question – what similar components do nonprofit higher education institutions with significant graduate-level online enrollments possess? – will help provide clarity for nonprofit institutions undecided about scaling their online course offerings as well as offering nonprofit institutions looking to build their online course portfolio a road map for successful implementation.

Research Method/Procedure

What follows were the steps I took to plan, conduct, analyze, and disseminate the findings from the aforementioned research question.

Planning the Study

To understand the shared components that HEIs with significant graduate-level online enrollments possess, in-depth interviews were conducted with senior-level administrators of graduate-level online learning at various institutions. To decide which institutions to use for further study, I consulted *the Carnegie Classification of Institutions of Higher Education*. This classification is considered “the leading framework for recognizing and describing institutional diversity in U.S. higher education since 1970,” (“The Carnegie Classification of Institutions of Higher Education,” n.d.) and groups campuses by institutional control and for research comparison. For this study, I assessed “R1: Doctoral Universities – Very high research activity.” This category includes institutions awarding at least 20 research doctoral degrees in the update year, as well as providing at least \$5 million in total research expenditures per year (“Carnegie Classifications: Basic Classification,” n.d.).

From the list of “R1” institutions, I chose the 15 schools with the greatest amount of enrolled graduate students online for further study (see Appendix A). After identifying these 15 institutions, a senior-level administrator tasked with developing and administering online graduate courses and programs on behalf of their institution was recruited to participate in an in-depth interview. A connection was made via email, and I recruited the administrator using a standardized email template (see Appendix B).

Developing Research Materials

After identifying and securing interviews with administrators, I developed a protocol to ensure consistency between each interview. This included a prescribed interview guide (see Appendix C) that led the researcher through a series of questions. This interview guide standardized the language and tasks conducted prior to and immediately following the interview, including solicitation of written consent for the interviewees’ answers to be analyzed for research

as well as reiteration of the care taken to protect the integrity and anonymity of each interviewee's identity. Knowing the interviews would be conducted remotely, I tested the video conferencing software to ensure a seamless experience for each in-depth interview.

Collecting Data

After planning the study and developing the research materials, I scheduled an agreed upon time for each interview to take place and proceeded with conducting the interviews. Before the questioning officially began in each interview, I explained the purpose of the interview, detailed why each participant had been chosen, outlined expectations of each participant, and ensured the technology was correctly administered. Additionally, I reiterated the identities of the interview subjects would remain anonymous. Then, I proceeded with the interview following the standardized interview guide (Appendix C), following the same protocol for each individual interview.

Analyzing Data

In this qualitative study, the responses from the research subjects were transcribed and reviewed following the in-depth interview process. To analyze the data, I used grounded theory to understand “the participants’ own framing of their experience and what their rationales, beliefs, and values reveal about the process in question” (Mihas, 2019). This process allowed me to distill the responses from the participants from general to specific along three types of coding: open coding to divide the data into preliminary categories, selective coding to provide groupings of the data resembling themes, and theoretical coding to complete the refinement process until the data reached saturation, providing no new ideas and insights emerged from the data (Strauss & Corbin, 1994). The following sections detail each step of the grounded theory process.

Open coding. After transcribing all 12 interviews, I consciously went into analyzing the data by suspending assumptions to allow the participants' own justifications and perspectives to guide the conceptualization (Mihas, 2019). I began analyzing the responses from each interview while creating inductive codes to fragments of the data, including phrases, sentences, and other small textual units, meant to capture participant insights and complex motivations for each interview in an Excel spreadsheet (see Appendix D). After generating 30-50 open codes for each of the 12 interviews, I analyzed the codes to consider how they might fit together as part of an emerging theory (Mihas, 2019).

To offset the granular nature of open coding, I also created a memo for each interview highlighting the overarching themes present to ground me in the results from each interview. These memos created a place for comparison via quotations, transcripts, and codes to see how each interview may contribute to any emerging theories as well as differentiate between the interviews as I moved forward analyzing the interview content.

Selective coding. From the created open codes, I identified which ones had the largest analytical reach in an effort to think more conceptually about the data (Mihas, 2019). At this point, I eliminated the open codes that had no relation to other open codes. The remaining open codes were grouped together by basic categories and concepts to begin discerning any central themes or theories which were emerging.

Theoretical coding. In the final step of the grounded theory process, I refined the subgroups organized in the selective coding phase to create overarching central themes and theories. Moving slowly back and forth between the data and the central themes, I organized a model to demonstrate how concepts were related by revisiting the open codes and ensuring each relevant code fit within a central theme (see Appendix E). By revisiting the data from the

interviews and seeing the data reinforced the theoretical categories already established, I was able to ensure theoretical saturation, where more data did not provide further insights (Mihas, 2019).

Disseminating Findings

After analyzing the data from the interviews using grounded theory, I detailed the high-level themes and theories which emerged in this thesis paper, as well as creating a corresponding best practices manual (see “Deliverable” section), an industry-driven publication meant to aid HEIs in developing and scaling their graduate-level online course enrollments.

Limitations

This study was effective in identifying the commonalities between the leading HEIs who develop and administer online graduate courses and programs at an institution. While theoretical saturation was accomplished through the interview process, a few minor limitations should be taken into account when considering future studies.

Researcher’s Positionality

My professional experience centers around marketing online courses and programs at UNC-Chapel Hill. Due to my day-to-day work, I understand how to implement best practices to advertise learning opportunities to potential online students. Through this research, I’m hoping to better understand the necessary factors to develop and continually administer graduate-level online learning opportunities at the institutional level. While conducting interviews with research participants, I worked to remain neutral by setting aside my own experiences and listen to the perspective of leaders in developing and administering graduate-level online learning initiatives.

Sampling

When planning to conduct this research, I identified the 15 R1 institutions enrolling the greatest number of online graduate students (Appendix A) in hopes of obtaining a research subject from each of the 15 schools listed. I was able to secure an interview with 12 of the top 15 R1 institutions enrolling the greatest number of online graduate students (see Appendix F). While I was able to achieve theoretical saturation in the 12 interviews I did conduct, perhaps the three schools that did not volunteer as research subjects could have uncovered new data, possibly shifting the theories or concepts I synthesized from the interviews.

Variability of Title and Purview

At each of the 12 institutions researched, the working title for each interviewee varied (see Appendix G). Directors, deans, vice provosts and vice presidents were all interviewed due to the organizational structure and job titles at each institution, as well as which specific individuals were available to volunteer as research subjects. While the majority of the interview subjects oversaw graduate-level online learning for their entire institution, some interview subjects were directly responsible for specific online programs or processes in creating online learning experiences at their institution. The scope and expertise of each interviewee varied slightly, thus yielding results from their point of view.

Spectrum of Centralization

One question asked to each participant was the degree of centralization in regard to administering online learning at their respective institution. Answers to this question varied from “extreme decentralization” with each individual academic college or department exercising dominion over all aspects of the online graduate programs existing within their unit to “extreme centralization” where one unit oversaw the majority of online learning duties on behalf of their institution. Through the research, typically the administrative roles for online learning

(instructional design support, marketing, IT support, and videography, among others) existed in the centralized unit and the teaching roles existed in specific academic schools or departments. While this division of labor led to a form of centralization at each institution, the degree of centralization varied campus to campus, impacting the perspective of each research subject.

Interview Modality

Nine of the 12 interviews were conducted using video conferencing software. In those interviews, I was able to not only hear the responses from the research subjects but also obtain data through visual cues such as body language. In these interviews, it was easier to connect with the research participant and understand the intent in their responses. Due to traveling constraints or inaccessibility to a webcam, three of the 12 interviews used audio conferencing software and were not conducted face-to-face. Therefore, any visual cues were not ascertained. While it was certainly more productive than receiving written responses from research participants, having visual cues would have been helpful in obtaining a greater sense of meaning, nuance, and connection from these three participants.

Findings

After utilizing grounded theory to comprehensively parse through content from the in-depth interviews, I found five central themes present among the 12 interviewed participants. Below, these five central themes and their related ideas are discussed.

Extending Institutional Access

In each of the 12 interviews, the participant described how graduate-level online learning extended both resources and access to the HEI. In these discussions, participants described a symbiotic relationship; one where the learner and institution mutually benefited.

Benefit to learners. Repeated throughout the interviews was the notion that online graduate students are a different type of learner than the residential graduate student. These are students who typically balance full-time work and family duties while taking graduate courses online and part-time. Whether it's to gain new applied skills, ascend in one's career, or simply for the sake of learning, research participants noted that extending high-quality academic resources adds value to the population taking online courses. These students can receive educational access at a leading institution from the convenience of their own home, without having to physically travel to campus.

Benefit to institution. In turn, this larger learner base provides a benefit to the HEI. Participants described online learning as an opportunity for an HEI to reflect their mission and value statements by extending institutional access to individuals who are unable to travel to campus. Many of the representative HEIs are land-grant institutions and said online learning allows their institution to deepen ties and create goodwill within their state.

The participants shared that online learning is a financial benefit. Since participants detailed online graduate learners as a different student pool than residential graduate students, the alternate source of revenue and enrollments available from online learners is money the institution wouldn't receive otherwise. In addition to an alternate source of revenue, participants explained how online learning provides supplementary financial benefits, citing online learning as a more economical financial model than traditional, face-to-face education. In the online learning financial model, participants noted that HEIs don't have to pay for physical campus infrastructure, including cafeterias, wellness centers, or classrooms to cater to this student type, alleviating congestion of the physical campus.

Participants also detailed online learning as a vehicle to boost an institution's brand recognition. Since online learning extends an institution's academic resources to students who wouldn't typically matriculate at that institution, online graduate students are exposed to a brand in which they might not be very familiar. If they have a positive experience as an online learner, they can share their experience with others, associating positive brand recognition with that institution. Additionally, industries can partner with HEIs as a result of the boosted institutional brand recognition. Participants stated that when their institution receives a positive association with a certain academic discipline, workforce leaders in that discipline can partner with the institution, perhaps for an industry-institution enrollment pipeline or to form an industry advisory board, further benefitting the HEI.

Institutional Priorities

Leadership as champions. Repeated throughout the interviews was the notion of buy-in from university leadership as essential to scale graduate-level online learning opportunities. Online learning can't be simply accepted as an alternative form of instruction. It has to be championed and communicated as a priority throughout the institution to gain traction. Participants detailed how this university-level support and recognition provides a ripple effect, helping align individual academic colleges and departments (and their respective faculty) to keep online learning as a priority essential to the institution's growth and prosperity.

Strategic growth. Since the 12 institutions researched are leaders in enrolling online graduate students, each participant indicated their university continuously thinks strategically in regard to their online learning initiatives. One way participants described their institution's online learning strategy included leveraging institutional strengths. Whether it was expert faculty, innovative research opportunities, or an institution's proximity to industry leaders, the

HEIs that are leaders in graduate-level online education ensure their online courses and programs align with the inherent strengths of the institution at-large.

These institutions have kept up with the rapid evolvement of online learning over time. Participants described their university leadership as having an intentional, public vision for strategically growing online learning. Many participants detailed the early days of online learning as a race to put content online, without a clear vision of which academic disciplines to focus. Today, these institutions are leading the way in strategically deciding which markets to expand their influence. As online graduate learning becomes more saturated with competition, participants said their institutions are focusing on more niche markets and degrees where they can stand apart from the competition, or venture into disciplines which haven't been highly adapted for online learning.

More than strategically deciding on disciplines in which to grow, participants describe their campus leadership as creating more modality options for online graduate students. By creating flexible, versatile, and on-demand offerings, these HEIs are offering more convenient choices for online learners to continue their academic pursuits. Due to the flexibility in degree offerings, participants stated their institution can more effectively align a student's academic goals with a program that more conveniently fits their lifestyle.

Finally, participants indicated their institutions are able to strategically grow online enrollments at the graduate level because they are making concerted efforts to build their in-house resources for online learning. The majority of participants described how their institution utilized an OPM partnership in the nascent stages of offering graduate-level online learning opportunities as a way to stimulate growth. These OPMs helped standardize and establish expectations for the institution's online learning framework. Over time, HEIs began shifting

responsibilities from the vendor partnership to in-house resources where the HEI could autonomously control online learning internally, rather than relying on a third-party vendor for viability. By strategically building in-house resources to develop and administer online learning opportunities, participants described how their institutions are better equipped to organically grow graduate-level online learning enrollments in the future.

Centralized Unit Capabilities

Eleven of the 12 participants detailed the unit in which they worked acts as a centralized unit to develop and administer graduate-level online learning on behalf of their entire institution. Only one participant described their institution as having essentially no shared or centralized resources for online learning, with each academic college or unit operating independently to produce their online learning initiatives. Since nearly all participants worked in a centralized unit for online learning at their institution, these 11 participants described the essential resources and capabilities needed for a centralized online learning unit to achieve sustained success.

Abundance of internal resources. As described previously, participants shared how their institutions largely made the strategic choice to move from working alongside an OPM to develop and administer online graduate courses to building resources to handle all aspects of the online graduate student lifecycle internally. The majority of these in-house resources reside in the centralized unit, and the participants cited having these resources meant their institution could exert more control and provide a more seamless student experience. Communication between a potential or matriculating student could be solely handled by in-house resources instead of toggling between the third-party vendor serving on the institution's behalf and internal staff members.

Additionally, many participants detailed moving from working alongside an OPM to having in-house resources was seen as a rallying point for their institution. They revealed their faculty seemed more willing to engage with employees of the institution, rather than with an OPM operating on behalf of the institution. Therefore, participants described the necessity of building internal resources to properly scale graduate-level online learning at their institution. What follows are commonalities shared by research participants as instrumental positions to properly develop and administer graduate online learning opportunities in their centralized units.

Instructional design. Participants described instructional designers as essential in the development of online graduate courses for their HEI for many reasons. While the instructional designers are the experts in developing graduate-level online courses, participants detailed that perhaps their most important task is as the main relationship-builder between the centralized unit and faculty looking to teach graduate courses online. Nearly every participant characterized the instructional designer as a “hand-holder” who works one-on-one with a faculty member to develop the curriculum, prepare the faculty member to be comfortable teaching a graduate-level course online, and consistently evaluate data and feedback from students to improve online courses over time.

By having an expert instructional designer walk through the comprehensive course development process with the faculty member, participants shared that faculty members who were initially leery of teaching online were much more willing to engage in the process and continue teaching online. Many participants detailed the emphasis of their unit striving for “quality learning outcomes” in online courses and how the instructional designer is integral to achieve those outcomes by working one-on-one with faculty members.

Responsive student support services. After instructional design, many research participants shared the importance of responsive student support as a necessary service within their centralized unit. Participants said that oftentimes, the duties of student support services means assisting potential online learners only by fielding questions from these interested students and moving them toward enrollment. However, once a learner has matriculated as an online student, participants said students are largely on their own to navigate through their coursework.

Participants described the differentiator for their centralized unit as employing student services for enrolled students in addition to potential students. Once an individual is in the university's system and started their coursework, participants shared that students still need a high level of support throughout their time as a student. This includes navigating the learner management system (the technology platform on which the course is housed), troubleshooting technical difficulties that arise throughout their courses, retention services for lapsed students, and academic advising services to ensure each student can plan their academic journey to meet their desired educational goals.

Multiple participants mentioned their centralized unit assigns an individual student service staff member for each online student for the duration of their student journey. Their job is to act as a point person to field questions from the student and help them navigate the student experience. This point person dispatches the student to the necessary resources across campus to ensure their questions get answered. Participants noted oftentimes online students exist within the ecosystem of the university at-large and can feel like an "outsider." An individual contact for each online student can overcome many of these inherent challenges and allow for a more rewarding experience for an online learner.

Marketing. Many participants described a full suite of marketing services as essential to the success of their centralized unit. For nearly all participants, centralized marketing efforts begin in the program planning stage. When someone at their institution has an idea for a new online graduate course or program, market research is conducted to strategically assess the viability of creating the new initiative. These market research reports reveal demand for the new course or program, potential competition in the space occupied by other HEIs, and labor market data, pairing potential courses or programs with needs in the workforce.

Building off of the front-end market research, participants noted the importance of creating clear, straightforward marketing copy in advertisements and on the institution's website for potential online graduate students. Research participants shared that online graduate students are typically nontraditional, adult learners who are considering taking online courses part-time while they continue to balance full-time work and family responsibilities. Transparency in marketing copy, including the program curriculum and expectations of each student, is beneficial to help busy adults make informed decisions as they consider life as an online graduate student.

Participants shared that marketers in their centralized unit also track data to improve processes for online students. Whether it is optimizing marketing initiatives by analyzing the advertising messages which resonate with potential online learners or diving into assessment data from online courses, tracking and interpreting various data sources allows the centralized unit to make educated decisions and continuously refine course content and marketing messaging for an enhanced student experience.

Centralized Unit/Faculty Relationship

In each of the 11 interviews conducted where the research subject represents a centralized online learning resource for their respective institution, the participant detailed the importance of

an authentic working relationship between the centralized unit and the faculty across the institution. In each of these 11 examples, the centralized unit is tasked with developing and administering the graduate-level online learning opportunities, while the actual teaching of the courses is the responsibility of faculty in individual academic colleges or departments. None of the institutions researched have standing faculty that the centralized unit hires to teach online courses, so the participants said it is critical for the centralized unit to work hand-in-hand with each academic unit for the most effective deployment of graduate-level online learning initiatives. Below are the main tactics used by centralized units to build relationships with faculty members across campus.

Educating faculty. Each participant described how a major task for their centralized unit is to educate faculty about online learning. Since the staff in the centralized online learning unit are the experts in online learning, participants stated it is their job to educate faculty in various ways. Many faculty members have spent their entire teaching career in face-to-face classrooms, never teaching online before. Participants said their instructors need to be taught how to effectively teach online. Each institution varies in the resources it provides to new instructors, but every institution includes some sort of workshop or course instructing faculty on the differences in pedagogy present in an online classroom, as well as best practices for teaching online. In the orientation phase, participants shared that faculty need the opportunity to “dip their toe in the water” in online learning. Many of the first-time online instructors may be intimidated by teaching to a new type of student as well as utilizing the technology within online courses. Therefore, the centralized unit works one-on-one with faculty members to go through iterations of testing to ensure faculty feel comfortable with the online modality. All the while, the

centralized unit provides feedback to the faculty member, helping hone their craft and setting the faculty member up for success to teach online.

Participants pointed out the education of faculty goes far beyond orienting an instructor in the methods of successful online teaching. Much of the work lies in changing the perception of online learning and sharing the benefits of online learning with faculty at-large. Participants continued that faculty at their institution are often reluctant to transition to online instruction due to preconceived notions about online learning in general. These perceptions are varied, including online learning not being a quality method of instruction, online learning not being rigorous enough for graduate coursework, or online learning threatening the existence of the traditional classroom experience, among others. Participants shared that they employ various tactics to educate faculty and change these perceptions.

Many of these conversations start with a concept in which faculty members are fluent: research. Participants explained how their units present research to faculty at their institution to grow support for online learning. Whether it's presenting academic research on the learning outcomes of online students, using learner data from existing online modules in their course portfolio to show student achievement, or revisions made in the course to make the experience better driven from student feedback, research participants said they are actively engaged in data-driven conversations with faculty members. This helps communicate the value of online learning as a quality option of instruction and to increase buy-in from faculty to teach online. Participants shared how it was important that they "show, not tell" the value of online learning for their institution, and they said that data is a vital tool to do that.

Participants said the most difficult part of getting faculty buy-in is having them agree to teach an online course for the first time. In addition to providing research-based evidence to

show the benefits of online learning, leadership in the centralized unit continues to “show, not tell” by looking at examples of active online classes being offered by the institution. Participants stated it is essential in these conversations to emphasize quality as a metric in their online courses, while aligning online learning to the mission of expanding access for a university to create further buy-in among faculty members. Additionally, leadership makes sure to communicate clear expectations about time allotment necessary on behalf of the faculty member; noting the commitment for the instructor is usually greater for an online class than in a face-to-face class. Typically, participants said that after a faculty member experiences teaching online for the first time, they are much more receptive to continue teaching future sections online. Many participants detailed that faculty reflect elements or best practices of their online courses back into their face-to-face courses, thus enhancing a faculty member’s teaching ability.

Peer influence. Similar to institutional leadership championing online learning, there was consensus among research participants that one of the most powerful tools at their institution to grow graduate-level online learning opportunities is to have faculty who champion online learning. Each participant said it is essential for faculty who have had a positive experiencing teaching online act as an advocate to grow online learning at their institution. Faculty who are teaching online can act as “peer influencers” for apprehensive faculty who are unsure whether they should transition to teaching online. Participants shared that faculty members are most likely to listen to other faculty members and ask them about their experience teaching online, so having individual faculty members advocating for online learning is essential.

More than just having faculty members promoting online learning, participants maintained that their centralized unit actively champions individual faculty members who have brought innovation and exemplary teaching practices to the institution’s online courses.

Opportunities to champion faculty include incentivizing awards for faculty members teaching online, providing grants for faculty members to conduct online learning research, and paying for faculty to present at online learning conferences.

Many participants shared that online learning administrators in the university's centralized unit often teach online courses, too. This improves goodwill between the faculty at-large and the centralized unit by demonstrating the importance of teaching online. It also shows that administrators in the centralized unit are actively honing their teaching craft and doing their part to ensure a quality experience in online courses at their respective institution.

Future of Online Learning

Online learning continues to evolve and mature as research provides new insights and the proliferation of technology provides new opportunities to innovate in online education.

Therefore, each of the 12 interviews ended with the research participant theorizing about the different ways in which graduate-level online learning may progress over the next three to five years based on trends they are witnessing. While answers varied, a few central themes emerged from the interviews; the growth of alternative options and the blurring of student types.

Growth of alternative options. As stated in the literature review, attention is being paid to the varying types of credentials students can obtain as online learners that are alternatives to the traditional degree model. This theme was echoed by research participants as they envisioned a future where alternative options become more common for HEIs in their graduate-level online learning portfolio. Some of the examples given by participants included badging, graduate certificates, or stackable micro-credentials that can be put together to form the basis of a graduate degree.

In addition, participants noted it is essential for online learning leaders to continue gauging industry and workforce needs as they grow their graduate online learning initiatives. Participants said they foresee a growing number of their online graduate programs as “applied” programs, with skills-based learning outcomes meant for professionals to ascend in their industry or pivot to a new industry by gaining valuable real-world skills. While not all participants described a future with a growth in applied online graduate degrees, each participant shared the importance of ensuring that graduate-level online learning opportunities, in whatever form they exist, meet the needs of both industry and students moving forward to successfully grow enrollments.

Many participants talked about “fracturing” the traditional graduate degree model. As stated previously, throughout its history online learning has traditionally mimicked the cadence of classroom courses. Participants believe that academic calendar for online courses will be restructured to more appropriately meet the needs of online learners, perhaps by offering “short courses” or allowing students to begin a new course outside of the semester start date reserved for face-to-face classes.

Blurring of student types. Participants shared that traditionally, online learning had been set apart from face-to-face learning at their respective institution in many regards, including not being core to an institution’s mission, seen as an inferior product compared to face-to-face instruction, or not given the necessary resources to grow. However, as the medium has evolved and success in graduate-level online education has been generated at these institutions, participants theorized that online learning is only going to grow in stature at their campus in the future.

Correspondingly, participants revealed their institutions have largely categorized their students by learning type, whether that was a “campus” student or an “online” student or a “hybrid” student, for example. Moving forward, participants see a continual blurring of student types, allowing online courses to more fully incorporate into the fabric of their institutions. Instead of restricting or limiting “campus” students from taking online courses or vice versa, participants agreed that student categories will become less important, allowing students to more easily take courses at both the undergraduate and graduate level based on the modality of their choosing, whether that is face-to-face or online. Similar to the growth of alternative credential options mentioned previously, the blurring of student types in the future will better match the needs of each student to an array of learning opportunities available to them at their institution.

Deliverable

The following section summarizes and visualizes the research findings. I created an industry white paper, a “best practices manual” to highlight the tactics and broad perspectives offered by the research participants. This best practices manual is a high-level overview meant for leadership and stakeholders at HEIs who are looking to develop and scale their graduate-level online learning opportunities at their respective institution.



THE FUTURE OF THE UNIVERSITY:

How to Position Graduate-level Online Learning for Success at your Institution

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INTRODUCTION

Throughout its history, higher education institutions (HEIs) have catered their academic offerings to students who enroll in traditional, face-to-face courses, where the teaching and learning takes place in the same setting at the same time (“Face-to-Face Instruction,” n.d.) However, the landscape of higher education is changing rapidly.

According to the Integrated Postsecondary Education Data System (IPEDS), which tracks higher education enrollments in the United States, as of the fall 2016 semester nearly 6.4 million students took at least one distance education course, where technology is employed to deliver instruction to students who are separated from the instructor (Seaman, Allen, & Seaman, 2018).

Nearly all of those distance courses were online courses in the United States, comprising 31.6% of all higher education enrollments (Seaman et al., 2018). As online learning becomes more popular, the line is increasingly blurred regarding the student demographic taking online courses. According to Allen & Seaman (2018), of the nearly 6.4 million students who took at least one distance education course in 2016:

- **47%** took exclusively distance courses
- **53%** took a combination of distance and face-to-face courses
- **69%** attended public nonprofit institutions
- **18%** attended private nonprofit institutions
- **17%** studied at the graduate level
- **83%** students at the undergraduate level

Among online education offerings, graduate-level online course enrollments are growing faster than their undergraduate-level counterpart. Although only 17% of the nearly 6.4 million students taking online courses do so at the graduate level, over the past four years, graduate-level online enrollments grew 21.7%, compared to 13.2% for undergraduate-level online enrollments over the same time span (Seaman et al., 2018). This growth pairs with the decrease of students studying exclusively on campus. Over the last four years, the number of total students enrolled in face-to-face classrooms has decreased by 4.8%. In this time span, more than one million fewer students were studying on campus in 2016 compared to 2012, translating into 250

fewer on-campus students for each HEI in the United States (Seaman et al., 2018).

Online education has only been an option for educating students since the early 1990s. Although online education is still in its infancy, the medium has morphed considerably from an alternative of face-to-face instruction to a strategic initiative at institutions, fitting securely within the overarching structure of higher education.

This best practices manual takes a closer look at graduate-level online learning to understand what is needed from an institutional level to cater to this growing student audience. Qualitative, in-depth interviews were conducted with senior-level online learning administrators at some of the nation's leading institutions by utilizing *the Carnegie Classification of Institutions of Higher Education*, considered "the leading framework for recognizing and describing institutional diversity in U.S. higher education since 1970" ("The Carnegie Classification of Institutions of Higher Education," n.d.). Twelve of the 15 "Research 1" (R1) institutions enrolling the greatest number of online graduate students were chosen for further study.

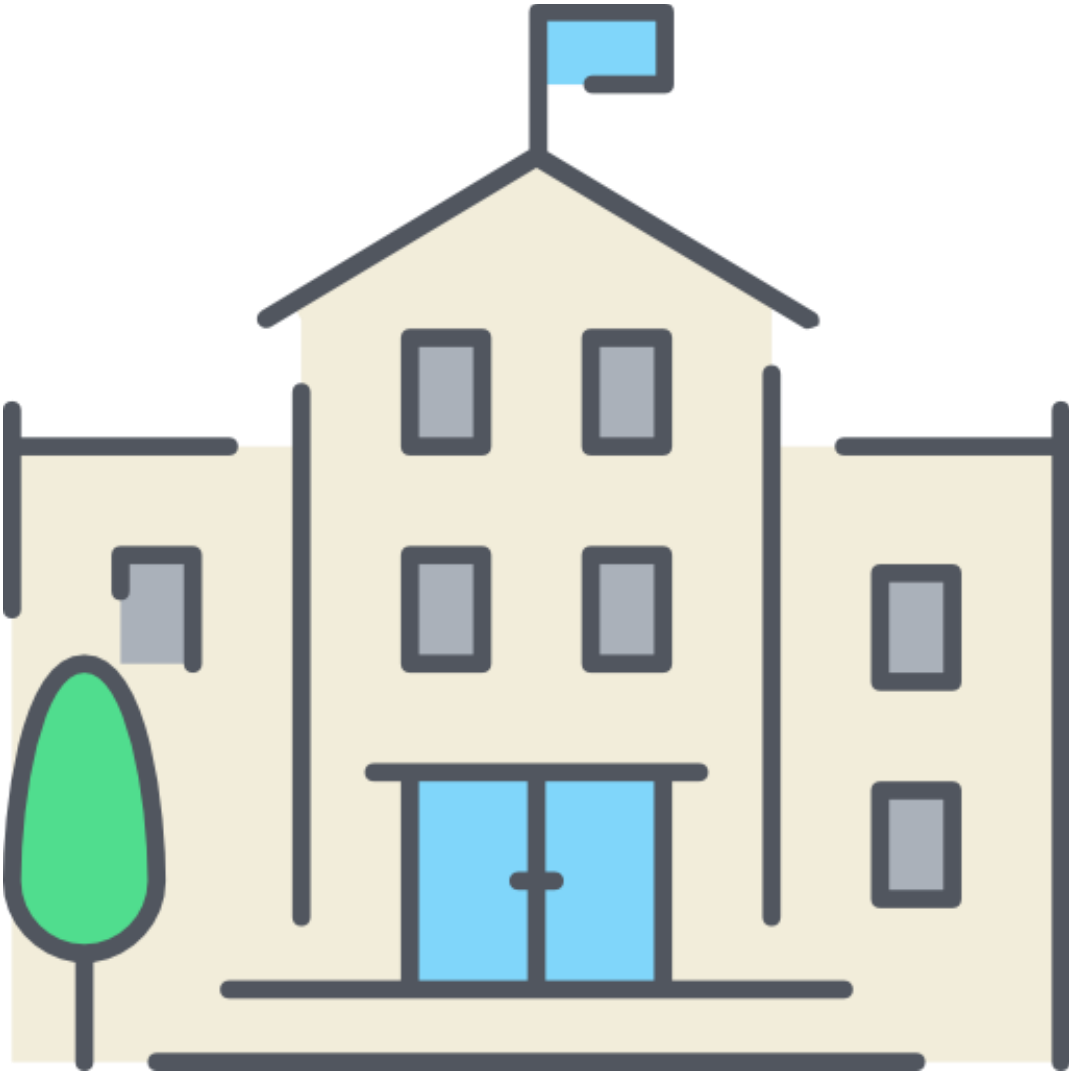
The list of institutions where research was conducted included:

- Johns Hopkins University
- University of Florida
- Georgia Institute of Technology
- George Washington University
- University of Cincinnati
- University of South Florida
- University of Central Florida
- Florida International University
- University of Illinois at Urbana-Champaign
- Harvard University
- North Carolina State University
- Rutgers University

Working titles for research participants varied by institution, but included deans, directors, vice provosts, and vice presidents. These individuals oversee the development and administration of graduate-level online learning initiatives for their respective institutions.

This manual is the summary of the findings provided by the research participants. It is meant for leadership at HEIs who are interested in mobilizing and scaling graduate-level online learning opportunities at their respective campus. By adapting and implementing the commonalities gleaned from leaders in the field in a way that is authentic and fits within the mission and vision of each individual institution, HEIs can be well-positioned for future success in graduate-level online education.

PART I: INSTITUTIONAL PRIORITIES



The amount of influence graduate-level online education carries depends on the institution. At some schools, online learning is seen as an important piece of the mission and vision for an institution. At other schools, online learning is seen as “set apart” or an alternative option not held in as high of regard as face-to-face instruction.

After discussing the development and administration of online learning with 12 of the 15 R1 institutions who enroll the greatest number of online graduate students, it is evident that growth in online learning opportunities starts with institutional leadership understanding the importance of the modality and prioritizing online learning as essential piece of the future growth of their school.

BEST PRACTICE #1: EXPAND INSTITUTIONAL ACCESS

Traditionally, expanding institutional access was seen as a benefit solely for the learner. Oftentimes, online graduate students are taking classes part-time while balancing full-time work and family duties. Online learning expands academic resources from the institution to students from the convenience of their own home, without the student having to physically travel to campus for class.

However, graduate-level online learning is a symbiotic relationship, as the institution also benefits from enrolling online students.



TIP: Expanding access to your institution’s academic resources is an opportunity to reflect your mission and value statements, deepening ties and creating goodwill within your community.

For an HEI, expanding institutional access means receiving an alternative source of enrollments and revenue from a population who wouldn’t typically enroll at their school. Expanding institutional access to online students is also a more economical financial model, as online learners don’t occupy physical campus space, such as cafeterias, wellness centers, or classrooms, thus alleviating congestion on crowded campuses.



At a school our size, when you’re not building buildings like you should to support all the students you have, the only way you’re going to grow and generate that new revenue is online.

Online learning can be a vehicle to boost your institution’s brand recognition. Students who wouldn’t normally be associated with your HEI take online courses and can share positive experiences within their networks, associating positive brand recognition with your institution.

“ *Our university wants more graduates out there with (our) degree. They need to be great students, and then subsequently, great employees. Expanding our access to this alternative learner base is a way to do just that.”*



TIP: Understand the perception of your school’s brand within the local community. Work with industry leaders to consider partnerships that can mutually benefit your institution as well as the local workforce.

BEST PRACTICE #2: UNIVERSITY LEADERSHIP CHAMPIONING ONLINE LEARNING

Buy-in from university leadership is absolutely essential to grow graduate-level online learning opportunities at an HEI. Online learning can’t be accepted as only an alternative for of instruction to face-to-face instruction. Rather, it has to be communicated as a priority to gain traction throughout an institution.

“ *It’s really important that you have the right messages coming from the top down. Our leadership has to always mention the online programs in the same breath as the residential programs. If you only talk about only (residential programs), you’re sending the wrong message.*

Leadership championing online learning and communicating it as a priority for their institution provides a ripple effect. This helps align individual academic colleges and departments, as well as their respective faculty, to keep online learning central to the institution’s growth and prosperity.



TIP: Ensure university leadership is abreast of the current state of online learning at your institution. Plan regular check-in meetings where the impact of online learning can be communicated.

BEST PRACTICE #3: PRIORITIZE STRATEGIC GROWTH

Leading institutions continuously think strategically with regard to the viability and growth of online learning. These schools have intentional, public visions to strategically grow their online learning initiatives.



TIP: Leverage specific institutional strengths for the benefit of online learning. Institutions with large enrollments in online graduate courses ensure that the pillars that make their institution at-large successful are reflected in their online learning initiatives.

Offer Flexible Options

One way institutions prioritize strategic growth is by creating more flexible options for online graduate students. Traditionally, online learning followed the cadence of traditional, face-to-face instruction. However, online courses

offered on a semester schedule may not be the most convenient for part-time students who have full-time responsibilities at work and at home. Offering courses that can be completed in a condensed timespan or offered on-demand allow online students more opportunities to continue their academic pursuits.

“ *How can we be more nimble or flexible without losing the value of what education means? We’ve got to be able to roll up a degree faster or a credential faster to support what the market needs...if we don’t think of options for students more openly or flexibly, it’s going to be a problem for us.*

Evaluate In-house Resources

Strategic growth in online learning can also mean building more in-house resources to better facilitate educational experiences for online students. Expanding in-house resources not only means your institution is better equipped to properly serve an expanding online student market, it also means your institution has more autonomous control over an online student’s lifecycle, rather than working alongside an online program manager (OPM) to develop and administer online learning experiences at your institution.

“ *If it’s in-house you have more control over your staff. You can make changes easily in terms of strategy and allocation. You can say, ‘We’re doing this wrong, let’s try something different.’*

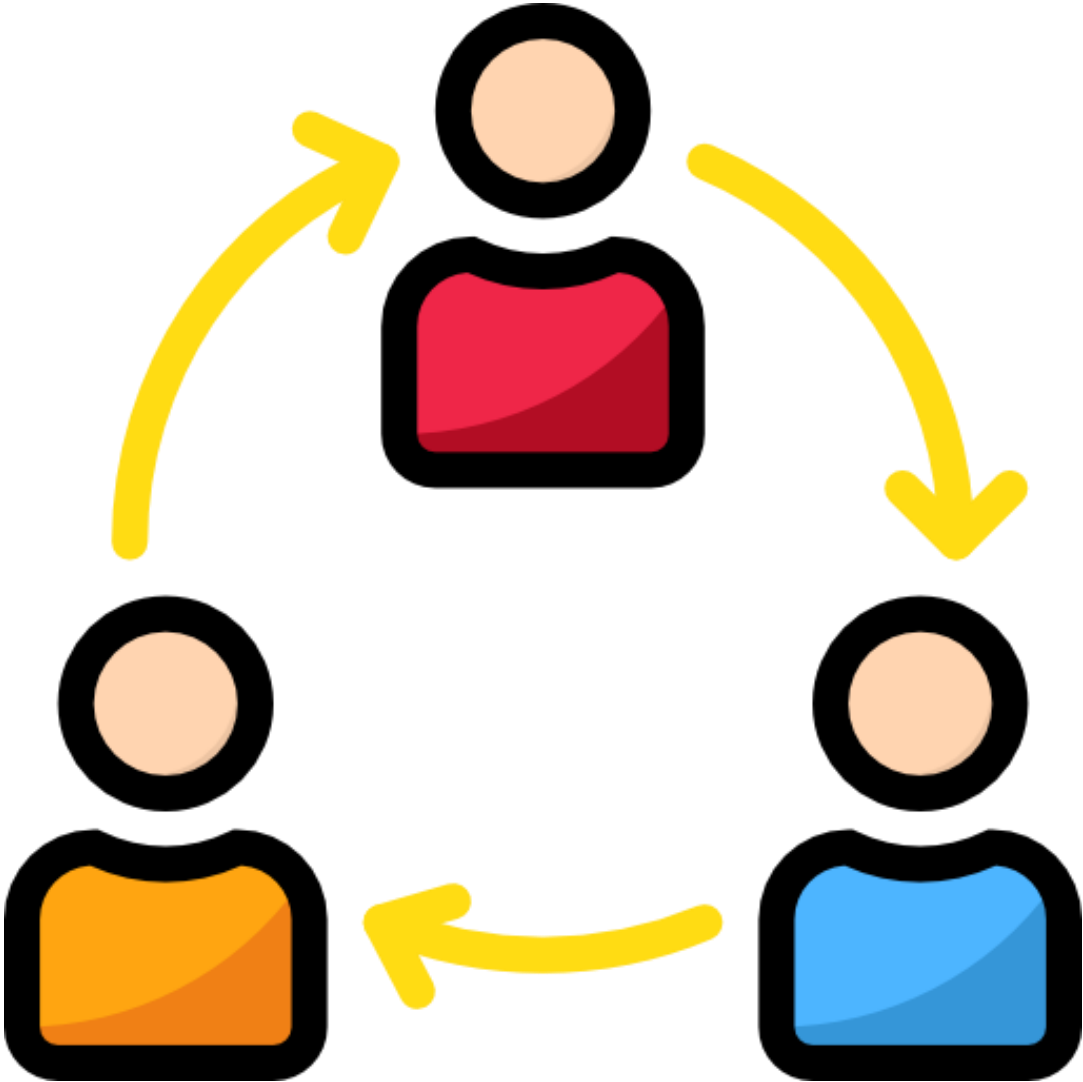
Consider New Disciplines

Graduate-level online education is becoming increasingly saturated as more HEIs are making a concerted effort to grow their online learning initiatives. Deciding which disciplines and markets in which to intentionally expand is an opportunity for schools to strategically grow online learning.



TIP: Focus on more niche markets and niche degrees to create a unique value proposition and stand apart from your competition.

PART II: CENTRALIZED UNIT CAPABILITIES




Many institutions partner with an OPM as they begin to scale their online learning opportunities. The appeal of an OPM means schools can lean on resources they don't have internally, such as marketing, enrollment, or instructional design to quickly build up their portfolio of graduate-level online courses or programs.

As the resources and processes for online learning have been developed, many institutions have made the strategic decision to halt working alongside an OPM to build in-house resources capable of facilitating the total online student experience. Building these in-house resources means exerting more control over each aspect of an online student's lifecycle and providing a more seamless student experience.

BEST PRACTICE #4: GROW INTERNAL RESOURCES **Instructional Design**


One strategic area in which institutions are focusing to grow their internal resources is with instructional design. Experts in building online courses, instructional designers also understand online pedagogy and work one-on-one with faculty members to build high-quality online graduate courses.

“ *Our instructional designers lead a personalized discussion with the faculty member. They ask open-ended questions to understand the faculty member's expectations, such as, 'What are your course objectives?' 'What do you want to accomplish here?' 'How do you want to measure student success?'*

 **TIP:** Instructional designers should walk through the comprehensive course development process with a faculty member. Faculty members engaging with a thoughtful course design process means they're more likely to continue teaching online.

Responsive Student Support Services

Responsive student support services are an important internal resource for centralized online learning units. These employees assist potential students by fielding questions and moving them toward enrollment. They also support matriculated students with technical issues in their online course, retention services, and academic advising.

 **TIP:** Assign each learner with a specific student support staff member for the duration of their time as a student. This "point person" helps online learners navigate their experience as a student and helps curtail student dropout.

Marketing

Marketing professionals are employed by centralized units to handle a variety of marketing and communication duties. These employees typically lead front-end market research processes by conducting research for a new online graduate course or program, strategically assessing the viability of creating the new initiative. Marketers in centralized online learning units also create and place marketing advertisements to recruit potential students and track various data sources to refine course content and messaging for an enhanced student experience.

““ *We look at the local and national level to see what market exists for this (program). Are people already doing it? Are you entering a field early? Are you entering late? How many students could you expect? Where would they come from? What could they afford?*



TIP: Ensure public-facing program and course websites contain the curriculum, associated learning outcomes, and expectations of each online student. Online graduate students lead busy lives and clear, straightforward copy allows potential students to make informed decisions.

BEST PRACTICE #5: INVEST IN EDUCATING FACULTY

Typically, the centralized unit handles the development and administration of online courses and programs at their institution while faculty members in individual academic colleges and departments teach the online courses. Therefore, a main duty of the centralized unit is to build a relationship with faculty members to increase participation in teaching online graduate courses.

Teach Faculty to Teach Online

Many faculty members have never had the opportunity to teach online courses. The centralized unit must give opportunities for faculty members to learn how to teach online. This can include workshops, consultations, or one-on-one lessons sharing the differences in online pedagogy and best practices for teaching online.



TIP: Allow faculty members to test elements of teaching a course online. Faculty members need iterations of testing to feel comfortable teaching in this new modality. Feedback from the centralized unit helps increase mastery of online teaching.

Lead with Research

Research is a useful tool to show the merits of teaching online to faculty members. Research can take various forms in online education, including presenting academic research on the learning outcomes of online students, utilizing learner data from online courses to show student achievement, or data-driven changes made in existing courses for better a better student experience.

Show Inside a Class

Often, the most difficult part of getting faculty buy-in is to have them agree to teach an online course for the first time. Looking inside a handful of active online courses can be an opportunity to communicate quality as a metric in online graduate courses. When faculty see the care and quality present in online courses, they can feel more comfortable participating in the instruction of online courses.



TIP: Make sure to communicate clear expectations about time allotment necessary for faculty members to teach online courses. A faculty member who understands the commitment of teaching online will be more prepared for a successful experience.

BEST PRACTICE #6: PROMOTE PEER INFLUENCE Faculty as Champions

One of the most powerful tools to grow graduate-level online learning opportunities is to have faculty champion online learning. Faculty who have taught online graduate courses and had a positive experience can act as an advocate to grow online learning at their institution. Leery faculty members can listen to a peer who had a positive experience teaching online, increasing buy-in among faculty members at-large.



Faculty respectfully listen to administration, but they like to hear from other faculty members. They want to hear from other engineers that this course can be successful in an online environment.



TIP: Think through the ways in which you can give faculty members a platform to promote online learning at your institution. How can you best leverage institutional communication channels to allow faculty members to speak about their experience?

Centralized Unit Championing Faculty

Conversely, the centralized unit should actively promote faculty members who have brought innovation and exemplary teaching practices to the institution's online courses. Some of these opportunities to champion successful faculty members include providing grants for online learning research, incentivizing awards for faculty members teaching online, or paying for faculty to present at online learning conferences.



TIP: Prioritize for administration in the centralized learning unit to teach online courses, too. This communicates to faculty members that the centralized unit is actively interested in honing their teaching craft.

PART III: FUTURE-PROOFING ONLINE LEARNING



Online learning is an increasingly large proportion of higher education enrollments. What was once seen as an alternative method to taking face-to-face courses, online learning will continue to be perceived as another viable option for students to achieve their academic goals. Online learning is constantly evolving. As research provides new insights and technology continues to develop, new opportunities to innovate in online education will be available.

While it's impossible to predict the exact nature of the future of online learning, one thing is certain; online learning will only become more ingrained in the fabric of HEIs moving forward. Leadership at the R1 institutions enrolling the greatest amount online graduate students predicted what graduate-level online learning could look like in the next three to five years.

Institutions looking to develop and scale graduate-level online learning opportunities at their respective institution can implement these practices to help ensure a forward-thinking approach to online learning, catered to meet the needs of online graduate students.

BEST PRACTICE #7: CONSIDER ALTERNATIVE COURSE OPTIONS

Vary Forms of Credit

A shift is occurring in graduate-level online education. Historically, online graduate courses mirrored the credit-bearing nature of face-to-face courses. Additionally, online graduate programs typically were designated as master and doctoral degrees, akin to the programs offered in traditional classrooms.

Institutions are offering alternatives to both traditional graduate credits and traditional graduate degrees to better meet the learning desires of online graduate students. Some of these offerings include badging, graduate certificates, or stackable micro-credentials that could form the basis of a graduate degree.

“ We continuously have to evaluate the value proposition for that degree program or that academic experience. What's the currency our outcomes is going to give to that students in their lives? How are we going to help them achieve their academic goals?

Gauge Industry and Workforce Needs

Graduate-level online students are increasingly looking for “applied” graduate programs, with skills-based learning outcomes. These programs give working professionals valuable real-world skills to ascend in their industry or pivot to a new industry. Therefore, institutions need to

continuously survey their local industries to understand what needs these industries have for their employees. Leading HEIs can translate these needs into learning opportunities to upskill the future workforce through graduate education at their institution.

““ *We work with a lot of companies in the region. They tell us that they really want particular skills for their workforce. It's up to us to see how we can creatively stack a learning experience together that meets what the companies need.*

BEST PRACTICE #8: ALLOW FOR STUDENT CHOICES

Historically, institutions categorized their students by their modality type. “Campus” students took face-to-face classes only while “online” students took online courses only. Moving forward, student modality categories will be less important, allowing students to more easily take courses at the graduate level based on the modality of their choosing. Students will be able to alternate more freely between taking face-to-face and online courses, matching the needs of each individual student to an array of graduate-level learning opportunities available to them at their institution.

““ *We've begun asking our students, 'What do you need to be successful according to your definition of success?' And then we have to think about how we can line up those learning opportunities up so students can consume them.*



TIP: Schedule regular opportunities to solicit feedback from students about their online learning experience. What is going well? What needs work? What new learning opportunities could match students to institutional resources?

CONCLUSION

The research was conducted and compiled in this best practices manual to understand a key piece missing from the existing academic literature; the commonalities between HEIs with significant graduate-level online enrollments.

To successfully develop and administer these online initiatives at an HEI, it is essential that both the institution at-large and a centralized online learning unit view expanding offerings as integral to the mission and vision of the institution.

For school leadership, online learning must be communicated as a priority across campus. This can be achieved by sharing the importance of expanding institutional access to a new learner type, actively advocating on behalf of the modality, and strategically considering new opportunities to grow online learning initiatives across the institution.

A centralized online learning resource must continue to grow internal resources to cater to an expanding online student base, invest in educating faculty to increase buy-in for online education, and promote peer influence by giving participating faculty members a chance to advocate for online learning.

Online learning continues to evolve and mature as research provides new insights and the proliferation of technology provides new opportunities to innovate in online education. Looking ahead, institutions can position themselves to respond to the changing nature of online learning by considering alternative course options and increasing a student's options for a more beneficial experience for the learner.

Both the tactics and broad perspectives highlighted by graduate-level online learning leaders in this manual are meant as a starting point for HEIs looking to develop and grow their graduate-level online learning opportunities. While each HEI has varied needs and nuanced processes unique to their school, the commonalities revealed in this manual allow leadership to consider how they might adapt and implement these practices at their institution in a way that fits within their mission and vision.

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Discussion/Implications

This research aimed to answer the following question: What similar components do nonprofit higher education institutions with significant graduate-level online enrollments possess? After conducting interviews with leading administrators, I was able to discover a series of shared components and tactics executed by institutional leaders for success in online learning. A benefit of conducting this research through qualitative, in-depth interviewing was the amount of pertinent quotations and explanations given by research subjects which helped provide additional context to the findings. Some of these quotations were surprising, some were inspiring, and some further validated a participant's assertions. Below are a handful of relevant quotations and descriptions that helped provide credibility to the findings, as well as the implications of this study in regard to the existing online learning literature.

Extending Institutional Access

While I wasn't surprised that participants detailed extending access to institutional resources as a central concept for their graduate-level online learning initiatives, I was surprised by the amount of conversations centered around the symbiotic nature of this relationship. Expanding access is a benefit to the learner in overt ways, as detailed succinctly by one participant. "We are constantly asking the question of how we are able to transform, evolve, and modernize the traditional campus experience to welcome in students who really need a more versatile learning experience."

According to the participants, the advantages of enrolling nontraditional learners in online courses provide more covert benefits. One participant said their university leadership sees expanding access to this learner base as a vehicle to boost their institution's reputation:

One of the best ways to boost your reputation is to expand your impact. Our university wants more graduates out there with (our) degree. They need to be great students, and then subsequently, great employees. Expanding our access to this alternative learner base is a way to do just that.

This sentiment surprised me. As an R1 institution with a world-renowned reputation, I wasn't expecting school leadership to perceive offering online courses as a way to grow a university's reputation. Rather, I was expecting them to see expanding access as a way to provide a service to the public. However, it was evident that a university gains from expanding institutional access and enrolling nontraditional students. Remarks about an institution's benefit due to expanding access, as shared by many research participants, is significant in this study because it shows that expanding access via online learning can help institutions achieve their internal goals and expand to new student markets that wouldn't traditionally matriculate at their university.

Institutional Priorities

It makes sense that university leadership at these respective schools have made online learning an institutional priority. They are among the top 15 R1 institutions for enrolling the greatest number online graduate students in large part because of the vision of university leadership for their online learning initiatives. Throughout the interviews, I thought it was noteworthy how nearly all participants detailed strategic growth for online learning meant building in-house resources, as well as the related optics building these internal resources had on their institution as a whole.

One participant admitted, "Leaving our OPM partnership was an amazing moment for faculty on campus. Online learning was less corporate, and (our institution) could specifically

shape online learning how we want it.” Another participant said, “Why would I have somebody acting like they were working at (our university) and work on behalf of the program? I just felt like my division could do it better and for a lot less cost.” A third participant noted, “If it’s in-house (resources), you have more control over your staff. You can make midstream changes more easily in terms of strategy and allocation.”

As stated earlier, participants shared that an OPM partnership is often necessary when a school is looking to quickly build its online learning initiatives and doesn’t have the in-house expertise or bandwidth to handle the expanding student base or course portfolio by themselves. Not all of these institutions have completely abandoned working with a third-party, as the scope of work for these vendors usually falls within marketing duties or handling initial student inquiries. However, it is evident that a priority for strategic growth by leadership at each of the researched institutions is to continue building in-house resources to cater to the graduate-level online student population. As noted in the interviews, it also increases likelihood of faculty teaching courses online and allows a more unified vision throughout the institution for the future of online learning.

Centralized Unit Capabilities

An overarching theme discussed by all participants was the importance of “quality” as a metric to guide their centralized unit’s actions in developing and administering online learning experiences. I found the emphasis on quality significant, because for the majority of the institutions researched, the centralized unit acts as the figurehead for online learning for the entire university. One participant stated, “Our centralized unit was mandated by the provost as a quality control piece to ensure the reputation and integrity of (our institution’s) brand.” Being able to control the online learning package for this institution meant there was a level of quality

across all of their online courses since they were being produced by staff members in the same unit.

Another way quality manifested itself in participant responses was as a way to project mastery of online learning processes to the campus at-large. One participant, who shared, “there’s a fundamental set of assumptions by faculty about online education that has to be reshaped,” detailed the importance of faculty seeing online learning as a quality enterprise. “When they take the time to teach in (the courses we develop) and... see the care we put into our course design process, they always walk away impressed.” A second participant echoed these sentiments. “Exposing faculty to our course design process can be eye-opening.”

The emphasis on quality as a unifier in the capabilities of the centralized online learning unit is significant to the overall study because it communicates online learning may still be seen as an inferior teaching method among certain sectors of higher education. By ensuring all aspects of a centralized online learning unit’s capabilities and processes communicate a quality experience, from the course design process to the analytical marketing efforts, these units can work to change the perception of online education lacking in quality and rigor.

Centralized Unit/Faculty Relationship

Perhaps no topic in the in-depth interviews were described as passionately or as comprehensively as the relationship between a centralized online learning unit and the faculty at-large at an institution. I found it significant how much of the participants’ central duties meant educating faculty members at their respective institutions and advocating for online learning as a valid and innovative teaching method.

While the specific tactics carried out to educate faculty members varied (and are outlined in the findings section), I found it especially compelling how one specific institution was able to educate and influence faculty on the merits of teaching online.

“We have a group of faculty fellows, four to five, that partner with (our centralized unit) for a two-year period. They are really cheerleaders and innovation leaders who are working with educational technologies with their students in online courses and face-to-face courses. Their job is to share with other faculty, ‘Hey, this can work. This is how I do it. Here are my results.’ Faculty respond best to other faculty members. You have to walk the walk and show them. You can’t just say, ‘Oh, it’s going to be fine.’ You have to illustrate that it’s different (than face-to-face teaching) but okay. Our faculty fellows really help with that.”

By paying a stipend for involvement in the faculty fellows program, and recruiting a spectrum of faculty across disciplines, individual colleges, and career stages, this institution is able to successfully leverage faculty as a means to communicate online learning options for their peer faculty members on behalf of the centralized unit. As the participant shared, “It’s ‘one of them’ doing the work, so it will resonate more.”

Understanding the amount of bandwidth necessary to foster relationships with faculty members across an institution has far-reaching implications for this research project. In addition to providing a sense of the specific tactics leaders in online learning are employing at their various institutions, this research is intended to provide a guide for HEIs looking to scale their online learning initiatives at their own campuses. Due to the amount of intentional effort necessary to build relationships with faculty members across an institution, internal teams and

administrators looking to scale online learning at their respective HEI should carefully consider how they allocate resources to build these necessary and integral relationships.

Future of Online Learning

The insights from participants as they forecasted how they see online learning evolving over the next few years was particularly telling. I found it surprising that only a few participants shared specific educational technologies, such as augmented reality, virtual reality, or gamification, which are meant to innovate and improve student understanding. Oftentimes, these terms are top-of-mind when someone thinks about the evolving nature of online education. Conversely, participants focused on how institutions think about the administration of online learning could evolve. This included the growth of alternative options for students to participate in educational offerings, as well as how institutions categorize their student types moving forward.

These shifts signify changes in how institutions think about online learning in the future, including the prevalence of online education within the fabric of HEIs at-large. Participants shared traditional graduate degrees as the credential for a student may not be the necessary currency to ascend in their professional industry moving forward and perhaps online education could lead the way in evolving to a more innovative, on-demand model for graduate students to grow in their field. One participant shared:

Our students are seeking new knowledge, not necessarily a new degree. (I see us) moving toward more parts of a degree whether that be micro-credentials, badges, or some other currency where learners can get the on-demand learning outcomes they need.

Another participant stated, “(We have) to prepare for the question, ‘What field 10 years from now will you need a professional credential for that doesn’t yet exist?’” A third participant

explained, “We’ve begun asking our students, ‘What do you need to be successful according to your definition of success?’ And then we have to think about how we can line up those learning opportunities up so students can consume them.”

These remarks are significant because they represent how online education must continue to cleave from traditional, face-to-face educational offerings to better serve the nontraditional student market. As one participant shared:

(As an R1 institution), how can we be more nimble or flexible without losing the value of what education means? We’ve got to be able to roll up a degree faster or a credential faster to support what the market needs...if we don’t think of options for students more openly or flexibly, it’s going to be a problem for us.

By continuing to progress and innovate in regard to learning opportunities, online education can ensure it remains highly valued for various learner types.

Finally, a particular quote resonated with me as a participant forecast the continual blurring of learner constructs served by an HEI. “Faculty like teaching online because it teaches them things they can do in classroom to make it better. They’re taking what they teach in online courses back to their face-to-face graduate classrooms and implementing it to improve learning outcomes.” As stated previously, for a majority of online education’s history online learning pedagogy and course material mimicked face-to-face classroom instruction. Online instructors didn’t have experience teaching online, so they took what they knew from their traditional classroom instruction and transferred it into their online courses. As the medium and academic research has evolved in online learning, faculty members are now taking instructional technology and best practices from their online courses and implementing them back into their face-to-face courses. This sentiment was echoed by many other participants and demonstrates both the wide-

reaching benefit of online learning and the way online learning doesn't have to be exclusive to "online only" students at HEIs. All student types can benefit from innovative educational technologies to improve their learning outcomes. By opening up this modality and its corresponding educational technology to all learners at an HEI will only better serve students while elevating the quality of instruction across all classroom environments.

Conclusion

I began this research to understand a key piece missing from the existing academic literature related to online learning; the commonalities between nonprofit higher education institutions with significant graduate-level online enrollments. After conducting in-depth interviews with online learning administrators at 12 of the 15 R1 institutions with the greatest amount of enrolled graduate students online, a number of central themes emerged. These overarching themes linked together the development and administrative priorities for online learning at leading HEIs.

These institutions use online learning to expand institutional access, for the benefit of both the learner and the institution. University leadership at these institutions prioritize online learning, consistently champion the modality, and provide opportunities for strategic growth in online learning initiatives. The majority of institutions have a centralized unit designated for online learning on behalf of the institution with an abundance of internal resources including innovative instructional designers, responsive student support services, and analytical marketers. Their centralized units work to build relationships with the faculty at-large by educating faculty on the benefits and capabilities of teaching online and encouraging peer influence between faculty members. Finally, these institutions are forward-thinking and position their university's

online learning initiatives to respond to the growth of alternative course and student designation options in the future.

The conversations and related findings from this study also revealed opportunities for future research. While this study focused primarily on for-credit graduate learning opportunities online, the research revealed many institutions are growing their noncredit, online professional development offerings in unique ways. A study could aim to survey these online noncredit opportunities with the goal of developing best practices for this medium. A second opportunity for further research could take a granular look at the specific educational technology being implemented in online courses. Since this study doesn't go into specifics with these technologies, research could show pedagogical uses of these technologies and how they impact learner outcomes. Due to the continued growth of online learning as an educational modality, the evolution of the corresponding technology associated with online learning, and the dynamic nature of the medium, topics for further research related to online learning will only grow in abundance.

The findings from this research are important because they add a new element to the existing literature related to online learning. By illuminating both nuanced tactics and broad perspectives from leaders who develop and administer online graduate courses, other HEIs looking to develop and grow their online course and program portfolio can use these findings as a starting point to scale their own online learning options. Additionally, these findings can inform campus leadership of the necessary resources to grow online learning at their respective institution. As stated previously, while each HEI has constraints or limitations unique to their campus, the commonalities revealed in this study allow institutions to consider how they might

adapt and implement these findings at their individual campus in a way that fits within their institution's mission and vision.

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Appendix A

R1 Research Institutions in the United States by Number of Graduate Students Taking Distance Courses, 2017

Institution	Students enrolled in some but not all distance courses	Students enrolled exclusively in distance courses	Total number of students enrolled in distance courses
Johns Hopkins University	2,950	6,440	9,390
The University of Texas at Arlington	1,142	6,313	7,455
University of Florida	3,334	3,919	7,253
University of Southern California	1,118	5,950	7,068
Georgia Institute of Technology	43	6,624	6,667
George Washington University	1,026	4,423	5,449
University of Cincinnati	1,278	3,399	4,677
University of South Florida	1,759	2,431	4,190
University of Central Florida	1,354	2,668	4,022
Florida International University	1,438	2,407	3,845
University of Alabama at Birmingham	891	2,939	3,830
University of Illinois at Urbana-Champaign	980	2,637	3,617
Harvard University	842	2,576	3,418
North Carolina State University	1,369	1,993	3,362
Rutgers University	1,132	1,891	3,023

Source: National Center for Education Statistics' Integrated Postsecondary Education Data System

Appendix B

Recruitment Email

To: (Potential Interviewee)
Subject: Participate in online learning research

Hello,

My name is Jack Rodenfels, and I am a graduate student at UNC-Chapel Hill. I'm conducting research for my master's thesis and am looking for your voluntary assistance with my study.

The purpose of this research study is to understand the most central factors to consider when preparing to employ a strategic framework for online learning initiatives at the institutional level. You are being asked to take part in a research study because you administer online courses and programs at your institution.

Being in a research study is completely voluntary. You can choose not to be in this research study. You can also say yes now and change your mind later.

If you agree to take part in this research, you will be asked to participate in a one-on-one in-depth interview with me, the researcher, to be conducted on Zoom video conferencing software. Your participation in this study will take about 45 minutes, as this is the expected amount of time necessary for the interview to be conducted. We expect that 15 people from various higher education institutions will take part in this research study.

You can choose not to answer any question you do not wish to answer. You can also choose to stop taking the survey at any time.

To protect your identity as a research subject, no personal identifiers will be used. Your responses will remain anonymous with no opportunity to ascertain the identity of a research participant.

If you have any questions about this research, please contact me, the Investigator by responding to this email or calling me at 919-962-3341. If you have questions or concerns about your rights as a research subject, you may contact the UNC Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

If you can't participate in this study but have a colleague who is also charged with administering online programs at your institution, I would be grateful if you sent me their email address for further consideration.

Thank you for your consideration,
Jack Rodenfels

Appendix C

Prescribed Interview Guide

Introduction:

The purpose of this interview is to understand the infrastructure of online courses at your institution. These questions are meant to be informal, so please speak from your experience. There is no correct answer. I'm simply looking to hear your opinion and learn from your experience.

If it's okay with you, I plan on taping this interview so I can easily go back into the interview to analyze the responses. Again, I want to emphasize that this is an informal, two-way conversation. If you have any questions or are looking for clarification about a question, please ask at any time.

Introductory Participant Demographic Questions:

- Number of years in academe
- Number of years teaching online courses
- Number of years administering online courses
- Does your institution offer fully online graduate degrees? Which ones/how many?
- Does your institution offer hybrid graduate degrees? Which ones/how many?
- Does your institution partner with an OPM to administer online graduate programs?

Interview Questions:

- **How long have you been involved with online graduate education and in what capacities?**
 - Possible probe:
 - Describe your role in regard to your institution's online initiatives?
 - In what capacities?
- **Describe your role in regard to your institution's online initiatives.**
 - Possible probes:
 - To whom do you report?
 - At what level (department, school, provost office, separate online initiative?)
 - Who, if anyone, reports to you regarding online initiatives?
 - What are their roles/what do you oversee?
- **How long have you been at your institution?**
 - Possible probe:
 - Have you had any other working titles at your institution?
- **Describe to me what you do in your position?**
 - Possible probe:
 - What does a normal week look like for you?
- **What initially interested you in administering/developing online courses?**

- **How does your institution define “success” in regard to administering/developing online graduate courses?**
 - Possible probes:
 - Enrollments?
 - Positive student evaluations?
 - Awards?
 - In your experience, have online graduate courses been successful at your institution? Why or why not?

- **What is the impression of online graduate courses by full-time faculty at your institution?**
 - Possible probes:
 - Does faculty enjoy teaching online courses? Why or why not?
 - Do you get buy-in from faculty to teach online courses? Why or why not?
 - Why do you think faculty feel that way about online graduate courses?
 - Why is that opinion important to faculty members?
 - Why do you say that?

- **What is the impression of online courses by University leadership at your institution?**
 - Possible probes:
 - Why do you say that?
 - Why do you say that they believe that?
 - How has leadership’s perception of online graduate education changed in recent years?
 - If so, what has that looked like over time?
 - If it hasn’t changed, why not?

- **What opportunities does the University provide for faculty to learn how to teach online?**
 - Possible probes:
 - What do those opportunities look like?
 - How have faculty responded to these opportunities?
 - Why do you think that is so?

- **How do online instructors at your institution receive feedback from students?**
 - Possible probes:
 - Is there anything beyond standard course evaluations used for in-person instruction?
 - Why or why not?

- **How does your institution market its online graduate degrees?**
 - Possible probe:
 - Why do they take that approach in marketing its online graduate degrees?

- **(If applicable) What kind of person enrolls in fully online graduate degrees at your institution? Why is that?**
 - Possible probes:
 - Are there any misconceptions about what kind of student enrolls in these programs?
 - If yes, why do you think that is so?
 - If no, why not?
- **(If applicable) What kind of person enrolls in hybrid graduate degrees at your institution? Why is that?**
 - Possible probes:
 - Are there any misconceptions about what kind of student enrolls in these programs?
 - If yes, why do you think that is so?
 - If no, why not?
- **Are there any misconceptions administration has about online courses? If so, what are they?**
 - Possible probes:
 - Is there anything you would like to change about the administration's perception of online courses?
 - How would you change it?
- **Are there any misconceptions faculty has about online courses? If so, what are they?**
 - Possible probes:
 - Is there anything you would like to change about the faculty's perception of online courses?
 - How would you change it?
- **Are there any misconceptions the general public has about online courses? If so, what are they?**
 - Possible probes:
 - Is there anything you would like to change about the general public's perception of online courses?
 - How would you change it?
- **In your experience, what makes an online graduate program successful?**
- **What do you think graduate online courses at your institution will look like in five years?**
 - Possible probes:
 - Why do you say that?
 - What factors will play a role?
- **What could your institution do to ensure a better online learning experience?**

- **What could your institution do to better support faculty in developing and teaching online courses?**
- **What could your institution do to better market online graduate programs?**
- **Is there anything that you'd like to add that we haven't discussed?**

Conclusion:

Thank you for agreeing to conduct an interview. It has been extremely insightful to hear your responses and learn more about online courses at your institution. I appreciate your time and look forward to using your responses to gauge the commonalities of institutions that have significant online course enrollments. Do you have any additional questions before we finish?

Appendix D

Open Coding Visualization

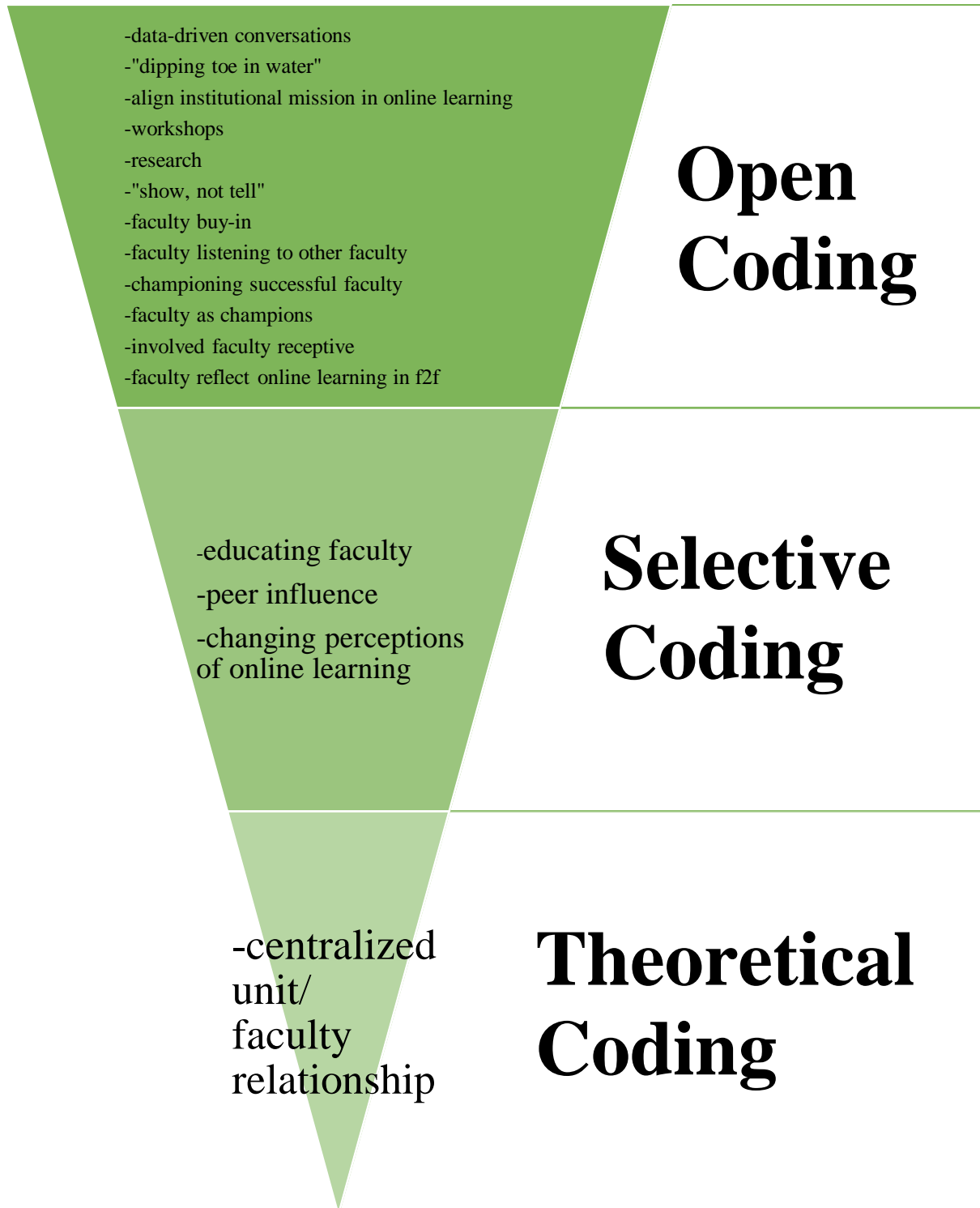
Note: The below terms are an example of open coding from one of the in-depth interviews. This is the first step of grounded theory and led to creating emerging theories from the research participants.

- relationship with faculty/centralized unit
- colleges promoting two-way relationship
- market research as kick-off
- centralized unit overseeing all aspects
- data-driven conversations
- career-centric
- support from faculty
- online learning as inferior
- involved faculty are receptive
- data-driven conversations
- course interactivity
- changing perceptions of online learning
- championing faculty
- peer pressure/support is critical
- instructional designer as main relationship bridge
- instructional designer as hand-holder
- colleges seeing value of investment
- learning opportunities
- leadership as champions
- reimagining degree terms
- growth of workforce/industry programs
- stackable credentials
- growth of certifications
- industry partnerships
- skills-based learning
- marketing as hand-holder
- faculty age as determining factor for online learning
- young faculty comfortable with technology
- strategic matching tech to learning outcomes
- reflecting online learning practices in f2f classrooms
- importance of flexibility
- reticence in older faculty
- centralized unit educating faculty
- leadership as champions
- relationship with faculty/centralized unit
- data-driven conversations
- ideation starts with market research
- more than relying on brand
- clear, straightforward marketing efforts
- aligned with mission
- faculty champions
- student service as critical
- building in-house capacity
- building in-house capacity

Appendix E

Theoretical Coding Visualization

Note: The below visualization shows the grounded theory process by transforming open codes to theoretical codes.



Appendix F

R1 Research Institutions Participating in Research Study

<u>Institution</u>
Johns Hopkins University
University of Florida
Georgia Institute of Technology
George Washington University
University of Cincinnati
University of South Florida
University of Central Florida
Florida International University
University of Illinois at Urbana-Champaign
Harvard University
North Carolina State University
<u>Rutgers University</u>

Appendix G

Job Titles of Research Participants

Job Title
Dean
Associate Director
Associate Vice President
Associate Vice Provost
Vice Provost
Associate Vice President
Assistant Provost
Associate Dean
Dean
Vice Provost
Associate Provost
Associate Dean
