LEARNING ON-DEMAND: MASSIVE OPEN ONLINE COURSES AND THE PRIVATIZATION OF THE EDUCATIONAL EXPERIENCE

BY

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DISSERTATION

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ABSTRACT

This study engages the phenomena of On-Demand Massive Open Online Courses (MOOCs) using both philosophical and qualitative methods of inquiry. Situating the emergence of MOOCs within the current values and structuring of neoliberal higher education, it explores a specific instance of On-Demand MOOCs at a public research university and examines the impact of the shift to On-Demand MOOCs on specific teaching and administrative practices.

Drawing upon the Community of Inquiry theoretical model as well as the educational philosophy of John Dewey for analysis, this study suggests that although often desired by students, the asynchronous learning experience provided by an On-Demand modality may not be the most effective method of instructional delivery to produce desired learning outcomes.

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CHAPTER 1: HIGHER EDUCATION IN THE AGE OF THE LEARNING EXPERIENCE

Every time a student sits down to write for us, he has to invent the university for the occasion – invent the university, that is, or a branch of it, like History or Anthropology or Economics or English. He has to learn to speak our language, to speak as we do, to try on the peculiar ways of knowing, selecting, evaluating, reporting, concluding, and arguing that define the discourse of our community. Or perhaps I should say the various discourses of our community... - David Bartholomae^I

I begin with a quote by David Bartholomae, because although it was directed toward the phenomenon of student writing, I believe it also speaks to a greater condition of the university at large; that of its invention – and constant reinvention – based on society's evolving understanding of the purposes and goals of higher education. And each time those of us within the university strive to innovate, evolve, transform (or whatever verb we insert into our institutional mission statements) the university, we too are trying on peculiar ways of knowing, of selecting, of evaluation and judgement. We are always negotiating within the existing discourses of the university even as we are reshaping those discourses for our own ends, reconfiguring the dimensions of the ship even as we are being tossed about at sea. This dissertation project speaks to one of higher education's current spaces of negotiation, that of online delivery, as it struggles to find a tenable intersection between what is technologically possible, pedagogically sound, and economically sustainable.

Origins of the Study

The idea for this dissertation began in a conference room at Central State Public

¹ Bartholomae, David. "Inventing the University." *Journal of Basic Writing* 5, no. 1 (1986): 4-21.

University² (CSPU) in the fall of 2014. I was a graduate student assistant in the College of Liberal Arts, and I was sitting in on a meeting between representatives from Coursera, the educational technology company providing the platform and infrastructure for the university's handful of Massive Open Online Courses (MOOCs), and a handful of faculty members and midlevel administrators. The purpose of the meeting was to provide cross-group updates on the university's ongoing experiment with MOOCs, and my role as a graduate assistant was to listen and learn. At one point, a representative from Coursera announced that they would be changing the technical structure of one of their commonly used course elements, the Message Board. While the Message Board had previously functioned as a place where students could post general or specific questions about the course, share ideas, and respond to each other's posts etc., it would now function more as a list of Frequently Asked Questions, with the presentation of the one correct (or most correct) answer for each question raised by students. Upon hearing this recasting of the role of the Message Board, one of the faculty members currently teaching a MOOC course raised their hand to object.

"In my courses," they began, "I think students really find value in hearing what their peers have to say about the topics I bring up in class. And I find the Message Board useful for stimulating my own teaching as well, as I can quickly see how student ideas are mushrooming around a subject or question."

"I can certainly understand that," one of the Coursera representatives replied, "but we just think it's better if when students go to a discussion board to try to get an answer to a question, that they get the best answer, the right answer, as quickly as possible."

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² a pseudonym

I took a deep breath and waited for the faculty member to respond. Two years earlier, I had held the position of Assistant Provost at a mid-sized community college in central Michigan. There, as in in many post-secondary institutions fighting to stay afloat during an economic recession, the relationship between faculty and administration was acrimonious to say the least. In my time as an administrator there I learned that with rare exception, faculty have the final say regarding matters of pedagogy. I hoped that this conversation wouldn't quickly devolve into so many exchanges I had experienced while sitting in the Faculty Senate, drifting inexorably into larger philosophical arguments regarding situated authority of teaching and learning. But there was only silence. The faculty member nodded their head in acknowledgment of the representative's point, and that was that. I was dumbfounded. I didn't understand how or why a faculty member would yield the matter so quickly. Something was different about the nature of this conversation, and for many days afterward I struggled to put my finger on just what it was.

Though not explicitly articulated as such in that meeting, at the heart of that exchange were two competing discourses regarding which deployment of the Message Board best facilitates the most desirable student learning experience in a MOOC course. For the faculty member who spoke up, student learning is best facilitated through a student's active engagement with their peers' questions, comments, and perspectives on the course content, and through navigating comparable and contrasting lattices of meaning making (via their classmates' comments on a Message Board) on the path toward developing their own understandings and knowledge. For the Coursera representative, student learning is best facilitated by student's gaining access to the 'right' answer – to a question already posed and addressed by their peers or instructor – as quickly and efficiently as possible.

Disputes regarding which pedagogical approaches deliver the best student learning outcomes are nothing new in educational philosophy, scholarship, and/or praxis. But looking back, I think it's inaccurate to characterize what happened in that meeting as a philosophical conflict about the nature of online learning. Rather, that conversation illuminated an ongoing struggle regarding not *what* particular digital pedagogical practices are the best, but rather, *who* gets to shape the definition of what 'the best' is. The distinction is subtle but significant, and at stake is the question of where the foci of judgment will rest: with faculty members (in their role as subject matter experts); higher education administrators (through their allocation of physical spaces of institutional learning such as classrooms, labs, libraries, etc.); or the corporations that faculty and administrators partner with as they strive to incorporate the fruits of emerging technologies into their practices and institutions. As higher education advances deeper into the 21st century, questions of *who* decides become increasingly interwoven with matters of *how* such decisions are enacted and enforced via technology.

In 1979, Jean-Francois Lyotard explored an analogous question regarding the status of knowledge in relation to emerging technologies in his collection of essays, *The Postmodern Condition: A Report on Knowledge*. His working hypothesis, succinctly put, was that "the status of knowledge is altered as societies enter what is known as the postindustrial age and cultures enter what is known as the postmodern age." He marks as the beginning of the postmodern age the tail end of the 1950s, when many modern nations were completing their recovery from the economic and cultural ravages of World War II. Lyotard argues that what has changed is how 'knowledge', a term he defines as "a question of competence that goes beyond the simple determination and application of the criterion of truth, extending to the determination and

³ Jean-Francois Lyotard, *The Postmodern Condition: A Report on Knowledge* (Minneapolis MN: University of Minnesota Press, 1984), 3.

application of the criteria of efficiency, of justice and/or happiness, of the beauty of a sound or color, etc.," is now subject to a new and particular form of 'legitimation', i.e., validation. In other words, the ways in which knowledge had been both understood and validated prior to the 1960s has changed as a result of society's movement into a new and increasingly technological postmodern era. According to Lyotard, prior to the postmodern era the pursuit and attainment of knowledge was validated in relation to its alignment with one of two grand narratives: the grand narrative that posited a totality and spiritual unity of all knowledge, and the grand narrative that articulated knowledge's role in the emancipation of humanity. But in the era of postmodernity those grand narratives have collapsed due to the computerization of society and the corresponding ways in which knowledge is increasingly mediated through technology. This technological shift has helped facilitate the societal condition in which the question of the validity and legitimacy of knowledge has become intertwined with that knowledge's capacity to flow through the emergent spaces of technological mediation. Put another way, Lyotard argues that the two primary socio-cultural narratives for assigning value to knowledge, unity and emancipation, have been superseded by a process heavily invested in evaluating knowledge in relation to its compatibility to emerging forms of computer technology. He defines this new technological-based evaluative criterion as *performativity*, and argues that it has now become the primary indicator of 'legitimate' forms of knowledge. He further theorizes that as a result, knowledge that can more easily be converted into digital form for transmission through and to computers (thus possessing a high degree of performativity) is more likely to be deemed legitimate (i.e., valid) than those types of knowledge that cannot be as easily rendered into digital

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⁴ Lyotard, The Postmodern Condition, 18.

form. For Lyotard, such a development carries with it profound implications about the nature of knowledge in the postmodern age:

The nature of knowledge cannot survive unchanged within this context of general transformation. It can fit into the new channels, and become operational, only if learning is translated into quantities of information. We can predict that anything in the constituted body of knowledge that is not translatable in this way will be abandoned.⁵

Revisiting this claim nearly forty years after its original publication, it is clear how in some ways it was grossly overstated. Any contemporary argument grounded in the premise that knowledge incompatible with digitalization has been *abandoned* would be considered specious at best; if anything, quite the opposite is true. Since the essay's publication technology has gradually expanded into nearly every facet of our economic, political, and social lives, and in our seemingly insatiable thirst for more content, we have transfigured much of what was once considered the private domain of interior life into an endless stream of public digital expression, with many individuals using technology to construct and promote a 'Brand of the Self' writ large for all to see. Furthermore, those spaces of experience not yet fully translatable into a digital environment have not been abandoned in this technological age, rather they are viewed as sites for potentially lucrative economic development, to be electronically colonized through technological innovation and when necessary, cultural re-norming. But while some aspects of Lyotard's thesis can be dismissed as simply alarmist, I maintain that his central thesis regarding the role of technology in legitimating certain forms of knowledge is a productive lens through

⁵ Lyotard, *The Postmodern Condition*, 4.

which to begin to examine the intersection of technology companies that create and control MOOC learning platforms and the colleges and universities that partner with them.

Positing Lyotard's claim that his concept of *performativity* (an evaluative criteria based on technological compatibility) increasingly functions as a legitimizing and/or validating framework for knowledge, I would argue that three consequent claims may reasonably follow. The first is simply a logical recognition that if the condition of performativity can be used to determine a specific type of knowledge's degree of validity or legitimacy, then it can also be used to determine its degree of *invalidity* or *il*legitimacy. With performativity as the most important criterion, the pathway of validation runs both ways, and can be used either to increasingly legitimate or marginalize specific types of knowledge. Second, since technology is always evolving, and thus the mechanisms and pathways for mediating knowledge through technology are too always evolving, then the degree of performativity for any particular type of knowledge must be understood as always in flux. In other words, knowledge that had been determined as legitimate (due to the degree of its performativity at one historical moment in time) can later be deemed less legitimate either though advances in technology, or through the utilization of an even more performative (and thus more legitimate) type of knowledge. An example of such can be seen in the ways in which statistical sampling as a way of discerning consumer preference in entertainment viewing has given way to metadata analysis. The completion and submission of Nielsen viewing logs, once considered an essential tool for determining levels of television consumption, has been slowly delegitimized as a way of understanding consumer entertainment preferences, displaced by the technological developments of both the internet as a viewing platform and digital data mining as a way to collect and analyze active and passive activity on that platform.

Lastly, I assert that Lyotard's concept of performativity can be expanded to encompass not only knowledge (as he has defined it) but also ways of knowing (the practices of knowledge creation), and sites of knowing (spaces of knowledge production and collection). My rationale is as follows: Over time, as particular forms of knowledge (e.g., scientific and/or technical knowledge) are continuously and consistently validated due to their high degree of performativity, it seems logical that the ways of gathering that knowledge -- epistemological assumptions, methodological frameworks, technological tools -- would similarly be validated. If the knowledge *product* is deemed valid, then the *process* for creating that product must also be considered valid. Similarly, the spaces in which the knowledge is housed would also be considered valid due to the knowledge it contained. But what happens when these emergent spaces of knowledge validation become increasingly distinct from the traditional sites of knowledge production and curation (i.e., colleges and universities)? Lyotard argues that this transformation in the nature of information will likely have repercussions on existing public institutions, "forcing them to reconsider their relations (both de jure and de facto) with the large corporations." Indeed, given the current cultural conversations regarding the disproportionate power of media companies such as Facebook, Twitter, and TikTok on American civic and political life, Lyotard's analysis feels eerily prescient.

In the instance of the widespread adoption of MOOCs by colleges and universities,
Lyotard's theory of performativity suggests the opportunity for a potential shift in power
relations between faculty and institutions that provide the intellectual content for MOOCs and
the corporations that deliver that content its consumers. Informed by Lyotard's assertion that the
embrace of performativity as an evaluative metric will likely impact relations between

⁶ Lyotard, The Postmodern Condition, 6.

corporations and public institutions, my three claims (that the marker of performativity can be used to both legitimize and *de*-legitimize forms of knowledge; that one's degree of performativity is always in flux due to constantly evolving methods of knowledge transmission and storage; and that the concept of performativity encapsulates not only knowledge but also its interrelated *ways* and *sites* of knowing) form the basis of this project's exploration of an intersection between a MOOC platform provider and its university partner. In performing this study, I hope to contribute to an evolving understanding of how the incorporation of MOOCs into a teaching and learning ecosystem can impact not only existing pedagogies and institutional methods of course evaluation and analysis, but also how such alliances, if left critically unchecked, can significantly impact cultural understandings regarding which entities get to decide which learning experiences are 'best'.

MOOC Research: A Review of the Literature

Ebben and Murphy have articulated two distinct waves of scholarly engagement with MOOCs. The first wave (2008 – 2012) can be largely characterized as a period of enthusiasm and experimentation, while the second (2013 – present) reflects a more structured and critical approach to understanding the MOOC phenomenon and its impact on higher education. In the first wave, scholarly engagement with MOOCs occurred within a discursive context of the perennial 'crisis' within higher education. Once again at a crossroads, with concerns over escalating costs and declining public support competing with the need to provide increasing levels of access so that growing numbers of students could graduate prepared to participate in the

⁷ Maureen Ebben and Julien Murphy. "Unpacking MOOC Scholarly Discourse: A Review of Nascent MOOC scholarship." *Learning Media and Technology* 39, no. 3 (2014). https://doi.org/10/1080/17439884.2013.878352.

new knowledge economy, higher education was ripe for a 'disruptive innovation'8. At the same time, advancements in digital technology afforded new opportunities within higher education to further engage the possibilities of connectivism, a theoretical framework for understanding learning in the digital age that explores how knowledge is distributed across an information network⁹. It was thought that the increase in online connectedness of individuals via the internet would have significant implications for educational practice¹⁰ and that this in turn would help address higher education's critical issues of cost, access, and integration into a more technologically driven economy. MOOCs then were viewed initially as a potential solution to a host of higher education structural and material issues that existed both within the U.S. and globally. At the same time, MOOCs held the promise of helping usher teaching and learning into a new digital era of communication, commerce, and culture. Thus, they were simultaneously touted as both the 'fix' for traditional higher education and possibly its evolution, and much of MOOC scholarship during this first wave focused on the potential and implication of large-scale institutional adoption of MOOCs, specifically, the possibility of significant disruption to current systems and practices of higher education.

As data regarding MOOCs became increasingly available, much of the earlier enthusiasm around their potential to transform higher education was dampened, as evidence showed that on average, only between seven and ten percent of students who enrolled in MOOCs earned a

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⁸ George Mehaffy. "Challenge and change." *Educause Review*, September/October (2012): 25-41.

⁹ Rita Kop and Adrian Hill. "Connectivism: Learning theory of the future or vestige of the past?" *International Review of Research in Open and Distance Learning*, 9, no. 3 (2008). http://www.irrodl.org/index.php/irrodl/article/view/523/1103

¹⁰ George Siemens. "Connectivism: A learning theory for the digital age." *International Journal of Instructional Technology and Distance Learning* 2, no. 1 (2005). http://www/itdll.org

certificate of completion¹¹. There was even something of a backlash in the popular press, with many critics asserting that any evidence of MOOCs being an effective way to promote learning was ambiguous at best, as most students only signed up because it didn't cost them anything 12. MOOC platform providers, with technical and marketing investments already in the tens of millions, quickly pivoted these findings, asserting that when viewed in the appropriate context, this level of completion for MOOC enrollees can be considered 'quite reasonable' 13. What must be understood they argued, was that participants in a MOOC course didn't necessarily enroll with the purpose of completion as they would in a traditional course-for-credit context. Their goals were much more diverse, and often had more to do with the opportunity to digest the information presented in the course than in taking the formative and summative assessments necessary to achieve formal recognition or certification. Given the open structure of MOOCs, participants could choose to download the entirety of the course lectures while never completing a single problem set or quiz, or the reverse. As understanding the nature of participant 'intent' became more central, researchers began to explore broader questions of who enrolls in MOOCs revealing that the average participant was not the educational opportunity starved youth in a developing country as earlier promised, but rather someone who was likely white, male, already gainfully employed in the US, and looking to use the knowledge gained through MOOCs for job advancement.

¹¹ Chris Parr. "Mooc completion rates below 7%." *Times Higher Education*, May 10, 2013. https://www.timeshighereducation.com/news/mooc-completion-rates-below-7/2003710.article.

¹² Jon Marcus. All hail MOOCs! Just don't ask if they actually work. *Time*. September 12, 2013. http://nation.time.com/2013/09/12/all-hail-moocs-just-dont-ask-if-they-actually-work/

¹³ Daphne Koller, et al. "Retention and Intention in Massive Open Online Courses: In Depth." *Educause Review*, June 3, 2013. https://er.educause.edu/articles/2013/6/retention-and-intention-in-massive-open-online-courses-in-depth

Researchers also worked to further illuminate the black box of participant 'intent'. Doug Clow adapted the marketing metaphor of the 'funnel of participation' to help explain the varying levels of individual progression within a MOOC course, while Phu Vu and Peter Fadde developed the model of 'rings of engagement' to help better distinguish between MOOC participants with differing levels of commitment. Researchers also analyzed specific elements and activities within MOOCs including user vocabulary, blogs, and forums, in the hopes they would provide insight into participant behavior. In addition, scholars examined factors external to MOOCs that might impact the processes of enrollment and completion, including perceptions of 'openness' and course reputation and the presence of MOOCs in social networks and public discourse. While no 'magic cure' for low completion was discovered, such work contributed greatly toward a scholarly consensus that for MOOCs, alternate frameworks of analysis and/or evaluation are likely necessary, as is the development of new methodological approaches for better understanding the choices of MOOC users.

Since their creation, a great deal of the research regarding MOOCs has been focused on questions related to their modality and efficacy; scholars have engaged how MOOC courses are structured, who enrolls in them, the reasons why, and the levels of participation and achievement. In response to significant negative publicity about low completion rates, MOOC scholarship has also taken up questions regarding the appropriate data variables and methods for evaluating the many data points associated with MOOC courses. A recent review and content analysis of MOOC research since 2008 distinguishes MOOC research trends along three levels of classification (macro, meso, and micro) and fifteen research areas. Most prevalent is macro level research (40.4%), with 27% of MOOC studies overall engaging either theories and/or models of MOOCs. Second most studied is the micro level (34.4%), with learner characteristics

making up 15.7% of MOOC research. Within the meso level classification (25.6%), research related to the management and organization of MOOCs comprised just 1.6% of total research regarding MOOCs.¹⁴

And while each study is essential in helping us better understand the role and function of MOOCs in higher education, these trends reveal a predilection toward examining MOOCs primarily as an extension of particular aspects of teaching and learning. But it is also important to critically engage the phenomena of MOOCs within the context of neoliberalism, and to situate their utilization in higher education in relation to the ever-strengthening connections between the university and corporate capitalism. By exploring a specific instance in institutional relations between a university and its MOOC platform provider, this project works to expand the sphere of critical inquiry beyond matters of how MOOCs function as techno-pedagogical tools, and into larger questions of how the growing use of MOOCs help facilitate particular types of discourses regarding higher education, its consumption, and the marketplace.

Research Questions

In 2012, Central State Public University¹⁵ (CSPU) entered into a formal partnership with Coursera, a for-profit educational technology company, to begin the process of developing MOOC courses for CSPU. The following April, a campus-level committee was formed and charged with the responsibility of advising the CSPU campus of the strategic and policy issues related to offering MOOC courses. A formal agreement was reached between the two entities in

¹⁴ Aras Bozkurt et al., "Trends and Patterns in Open Online Courses: Review and Content Analysis of Research on MOOCs (2008-2015)". *The International Review of Research on Open and Distributed Learning* 18, no. 5 (2017). https://doi.org/10.19173/irrodl.v18i5.3080

¹⁵ A pseudonym.

2013, and since then CSPU has launched over two dozen separate MOOC courses in partnership with Coursera, ranging in topics from Subsistence Marketplaces to Cloud Computing, with over 40 separate course sections delivered in four, eight, twelve, or sixteen-week session-based intervals. By virtue of its collaboration with Coursera, CSPU's MOOCs have enrolled over 2.6 million participants. Most recently, CSPU has developed several new graduate programs with significant MOOC-based components, one of a small percentage of universities in the United States to do so.

In the summer of 2015, Coursera began to transition to a new 'On-Demand' course format for CSPU's MOOCs. The input of Coursera's university partners (this change was system wide) regarding this change was neither solicited nor their consent given; institutions were simply notified that a new course delivery platform was being developed for existing MOOCs, and that the current platform for courses would no longer be supported after a specified cutoff date. This move to On-Demand represented a significant shift in instructional delivery methods; rather than releasing course learning material at specific and deliberate time intervals (e.g. Unit 1 material in Week One, Unit 2 material in Week Two – in a manner parallel to traditionally styled face-to-face and online courses), Coursera would now allow participants to access and complete course content in any sequential order, and without the concern of time constraints. Similar to a Netflix digital subscriber, MOOC participants were now free to consume course material over an extended period of weeks or months, or binge on a semester's worth of material in a single night. And while this change was rationalized by Coursera as necessary in order to help improve course completion rates, there was also a question as to how such a change would impact CSPU's existing practices of course design, instruction, and analysis. Furthermore, did Coursera's ability to make such a significant change unilaterally suggest an unsettling tilt in pedagogical authority

toward those who provide the technological infrastructure? To more fully engage these questions, as well as explore the impact of this change in format for CSPU, this dissertation project poses the following research questions:

- 1. How did CSPU experience the change to 'On-Demand'?
- 2. How did the transition to the On-Demand learning platform impact existing practices of MOOC course design and pedagogy as well as institutional data collection and analysis of MOOC courses?
- 3. How might the format of On-Demand impact student learning?

Theoretical Frameworks

In articulating as the subject of this study the impact of a change in educational practice at a particular university, this researcher posits the following: That higher education institutions can implicitly or explicitly support, sustain, and/or reproduce spheres of physical, material, economic, political, ideological, and social repression, often in concert with similar forces at work within the larger society. Similarly, these same institutions can also contribute significantly to the transcendence of such forces and conditions through the articulation, promotion, circulation, and reinforcement of democratic and equitable practices, policies and ideas. Because higher education institutions have the capacity to both reproduce and/or disrupt spaces of oppression, and because this research project aspires to effect the latter through analysis and critique, this project's qualitative and philosophical focus naturally aligns with the ideological frameworks of Critical Theory, an intellectual practice concerned with the liberation of the human self from those larger social forces which often seek to oppress it.

Critical Theory

Critical Theory has its origins in the collective work of the Institute for Social Research, founded in 1923, and known commonly today as the Frankfurt School. Led by Theodore Adorno and Max Horkheimer, theorists at the Frankfurt School worked to interrogate the unsatisfactory social and political conditions that emerged in the wake of the Communist revolutions in Europe in the 1920s. "Political events and revolutionary practice had not coincided with the expectations derived from Marxist theory of the day. The following questions became urgent: How could the relationship between theory and practice now be conceived? Could theory preserve hope for the future? In changing historical circumstances how could the revolutionary ideal be justified?"¹⁶ While initially dismissed by several of his peers in the field, much of the contemporary intellectual work of critical theory can be traced to practices articulated by Georg Lukács in his early critiques of Marxist theory. Asserting that elements of Marx's writings were in opposition with the orthodox Marxism being promoted in the 1920s, he (along with Karl Korsch) worked to explore what they felt were spaces of contradiction between Marx's writings and prevalent Marxist practices, examining the intellectual influences of Marx's work, and promoting intellectual engagement with social and psychological theorists they felt could aid the process of elaboration and evolution (some would argue reconstruction) of Marxist ideology. Most significant was Lukács' argument against the deterministic and positivistic interpretations of Marx's theory. For Lukács':

Historical materialism has no meaning outside of the struggle of the proletariat... [its] position is predicated on the existence of a class whose social position is said to be

¹⁶ David Held, *Introduction to Critical Theory: Horkheimer to Habermas* (Berkeley: University of California Press, 1980), 20.

unique because it has the capacity both to understand and change society radically. Even if (mass) revolutionary working-class practice does not exist, one is still able to talk of its objective possibility. The purpose of theory, therefore, is to analyze and expose the hiatus between the actual and the possible, between the existing order or contradictions and a potential future state. Theory must be oriented, in short, to the development of consciousness and the promotion of active political involvement¹⁷

This 'analyze and expose' approach was deployed by many Frankfurt School theorists to engage the rapid structural and cultural changes in society, and to attempt to resolve the inherent contradictions they perceived between modern life and the supposed trajectory of Enlightenment thinking, including the rise of scientific rationality and instrumental reason and the development of mass culture. Their critiques often reflected a heavy skepticism toward empiricist driven research, drawing instead upon a variety of disciplinary approaches, and a host of methodological tools.

In the late 1960s, the work of critical theory took a significant turn through the efforts of Jürgen Habermas, whose reevaluation of the discourse of the Frankfurt School laid the foundation for contemporary understandings of the form and purpose of critical theory.

Concerned with what he named 'the rise of technocratic consciousness', and the subsequent disintegration of the public sphere, Habermas recast the work of critical theory to include a practical intervention, "the self-emancipation of people from domination". And although he drew heavily from the earlier work of Horkheimer and Adorno, Habermas' work represented a

¹⁷ Held, 22.

¹⁸ Held, 250.

significant break from traditional Frankfurt School approaches to social explanation and evaluation. His practice of engaging and appropriating competing traditions of philosophy and social science in order to reformulate the structural and intellectual foundations of Neo-Marxian School theory found its way into several disciplines within the social sciences and humanities and helped facilitate an expansion of sites and means of inquiry, including literary theory, queer theory, postcolonial theory, critical race theory, and many more. In its contemporary phase, critical theory is committed to "examining cultural practices from the point of view of their interaction with, and within, relations of power". Furthermore, it views the space of culture as one of ideological struggle; although a cultural hegemony clearly exists, positions of centrality and displacement are fluid. In summary, critical theorists believe that through an examination of contemporary social and political issues they could "contribute to a critique of ideology and to the development of a non-authoritarian and non-bureaucratic politics".²⁰

Qualitative Inquiry

Maxwell presents five intellectual goals for which qualitative studies are especially suited, including: understanding the meaning of events, situations, or actions; understanding a particular context; identifying unanticipated phenomena and influences of an event; understanding the process by which events take place; and developing causal explanations.²¹ In research studies engaging the policies and practices of higher education institutions, qualitative inquiry has often been employed to help illuminate the complex rationales that drive shifts in

¹⁹ John Storey, ed., Cultural Theory and Popular Culture: A Reader (London: Routledge, 1998) xii.

²⁰ Held, 16.

²¹ Joseph Maxwell, *Qualitative Research Design: An Interactive Approach*, 2nd ed (Thousand Oaks, CA: Sage, 2005) 22-3.

And while the descriptive term Qualitative Inquiry is often applied broadly in the context of social science research its historical and collective usage reflect a shared understanding that it has as its foci the meanings, concepts, definitions, characteristics, metaphors, symbols, and descriptions of things relevant to human experience.

Methods of data collection and analysis for Qualitative Inquiry (QI) have their roots in various disciplines in the social sciences and humanities; Vidich and Lyman locate contemporary understandings of QI as emerging out of research practices employed in the fields of sociology and anthropology in the early twentieth century. Through constructing an 'ethnography of the Other', early qualitative researchers "sought to understand the mechanisms of social processes and explain why both actors and processes are as they are". ²² Contemporary approaches to qualitative inquiry include action research, ethnography, case study research, and narrative inquiry. Continuously evolving through its intellectual intersection with concurrent social, political, and economic movements, the development of qualitative research can be traced through several overlapping historical moments. Qualitative Inquiry scholars Denzin and Lincoln (2000) partition QI's history into five phases: traditional, modernist, blurred genres, the crisis of representation, and the present moment. The present moment, Denzin and Lincoln assert, is concerned with a moral discourse, and "asks that social sciences and the humanities become sites for critical conversations about democracy, race, gender, class, nation-states, globalization, freedom, and community".23

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²² Arthur Vidich and Stanford Lyman, "Qualitative Methods: Their History in Sociology and Anthropology," in *Handbook of Qualitative Research* (2nd ed), ed. Norman Denzin and Yvonne Lincoln (Thousand Oaks, CA: Sage, 2000) 38.

²³ Norman Denzin and Yvonne Lincoln, "Introduction: The Discipline and Practice of Qualitative Research," in *Handbook of Qualitative Research* (2nd ed), ed. Norman Denzin and Yvonne Lincoln (Thousand Oaks, CA: Sage, 2000) 3.

Critical University Studies

Many educational scholars agree that the American university has entered a distinct phase of its existence due to the economic and political impact of neoliberalism. And while a sustained skepticism regarding the changing policies and practices of colleges and universities is nothing new, higher education scholars such as Jeffrey Williams argue that the independent strands of scholarship specifically engaging the impact and implications of neoliberalism thought and practice on higher education have coalesced into an intellectual movement, known as 'Critical University Studies'. A beachhead for sustained and interdisciplinary critique of emerging institutional practices in higher education, Critical University Studies "reports on and analyzes changes besetting higher education, focusing on the ways in which current practices serve power and wealth, and contribute to injustice and inequality rather than social hope". 24 Such critiques have a range of focus, from macro approaches that engage the influence of market ideology and globalization on America's higher educational landscape, to micro analyses that explore how such changes impact issues of shared governance, faculty labor, and even student debt load in both theoretical and material ways At its most robust, Critical University Studies represents a sustained focus on the practices at work in colleges and universities, recognizing them as significant sites of intellectual production with the potential to combat or reproduce longstanding mechanisms of social, political, and economic hegemony.

In summary, this research project pursues its questions through a Qualitative research framework, one informed by the ideological goals of critical theory. Such an approach allows for a nuanced exploration of changes in policy and practice within higher education institutions, with

²⁴ Jeffrey J. Williams, "Deconstructing Academe: The Birth of Critical University Studies," *Chronicle of Higher Education*, February 24, 2012. https://chronicle.com

an emphasis on how these changes impact the experiences of individuals within the institution and reflect shifts in institutional values and power. Accordingly, this study situates its research goals within Critical University Studies, an emergent field of scholarship dedicated to exploring the complexities of the intersection of neoliberalism and American higher education.

CHAPTER 2: HIGHER EDUCATION, THE NEOLIBERAL CRISIS, AND MASSIVE OPEN ONLINE COURSES

Many higher education scholars affirm that the American higher educational system has entered a distinct and particular phrase of its institutional existence, a phase shaped by the powerfully restructuring ideology of neoliberalism, and visible through the increased penetration of market forces into American higher education. Often introduced within a narrative framework of economic and/or political reform, neoliberalism's most profound impact on higher education has been the internalization of 'the marketplace' as the ideal regulator of educational products, services, and costs; an ideological shift corresponding to systemic federal and state divestment in public education, and the increased use of market-sensitive criteria in evaluating institutional goals, practices, and outcomes.

A complex amalgamation of ideology and practice often aligned with the processes of globalization, neoliberalism has been characterized as an integration of economic and political ideologies that collectively promote policies of increased trade and financial liberalization, and support a substantial reduction in the state's responsibility to provide goods and services, via structural deregulation or privatization. But even as 'neoliberalism' is increasingly put forth as the pocket explanation for so much of higher education's current woes, what the term actually signifies has itself become more nebulous and/or diffuse.

The contemporary use of the term 'neoliberalism' in theoretical, descriptive, or evaluative contexts has become so expansive that some have argued it is in danger of being emptied out of its meaning. Several scholars have noted that there is no single understanding of neoliberalism, rather there are many neoliberalisms and their manifestations are variant and path

dependent.²⁵ For the scope of this project, I am focusing my engagement with neoliberalism in higher education to its employment as an economic and political rationale, one that works to align the role and function of the state (and by extension, the public university) with the presumed optimal economic conditions of the marketplace.

As an economic and political rationale, neoliberal policies are often identified through their common goals and/or elements, including: policies that loosen the economy by reducing or removing price controls, deregulating capital markets, and lowering trade barriers; policies that otherwise reduce the role of government in shaping the economy; and policies that contribute to governmental fiscal austerity. Its tenets stand in opposition to the Keynesian strand of liberal economic theory (sometimes referred to as social liberalism), which advocates a cooperative 'public-private' approach to managing the economy and where the federal government plays a significant and continuing role, particularly in times of economic recession. But neoliberalism also departs significantly from classical liberalism (i.e. laissez-faire, which calls for minimal interference from political institutions in matters of competition and free trade) in that not only does it posit certain conditions as integral for economic growth, it also casts political institutions in the role of 'facilitator' of these conditions. Adopting a neoliberalist perspective, therefore, would make government entities responsible for managing themselves: for producing and maintaining the conditions most amenable to neoliberalism, and also, when necessary, intensifying those conditions by further restricting regulations and central controls. The ascendance of neoliberalism has allowed for the market to re-organize historical government functions along three separate lines: as that which openly responds to the needs of the market; as

²⁵ Stephanie L. Mudge. "What is Neo-Liberalism?" Socio-Economic Review 6, no. 4 (2008): 703-731.

that which is inhabited by a market rationality; and as that which holds the health and growth of the economy as the basis for its legitimacy.

America's broad embrace of neoliberal economic theory occurred in the early 1980s, likely hastened by the failure of government policies to provide relief from the economic malaise of the 1970s. In the decades following World War II, the American economy had slowly rebuilt itself by establishing rules, institutions, and practices both domestically and internationally that promoted coexistence, if not cooperation, with other national economies. This style of economic management, known commonly as 'interventionism', reflected the manner in which central governments actively intervened in private economic activity with the intent of driving it toward specific state defined goals. After a series of successive global political and economic shocks, most notably the economic stagflation of the late 1970s and the Iranian hostage crisis, American public confidence fell significantly, and suddenly the emphasis was no longer on building a record of program initiatives or on projecting the cost-effectiveness of prospective federal policies, but on looking backward to measure what has been accomplished by means of the activities already undertaken. In short, calls for a repudiation of interventionism grew, opening the door for an ideological shift toward an economic orthodoxy that would recast the federal government's presumed role in creating prosperity for its citizens by minimizing - if not completely eliminating - perceived barriers to growth; in other words, by strenuously facilitating the 'free market'.

Concomitant with the 'free market' economic principles being promoted at the time was another aspect of neoliberal ideology, one that framed the individual as the most fundamental and unifying element of society and promoted the idea of minimal state intervention on moral as well as efficiency grounds. Mutually reinforcing, these ideas posited that capitalism and

individualism are intimately connected, and thus capitalism promotes the economic and political freedom of persons, by defending the individual against the state. Policies lifting restrictions on capitalism were thus seen as integral to the protection and promotion of individual freedom, and policies restricting the free flow of capital were seen as suppressing or even negating the 'American' spirit and birthright. Emerging at a juncture of economic and political instability, this particular discourse of American neoliberalism was sustained by mutually reinforcing economic and political rationales. At that specific historical moment, neoliberalism was presented not only as a way out of the economic crisis of the 1970s, but also as a panacea against the ideological forces that presumably caused the crisis in the first place.

At the same time, the institution of higher education was in the throes of its own 'crisis of confidence' regarding its role and direction in American society. While the historical expansion of educational opportunities promoted through the Higher Education Act of 1965 was considered one of the great social, economic, and political achievements of the decade, it was not without its complications. According to Thelin, while the previous structures of higher education had worked well when asked to transition from elite to mass higher education, when expected to fulfill a commitment to universal higher education, "the structures started to buckle" And as the presence of remedial programs ballooned at traditional colleges (as part of the commitment to increase access), entry into leading research universities and prestigious liberal arts colleges actually became *more* difficult, as schools more competitively pursued their share of 'well-qualified' individuals. By the mid-1970s, the enormous growth of new curricula and student programs designed to make postsecondary education even more accessible and affordable had left the inner workings of several colleges and universities in disarray, leading to a diminished

²⁶ John Thelin. A History of American Higher Education (Baltimore: Johns Hopkins University Press, 2004), 321.

coherence of curriculum and declining public confidence in what the college experience meant.

And by the end of the decade, much of the intellectual energy used to promote the possibilities of universal higher education now focused on its systemic critique, with many nostalgic for higher education's perceived golden age.

America's embrace of the nostalgic promise of neoliberalism in economic, political, and cultural contexts found its public spokesperson in president-elect Ronald Reagan, a California republican who pledged to check and even reverse the growth of government in the private sector as part of his overall plan to return America to its former greatness. And while several scholars identify the Reagan presidency as a neoliberal turning point in higher education, it is important to acknowledge that the cornerstones for higher education's move toward the market were laid several years earlier in the 1972 amendments to the Higher Education Act of 1965. Pursuant to those amendments, the federal student financial aid which had previously been dispersed to colleges and universities in the form of institutional block funding was now awarded to students directly, a voucher that could be used as partial payment at a school of their choice. As students were now free to 'shop around', this change introduced a new layer of incentive in the institutional competition for students, resulting in the creation and/or expansion of enrollment management, student aid, and marketing divisions within colleges and universities.

Under Reagan's political leadership, and with the logic of neoliberalism as the preferred discursive framework, the historic boundary between the public university and the marketplace continued to erode. The passage of the Bayh-Dole Act in 1980, which allowed institutions to apply for patents for discoveries generated through the use of federal research or grant funds, strongly incentivized universities to pursue funding streams beyond state appropriations. To organizational theorists Rhoades and Slaughter, the passing of such legislation signified that:

Universities were now in the business of creating products with public monies and taking profit from them. This practice fundamentally challenged prevailing conceptions of conflicts of interest, which worked to keep public entities and their employees separate from direct involvement in the market. This Mertonian conception of the public interest and the basic norms of science was replaced by a more market-based conception, which suggested that the public interest was best served by public sector involvement in the private sector marketplace.²⁷

In a sense, the Bayh-Dole Act effectively signaled to universities that the perceived value of their institution would now be even more closely tied to perceptions shaped by the 'market'. In the decades following, public institutions were further incentivized to develop and maintain their own financially beneficial ties to the market due to the deep slashes in federal education spending. From 1980 to 1997 federal support for higher education declined by 28 percent (inflation adjusted), even as twenty-five additional research parks were constructed on university campuses²⁸. This precipitous drop in federal dollars for higher education was mirrored to a lesser extent by decreases in state funding, as populist movements to limit taxes and expand incarceration rates in the 1980s and 1990s left state legislatures with scant resources (and even less political will) to spare on higher education, even as student enrollment ballooned. These

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²⁷ Gary Rhoades and Sheila Slaughter, "Academic Capitalism and the New Economy: Privatization as Shifting the Target of Public Subsidy in Higher Education", in *The University, State, and Market: The Political Economy of Globalization in the Americas*, eds. Robert Rhoads and Carlos Torres (Stanford, CA: Stanford University Press, 2006) 107-8.

²⁸ Arthur M. Cohen. The Shaping of American Higher Education: Emergence and Growth of the Contemporary System. 1st ed. San Francisco: Jossey-Bass Publishers, 1998.

financial pressures continued throughout the 2000s, and more and more institutions of higher education found themselves in an economic vortex in which they were increasingly dependent on non-state dollars to cover their operational expenses, and thus increasingly pressured to generate additional revenue from both their students and their dealings with the marketplace.

Perhaps the most salient theoretical critique of the implications of neoliberalist thought in higher education can be seen in Henry Giroux's 2002 essay, "Neoliberalism, Corporate Culture, and the Promise of Higher Education". In this essay, Giroux argues that more than simply reversing the historical gains in access, neoliberalist driven reform works to *alter* the lenses through which the larger goals, processes, and outcomes of higher education are viewed; it erodes traditional understandings of public higher education as being in the interest of a 'public good', and works against the perception of public higher education institutions as sites essential for democracy and equality in American life. According to Giroux, neoliberalism is:

The most dangerous ideology of the current moment [because] it assaults all things public, mystifies the basic contradiction between democratic values and market fundamentalism, and weakens any viable notion of political agency by offering no language capable of connecting private considerations to public issues.²⁹

While American public research universities have historically maintained an intimate relationship to the market via their scientific research and output, under neoliberalism increasingly the very *purpose* of public higher education became imbued with a market rationality.

²⁹ Henry Giroux, "Neoliberalism, corporate culture, and the promise of higher education: The university as democratic public sphere." *Harvard Educational Review* 72, no. 4, (2002): 428.

The Research University and the Rise of 'Academic Capitalism'

In 1997, organizational theorists Shelia Slaughter and Larry Leslie introduced a term to characterize some of the emerging practices of public research universities responding to an environment increasingly shaped by a neoliberalist economic framework:

We call institutional and professorial market and marketlike efforts to secure external moneys *academic capitalism*.... By using *academic capitalism* as our central concept, we define the reality of the nascent environment of public research universities, an environment full of contradictions, in which faculty and professional staff expend their human capital stocks increasingly in competitive situations. In these situations, university employees are employed simultaneously by the public sector and are increasingly autonomous from it. They are academics who act as capitalists from within the public sector; they are state-subsidized entrepreneurs.³⁰

Thus the term 'academic capitalism' began as a way to explain a certain type of institutional and faculty behavior in the growing context of neoliberalism. In their first iteration of the term, Slaughter and Leslie make a distinction between the *market* behavior of institutions and faculty, which encompasses direct for-profit activity (such as patenting and licensing arrangements as well as profit-driven university-corporate partnerships) and *market-like behavior*, which refers to institutional and faculty competition for monies from external resource providers (such as grants, contracts, endowments, and student tuition and fees). Originally conceptualized as a way to

³⁰ Sheila Slaughter and Larry Leslie, *Academic Capitalism: Politics policies, and the entrepreneurial university*. (Baltimore: Johns Hopkins University Press, 1997) 8-9.

better understand the highly localized behavior of faculty and administrators in professional fields close to the market (i.e. market behavior), their concept of academic capitalism was later broadened to a theory that engages the processes (i.e. market-like behavior) by which universities began to more fully integrate with the new knowledge economy.

In expanding and refining the concept of academic capitalism into a theory in 2004, Sheila Slaughter and Gary Rhoades hoped to further understand institutional and staff behavior by exploring how universities and their employees not only *participate* in the new economy, but *integrate* themselves into it:

The theory of academic capitalism focuses on networks – new circuits of knowledge, interstitial organizational emergence, networks that intermediate between public and private sector, extended managerial capacity – that link institutions as well as faculty, administrators, academic professionals and students to the new economy.³¹

For Slaughter and Rhoades, this expanded concept of academic capitalism provides a better explanation for the moves toward the market by public research universities over the past 25 years than do other theories of marketization, managerialism, institutional theory, and institutional isomorphism. Rather than analyzing isolated or irregular instances of institutional or faculty market and market-like behaviors, the theory of academic capitalism contextualizes the totality of these practices as evidence of the shrinking ideological gap between higher education and the marketplace, and frames those instances as evidence of the growing networks between the university and the new knowledge economy. They argue that this narrowing of the

³¹ Sheila Slaughter and Larry Leslie, *Academic Capitalism: Politics policies, and the entrepreneurial university*. (Baltimore: Johns Hopkins University Press, 1997) 15.

ideological gap between the university and the market is visible in their mutual calls for increased globalization and in the systemic unbundling of white-collar work, resulting in significant increases in levels of contingent labor in both academic (adjunct faculty) and nonacademic (part-time hourly) employment settings. Another example of the strengthening link between the university and the knowledge economy can be seen in the growing credentialization of higher education, whereby the learning institution is understood as that which produces a 'knowledge unit'; raw material that can be bought, sold, marketed, and leveraged interchangeably between the university and the workplace. Overall, Slaughter and Rhoades assert the theory of academic capitalism helps better explain the slow yet steady migration of public colleges and universities from a 'public good' knowledge/learning paradigm (where created knowledge is considered a public good to which the citizenry has claims in a manner consistent with Mertonian norms) to an academic capitalist knowledge/learning paradigm (where created knowledge is considered private in order to better facilitate profit creation, and institutions and corporations have claims that come before the public good). And while they characterize the academic capitalist knowledge/learning paradigm as ascendant and perhaps dominant, they acknowledge that it has not fully displaced or replaced the public good knowledge/learning paradigm; the two continue to "coexist, intersect, and overlap". 32

MOOCs: Emerging Technology Articulated as a Neoliberal Solution

In many ways, the cultural trajectory of MOOCs (from its earliest developmental stages to its increasing incorporation into graduate degree programs) reflects the overlap and inherent tensions between the academic capitalist knowledge/learning paradigm and the public good

³² Slaughter and Rhoades, 29.

knowledge/learning paradigm embodied in American higher education. The acronym MOOC was first coined by Dave Cormier and Bryan Alexander to describe an open online course designed by George Siemens and Stephen Downes in 2008. The course, Connectivism and Connective Knowledge, was based on a for-credit class simultaneously offered at the University of Manitoba and was presented to 25 fee-paying students on campus and 2,300 other students from the general public who took the online class free of charge. Originally envisioned as an environment for enacting connectivist pedagogy (an approach to teaching focused on building networks between participants based on a foundation of shared content), MOOCs have evolved into two distinct branches: Connectivist MOOCs (cMOOCs) and Extension MOOCs (xMOOCs). The pedagogies behind these two branches are quite distinct, as cMOOCs are grounded in theories of connectivism while xMOOCs are based on a behaviorist approach centered on information transmission. Due to its structure, xMOOCs are much more adaptable to significant increases in enrollment, allowing the courses to be scaled to hundreds of thousands of participants, and as such has become the default structure for most MOOC courses currently in operation. Udemy, a for-profit venture that provides free and paid MOOC courses unaffiliated with existing universities, first launched in 2010. But MOOCs garnered mainstream attention in 2011 through the work of Stanford University professor Sebastian Thrun and Google Director of Research Peter Norvig, whose MOOC course 'CS221 - Introduction to Artificial Intelligence' enrolled more than 160,000 participants. CS221 reflected a more behaviorist approach emphasizing linear content acquisition: participants viewed instructor-generated video tutorials that worked through a predetermined curriculum and completed graded homework assignments and scheduled exams. Thrun later co-founded the company KnowLabs to run the course, which was offered in partnership with Stanford and in January 2012, soon after completing CS221,

Thrun announced the launch of a new KnowLabs project, Udacity, a for-profit platform for MOOCs.

The MOOC landscape expanded rapidly after that. Udacity was immediately joined by Coursera, a second for-profit MOOC platform founded by Stanford professors Daphne Koller and Andrew Ng that offered classes in collaboration with several research universities, including Princeton, Stanford, University of California Berkeley, University of Michigan, University of Pennsylvania and others. Four months after the launch of Coursera, Harvard University and the Massachusetts Institute of Technology announced edX, their own jointly run, not-for-profit MOOC platform. Founders of Udacity, Coursera, and edX all emphasized the goal of expanding access to quality education; edX envisioned a "a global community of learners" (edX, 2012) while Coursera promoted its desire "to empower people with education that will improve their lives, the lives of their families, and the communities they live in" (Coursera, n.d.-b). But soon after these companies began, MOOCs were philosophically recast: no longer seen as a force multiplier to help sustain American higher education's contemporary mantra of ever-increasing access, they were viewed instead as the gateway to its technical, structural, and ideological shift. MOOCs were now seen as a disruptive innovation to American higher education.

Disruptive Innovation

Coined in 1995 by Clayton M. Christensen, *disruptive innovation* (or alternatively, *disruption*) is a term that has been used to describe a product, a process, and/or a corresponding theory related to the manner in which a new product or service takes root at the bottom rungs of a specific consumer market and progresses upward, eventually displacing the products of established competitors at the top rungs. An oft cited example of disruptive innovation as a

product is Sony's early portable transistor radios: although they provided significantly inferior sound fidelity than Sony's other existing products when introduced, they eventually became a dominant product in the market because they created a niche for themselves by offering a new and different package of product attributes including small size, light weight, and portability³³. Both Amazon and Netflix are considered contemporary examples of companies that are successful due to their utilization of disruptive (innovation) *processes*; so great has been the magnitude of their disruption that consumer expectations around the products and services they provide have re-aligned to match their business models. In time, products and processes termed "disruptive" are eventually supplanted by new approaches, ones quite likely driven by new technological inventions or applications.

In characterizing the product and processes of disruptive innovation, Christensen distinguishes it from a *sustaining innovation*, a product or service which tends to facilitate a rate of improvement within a specific market by providing consumers with an increase in the quantity or quality of attributes they already value (e.g. the latest model of an Android or iPhone). Sustaining innovations tend to thrive *within* established product expectations, while disruptive innovations tend to thrive in the *subversion* (*or inversion*) of product expectations. At their outset, disruptive innovations highlight a very different set of attributes or processes from the ones mainstream customers have historically valued, and products or services that emerge from disruptive innovations often initially perform far worse along one or two key dimensions that are particularly important to existing market customers. To survive therefore, disruptive innovations must attract its customers from an *existing* market into a *non-existing* (*yet closely related*) submarket; it must create a unique space of consumer expectations in which it can thrive from

³³ Joseph L. Bower and Clayton M. Christensen. "Disruptive Technologies: Catching the Wave." *Harvard Business Review* 73, no. 1 (1995): 43-53.

within an existing space. If done successfully, the end result is the creation of a new market in which the disruptive innovator now possesses both a dominant share and a significant headstart on any competition. The struggle to resolve that paradox, of how success is achieved not by catering to an existing market but rather by embracing a miniscule sub-market is at the heart of the *theory* of disruptive innovation; an attempt to understand exactly how such market displacements occur. And while the products and processes named as 'disruptive innovations' are often seen as emblematic of great success, the theory itself is used to interrogate its opposite: To understand how strong companies with a dominant market share could suddenly be displaced; how industry leaders could fall quickly (and often fatally) behind. The theory of disruptive innovation is a theory grounded in the anxiety surrounding potential failure; of detailing the critical moments missed that seemingly make the difference between continued dominance or commercial failure.

Given the chronic anxieties enveloping American higher education at the beginning of the twenty-first century: escalating costs of attendance, declining legislative support for public higher education, and academic institutions fervently competing against each other for an ever diminishing slice of full-freight paying students (all within the emergence of a neoliberalist framework that increasingly characterized students as 'customers'), it is not at all surprising that the concept of disruptive innovation made its way into the commodified and corporatized American higher educational system. When advancements in digital technology afforded new opportunities within higher education to further engage the possibilities of connectivism, a theoretical framework for understanding learning in the digital age that explores how knowledge is distributed across an information network, it was thought that the increase in online connectedness of individuals via the internet would have significant implications for educational

practice and that this in turn would help address higher education's critical issues of cost, access, and integration into a more technologically driven economy³⁴. MOOCs then were viewed initially as a potential solution to a host of higher education structural and material issues that existed both within the U.S. and globally. At the same time, MOOCs held the promise of helping usher teaching and learning into a new digital era of communication, commerce, and culture. Thus, they were simultaneously touted as both the 'fix' for traditional higher education and its likely evolution, and much of the popular and scholarly engagement of MOOCs during its first wave focused on the potential and implication of large-scale institutional adoption of MOOCs, specifically, the possibility of significant disruption to current systems and practices of higher education. Between January 2011 and December 2012³⁵, there were 108 articles published about Massive Open Online Courses or MOOCs in newspapers, magazines, or peer-reviewed academic journals. Of those 108, 92% were found in popular newspapers or magazines, with the remaining 8% in peer-reviewed academic journals. In both the popular and scholarly locations, 10% of those articles actually contained the word "future" in the title. And as the number of popular and scholarly articles about MOOCs increased (the years 2013 and 2014 saw 775 articles published, with 73% in popular outlets and 27% in scholarly journals) the number of articles characterizing MOOCs as the future of higher education increased as well. For many of the authors, disruption was the pathway to that future.

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³⁴ John Daniel. "Making sense of MOOCs: Musings in a maze of myth, paradox and possibility." *Journal of Interactive Media in Education* 3, (2012). http://jime.open.ac.uk/2012/18

³⁵ 2012 was considered 'The Year of The MOOC' in the popular press

The Attraction of 'Disruption'

In her analysis of Christensen's theory, Jill Lepore argues that part of the reason the concept of "disruptive innovation" initially received so little pushback in the business community was that it was framed as an "idea of progress jammed into a criticism-proof jack-inthe-box"³⁶, a gospel that both preached and promised against capitalism's most dread fear: product obsolescence. It's theoretical foundation, that market forces drive technical and economic innovation, fits snugly alongside the core tenet of neoliberalism: that the best way to effect the greatest amount of democracy and prosperity in American life is through a close adherence to the ideology of the market. Disruption innovation then, offers the promise of an evolutionary way forward by skirting the received business wisdom of the present moment. But that, according to Lepore, is precisely its inherent flaw: using cherry picked business case studies as examples, and paired with the leanest bits of corporate anecdotal evidence, disruptive innovation presents itself as a predictive (rather than simply an historic) model of positive change, and thus implicitly posits the methodology of disruption as a 'best practice' blueprint for going forward. And while it holds out the hope of new streams of revenue and profit through the creation of new markets, at best Christensen's theory can offer only a possible explanation as to why particular products and/or companies succeeded or failed in the past, better illuminating perhaps a corporate decision-making crossroad that lead to a specific business outcome. Despite its clear shortcomings, the gospel of disruptive innovation nevertheless continues to be highly seductive to those who already accept the ideological framework that grounds it, its promise a mirage to those wandering in the ever-growing desert of late capitalism.

³⁶ Jill Lepore. "The Disruption Machine: What the Gospel of Innovation Gets Wrong." *The New Yorker* (June 23, 2014).

The Disruptive Potential of MOOCs

A great deal of the cultural excitement around the emergence of MOOCs in 2012 was due to its perceived potential to further facilitate within higher education a key aspect of disruptive innovation, *unbundling*. Within contemporary economic discourse, the term 'unbundling' has come to signify the act of separating out previously grouped services or products for the purpose of better aligning resources and/or modes of production with consumer demand and/or patterns of consumption; a structural reallocation toward the larger goal of decreasing costs, adding value to the consumer, and maximizing profit.

In her critical analysis of unbundling, Tristan McCowan³⁷ first engages the three primary rationales linked to the deployment of the 'bundle': the interrelated bundle, where all bundled items are required for a good to be enjoyed (the piece of Ikea furniture with the tools for assembly included); the convenience bundle, where the bundle appears to save the consumer time and money (the vacation package that includes airfare, car rental, hotel, and meals); and the 'tie-in' bundle, which forces consumers to buy undesired or unnecessary goods or services in order to get what they really want (the record album, pre-digital era, that contained two hit songs and seven misses). She then goes on to distinguish the two primary types of unbundling. First is where a group of products that were sold together are now dispensed separately (also known as disaggregation). Perhaps the most common example used to illuminate this concept of disaggregation is the trajectory of the cable television industry: for decades cable subscribers were compelled to purchase an entire basket of channels to ensure they gained access to one or two channels they specifically desired. The reasons for this were primarily technical; existing

³⁷ Tristan McCowan. "Higher Education, Unbundling, and the End of the University as we Know It." *Oxford Review of Education* 43, no. 6 (2017): 733-748. doi:10.1080/03054985.2017.1343712.

analog transmission systems would have made the centralized scrambling and localized unscrambling of individual channels a time, labor, and cost-intensive process, it was simply more financially viable for both providers and consumers to group channels into 'bundles' for a set fee. But with the advent of digital cable, channels could be decoded individually (unbundled). This option both allows consumers greater selectivity in their cable choices, and cable providers greater flexibility in purchasing and pricing cable content relative to cost and market demand. The second type of unbundling is the no-frills model, in which the basic product is sold in its barest form. This model is visible in the business structures of "low-cost" airline carriers such as Southwest, Jet Blue, and RyanAir, who provide travel services without the traditional amenities found in the industry, thus resulting in lower prices for their customers.

In many ways, unbundling can be considered an ideological successor to *outsourcing*, a common business management practice that was widely used in the 1990s. Generally defined as the procurement of services from an outside supplier rather than having them provided in-house, outsourcing allows for an institution to concentrate on its core competencies; when properly planned and controlled, outsourcing is expected to produce several benefits such as reduced costs, improved service quality, and increased efficiency and innovation. In other words, outsourcing results in improving the strategic triangle of an organization; quality, cost, and time. By 2002, American higher education had embraced outsourcing (ostensibly as a means of reducing costs), with food services, vending, bookstore operations, and custodial services the most common activities performed by outside vendors.

But while the practices of outsourcing and unbundling are similar in that they both facilitate the reallocation of resources toward the goal of maximizing efficiency and profit, I would argue that there remains a crucial distinction between the two. In outsourcing, it is often

considered paramount that the outsourced activity appear to be contained and/or functioning within the larger organization or brand. The consumer has no direct input into the company's resource re-allocation; and if done effectively, the consumer should be unaware that the service has been outsourced.³⁸ With unbundling, the consumer plays a much greater role in the process by separating out for themselves specific goods and/or services as an active and deliberate choice. Furthermore, the fact that they feel empowered to make such a choice is part of the appeal and perceived value to the consumer. And while outsourcing tends to occur in a manner proximate to a sleight-of-hand trick between provider and consumer, unbundling makes it immediately transparent the precise terms of the trade-off: consumers are aware of what they are gaining and what they are losing in the exchange and are left to themselves to determine the relative value of each. With both outsourcing and unbundling, organizations embrace the neoliberalist goal of resource re-allocation in stricter accordance with the market, but with unbundling there is an added element of consumer participation in achieving that goal, thus through unbundling, the desired outcomes of neoliberalism can quickly and easily become enmeshed with the perceived desirability of consumer choice.

Part of the excitement around MOOCs was that it offered something new in relation to existing practices of higher educational unbundling via the internet: access to intellectual content that had retained nearly the full value of its original cultural capital even after it had been disaggregated. Because MOOC courses were able to promote and sustain their intellectual credibility in a way that other entities providing content on the web were not (because MOOCs were instantly linked to the prestige of the universities that provided them), there was now the

³⁸ As an example, consider the global phenomenon of the 'outsourced' customer service call center, and the ways in which their service representatives often work to obscure their geographic location (and sometimes, their racial and ethnic identity) as a way of presenting themselves as a seamless extension of the larger organization.

option of combining one model of unbundling (disaggregation) with a second model (the 'no-frills' approach), creating the possibility of a disaggregated, no-frills educational experience that provided an amount of cultural capital comparable to that generated by a brick-and-mortar institution. In other words, the ability of MOOCs to provide access to unbundled content could cause a disruption so great, it could fundamentally reshape American higher education. In the words of a Washington Post Magazine headline: "One vision of tomorrow's college: Cheap, and you get an education, not a degree."

MOOCs emerged at a highly particular social, political, and economic moment in American higher education, one increasingly imbued with aspects of neoliberal ideology even as colleges and universities were simultaneously called upon to adhere to their founding principles and historical precedents in resistance to those neoliberal impulses. As always, there were the long-standing cultural anxieties about the differing levels of access to higher education due to gender, class, and race, suddenly complicated by a global educational movement that seemingly pit international-rate tuition payers up against Harry and Henrietta Hometown. There was dismay at the skyrocketing cost of attendance, sparking a furor over the proliferation of what many considered to be non-essential elements of higher education, even as institutions insisted these elements were needed to attract and support students as well as maintain alumni support. And these issues were now blended with a concern that students who *did* somehow graduate were not fully prepared to enter the 21st century workforce. Brought forth into such an environment, the presumptive impact of MOOCs are usually understood and/or evaluated within the scope of those dimensions: access, globalization, cost savings, and workforce preparation.

³⁹ Kevin Carey. "One vision of tomorrow's college: Cheap, and you get an education, not a degree." *Washington Post Magazine*, February 20, 2015.

But interwoven within all that was something more: an opportunity for the corporate entities that provided the technical backbone of MOOCs to perhaps facilitate an alternative pathway to higher education credentialization. To create a new higher educational marketplace (via disruption), one more fully governed by instrumentalist rationales, driven by consumer choice (through the option of unbundling), and almost exclusively occupied by corporate technology companies such as Coursera, edX, and Udacity. If its disruptive potential were ever fully realized, MOOCs could achieve that which had eluded neoliberal 'reformers' of higher education for the previous two decades, a shattering of the historical monopoly of brick and mortar institutions of their power to dictate the terms, expression, fulfillment, and credentialing of that most abstract of concepts, 'higher education'. In the words of MOOC hopeful Kevin Carey:

Indeed, the future is so clearly one of universal access to free, high-quality, impeccably branded online courses that their presence can be simply assumed.... meanwhile, the dominant higher-education pricing model, in which different students pay a single price for a huge package of services they may or may not need, will come under increasing stress. Colleges of all kinds will need to re-examine exactly what value they provide to students, what it costs, and what price the market will bear.⁴⁰

What Carey and many others seemed to overlook was not only the question of who might gain (other than the primary educational consumers, students) from such a rapid and radical reconstruction of the educational marketplace, but also, what further forms of disruption might

⁴⁰ Kevin Carey. "Into the Future With MOOCs", *Chronicle of Higher Education*, September 7, 2012.

be attempted in higher education as part of neoliberalism's endless quest to more tightly constrain education to the needs of the marketplace.

It is with these concerns in mind that I move to the work of my next chapter, an analysis and discussion of Coursera's experiment with an "On-Demand" MOOC format at Central State Public University in 2014. For even as MOOCs were already understood as highly disruptive to the higher educational marketplace, I posit that Coursera's adoption of the On-Demand format was an attempt to intensify that disruption even further, by pushing the concept of unbundling beyond merely a separation of college courses from their in-person institutional experiences, into a framework where the student-consumer is effectively disassociated from everything other than the content, and the technology company facilitating that content. In the following chapter, I explore the consequences of "On-Demand" MOOC courses on the practices of teaching and learning.

CHAPTER 3: EXPLORING THE IMPACTS OF ON-DEMAND MOOCS

In this chapter, I discuss the findings of my qualitative study exploring the impact of the shift to an On-Demand MOOC format at a Central State Public University (CSPU). This study centers around the experiences of the CSPU instructors, course administrators, and data analysts of the MOOC courses impacted by the shift to On-Demand. Specifically, the study engages the following research questions: *How did CSPU faculty teaching MOOC courses experience the change to On-Demand?*; *How did the transition to On-Demand impact course design and pedagogy for existing MOOC courses?*; and lastly, *How did On-Demand impact the research methodology, data collection and analysis for existing MOOC courses?*

Background of the Study

In 2012, CSPU entered into a formal partnership with Coursera, a for-profit educational technology company, to begin the process of developing MOOC courses for CSPU. The following April, a campus-level committee was formed and charged with the responsibility of advising the CSPU campus of the strategic and policy issues related to offering MOOC courses. A formal agreement was reached between the two entities in 2013, and since then CSPU has launched over two dozen separate MOOC courses in partnership with Coursera, ranging in topics from Subsistence Marketplaces to Cloud Computing, with over 40 separate course sections delivered in four, eight, twelve, or sixteen-week Session-Based⁴¹ intervals. By virtue of its collaboration with Coursera, CSPU's MOOCs have enrolled over 2.6 million participants. Most

⁴¹ Session-Based intervals reproduce the traditional content delivery structure of a face-to-face class within a digital environment, with the coursework distributed equally across the total length of the course.

recently, CSPU has developed several new graduate programs with significant MOOC-based components, one of a handful of public universities in the United States to do so.

In the summer of 2015, Coursera began a system wide transition to an 'On-Demand' course format for its MOOCs. Consent for this change from Coursera's university partners was neither solicited nor given; partner institutions were simply notified that a new delivery mode was being developed for MOOC courses, and that the current mode (Session-Based) would no longer be supported after a specified cutoff date. The move to On-Demand represented a significant shift from the ongoing Session-Based instructional delivery methods; rather than releasing material at deliberate and bounded time intervals (e.g. Unit 1 material available the first week, Unit 2 material available the second, etc.,—in a manner comparable to traditionally styled face-to-face and online courses), Coursera would now allow participants to access and complete course content in any sequential order, and without the concern of time constraints. Similar to a Netflix digital subscriber, MOOC participants were now free to consume course material over an extended period of weeks or months, or binge on a semester's worth of material in a single night.

And while this change was rationalized by Coursera as necessary in order to help improve course completion rates, there were significant concerns expressed by CSPU faculty, staff, and administrators as to how such a change would impact existing practices of MOOC course design, instruction, and analysis. Furthermore, did Coursera's ability to make such a significant change unilaterally reflect an unsettling tilt in pedagogical control toward those entities who provide the technological infrastructure for MOOCs?

Research Methodology

Within the field of higher education, the case study approach to institutional research has often been employed to in order to gain a more in-depth knowledge of the human impact of institutional policies and practices. Primarily associated with ethnographic models of data collection and analysis, recent scholarship has worked to separate a case study approach from any particular method, and instead present it as "a logic of design... a strategy to be preferred when circumstances and research problems are appropriate". ⁴² Such an understanding is consistent with Yin's more technical definition of case study research that encompasses both a case study's scope and its varying forms of inquiry:

A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident... the case study inquiry copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result relies on multiple sources of evidence, with data needing to converge in a triangulating fashion, and as another result benefits from the prior development of theoretical propositions to guide data collection and analysis.⁴³

Yin also identifies a case study research strategy as appropriate when research is conducted research in a contemporary setting, when the researcher lacks control of events, and when the researcher is focused on questions of 'how' and 'why'. Additional rationales regarding the

⁴² Jennifer Platt, "Case Study' in American Methodological Thought." Current Sociology 40 (1992): 46.

⁴³ Robert Yin, Case Study Research: Design and Methods, 3rd Ed, (Thousand Oaks, CA: Sage, 2003) 13-4.

appropriateness of the case study approach are also articulated in the categorical labels often associated with its use:

It is not unusual for the choice of case to be no choice at all. The case is given. We are interested in it, not because by studying it we learn about other cases or about some general problem, but because we need to learn about that particular case. We have an intrinsic interest in the case, and we may call our work *intrinsic* case study. In a different situation, we will have a research question, a puzzlement, a need for general understanding, and feel that we might get insight into a question by studying a particular case. This use of case study is to understand something else, and we may call our inquiry *instrumental* case study.⁴⁴

Other ways of categorizing the case study approach in relation to its application include: explanatory, descriptive, illustrative, exploratory, and evaluative. This researcher's rationale for the use of a case study approach to explore the shift to 'On-Demand' exists at an intersection of these categorical understandings. In employing this a case study approach, the researcher seeks an *intrinsic* understanding of the phenomena: 'how' the shift occurred and 'what' changes (if any) the shift engendered in the practices of the faculty, administrators, and analysts associated with MOOCs at the institution. But this project also has an *instrumental* interest in that it proceeds from within a theoretical framework that posits that the interior dynamics of universities have significantly altered as a result of their increased integration into the knowledge economy. And while this study does not pursue as its primary goal the validation of a causal link

⁴⁴ Robert Stake, *The Art of Case Study Research* (Thousand Oaks, CA: Sage, 1995), 3.

between academic capitalism, MOOCs, and perilous disruptions in the historic practices of teaching and learning in higher education, it embraces the possibility that its findings can contribute to a deeper understanding of the ongoing impact of neoliberalism in higher ed. Thus this project strives to be both *exploratory* (in its nature) and *explanatory* (in its aspirations) in that exploratory case studies are often utilized when the phenomena being explored has no clear, single set of outcomes, while explanatory case studies are used to explain causal links between real-life interventions.

Study Design

Within the case study approach, Yin presents several rationales for the selection of a single-case over a multi-case study design. For this study, a single-case design was chosen because it allowed for a more focused and comprehensive approach toward understanding the research question, namely, what was the impact of the change to On-Demand for CSPU's MOOC courses. Since this shift to an on-demand platform was both an emergent phenomenon and highly localized within the university (it only impacted a limited number of MOOC courses), the choice to utilize a single-case study design was also consistent with Yin's fourth rationale for single-case use, *revelatory*, to be employed "when a situation exists where an investigator has an opportunity to investigate a phenomenon previously inaccessible". 45

According to Stake (1995), an element essential to successful case study design is an explicit understanding and definition of the 'case' under examination. This study defines as its 'case' the specific occurrence of change in the learning platform for MOOC courses offered by Central State Public University. As a result of that change, which took place in the spring of

⁴⁵ Yin, 42.

2015, selected MOOC courses were no longer presented in a Session-Based format and were presented instead in an On-Demand format. And while this change to On-Demand was arguably effected with a minimum of disruption for MOOC participants, such a shift required significant adjustment on the part of the course faculty, instructional designers, and data analysts. Thus from within this case, this study's primary research question emerges, namely: "How did this change in course format impact the instructional faculty, instructional designers, and data analysts associated with those courses?" For this case study, the primary units of analysis are those faculty, instructional designers, and data analysts impacted by the change to On-Demand. Through a detailed analysis of the data collected about their responses to On-Demand, this research project explores the impact of that shift.

Institutional Context

The site of this case study is Central State Public University (CSPU), a four-year comprehensive doctoral research university considered the 'flagship' institution within its state university system. Founded in the 19th century, CSPU currently offers over 140 graduate and undergraduate programs, and has an annual enrollment of over 45,000 students. CSPU also offers over 75 online degree, certificate, and endorsement programs, as well as more than 800 distinct online courses.

A state supported institution, CSPU finds itself (like many other public institutions) in a state of continual fiscal crisis due to a restructured state economy that no longer bears a significant share of the public higher education cost burden. Between 1996 and 2004, the Central State Public University System (all campuses combined) experienced an overall increase in operating costs of 42%, from 1.9 to 3.3 billion dollars. During that same time period, state

appropriations for all campuses declined from 804.8 to 699 million dollars. For the individual CSPU campus, the financial outlook was especially bleak. While its portion of state funding had roughly kept pace with the cost of instruction, CSPU's associated institutional costs were greatly increasing. Expenditures for 'academic support' (a term used to denote costs related to supporting the institution's primary missions – instruction, research, and public service) more than doubled, from 67.5 million in FY 96 to 140 million in FY 2004. And costs related to 'student services' (institutionally defined as those activities contributing to students' emotional and physical well-being and their intellectual, cultural, and social development outside of formal instruction) nearly tripled, from 15.4 to 42.5 million. These economic realities helped shape the tenor of university administration, and in 2005 a newly appointed system president called for a new compact through which to support the university, one in which "the state continues to play a vital role; tuition payers and their families carry an increasing share of the burden; faculty members do their part through excellent work and success in winning grants and contracts; donors do their part through generous giving; and the leadership of the University does its part by making the best use of its resources". 46

In order to help facilitate this "best use" of institutional resources, senior university executives developed a comprehensive Strategic Plan, which held as one of its intents "to develop a broader state, national, and global presence" This concern with expanding the institutions' local, national, and global *presence* permeates the Strategic Plan, and is ideologically consistent with institutions operating within the framework of academic capitalism, in which:

⁴⁶ President, Central State Public University, "Inaugural Address". Office of the Chancellor. (2005).

⁴⁷ Central State Public University, Office of the Chancellor. *Campus Strategic Plan.* (2006): 12

Universities as institutions no longer judge their own performance. Instead, outside organizations (such as US News and World Report) rate college and university performance, judging their worth to the student/parent/consumer. To some degree, such outsiders have replaced accrediting associations... institutions compete for position, as concerned to maintain place in these venues via the ratings of the disciplines by their scholarly peers". 48

Within the 'reality' of academic capitalism, higher education institutional concerns become situated within a market-oriented discourse, and reductions in external funding sources are presented and/or understood as symptomatic of declining market share. Correspondingly, this reality requires an institutional response, centered around, among other things, an intensification of the promotion of institutional identity. The emergence of the Massive Open Online Course, with its potential to market the institutional brand out to hundreds of thousands of potential student-customers, seemed a perfect solution.

Data Collection

Once Institutional Review Board approval was obtained the researcher began collecting data. One strength of the case study data collection process is the opportunity to use many sources of data, allowing for the potential of what is referred to as a 'triangulation of data'; a convergence of corresponding evidence from different sources. Through the utilization of multiple sources, the internal validity of a case study is strengthened. This study obtained its data from personal interviews and institutional documentation.

⁴⁸ Slaughter and Rhoades, 23.

Interviews

Within a case-study research design, interviews are considered one of the most important sources of information. Potential interview subjects were approached based on their status as *key informants*; those individuals "who possess special knowledge, status, or communicative skills" and who are often chosen "because they have access – in time, space, or perspective – to observations denied the researcher". ⁴⁹ For this study, interviews were conducted with members of the three groups at CSPU impacted by the change to the On-Demand: faculty instructors of MOOC courses, course instructional designers, and course data analysts. Faculty instructors were considered as potential interviewees only if they had taught the same course in both the Session-Based and On-Demand formats and could thus speak to a change, if any, in their practice. Of the nine faculty members who met this criteria prior to the start of the research project, five agreed to be interviewed.

Design responsibilities for CSPU's MOOC courses are divided amongst a group of instructional designers, who meet with an administrative supervisor weekly to discuss any emergent issues and ensure consistency across courses. Similarly, instructional designers were considered as potential interviewees only if they themselves had modified courses due to the change to On-Demand. For this study, two of the four designers who met that criteria were interviewed, as well as their administrative supervisor, in order to gather data on any immediate as well as long-term issues with the implementation of On-Demand.

Analysis of MOOC data is performed by CSPU's Data Analytics division. As they had all been continuously employed in the division prior to the shift to 'On-Demand', all four full-

⁴⁹ Margaret LeCompte and Judith Preissle, *Ethnography and Qualitative Design in Educational Research*, (San Diego, CA: Academic Press, 1993), 166.

time staffers of the group, as well as their graduate student assistant who also performs analyses, were interviewed. In addition, the university liaison between CSPU and Coursera (a senior administrator that helped facilitate the original partnership) was interviewed for background information.

All interviews were conducted between September 2015 and June 2016 and occurred in the private offices of the interview subjects, or in nearby private conference rooms. Before the start of any interview, the researcher explained the purpose and design of the research and addressed issues of subject consent and confidentiality. All interviews were tape recorded; in addition, the researcher took extensive notes during the interviews. All interviews lasted between 25 and 50 minutes. To help ensure an accurate accounting of the interview, after each interview was completed and transcribed, each subject was given the opportunity to review the transcript for accuracy. For this study, the researcher employed the format of the 'open-ended interview', in which subjects are asked about the facts of a matter as well as their opinions and interpretations of events. The interview protocol contained a set of semi-structured questions, arranged to flow from low-risk to high-risk, with several general questions followed up with a series of more open-ended inquires which could then lead to more probing questions.

Institutional Documentation

In addition to the information gathered from interviews, the researcher obtained data for this study from publicly accessible institutional documentation regarding MOOCs. For case studies, documentary evidence can often be used to collaborate, augment, or contradict data from other sources. For this project, such data included the current and archived institutional websites related to MOOCs at CSPU. Aware that some areas of information presented on institutional

websites are sometimes crafted toward specific audiences and with a deliberate rhetorical focus, the researcher was mindful as to their potential to present limited information and/or perspectives regarding MOOCs at the institution.

Data Analysis

The case study approach to qualitative research represents a particular orientation toward collecting, organizing, and analyzing data; in that sense it reflects a *process* as much as it does a *product*. For this research project, all interviews were digitally recorded and transcribed in order to provide verbatim accounts. Once transcribed, the collected interviews were reviewed in order to identify patterns within the data. This study utilized Atlas.ti software to assist with data coding and analysis. Upon the first analysis, specific themes and concepts emerged; the interviews were then re-coded using these themes and concepts as interpretive categories. Responses both convergent and divergent to these categories were noted, as well as degrees of specificity within responses, and when necessary, new categories were added and the interviews again recoded. Through several iterations of this process, what Yin terms 'explanation building', a reasoned understanding of the human impact of the shift to On-Demand (for the three interview groups) emerged.

Validity

Within the field of educational research, there are ongoing debates as to how to best address questions regarding the validity of qualitative studies. For a case study, different aspects of the project's validity are managed at different stages of the research. Questions of *construct* validity are addressed in the data collection process, through the use of multiple sources of

evidence to confirm data. For this study, the researcher interviewed several university employees in different potential areas of impact (in order to better facilitate data triangulation), and performed specific acts of validation during the data collection procedures, including digitally recording and member checking each interview for accuracy. Questions of *internal validity* are addressed through data analysis, in the procedures of pattern-matching the data and the explanations that emerge. As discussed in the Data Analysis section, through several iterations of data review, categorical emergence, and re-engagement with the data, a reasonable measure of internal validity was achieved.

Role of the Researcher

In case study research, the role of the researcher is paramount in that "the perspective that the researcher brings to a qualitative inquiry is part of the context of the findings". ⁵⁰ Throughout the research process, researchers should continually engage in the practice of *reflexivity*, which requires a manner of self-awareness, including one's political and cultural consciousness, and ownership of one's perspective. The researcher acknowledges that the origins of this research project were significantly shaped by his experiences as a student at CSPU. During the span of his academic career, he witnessed significant structural changes within the institution, as it was buffeted by economic shortfalls, political scandals, instability in executive leadership, and the cultural erosion of the idea of public higher education as a public good. In addition, the researcher also attended several public colloquia held at CSPU pertaining to MOOCs, and was able to observe and note the ways in which MOOCs, as well as the institutional relationship with

⁵⁰ Michael Patton, Qualitative Research and Evaluation Methods, 3rd Ed (Thousand Oaks, CA: Sage, 2002), 64.

the MOOC platform provider, Coursera, was articulated to the university community as well as the public at large.

The selection of CSPU as a research site was further influenced by the researcher's relative ease of access to faculty and administrators at the institution. Employed as a student assistant in the Data Analytics division, the researcher was able to develop a friendly rapport with MOOC instructors, administrators, and analytic staff. It was also due to this status as student employee that the researcher first became aware of the shift to On-Demand, and thus decided to construct and conduct this study. As a result of this positioning, the researcher's orientation toward the study sometimes approximated that of an internal evaluator, one who emphasizes "the quality of activities and processes, portraying them in narrative description and interpretive assertion". Nevertheless, the researcher's impact on the data collection and analysis process was minimal.

Limitations of the Study

This case study has several limitations, many of them a function of its deliberately narrow scope. In pursuing information regarding the impact of the change from Session-Based to On-Demand MOOC courses, the researcher excluded perhaps the most obvious source of information, participants in the MOOC courses themselves. And while data from this population would have contributed greatly to the project, the time and logistical effort to identify and locate a significant sample of users that had taken *the same course* in both Session-Based and On-Demand format would have precluded the completion of this study in a timely fashion. The pursuit and inclusion of such data would have also likely expanded the focus of this study

⁵¹ Stake, 96.

beyond an understanding of the impact of this change at the university. Thus, that category of data was excluded.

The design and implementation of this research project also reflects a conscious decision not to pursue interview data from employees of Coursera (the MOOC platform provider) regarding the change to On-Demand. In doing so, the researcher acknowledges a potential critique that the findings of this study present only 'one side of the story', as it were. Again, given that this project was focused on understanding the impact from the *university's* perspective, the exclusion of Coursera employees seemed warranted.

As a single-case exploratory study, this research was not designed to produce findings generalizable across research universities offering MOOC courses. My selection of interview subjects for the study, while comprehensive, was not 100% complete. And while there were several common themes presented in the personal interviews, the lived experience of each respondent remains distinctly unique; thus the findings reflect an amalgamation of thoughts, feelings, and actions regarding the change to On-Demand. It is the researcher's sincere hope that the scholarly potential of this research regarding a MOOC process and its impact will inspire others to develop and pursue complementary research pathways.

Significance of the Study

While the lived reality of university-corporate partnerships is certainly not new, such relationships have become infinitely more complex in the last quarter century given the spread of neoliberalism into the social and political sphere and the increased use of technology in the educational environment. And what likely began as simple, mutually beneficial collaborations in higher education have become sites of struggle, as an increasing reliance on technology to help

address higher education's crises is slowly re-articulating the power relations between traditional and emerging stakeholders. Ultimately, who will determine the framework for evaluating higher education's technologically dependent ways of learning, knowing, and doing? Will it be the faculty, some highly resistant to change for reasons both philosophical and pedagogical? Will it be the emerging techne worker-class, the instructional designers, administrators and analysts born out of our ever-expanding technological support systems? Or will it be the techno-corporate oligarchs, ceaselessly working to merge the activities of self-expression, learning, and consumption into a singular and profitable act? By exploring a corporate-driven change in MOOCs using a case-study method, this research hopes to deepen existing knowledge of how techno-corporate entities, through their partnerships with colleges and universities, can impact practices of teaching, learning, and evaluation directly and indirectly via the technological platforms under their control. Its findings, taken in context, suggest a potential shift in the balance of power in higher education, as corporate partners are increasingly comfortable asserting the highest and best use of educational technology in direct relation and response to the market.

Findings

Research Question 1: How Did Faculty Experience the Change to On-Demand?

The path to On-Demand: Rationales and skepticism

When Coursera first informed its institutional partners at CSPU of the change to an On-Demand platform, it offered two rationales for doing so. First, from a consumer perspective, Coursera felt that they were losing potential customers due to the rigidity of entry points into courses in a Session-Based platform. With Session-Based, CSPU's MOOC courses would cycle every 20-24 weeks, similar to face-to-face courses in a physical learning environment. If a potential MOOC student missed a course start date in January, they would have to wait until the next start date (approximately the following semester) to enroll. Coursera felt that this time lag between 'impulse-to-learn' and 'ability-to-sign-up' negatively impacted their enrollment numbers, so in order to take advantage of the participants' impulses, they wanted courses to be available immediately, with little or no impediments.

Second, Coursera saw the shift to On-Demand as a way to eliminate what it perceived as one of the most significant barriers to completion of MOOC Session-Based courses: the reality that if a participant misses a deadline in a deadline-driven course it can often derail that participant's possibility for success in the entire course. And given that the typical demographic for MOOC participants were individuals who were likely already balancing work and family responsibilities, the number of people who often failed to complete a course due to an exigent 'life circumstance' that interrupted their pattern of course participation was significant.

Despite the rationales put forth by Coursera to justify the transition to On-Demand, many faculty and administrative staff at CSPU recalled being concerned about the change before it happened. For one, Coursera failed to share any research or survey data they had collected to support their argument. They simply made the announcement at their annual conference with their institutional partners. Several CSPU staff members found the lack of presented evidence to support the change troubling:

"They [Coursera] say 'we ran the data, we crunched the numbers,' but we never actually saw those numbers. I hate to say we don't trust them but in some regards we don't trust the data they come up with because we don't think they have a research background, they

have a corporate background... I feel like they have corporate goals that are at odds with academic goals so they might not be studying things in a neutral way"⁵² (Interview subjects 7 & 10, data analysts).

These two analysts also felt that this type of notification was consistent with how Coursera kept its university partners in the dark regarding its rationales and concrete evidence for changes in policy and practice.

In general, a more supportive tone was reflected in the faculty interviews, with several seeming to accept prima facie that the On-Demand format was more 'learner-focused' and would positively impact levels of course completion. But one faculty instructor remembered being highly skeptical about the switch to new platform because the assertions put forth by Coursera regarding relevant factors for course completion were contradictory to their own research and teaching experience:

"I never really believed [Coursera's] idea about On-Demand, I have done my own research to test this idea out...basically the students that were procrastinating, they were procrastinating because they were procrastinators, not because they were going to be able to do it if they were given more time. So I really questioned the rationale of making the change...it's very clear in the data I have for my course that deadlines serve the purpose of incentivizing students to finish the work. If you get rid of the deadlines then no one's gonna do it" (Subject #5, faculty).

⁵² To protect their anonymity, all interview subjects were assigned a randomly generated identification number. When relevant, I have included references to their category of employment at CSPU.

Another faculty member recognized this turn to On-Demand as contrary to earlier assertions by Coursera:

"In one sense I don't require evidence that [On-Demand] would be convenient for people. If you want to sign up for something, being able to sign up straightaway is better than waiting six weeks... however, it is slightly surprising because when [Coursera] first started [offering MOOCs] they said the cohort effect was very important. And obviously On-Demand downgrades the cohort effect" (Subject #9, faculty).

Their comment alludes to the fact that when Coursera first began developing their courses in 2012, they piloted a structure very similar to the 'On-Demand' format, where courses were "just open, no due dates, etc.," and discovered that "very very few people completed the course" (Subject #4, administrator). After that, they began offering courses in the Session-Based format, modeled after the traditional face-to-face course experience. In her 2012 TEDTalk: *What we're learning from online education*, Coursera co-founder and then CEO Daphne Koller asserted that what separated Coursera from other forms of online courses and made it such a useful educational experience for participants was its similarity to traditional learning structures:

"...So what made these courses so different? After all online course content has been available for a while. What made it different is that this was a real course experience. It started on a given day, and then the students would watch videos on a weekly basis, and

do homework assignments. And these would be real homework assignments, for a real grade, with a real deadline."⁵³

So why then, given what Coursera had discovered about the meager efficacy of an open-entry, no-deadlines format, and what CEO Koller had publicly asserted about the benefits of a Session-Based, traditionally structured online course format, did they move to On-Demand? One faculty member at CSPU speculated the shift was simply a ploy designed to increase revenue:

"With On-Demand, we get to actually pretend that we're doing something new, that there's a way of learning by getting around learning. So if I'm going to sell knowledge outside of that practice, outside of the traditional process of learning, I need to have a new practice to do it. And On-Demand presents itself as a new learning practice, whereas Session-Based courses did not. That feels more like I'm just sitting in a classroom online. And I think On-Demand is very much about trying to capture the dollars and the groups of people who don't, for whatever reason, feel like they can participate in that generalizable discourse around knowledge. I think they are making this change because they were not able to make money with the model they had" (Subject #5, faculty).

But even as some saw Coursera's actions as purely self-serving, others saw it as a necessary response to the market pressures of higher education:

⁵³ Daphne Koller, "What We're Learning From Online Education", TED video, (April 2012): 20:25. https://www.ted.com/talks/daphne_koller_what_we_re_learning_from_online_education?language=se

"At first, I thought [Coursera's] decision to sort of mimic the structure of college courses was mostly a marketing thing, in a sense of trying to have something that was familiar to people who worked in higher education. But it makes no sense from an internet standpoint, and so it's not surprising that once they got a little bit of traction they started pulling folks along in the direction the internet goes, which is access 'on-demand'" (Subject #2, analyst).

Although On-Demand was ostensibly presented by Coursera as a format designed to minimize the barriers many students faced in enrolling and completing MOOC courses, Coursera's lack of sufficient philosophical and/or data-informed engagement regarding its implementation led to a 'rationale vacuum' that in turn fostered great skepticism among CSPU staff. Such a vacuum only seemed to nurture speculation about Coursera's 'real' motives for the change, speculations that often seemed to reflect interview subjects' pre-existing dispositions toward the idea of a forprofit company providing higher education.

Research Question 2: How Did the Transition to On-Demand Impact Course Design and Pedagogy for Existing MOOC Courses?

Course design

One of the most significant consequences of the shift to On-Demand were the resulting changes in the design of existing Session-Based MOOC courses. Some of these design changes were required due to the technical aspects of the new system itself; as Coursera rushed through its production schedule in order to release On-Demand not all of the features that had been

available in Session-Based made the transition, lessening the options of those instructional designers working to adapt courses from one platform to the other:

"When Coursera launched the on-demand platform, all we could do is create [web] pages and quizzes. And we had less control over peer review and structured classroom discussions" (Subject # 14, administrator).

In some ways, the move to the On-Demand platform was a step *backward* in terms of the functionality that had been available in Session-Based because of its inability to accommodate structured classroom discussions and peer-review exercises. Since On-Demand was primarily designed to facilitate access to course content within the most minimal of structures, other instructional features were given short shrift in the development process.

The On-Demand platform also required a shift in the ways in which content was made available to students within courses. With Session-Based, instructors and administrators managed student access to course content using an 'adaptive release' approach, which allows instructors and/or course designers to release course content based on rules they create. These rules can be created using several criteria, including date, time, subject, quiz/exam scores or number of attempts, and various other conditions. With the transition to On-Demand, and its corresponding shift to an 'any-content-in-any-order-at-any-time' instructional ethos, an adaptive release strategy was no longer viable. Accordingly, some of the narrative language used to describe course elements also needed to be altered:

"We had to consider no longer referencing Week 1, Week 2, Week 3 in the course materials... it's harder to have discussions around a 'Topic of the Week' if everyone's not at the same place" (Subject #4, administrator).

Similarly, adaptations also needed to be made for those methods of assessment that had been tied to deliberate pathways of course content mastery. While summative evaluations for individual instructional units (or the entirety of the course content) were still possible, formative exams were no longer an option, because the instructor had no way to gauge *where* a student was in the learning content pipeline when they took the exam.

Student-to-Student interaction

The change to On-Demand also impacted the type and amount of student-to-student interactions *within* a course. With the open-entry, open-exit aspect of On-Demand, any sense of 'cohort' or student cohesion within a course was much more difficult to create or sustain.

Adapting to fit this new format, faculty and instructional designers removed course requirements that students engage in ice-breakers or jump into a discussion forums as a way to get to know their peers. This loss of cohort also negatively impacted the recruitment and retention of Community Teaching Assistants, an integral student-supported aspect of CSPU's STEM-focused MOOCs.

Community Teaching Assistants (CTAs) were often the outstanding graduates of the immediately previous cohort of a MOOC class, who were then recruited and trained by MOOC administrators to help provide support for students in the current cohort. Although being a CTA often involved a significant time commitment, CTAs were strictly volunteer, and the level of

churn was significant as few remained for more than one iteration of a course. As a function of On-Demand, CSPU's STEM-focused MOOC courses were now continuously open for enrollment, and this made the recruitment and retention of CTAs that much more difficult as administrators now needed to continuously analyze participant course data to see who had 'completed' the requirements, and of that group, who might be suitable for the position. In addition, administrators were less inclined to spend the resources to train CTAs without the existing course structure to help define their minimal period of volunteer service.

Overall, the transition to On-Demand significantly reduced the likelihood for student-to-student interactions in MOOC classes at CSPU. This impact was visible in the ways in which instructional units were described within MOOC courses: designations related to sequential patterns of content engagement (Week 1, Week 2, Week 3) no longer made sense, and could no longer facilitate de-facto student cohorts around consumption of course content. This impact was also visible in the decrease of types of student-to-student pedagogical tools available within the On-Demand platform. Taken together, such changes severely curtailed peer community and/or cohort identity within On-Demand MOOC courses.

Faculty engagement

Another consequence of the change to On-Demand was a substantial decrease in levels of faculty engagement within MOOC courses. These decreases were visible in the lessening of weekly interactions between faculty and students, the absence of topically driven moments of engagement, and in reduced instances of periodic course review from faculty. Even when MOOC courses were offered in the Session-Based format, not all faculty stayed engaged with their courses on a regular basis. Many took a 'set it and forget it' approach, satisfied to merely

provide the initial content expertise and then let the course be managed by administrators. But for those faculty who *did* choose to actively engage, the transition to On-Demand caused a marked shift in their course experience.

The outcome most articulated by those faculty who were actively engaged was a change in their week-to-week experience of the course. After the switch to On-Demand, faculty felt like they "no longer had a sense of where the students were" (Subject #12, faculty) in terms of the course content. During their interviews, several faculty revealed how, prior to On-Demand, they would read excerpts from the weekly discussion boards to "get a feel for where the class was in terms of its thinking and analysis" (Subject #8, faculty). Even with enrollments of 10,000 students, faculty expressed that this weekly or bi-weekly 'look-in' helped them stay connected to the students in their course. One faculty member even engaged in discussions with the participants of their course – based on what they read on the discussion boards – as a way to "foster engagement between the learners" (Subject #8, faculty). After the course switched to On-Demand, this method of interaction was no longer viable.

The structure of On-Demand also foreclosed opportunities for faculty to inject emergent topics into the course as they arose. When the Volkswagen emissions scandal became public, a faculty member wanted to make connections between it and a unit within the course, but "found that it wasn't really feasible… because only a fraction of the students will be right there [at the relevant point in the course]. And I suppose I could make this case relate to several units within the course, but that's a bit clumsy and it's not going to be as personal" (Subject #9, faculty).

Another aspect of faculty engagement that was negatively affected by the shift to On-Demand was the cyclical review and updating of the course material by faculty. Many faculty expressed that with the On-Demand platform, they quickly felt far removed from their courses, and whereas with Session-Based they saw the 'end' of each course cycle as a chance to review and reflect upon content, outcomes, and student experiences (just as they would have similarly done with a face-to-face course), with On-Demand there just wasn't that cognitive trigger for self-evaluation. The absence of a fixed 'end date' for the course also impacted faculty's ability to update course content. With Session-Based, course administrators would process faculty requests for content changes (new or revised content, assessments, and/or digital links, etc.) in between course run schedules. But with On-Demand, the course is always 'live', there is never any downtime, so changes must be made while the course is in-progress. As a result, two students in the process of completing the same course during the same time interval could encounter different content from unit to unit.

Compared to their level of engagement with Session-Based courses, faculty were much less engaged with those same courses when they were offered in an On-Demand format. Their reasons for expressing a sense of decreased engagement seemed to derive from the structural changes related to the switch to On-Demand. As a result of these changes, the faculty I interviewed no longer felt they had a 'feel' for the course, and felt relegated to the position of detached observer of a course mechanism rather than faculty instructor. For one faculty member in particular, the shift to On-Demand helped clarify their role in their institution's participation with MOOCs:

"You know... I don't get paid extra for this [teaching MOOC courses]. And that's fine and I'm not complaining about that, I'm just making an observation. It's more about that this [being a full-time faculty member] is my professional identity. My position is to be a person who works for Central State Public University ...my position is *not* to be a

Coursera instructor. Maybe if you replaced universities with Courseras, then people like me might be saying, 'yes, my job is to be responsive to students in this [On-Demand] platform'. But because it isn't, I have no problem with this change to On-Demand. It feels like an opportunity for me to do less, so I'm going to do less" (Subject #9, faculty).

As a result of this decreased engagement, faculty were less likely to review and/or upgrade content for their MOOC courses, or incorporate student feedback into the course. Overall, Coursera's turn to On-Demand further highlighted for MOOC instructors in the study the distinctions between spaces of educational engagement and spaces of transactional learning, and revealed their relative investment in each form of practice.

Research Question 3: How Did On-Demand Impact the Research Methodology, Data Collection and Analysis for Existing MOOC Courses?

The change to On-Demand also greatly impacted existing processes of data collection and analysis for CSPU's MOOCs. For the data analysts, the first concern with the shift to On-Demand was figuring out how the change would impact their units of analysis. For Session-Based courses, the primary data set consisted of demographic data of participants, as well as their activity logs within a specific time interval: the first and final scheduled day of the course. Such information helped the analysts build crude profiles around student activity, as a way of understanding what types of participants behaved in what types of ways over time. But with On-Demand, there is no designated 'final' day of the course; thus it required a critical rethinking of how one understands participant behavior in a MOOC in the absence of a fixed time requirement:

"When we first heard about it, we sort of realized that this was gonna change the whole structure of how we thought about the phenomenon of MOOCs... there were these ways we had developed of making sense of it, but once that cohesive structure went away, all our questions had to be rethought" (Subject #1, administrator).

These new ways of making sense in On-Demand were required not only for understanding participant behavior in individual courses, but were also necessary in order to continue performing comparative and longitudinal analyses as well.

Prior to the shift, much of the meaning making regarding the students in MOOC courses was derived through a relative comparison of participant groups; with the most important distinction being between those who had completed the course within its allotted the time frame and those who had not. By doing so, CU's analysts were able to construct interpretive clusters based on completion data. But again, without a structured end date, such comparisons were no longer viable. Within Session-Based courses, participants' whose online activity ceased (no further webpages viewed, no videos watched or downloaded, no forum posts) after having reached a threshold level of participation were considered 'drop-outs' if their non-activity extended to the course end date. So if a student signed up for a course, performed the required course activities for the first few weeks of the course, and then did nothing else until the course ended, they were considered a drop-out for categorical and analytical purposes. It's important to note that *any* interruption of that inactivity (meaning if a student re-engages in any way after a lull in their online presence -- looks at a single video, takes a quiz, writes a one sentence posting on the course discussion board) meant that they were no longer considered a drop-out. For

Session-Based MOOC courses at CSPU, analysis of learning behavior centered around observing it within a fixed frame of time, and making a clear distinction between active and inactive (dropout) students. But with On-Demand, the ability to compare the behaviors of active participants against dropouts was no longer an option, since the elimination of fixed end dates for MOOC courses made the concept of 'inactivity' much more difficult to quantify. According to one analyst, "The problem is that people could take absolutely forever to finish a course and how would we know when they are really no longer participating or just on hiatus?" (Subject #10, analyst). In other words, how could one understand and analyze the behavior of students who *completed* a MOOC course without a comparative understanding of the behavior of students who *didn't complete* the course?

But such technical and philosophical questions of how to incorporate this new type of data into existing interpretive paradigms were quickly rendered moot by the fact that after the switch, analysts at CSPU had a difficult time getting any data at all related to participant activity in On-Demand courses from Coursera. With the Session-Based platform, CSPU administrators were able to access course data from Coursera using a self-service database; they simply inputted the parameters of the data they wanted into a database hosted by Coursera and they were able to download it. But Coursera's On-Demand courses were built on a completely separate digital platform, one that was incompatible with their existing data storage and sharing capacities, and was therefore completely inaccessible to CSPU's analysts. At the time of my data collection, between three and six months after the launch of On-Demand, the analysts still had received no participant activity data from Coursera for its On-Demand courses. Needless to say, this absence of available data not only forestalled analyses, it also prevented the collection of any

data that could potentially challenge Coursera's original claim that On-Demand provided better outcomes for students.

Summary of Findings

With the advent of On-Demand, Central State Public University's students had an opportunity to experience their MOOC courses in a new way. But the impact of this change went far beyond that of just another 'new feature' of MOOCs, the introduction of this new type of learning experience required the university to quickly adapt; to adjust pedagogical practices, production line mechanisms, and evaluative frameworks in order to accommodate this new type of MOOCs. Such changes were both resisted and embraced within multiple spaces in the institution, as CSPU employees struggled to reconcile with their own beliefs the competing discourses from Coursera that cast MOOCs as an idealized space for *both* deep educational engagement *and* transactional learning, a satisfactory site to pursue and attain both *liberal* and *neoliberal* educational goals.

As part of this summary, I have included some opinions and speculations regarding the change to On-Demand expressed by those I interviewed for this project. I feel such comments embody the institution's struggle to adapt to On-Demand, and thus should be seen as part of the impact of the change. Among my interview subjects, opinions about the change to On-Demand were wide ranging. Many of the negative opinions of On-Demand were grounded in the perception that its new format was simply not supportive of student learning. To these respondents, the structural damage caused by the loss of cohorts was irrecoverable:

"Fully On-Demand doesn't make a lot of sense to me. Not having groups of students together and trying to support that and answer questions from Week 8 when some people are in Week 1 and 4...some structure would be better than no structure" (Subject #14, administrator).

Some respondents also wondered if the move to On-Demand reflected a critical error in Coursera's development strategy, as its online learning experience would now more closely resemble the minimally mediated space of the internet:

"When you think about what On-Demand is, they are moving from the structured concept of a 'course' to simply providing a repository of content, which is really just a website.

And there are other systems out there that do that, and do it better... They are kind of just shooting in the air and seeing what sticks (Subject #13, faculty).

"I don't see any difference now between Coursera and You Tube and Khan Academy. It's all unstructured learning" (Subject #7, analyst).

Others were more measured in their responses, framing the switch to On-Demand within the totality of all its corresponding changes:

"The move to On-Demand has been helpful but overall...a net negative. Helpful because it helps reduce barriers to completion but not having a connection to a cohort and losing the motivation aspect of deadlines... that has not been good. (Subject #11, administrator)

"There is a plus value to instant access...But I don't think we have enough data yet to make a judgment about the learning outcomes" (Subject #9, faculty).

"[This change] is simply in the nature of things. When you're going to deliver things on the internet, people expect it to be 'on-demand'. But I'm not sure that Coursera has figured out all the tools to maximize that experience" (Subject #2, analyst).

Those respondents who thought the move was the right thing to do were often thinking about issues beyond Coursera itself, and were reflecting on Coursera's role in promoting higher educational change:

"One of the things I will say that I have like about Coursera is the fact that they are willing to constantly evolve, based on what the market is telling you, figuring out what the bets model is for the time being. If you're not willing to do that, you're not going to be around six months or a year from now. Another thing I like about everything Coursera's doing is that it opens [the university's] eyes to the possibilities. Not all of them will be right for a traditional institution of higher education, but at least if we start to ask the tough questions it helps us see what our possibilities are and how that can inform what we do here" (Subject #14, administrator).

"It's kind of a good thing that [Coursera] moved to On-Demand and are sort of realizing what's going on. They needed to test things out. If MOOCs do become ingrained in the

fabric of higher education, we will have needed to vet them adequately" (Subject #1 administrator).

Coursera's shift to On-Demand MOOCs created significant disruption for course designers, instructional faculty, and data analysts at Central State Public University. These disruptions were structural as well as ideological, and revealed tensions that existed between Coursera and the university staff teaching and managing 'On-Demand'. In terms of classroom practice, such disruptions included changes in introduction and community building exercises for participants in MOOC courses as well as significant adjustment to some quiz and exam formats. The switch to On-Demand also impacted faculty members' relationships to their courses, precipitating a much more passive relationship to the course, and presumably a much more distant relationship to the course participants. Lastly, Coursera's change to On-Demand created a whole new set of data parameters which greatly compromised the ability of CSPU staff to perform comparable analyses of participant activity and course outcomes between Session-Based and On-Demand MOOCs.

Given the significance of these pedagogical, structural, and analytical changes, an obvious question presents itself, namely: What impact, if any, did the transition to an On-Demand format have on participant learning? Was it positive, negative, or negligible? And while this research project was not designed to answer such questions, based on the findings of my study I would argue that contrary to providing an improved learning experience for its participants, the introduction of On-Demand MOOCs facilitated a learning environment that was *mis*-educative. I address this claim further in the following chapter.

CHAPTER 4: ON-DEMAND AND THE PARADOX OF EDUCATIONAL CHOICE

In my previous chapter, I presented the findings of narrowly focused empirical questions as to how the shift to an On-Demand MOOC learning platform was experienced by faculty and administrators of MOOC courses at Central State Public University. In this chapter, I explore the potential impact of such a shift on students in those courses and situate the appeal of 'On-

Demand' within larger philosophical conversations regarding the role of freedom in student

learning.

Online Learning and the Community of Inquiry Model

In online education, the necessary conditions for an effective online educational experience have been theorized utilizing the Community of Inquiry Model (CoI), a social-constructivist framework designed to define, describe, and measure elements supporting the development of effective online learning communities. Grounded in John Dewey's notion of practical inquiry, CoI posits that deep and meaningful learning can occur in online learning environments given sufficient amounts of three key elements: *social presence*, *teaching presence*, and *cognitive presence*, with the term 'presence' defined as a sense of being or identity created through interpersonal communication.⁵⁴ This model emerged in the 1990s, in tandem with the growing need to better understand how students in online courses learn through interaction with each other via course discussion boards, online conversations, and other electronically mediated forms of communication. The CoI model posits that online learning

⁵⁴ D. Randy Garrison, Terry Anderson, and Walter Archer, "Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education", *The Internet and Higher Education* 2, no. 2-3 (2000).

unfolds through the interaction of its three elements, holding each as necessary yet interdependent on the others for achieving an effective online educational experience (Fig. 1).⁵⁵ Within each element, several dimensions are presented (as well as their corresponding indicators) whose presence can reflect meaningful learning activities in an e-learning environment.

SOCIAL PRESENCE SOCIAL PRESENCE COGNITIVE PRESENCE COGNITIVE PRESENCE Setting Climate Content TEACHING PRESENCE Communication Medium

Fig. 1. Community of inquiry framework.

Social Presence

Within the CoI model, social presence in online learning settings is defined as the extent to which a student's true self is perceived in an online course, including: "the ability of participants to identify with a group, communicate purposefully in a trusting environment, and develop personal and affective relationships progressively by way of projecting their individual

⁵⁵ D. Randy Garrison and J.B. Arbaugh, "Researching the community of inquiry framework: Review, issues, and future directions", *The Internet and Higher Education*, 10 (2007).

personalities".⁵⁶ Facilitating social presence in an online course allows participants to project themselves socially and emotionally as 'real' people, and "marks a qualitative difference between a collaborative community of inquiry and a simple process of downloading information."⁵⁷ Within the element of social presence, the sub-dimensions (and their potential indicators) are as follows: Affective (expressing emotions); Open communication (risk-free expression); and Group Cohesion (Encouraging collaboration).

Teaching Presence

Teaching presence is defined as "the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes"⁵⁸. It is seen as a significant determinant of online learner satisfaction, as well as perceived student learning and sense of community, as a strong teaching presence congeals all the elements of a learning community in a balanced and functional relationship consistent with the needs and capabilities of the students. Within the element of teaching presence, the sub-dimensions (and their potential indicators) are as follows: Design and organization (Setting Curriculum and Methods); Facilitating discourse (Shaping Constructive Exchange); and Direct Instruction (Focusing and resolving issues).

⁵⁶ D. Randy Garrison, *E-Learning in the 21st Century: A Framework for Research and Practice*, 2nd Ed. (New York: Routledge, 2011), 19.

⁵⁷ Garrison et al., p. 96

⁵⁸ Terry Anderson et al., "Assessing Teaching Presence in a Computer Conferencing Context", *Journal of Asynchronous Learning Networks*, 5:2 (2001): 5.

Cognitive Presence

Within the Community of Inquiry Model, cognitive presence is defined as "the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse in a critical community of inquiry".⁵⁹ Within this framework, a strong cognitive presence in an online course emerges through an individual's ability to think critically and exhibit rational judgment, *as well as* through the development of communicative relationships between learners (Social Presence), and the use of structured communication purposefully focused on understanding a dilemma or problem (Teaching Presence). In this sense, cognitive presence not only reflects the learner's intellectual engagement with the course material, but also reflects a culmination of the efforts to develop a strong social and teaching presence in the online course, and thus is "partly dependent upon how communication is restricted or encouraged by the medium" (Garrison et al., 2000, p. 93). Within this element the sub-dimensions (and their potential indicators) are as follows: Triggering event (Sense of puzzlement); Exploration (Information Exchange); Integration (Connecting Ideas); and Resolution (Applying New Ideas).

Taken together, these three elements provide the interpretive lenses used in constructing a framework for understanding the effectiveness of an online educational experience. It is within this CoI framework that I evaluate the potential impact of an On-Demand format on student learning.

⁵⁹ D. Randy Garrison, Terry Anderson, and Walter Archer, "Critical thinking, cognitive presence and computer conferencing in distance education", *American Journal of Distance Education*, 15:1 (2001): 11

On-Demand MOOCs and Social Presence

With its open-entry, open-exit structure and individualized pathways of content consumption, the structure of On-Demand MOOCs severely impairs the possibility of student community within an online course. As highlighted in a previous chapter, as part of their adaptation of existing MOOCs courses to the new On-Demand format, faculty at Central State Public University were compelled to remove requirements that students participate in online icebreakers or jump into discussion forums as a way to get to know their online peers in the course. Such exercises were integral in developing student community, and without them, students had no way of getting to know their peers intellectually or personally (other than through their own one-on-one initiative). Given the absence of such deliberately structured student-to-student interactions, and complicated by the fact that any student could be accessing any module of the On-Demand course at any time, the likelihood of students enacting the sub-dimensions of Social Presence (such as expressing emotion) seems minimal as there is no cohesive discursive place to demonstrate oneself socially to one's learning peers.

On-Demand MOOCs and Teaching Presence

While the faculty instructors at CSPU were able to translate the Design and Organization aspects of their online courses into On-Demand MOOCs with minimal difficulty, the other two sub-dimensions of Teaching Presence, Facilitating Discourse, and Direct Instruction, likely suffered due to the non-cohesive structure of On-Demand. As visible through my research findings, with On-Demand, faculty are much less likely to have synchronous contacts with their students, and while that alone does not make the elements of Facilitating Discourse and Direct Instruction impossible, when combined with the non-sequential aspects of the course structure,

such interactions seem highly unlikely. As an instructor, how would one facilitate an asynchronous class conversation regarding information in a learning module that students may or may not have encountered?

On-Demand MOOCs and Cognitive Presence

As mentioned earlier, the articulation of a student's Cognitive Presence in an online course is highly dependent on their interaction with an online learning community. In an On-Demand format, a student's cognitive presence would effectively be zero, as the absence of any sort of cohort or otherwise cohesive community would make sustained student dialogue highly unlikely.

Overall Impact of On-Demand MOOCs On Student Learning

As I have argued, the very structure of On-Demand MOOCs cuts at the very core of the communal aspect of online learning. That alone does not negate the potential educative value of On-Demand; it is not impossible to 'learn online' in isolation. But such a learning experience is far from ideal, and would seem to undermine one of the most deliberate purposes of 'higher' education: the pursuit of intellectual growth through a dialogic exchange of ideas, a pushing forward together in the hopes of developing shared understandings. Within an On-Demand format one can certainly consume information, but the other key aspects of the learning experience – particularly those that occur as a function of community – suffer greatly.

On-Demand and the Discourse of Educational Choice

In many ways, the emergence of an On-Demand MOOC format seems a logical, even inevitable occurrence, given the extent to which American higher education has become infused with the individualist impulses of neoliberalism. At the core of neoliberalist thinking is the presumption "that human well-being can best be advanced by liberating individual entrepreneurial freedoms"⁶⁰, and that such freedoms "are guaranteed by the freedom of the market and of trade"⁶¹. Over time in the United States, the concept of freedom has become increasingly linked to one's ability to exercise one's personal choices within a marketplace and measured by the degree that one is able to do so. Put another way, although the philosophical conversation around freedom is indeed quite nuanced⁶², in 21st century neoliberal America, the concept of 'freedom' has become conflated with the freedom to choose and/or consume.

Hence the intuitive appeal of On-Demand. Through the structure of its digital platform, the On-Demand MOOC offers students an additional degree of choice regarding their consumption of educational content. With it, students have access to modularized course content not only at any unspecified time, but also in any unspecified order. In other words, students can digest whatever content they want, when they want it, as many times as they want, and in any order. But *why* might this degree of choice be considered a desirable option for students? Of course there is the obvious rationale of 'increased flexibility', driven perhaps by an assumption that if individuals are provided more options to complete MOOC courses then they are more likely to complete those courses. But it is also the case that the perceived worth of the

⁶⁰ David Harvey, A Brief History of Neoliberalism. (Oxford; Oxford University Press, 2005), 2.

⁶¹ Harvey, 7.

⁶² See e.g., Isaiah Berlin, "Two Concepts of Liberty," *Four Essays on Liberty*, (Oxford: Oxford University Press, 1969), 118-72.

'educational choice' available through On-Demand derives from historical articulations of the importance and value of 'educational freedom'.

Even before the neoliberalist turn in higher education, the premium of choice in the university held a significant place in American colleges and universities; one of most prominent markers of the beginning of the modern university era in the United States was its commitment to a previously unrecognized degree of intellectual autonomy for both students and faculty. This autonomy, arguably emerging as a direct result of the reverence for the German higher education system at that time, was often understood and expressed in the German system through two complementary terms, Lernfreiheit and Lehrfreiheit. Lehrfreiheit, loosely translated as 'freedom to teach', speaks to the right of faculty to research and publish on matters of their own choosing, and forms the philosophical grounding for the concept of faculty 'academic freedom' that exists in higher education today. The other term, Lernfreiheit, speaks more to the learning conditions of students; in particular, "that German students were free to roam from place to place, sampling academic wares; that wherever they lighted, they were free to determine the choice and sequence of courses, and were responsible to no one for regular attendance; that they were exempted from all tests save the final examination, that they lived in private quarters and controlled their private lives."63

In both instances, we see the concept of educational freedom (both in the production of knowledge and in its pursuit) as something realized through the power of humans to enact their individual choices. In his essay, *Philosophies of Freedom*, John Dewey explores the rationale behind such a connection:

⁶³ Richard Hofstader and Walter P. Metzger. *The Development of Academic Freedom in the United States*. (New York: Columbia University Press, 1955), 386.

The desire to dignify choice, to account for its significance in human affairs, to magnify that significance by making it the centre of man's moral struggles and achievements has been reflected in this idea of freedom. There is an inexpugnable feeling that choice *is* freedom and that man without choice is a puppet, and that man then has no acts which he can call his very own. Without genuine choice, choice that when expressed in action makes things different from what they otherwise would be, men are but passive vehicles through which external forces operate. This feeling is neither self-explanatory nor self-justificatory.⁶⁴

For Dewey, it has become second nature to equate freedom with choice, but there is no good reason for equating the two.

In *Lernfreiheit*, we see several layers of student freedom distinctly articulated; freedom of institutional movement, freedom of intellectual content choice, freedom of intellectual content sequence, freedom of attendance, freedom from certain forms of assessment (limited), and in general, freedom for students to live how they chose. And the fact that such freedoms were "deemed essential to the main purposes of the German university: to forward research and to train researchers" reflects how, even then, the conditions of intellectual freedom and advanced learning were understood as tightly bound, with each reinforcing the potential and possibilities of the other.

In education, tensions between a student's unrestrained learning impulses and the institutional structures (major and minor fields of study, course distribution requirements for

⁶⁴ John Dewey, "Philosophies of Freedom," in *John Dewey, The Later Works, 1925-1953, Volume 3: 1927-1928*, ed. Jo Ann Boydston (Carbondale, IL: Southern Illinois University Press, 1984), 92-3.

⁶⁵ Hofstader and Metzger, 386.

graduation, etc.) that contain and/or direct those freedoms are productive, even essential for learning. And rightly so, as even the most abstract expression of freedom is rendered meaningless without a context in which such freedom might possibly be constrained and/or negated. Consider the value of the principle 'freedom of speech' when one is stranded alone on a desert island. What makes such a principle meaningful is not only that it articulates a freedom from vocal restraint, but that it does so in the context of an understanding that one's potential speech act exists in a potential dialogue and/or conflict with a community of other potential speech acts; that there exists an ecosystem of numerous other speech acts against which the permissiveness of a single speech act can be measured. Absent such context, the value of the privilege of unfettered speech is relatively worthless.

To be clear, I understand that for some, not *every* idea of freedom (expressed either in principle or as a practice) requires a restraining context in order to be realized or recognized as valuable. In American popular culture, freedom is often presented as a desired end in and of itself, with any idea of restraint being antithetical. ⁶⁶ But I would argue that any freedom that holds as part of its promise a person's intellectual growth, development, and/or productivity, requires constraint in order to help fulfill that promise. John Dewey, in his interrogation of the Progressive Movement in education, makes a similar assertion about the role of 'student freedom': "Natural impulses and desires constitute in any case the starting point. But there is no intellectual growth without some reconstruction, some remaking, of impulses and desires in the form of which they first show themselves. This remaking involves inhibition of impulse in its

⁶⁶ Marathon Gas, "Full Tank of Freedom", YouTube Video, 0:30, https://www.youtube.com/watch?v=sqIIkzHOYBc

first estate."⁶⁷ Thus, if one is to attain the benefits of learning, one must be willing to accept some degree of constraint regarding one's freedom.

This is not to say that imposing constraint merely for the sake of imposing constraint is desirable; arguably, such thinking is precisely what the educational Progressivists (such as Dewey) were railing against. Rather, I wish to foreground the role selective and deliberative constraint can play in enhancing the value of an experience through its shaping of the medium (or context) of the experience. A childhood memory comes to mind: twelve similarly aged children in an urban playground on a summer afternoon want desperately to play baseball. We have a bat and a sixteen-inch softball but nothing else. Our 'playing field' is roughly textured concrete; thirty feet diagonal right of the sewer cover we have designated home plate there are monkeybars; forty feet diagonal left a set of three swings; and in shallow center field, an assortment of size-differentiated playground slides. Clearly, the space was not designed for baseball. But we adapt. We create foul line markers from crushed beer cans. We establish a 'home run' boundary. We designate both stationary and moveable objects as bases, each with their own set of rules for arriving safely or being 'put out'. Through our manipulation of the space via specific constraints, we create not the game of baseball, but rather an environment in which a game could be recognized as such, and thus understood, played, and enjoyed. As rambunctious children, we could have just as easily hit or thrown the ball around absent those constraints, run toward and touched different objects on the playground (and each other) at irregular intervals, generated loud vocal outbursts of elation or disappointment at random. It would certainly have been play, and might even have been fun, but it would not have been baseball, because part of what defines a game is not only the presence of specific elements of the

⁶⁷ John Dewey. Experience and Education. (New York: Touchstone, 1997), 64.

game (in this case, a bat, a ball, some bases, and position players), but also the rules (regulations which articulate both permissions and constraints of action) under which the game must be played.

In this way, we can understand how these two differing aspects of an experience – 1) the presence of specific and necessary elements, and 2) the regulation of permissions and constraints of action -- come together to help define both the nature and shared understanding of that experience. Though significantly different in nature, these aspects are equally essential: one can play the game of baseball only if one has a minimum number of players, some basic equipment, AND a shared understanding of the rules regarding player actions. Such an understanding also recognizes the necessity of a willful surrender of some degree of one's individual autonomy in order to facilitate the desired experience. In theory, the group of children in the aforementioned example were free in the beginning to play whatever game they wanted, but the moment they collectively decided upon baseball, a portion of their playful 'freedom' was surrendered to the constraints of the game. Thus, while an individual's condition of freedom might be theoretically boundless, the moment such freedom is engaged in the pursuit of a specific experience part of that freedom must be surrendered in order to conform to the restrictions that help define and sustain said experience.

Implicit within the Community of Inquiry (CoI) framework is the idea that for online learning, the regulation and/or constraint of the responsibility of interacting with a community as part of one's learning process is a necessary one. Drawing again on my baseball analogy, CoI would seem to insist upon a recognition that, in an educational setting, the interactions between faculty, individual student, and larger cohort somewhat resemble that of a *team*; that they are engaged in a collaborative exercise, with responsibilities both to themselves and to the other

members of the group. Together they share a collective understanding of the larger structure of the education 'game', and if temporary alterations need to be made (because we may lack all of the proper equipment, or are short a number of players) our shared understanding is cohesive enough to allow for it, without completely undermining the integrity of the experience.

By contrast, the structure of On-Demand would seem to suggest that education can occur sufficiently enough simply through the presence of specific learning elements (the video lecture, the text, the quiz, the exam); in other words, that one can access the experience of learning WITHOUT needing to deal with the messy constraints of learning with others. When I first encountered On-Demand, it reminded me of the early Blockbuster Video tv ads that offered consumers the experience of first-run movies in the convenience of their own home. More than the saved cost of parking and snacks, home videos made it so one didn't have to share the experience of filmgoing with other people; one could view the film as quietly, as loudly, as slowly or as quickly as one wished. Indeed, what On-Demand presents is but the latest iteration of modern technology's most shopworn sales pitch: that through technology, one can access a desired experience with a lessening of previously required restraint regarding others. And similar to Blockbuster, Coursera (via On-Demand) works to make the case that an experience (learning) we once understood as having a large part of its value derived through its communal nature can now be individualized without realizing any significant loss.

With Coursera's proffer of an On-Demand option for online education, we find ourselves faced with the age-old question (recast within a digital framework) of how much self-directed freedom can an educational experience tolerate before the experience itself ceases to be educational? The logic of neoliberalism would suggest that 'the market' be allowed to determine the most appropriate answer to this question. If the practice of education is framed as

consumption, then the *conditions* of that consumption become the most important variable⁶⁸, and we can then situate Coursera's offering of On-Demand education as simply a way of testing the market's tolerance of a specific type of learning conditions. I feel that it is important to note that by centering the value of the experience of education around learning conditions facilitated through technology, the educational technology companies threaten to displace the intellectual authority of brick-and-mortar institutions (and by extension the faculty who inhabit them.)

Within such a framework, in time the educational marketplace will reach a point of equilibrium, whereby a certain degree of learning autonomy is embraced by a critical mass of educational consumers; and this educational experience will be understood as 'good enough' because it is accepted by many, and will be accepted by many because it is understood as 'good enough'.

But there is another way to take up this question regarding individual freedom and its limits in relation to the quality of the educational experience. Today's degree of cultural noise surrounding the possibility of a seismic cultural shift impacting the ideas and practices of education is not unlike what John Dewey encountered over three quarters of a century ago when he published *Experience and Education* (1938) in response to both the pedagogical practices and corresponding criticisms of progressive education. Then as now, swift changes in education were framed within a narrative of student liberation and cultural transformation. Educational progressivism promised to free students from the structural and creative repression seemingly inherent in the classic educational tradition; today it is the technological innovation of MOOCs that promises to unbind students from the strictures of institutionally centered, brick-and-mortar

⁶⁸ Clearly such a logic already exists within the educational marketplace, what else could explain a past quarter century of dizzying institutional investment in new living, social, and recreational facilities in colleges and universities if not a common belief that the material conditions of higher education make all the difference. But while an 'arms race' for distinction via campus structures is nothing new, what is new is Coursera's manipulation of the *technical* conditions of online learning, an arena in which they exert a monopoly of power and control.

education. Although written in a different era, Dewey's philosophy of educational experience still holds significance, as it explores the relationship between 'education' and the 'learning experience'.

A 'Philosophy of Experience'

In many ways, Dewey's *Experience and Education* served as a response to some of the critiques surrounding the progressive schools of his time. Rejecting many of the historical practices of schooling, many progressive educators had cast themselves as the antithesis of traditionalists but soon realized that simply rejecting the practices of the past had not brought forth an effective or even cohesive approach to progressive education. For Dewey, this state of affairs reflected his belief that "we shall operate blindly and in confusion until we recognize this fact; until we thoroughly appreciate that departure from the old solves no problems". ⁶⁹ Dewey's goal then in *Experience and Education* was to begin to articulate a *philosophy of experience*, through which constructive student curricula and learning environments (from either a progressive or traditional perspective) might be designed and effected. This philosophy begins with the supposition that there is an intimate and necessary relation between the processes of experience and education: "I assume that amid all uncertainties there is one permanent frame of reference: namely the organic connection between education and personal experience". ⁷⁰

While Dewey posits a strong correlation between education and human experience, he is careful not to merge the two uncritically: "The belief that all genuine education comes about through experience does not mean that all experiences are genuinely or equally educative.

⁶⁹ John Dewey. Experience in Education (New York: Simon and Schuster, 1938), 25.

⁷⁰ Dewey, 25.

Experience and education cannot directly be related to each other. For some experiences are miseducative". Dewey further establishes the experiential conditions through which the distinctions between educative and miseducative can be recognized and understood. For Dewey, a miseducative experience is one that "arrests or distorts the growth of further experience", for him, the primary focus of an education grounded in learning experiences (one of the central tenets of progressivism) should be to "select the kinds of experiences that live fruitfully and creatively in subsequent experiences". Dewey's first criteria then of an educative experience is the condition of *continuity*, that an educative experience "establish and/or reinforce the productive habits associated with organic growth, the formation of attitudes, emotional and intellectual; our basic sensitivities and ways of meeting and responding to all the conditions that we meet in living". The same and the same are the same and the same are the same and the same are the same are the same are the same are the same and the same are the same

Aware that continuity within both positive and negative experiences is possible, Dewey further qualifies the condition of continuity by relating it to the value of the experience itself:

There is no paradox in the fact that the principle of the continuity of experience may operate so as to leave a person arrested on a low plane of development, in a way which limits later capacity for growth. On the other hand, if an experience arouses curiosity, strengthens initiative, and sets up desires and purposes that are sufficiently intense to carry a person over dead places in the future, continuity works in a very different way.⁷⁵

⁷¹ Dewey, 25

⁷² Dewey, 25.

⁷³ Dewey, 28.

⁷⁴ Dewey, 35

This statement is significant, because in it Dewey establishes that it is not only the *process* of continuity that must be examined in determining the quality of the educative experience, but also the *outcome*. Thus, there can be no standard 'progressive formula' for providing an educative experience using continuity alone as a criteria; a sense of continuity between experiences is necessary – but not in itself sufficient – to make a distinction between educative and miseducative experiences.

Embedded within Dewey's concept of continuity is also the idea of experiential *aggregation*; that experiences over time can be either summative or subtractive in relation to future experiences:

Moreover, every experience influenced in some degree the objective conditions under which further experiences are had... If a person decides to become a teacher, lawyer, physician, or stockbroker, when he executes his intention he thereby necessarily determines to some extent the environment in which he will act in the future. He has rendered himself more sensitive and responsive to certain conditions, and relatively immune to those things about him that would have been stimuli if he had made another choice.⁷⁶

While contiguous with the concept of continuity, aggregation is distinct in that it denotes how experiences (both educative and mis-educative) can accumulate to form and sustain pathways to further experience. This again reveals Dewey's insistence on outcome as a significant indicator

⁷⁵ Dewey, 37-8.

⁷⁶ Dewey, 37.

of the quality of an experience. For him, the true test of an educative experience is that not only must it promote further experiences (continuity), but further *positive* experiences:

Every experience is a moving force. Its value can be judged only on the ground of what it moves toward and into... Failure to take the moving force of an experience into account so as to judge and direct it on the ground of what it is moving into means disloyalty to the principle of experience itself.⁷⁷

In other words, an experience simply for experience's sake does not make it educative. It should be part of an ever-growing foundation of positive experiences, moving toward something greater.

The second element essential to determining the quality of an educational experience is its type of *interaction*. Dewey argues that the quality of an experience is what it is:

Because of a transaction taking place between an individual and what, at the time, constitutes his environment, whether the latter consists of persons with whom he is talking about some topic or event, the subject talked about... the book he is reading; or the materials of an experiment he is performing.⁷⁸

His concept of experiential interaction denotes the intersection between a subject's environmental conditions and their internal states of being; the environment is whatever conditions interact with the personal needs, desires, purposes, and capabilities of the individual.

⁷⁸ Dewey, 43-4.

⁷⁷ Dewey, 38.

A positive educational interaction then, is one that neither over-emphasizes the learner's external conditions or structures (hyper-traditionalism), nor over-emphasizes the student's interior wants (hyper-progressivism). For Dewey:

The trouble with traditional education is not that it emphasized the external conditions... but that it paid so little attention to the internal factors which also decide what kind of experience is had. It violated the principle of interaction from one side. But this violation is no reason why the new education should violate the principle from the other side – except upon the basis of an extreme *Either-Or* educational perspective.⁷⁹

To promote the types and levels of interaction that are conducive to a positive educative experience, one must engage *both* internal and external factors of the learner.

Taken together, these principles of continuity and interaction provide the framework for understanding Dewey's philosophy of experience and how it relates to education. Central to a Deweyan evaluation of the learning experience is the following question: Does the experience acknowledge and/or engage both the interior and exterior factors of the learner? For On-Demand, the answer is no. Looking at the findings from my study, On-Demand suggests a limit of individual freedom in the educational experience. But it is not a limit framed through specific types of content, but rather through time, because it seems that time is the ultimate medium that binds us. Not in the sense of a specific day or hour in which we study, but rather in whatever time in which we study *together*; it is the act of a collectively moving through material at designated intervals that facilitates the best learning.

⁷⁹ Dewey, 42.

CHAPTER 5: THE PRIVATIZATION OF

THE EDUCATIONAL EXPERIENCE

In *Beyond Learning, Democratic Education for a Human Future*, Gert Biesta (2006) argues that the language of *education* has been displaced by the language of *learning*, and that the main problem with this new language (of learning) is that:

...it has facilitated a redescription of the process of education in terms of an *economic transaction* [Biesta's emphasis], that is, a transaction in which (1) the learner is the (potential) consumer, the one who has certain "needs", in which (2) the teacher, the educator, or the educational institution is seen as the provider, that is, the one who is there to meet the needs of the learner, and where (3) education itself becomes a commodity – a "thing" – to be provided or delivered by the teacher or educational institution and to be consumer by the learner.⁸⁰

In support of his argument, he draws upon an analogy presented by Walter Feinberg, that shows how the structuring of human relations within a 'market model' simply does not align with the 'professional model' more akin to the interactions between teacher and student:

In market models consumers are supposed to know what they need, and producers bid in price and quantity in order to satisfy them. In professional models the producer not only

⁸⁰ Gert J.J. Biesta, *Beyond Learning: Democratic Education for a Human Future* (Boulder, Colorado: Paradigm Publishers, 2006), 19-20.

services a need but also defines it... Sam goes to his physician complaining of a headache. Is it an aspirin or brain surgery that he needs? Only the doctor knows.⁸¹

And while Biesta acknowledges the merit of a 'kitchen-table' logic in characterizing the practice of higher education as a simple commodity exchange (understandable given the scale of the economic transfer from students to institutions), he ultimately concludes that "to think of education as an economic transaction... is problematic because it misconstrues both the role of the learner and the role of the educational professional in the education relationship."

Both Feinberg and Biesta's analyses reflect a common critique of higher education in the age of neoliberalism, but such critiques often fail to take into account the emergence of a new interlocutor in the traditional interaction between student, teacher, and educational institution: the educational technology company. Unlike (most) universities, educational technology companies are ideologically formed and structured under the premise that higher education is always already a commodity; their approach regarding the products and/or services they provide have much more in common with multi-national corporate entities than the universities they partner with. For these companies, questions such as: *How do I distinguish my product/service* from similar products? What is my product's USP (Unique Selling Point)? and How do I provide both a unique and repeatable experience for my customer? are much more central to their continued existence than the nuanced questions about teaching and learning that occupy the heart of the university. Educational technology company Coursera's brief experiment with an 'On-Demand' Massive Open Online Course (MOOC) format offers a glimpse into one possible future

⁸¹ Walter Feinberg, "Choice, Autonomy, Need-Definition and Educational Reform." *Studies in Philosophy of Education* 20 (5), 403.

⁸² Biesta, 22.

permutation of higher education, one where learning is branded and sold as a 'individual experience' (a natural outgrowth of a contemporary ideology that frames higher education as a 'private good'). But as their experiment showed, the crafting of a fully disaggregated experience of education – one both asynchronous in connection and non-sequential in content – can result in significant degradation in the practices of teaching and learning. A person's educational experience, when situated in the operational nexus of an educational technology company, is subject to a significantly different set of ideological questions and concerns regarding the nature of that experience than when framed solely within the sphere of teacher, student, and university relations. And as the use of educational technology grows, so does the student's educational experience - increasingly linked to that technology - become more susceptible to the economic (or even ideological) pressures of the marketplace. Once such pressure is that of endless innovation, or even more desirable, to effect a *disruptive innovation* that will secure a company's dominant position in the industry for years to come.

As I argued in Chapter 2, ideologies of *disruption* and *disruptive innovation* are clearly rooted within the ethos of late capitalism; business leaders who have successfully facilitated disruptive moments in their industries are seen as the apotheosis of the modern entrepreneur, gifted with a perfect blend of knowledge, vision, persistence, and appetite for risk. At their core, disruptive innovations are tightly bound to the creation of new consumer pathways of consumption around a particular good or service. Often disruptive innovations don't bring a new item to market so much as they offer a new way to consume an item; at their inception Amazon and Netflix functioned neither as product manufacturers or content creators⁸³, their disruptions lie in the new ways they provided to shop and watch movies. And while at the center of

⁸³ That has changed, of course.

disruptive innovation is a necessary understanding of the nuances of consumer taste and demand, the practice of disruption is as much about effecting a shift in *process* as it is about creating a product, about reconfiguring the nature of a user's experience with an object as much as it is about the nature of the object itself. Innovations are considered disruptive when they are seen as significantly altering an established structure of relations around an existing practice of consumption, which is why Uber, although groundbreaking, is not considered a disruptive company under Christensen's theory.

When they first emerged, the MOOC courses offered by Coursera, EdX, and Udacity were considered potentially disruptive to higher education because they offered a new way to for people to access educational content (and the affiliated credentials) without physically attending a university; MOOCs would usher in a new era of service unbundling in higher education whereby students would now have a 'no-frills' coursework only option for getting a degree. But after the initial hype cooled, and MOOCs became just another form of university sanctioned distance education (and one with a marginal completion rate at that), ed tech companies needed a way to re-frame their commodity so as to maintain interest and grow market share. And since these companies couldn't adjust the intellectual content of the MOOCs (as such content was solely the purview of faculty and the universities), they had to focus instead on shaping the student's experience of their courses, on manipulating the disruption of the student's educational experience even further. Enter Coursera's structure of On-Demand, which offered nothing new in terms of course material, but offered a learning experience almost completely on the student's own terms. This Netflix of education, as it were, would combine the pursuit of the 'individual good' of higher education with the additional perceived value of the 'private experience'; creating a win-win situation for the consumer.

The Experience of On-Demand

Coursera's On-Demand MOOCs had two key features that distinguished them from traditional 'Session-Based'⁸⁴ MOOCs. The first was the lack of fixed deadlines for completion of course material. Part of the original argument from Coursera to its partner universities for the switch to an On-Demand format was its own internal survey data that showed students wanted 'increased flexibility' in meeting the demands of online coursework. By eliminating deadlines, Coursera reasoned, students would have greater opportunities to complete their courses.

The second feature is that On-Demand learning modules (similar to units in a textbook) could be accessed in any sequential order. In Session-Based MOOCs, modules were often digitally 'locked' until specific time intervals in the course, which helped move the class from topic to topic as a cohort. This change to fully open access was also promoted as allowing for increased flexibility for students, as they would now be free to engage course content completely at their own discretion. With these two changes, students could now progress through the MOOCs at will, on their own individualized timelines for content consumption, reflection, assessment, and completion.

In its reckless pursuit of a disruptive innovation, what Coursera offered to its higher ed consumers was an amalgamation of the two types of unbundling: a 'no-frills' aspect of online learning blended with the opportunity to disaggregated one's learning experience from well... everyone. And to be fair, On-Demand delivered exactly as promised, a structurally isolating educational experience. But once the sheen of being able to choose your own adventure wore off,

⁸⁴ The 'Session-Based' MOOC format is analogous to a traditional face-to-face course format in that it has fixed course start and end dates, progresses through the learning material in a sequential manner (Unit 1,2,3 etc.), and has formative and summative assessments given at specific intervals.

students (and faculty) found themselves in a learning situation without either community or continuity and the results were less than optimal.

From the moment of its rollout, On-Demand MOOCs had powerful consequences on the educational experiences of faculty and students. For faculty, the structure of On-Demand severely decreased their levels of engagement in MOOC courses. These decreases were manifest in the sharp reduction in the structured weekly interactions between faculty and students, the absence of topically driven/impromptu moments of engagement, and in a general intellectual and emotional distancing of faculty from their MOOC courses. In my research, the outcome most expressed by those faculty self-identifying as 'actively engaged' in their MOOC courses prior to On-Demand was a change in their week-to-week experience of the course. After the switch to On-Demand, those faculty felt like they no longer had a sense of where the students were in terms of the course material, and thus a critical point of connection with their students was lost. Such loss of connection also foreclosed opportunities for faculty to inject emergent topics into the course dialogue as they arose. When the Volkswagen emissions scandal first became public, a faculty member wanted to make direct connections between it and a unit within his environmentally-focused MOOC course but didn't do so because he had no idea what percentage of his students would be at the relevant unit in the course trajectory.

Another aspect of faculty engagement that was negatively impacted by the shift to On-Demand was their intellectual and emotional connection to the course. Many faculty expressed that with On-Demand, they quickly felt far removed from their courses due to the decrease in student interaction, and whereas with Session-Based they often saw the 'end' of each course cycle as a chance to review and reflect on how that semester's content, student interactions, and

assessments shaped that particular course experience (just as they would have done with a face-to-face course), with On-Demand there just wasn't the same impulse for reflection.

The absence of a fixed 'end date' for On-Demand MOOC courses also impacted faculty's ability to update course content. With Session-Based MOOCs, course administrators would process faculty requests for content changes (new or revised content, assessments, and/or digital links, etc.) in between course run schedules. But with On-Demand, the course was always 'live', so there was never any official downtime, and any changes to the course had to be made while the course was in progress. As a result, faculty were less likely to make changes out of concern that two students in the process of completing the same course during the same time interval could theoretically encounter different content within the same unit.

The individualized structure of On-Demand also negatively impacted the student experience of MOOC courses. With the open-entry, open-exit and non-sequential aspects of On-Demand, any sense of 'cohort' or student cohesion within a course was nearly impossible to create or sustain. Adapting to fit this new format, faculty and instructional designers removed from existing courses any requirements that students engage in ice-breakers or wade into a discussion forums as a way to get to know their peers, as any interpersonal connections established would be nearly impossible to sustain with every student following their own pathway of learning. The On-Demand format also negatively impacted the recruitment and retention of Community Teaching Assistants, an integral student-support aspect of STEM-focused MOOCs. Community Teaching Assistants (CTAs) were often the outstanding graduates of the immediately previous cohort of a MOOC class, who were then recruited and trained by MOOC administrators to help provide learning support for students in the current cohort.

Although the position was unpaid and involved a significant time commitment, enough students

volunteered every semester to sustain the practice. With the switch to On-Demand, MOOC courses were now continuously open for enrollment, and this made the recruitment and retention of CTAs that much more difficult as administrators now needed to continuously analyze participant course data to see who might had 'completed' the course requirements, and of that group, who might be suitable for the position. In addition, without the framework of a 'semester' to help delineate a term of volunteer service, administrators were less inclined to spend the resources to train CTAs, and feeling no connection with the course or with their peers, volunteers were less likely to present themselves for such training. This outcome is emblematic of the ripple-effects of On-Demand; once the primary points of connection are disrupted, then the secondary pathways of connection will never be formed.

As a 'disruption' On-Demand was highly successful, but ironically this success became corrosive to the very learning it sought to promote as what ultimately was disrupted were not only traditional pathways of (knowledge) consumption via higher education, but also the delicate set of inter-relations between faculty, students, and institutions that may be at the heart of learning itself. Through their pursuit of innovation via technology, Coursera may have inadvertently revealed the limits of a market-driven and consumer focused discourse in education, in that market logic would dictate that in order to innovate one must first disaggregate, and to maximize consumer appeal one must promote the value of individual choice, yet the unrestricted blending of those impulses can deliver a negative outcome. If anything, Coursera's experiment with On-Demand demonstrates that both the structures and strictures of 'time' and 'connection' are integral elements to education, and that while we may consume information as individuals, learning remains a communal act, one grounded in interpersonal exchange.

Implications

Approximately 24 months after Coursera first transitioned Central State Public University's MOOCs from a Session-Based to an On-Demand⁸⁵ format, Coursera pivoted again to another MOOC format, Flexible Session-Based. Essentially a blend of the Session-Based and On-Demand course structures, Flexible Session-Based allows students to enroll in a typically structured online course (with fixed start and end dates), but the assignment due dates within the course are suggested, not mandatory (there are no grade penalties for missing a deadline), and if students fall behind or need additional time to complete the coursework after the class has ended, they can rollover into a subsequent session of the same course, with their previously graded work counted toward completion of their new course. In traditional face-to-face terms, it would be as if a university's Intro to Sociology class was offered each semester, with those students who didn't finish the coursework by term's end allowed to re-enroll in the course the following semester, with credit for their completed assignments transferring into the new course. According to Coursera, this Flexible Session-Based format provides much of the same flexibility of the On-Demand model, but "the biggest difference is the community – in a session-based course, you're part of a smaller peer group working on the same schedule, so you can share ideas, discuss assignments, and motivate each other."86 And with that, the experiment of On-Demand came to a close.

⁸⁵ Through the course of the completion of this dissertation, Coursera retitled their 'On-Demand' MOOCs to 'Self-Paced' MOOCs; I have kept the original term 'On-Demand' throughout this document for consistency.

⁸⁶ Coursera, "Coming soon to all courses: Flexible session-based schedules," *Coursera Blog* (blog), August 10, 2016, https://blog.coursera.org/coming-soon-to-all-courses-flexible-session-based/

In presenting On-Demand, Coursera was attempting to combine the appeal of self-paced learning with the legitimacy of an institutional credential; to offer a new type of learning experience that existed somewhere between the structure and deadlines of a university and the do-as-you-feel internet. Similar to Amazon and Netflix, it wanted to develop a market for a new medium of commodity consumption; in this instance the commodity was the post-secondary credential, attainable through course learning modules packaged and ready to ship to consumers across the globe via MOOCs. To achieve this, Coursera needed to demonstrate a workable malleability in a set of relations long considered immutable: the structured interactions between students, instructors, and institutions. Thus, Coursera's foray into On-Demand was a deliberate (albeit indirect) method of interrogating long-held philosophical and material understandings regarding just which distinct elements are essential to higher education. In doing so, they have re-illuminated one of many contradictions that emerge at the intersection of neoliberalism and higher education. We know higher education must improve, improve its costs, its access, and its outcomes, but the methods we employ to improve it, methods that often insist on characterizing learning as a series of discrete operations and locations, sometimes allow us to lose sight of the experience that we are trying to enhance, and we run the risk of innovating ourselves out of the very goal we claim we are in pursuit of. Our established ideological playbook for making 'progress' may in fact lead to ruin.

Of course, a recognition of such contradictions is not necessarily an end to the problem, as recognition itself has several options. One option is to treat the contradiction as just another problem to be solved using technology, as Coursera did by introducing its *Flexible Session-Based* MOOCs. But there is another option, one slowly working its way through our collective unconsciousness: restraint. Restraint from the urge to follow our consumerist impulses all the

way down into the rabbit hole; restraint from the full embrace of the ideology of consumptionon-demand. Not a complete rejection, mind you, but simply a degree of restraint. This idea of
restraint is beginning to manifest itself in interesting ways in American popular culture. After a
torrid multi-year love affair with 'binge television' (literally the On-Demand of tv watching),
many television critics are now arguing that some storytelling modes function better over a
longer interval, where time between episodes can promote conversation and reflection about an
idea. According to one, "But just because you can make TV a certain way doesn't mean that you
should. Sometimes, good things come from those who make you wait."

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And we are also beginning to engage the consequences of our endless pursuit of On-Demand consumerism in our economic and social lives as well. The *Bust Up Big Tech Act*, legislation recently introduced by Sen. Josh Hawley is designed to destabilize the monopoly of tech giants such as Amazon, giants forged by the "near-universal appeal of convenience, the magic of having the thing you want when you want it, which people are likely to choose even if it means that regional department stores evanesce and local businesses decline." Increasingly, we are beginning to realize the unintended consequences of an On-Demand environment which inevitably reverse-engineers modes of delivery, production, even the process of creation in order to fit its needs. No longer only shaped by *what* we consume, we are increasingly transformed by *how* we choose to consume it.

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⁸⁷ James Poniewozik, "TV's Battle of the Binge: Why The Wait Can Be Worth It", *New York Times*, March 19th, 2021. https://www.nytimes.com/2021/03/19/arts/television/binge-wandavision-falcon-and-winter-soldier.html

⁸⁸ Ross Douthat, "America's Amazon Problems", *New York Times*, April 20, 2021. https://www.nytimes.com/2021/04/20/opinion/josh-hawley-amazon.html

A Coda for Covid-19

I write these concluding words at the tail end of the first full year of Covid-19 precautionary health protocols in the US. In the wake of what felt like an endless season of lockdowns, rising death counts, mandatory masks, free-floating anxiety, social distancing, and now, vaccination schedules I believe there was also a moment or two of global sustained selfreflection. And as we all struggle to re-configure our lives to somewhere between the competing socio-political discourses of Back-To-Normal vs. The New Normal, I can't help but think that the questions that have been pushed to our economic and cultural forefront due to the pandemic are not unsimilar to those raised through the work of my dissertation. Collectively, we are beginning to explore the options regarding unbundling in the spaces of our working and social lives. But in order to do so effectively, we must first distinguish between those forms of human activity that require group engagement, those that do not require group engagement but are greatly enhanced by it, and those that can be sufficiently performed in (relative) solitude. And while technology has facilitated a reconsideration of the need for us to be in close proximity to one another for work, worship, or wanderlust, what has also emerged is the unassailable value of human community, human connection. And as we move forward out of this moment, ready to unleash our modes of consumption, we must continue to strive for balance, to embrace change while clinging to the things dear to us.

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APPENDIX A: IRB APPROVAL

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Office of the Vice Chancellor for Research



Office for the Protection of Research Subjects 528 East Green Street Suite 203 Champaign, IL 61820

04/08/2015

Maryalice Wu ATLAS 2045 Lincoln Hall M/C 460

RE: This Is What It Means To 'MOOC': A case study of institutional policies procedures and

practices regarding MOOCs at a public research university

IRB Protocol Number: 15763

EXPIRATION DATE: 04/07/2018

Dear Dr. Wu:

Thank you for submitting the completed IRB application form for your project entitled This Is What It Means To 'MOOC': A case study of institutional policies procedures and practices regarding MOOCs at a public research university. Your project was assigned Institutional Review Board (IRB) Protocol Number 15763 and reviewed. It has been determined that the research activities described in this application meet the criteria for exemption at 45CFR46.101(b)(2).

This determination of exemption only applies to the research study as submitted. Please note that additional modifications to your project need to be submitted to the IRB for review and exemption determination or approval before the modifications are initiated.

We appreciate your conscientious adherence to the requirements of human subjects research. If you have any questions about the IRB process, or if you need assistance at any time, please feel free to contact me at the OPRS office, or visit our website at http://www.irb.illinois.edu.

Sincerely,

Rose St. Clair, BA

Rose Stllair

Assistant Human Subjects Research Specialist, Office for the Protection of Research Subjects

e: Rashid Robinson