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by

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On-Campus and Online:

The Lived Experiences of Students Enrolled in the Online Courses of a Major Research University

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**On-Campus and Online:
The Lived Experiences of Students Enrolled in the Online Courses of a
Major Research University**

by

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Dedication

I dedicate this dissertation to:

The two most influential educators in my life: my mom and pops.

The woman without whom this study—and I—would be lost: my wife.

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**On-Campus and Online:
The Lived Experiences of Students Enrolled in the Online Courses of a
Major Research University**

Jeffrey Robert Mayo, Ph.D.

The University of Texas at Austin, 2015

Supervisor: Richard J. Reddick

Online education's potential to "scale-up" the traditional lecture-based, face-to-face course while maintaining or improving the quality of instruction attracts the attention of university administrators, faculty, and policymakers interested in opening access to higher education and expanding access to faculty experts. However, previous research has focused on distance education and not online education offered through campus-based institutions. As such, this dissertation used a qualitative, phenomenological approach to examine the lived experiences of students enrolled in online courses offered through a major research university (MRU). This study employed student engagement and developmental ecology theories to present the perspectives of 11 students through the analysis of student interviews, journals, and questionnaires; course syllabi; and faculty interviews.

The significance of this study lies in its capacity to capture student perceptions and behaviors to better understand how online courses, and specific components of such courses, promote or discourage undergraduate student engagement in the modern

research university. The interview and journal data indicated that online courses have the capacity to promote active and collaborative learning, academically challenge students, and contribute to a supportive campus environment at an MRU. Students related an enhanced sense of being independent and responsible for their own learning to online courses' physical and transactional distance. Further, they considered anonymity as crucial to honest interactions with peers and teaching assistants and strengthened their commitment to one another. With regard to student-faculty interactions, students in the synchronous courses tended to form meaningful connections with faculty through intimate, face-to-face interactions rather than through online activities. The study also found that the perception held by some students that online courses equate to an "easy 'A'" and mandated course enrollment negatively influenced participants' investment of time and effort in their online courses. Given these findings, this dissertation calls for instructors and policymakers at major research universities to integrate key online and face-to-face components into online course designs and dedicate the necessary resources to engage students across the physical and transactional gap. For their part, students may consider how settings beget certain behaviors in their selection of physical workspaces and strategically utilize in- and out-of-class activities as active and collaborative learners.

Table of Contents

<i>List of Tables</i>	xv
<i>List of Figures</i>	xvi
Chapter One: Introduction and Statement of the Problem	1
<i>Introduction</i>	1
<i>Presentation of the Research Problem</i>	4
Background.....	4
Statement of the Problem.....	10
Statement of the Purpose.....	13
Statement of the Research Questions.....	13
Research Assumptions.....	14
Significance of the Study.....	15
Definition of Terms.....	16
Chapter Two: Literature Review	19
<i>Introduction</i>	19
<i>Student Engagement</i>	19
Foundational Works on Student Engagement.....	19
Kuh's Benchmarks of Engagement.....	23
Student Inputs in Student Engagement Model.....	37
The History and Context of Online Education.....	39
<i>Theoretical Framework</i>	47
Developmental Ecology.....	48
Constructivist Paradigm.....	53
Summary.....	54
Chapter Three: Methodology	55
<i>Introduction</i>	55
<i>Research Perspective</i>	56
Qualitative Research.....	56
Phenomenological Approach.....	57
<i>Study Design</i>	58
Research Site.....	58
Participants and Sampling.....	61
Data Collection.....	66
Triangulation.....	67
Data Analysis.....	68
<i>Reliability and Validity</i>	69
<i>Limitations</i>	71
<i>Conclusion</i>	72
Chapter Four: Sample Description and Participant Profiles	73
<i>Student Biographical Sketches</i>	73
Eva.....	73
Paul.....	77
Judy.....	80
Mike.....	85
Jennifer.....	88

Grace	91
Ashley	94
Mary	97
Katie	100
Ally	104
Elaine	107
Chapter Five: Student Perceptions	114
<i>Active and Collaborative Learning</i>	115
In-Class Activities	116
Out-of-Class Activities	131
Summary	143
<i>Student-Faculty Interaction</i>	145
Ill-Suited for Traditional Student-Faculty Interaction	146
Creative, Personal Interactions	150
Summary	154
<i>Level of Academic Challenge</i>	156
Drive to Do Best Work	157
Online Platform’s Impact on Student Investment	170
Summary	177
<i>Supportive Campus Environment</i>	178
Instructional Support Made More Available	179
Flexibility Related to Small Impact on Extra- and Co-Curricular Involvement	183
Summary	187
<i>Enriching Educational Experiences</i>	188
<i>Online Courses and Developmental Ecology</i>	191
Physical Learning Environments of Online Courses	192
Interplay of Online Courses with Work and Family	201
Integration and Isolation of Online Courses with Campus Environments	205
Summary	215
Chapter Six: Faculty Perceptions of Student Engagement in Online Courses.....	218
<i>Active and Collaborative Learning</i>	218
<i>Student-Faculty Interaction</i>	223
<i>Academic Challenge</i>	227
<i>Supportive Campus Environment</i>	230
<i>Ecology of Online Course Engagement</i>	232
<i>Summary</i>	233
Chapter Seven: Discussion and Implications for Research and Practice	236
<i>Discussion of Findings</i>	236
Key Finding #1: Online Activities Have The Capacity To Deeply Engage Students.....	236
Key Finding #2: Spatial and Temporal Flexibility Related To a Heightened Sense of Responsibility for One’s Learning	241
Key Finding #3: One-Way Communication Impedes Meaningful In-Class Discussion	247
Key Finding #4: Anonymity’s Relationship with Online and In-Person Collaboration	249
Key Finding #5: Student Motivations and Expectations	250
Key Findings and the Student Experience	252
<i>Contributions to the Research Literature</i>	254

<i>Implications for Practice and Policy</i>	256
Instructor Practices and Policies	256
Student Behaviors.....	260
Institutional and State Practices and Policies.....	262
<i>Limitations and Delimitations</i>	265
<i>Future Research</i>	267
Appendices	270
<i>Appendix A: Recruitment Email</i>	270
<i>Appendix B: Terms of Consent</i>	271
<i>Appendix C: Social Science Recruitment Handout</i>	274
<i>Appendix D: First Student Interview Protocol</i>	275
<i>Appendix E: Second Student Interview Protocol</i>	278
<i>Appendix F: Faculty Interview Protocol</i>	281
References	283

List of Tables

Table 3.1: Descriptive overview of online WSU courses.....	63
Table 4.1: Participant descriptive overview	112
Table 4.2: Participant online education overview	113

List of Figures

Figure 1.1 Theoretical model of student engagement.....	25
Figure 2.1 Developmental ecology model applied to higher education.....	52
Figure 5.1 Active and Collaborative Learning Themes.....	116
Figure 5.2 Student-Faculty Interaction Themes	146
Figure 5.3 Level of Academic Challenge Themes	157
Figure 5.4 Supportive Campus Environment Themes	179
Figure 5.5 Developmental Ecology Themes.....	192

Chapter One: Introduction and Statement of the Problem

Introduction

“The ideal college is Mark Hopkins on one end of a log and a student at the other” (Peskin, 1999, p. 34). Attributed to James Garfield—who before his election as the 20th president of the United States was a proud graduate of Williams College and supporter of its president, Mark Hopkins—the above quote sums up the core tenet of the American higher education system: the best education involves the most talented instructor or administrator dedicating time and attention to a single student. The sentiment still holds true on many college and university campuses. In its capital campaign promotional materials, Dartmouth College claims that “inefficiency is what makes a school like Dartmouth so good” (“Dartmouth College Fund,” 2014). Yet in the current recessed economy, and with national student debt topping \$1.2 trillion (Federal Reserve Bank of New York, 2014), a growing body of researchers and policy analysts calls for greater efficiency and affordability through online education (Carey, 2015; Wildavsky, Kelly, & Carey, 2011).

Due in part to perceived inefficiencies, the American higher education system, in particular public, major research universities (MRUs), has been criticized for a lack of access (Aud, Wilkinson-Flicker, Kristapovich, Rathbun, Wang, & Zhang, 2013), affordability (Rivard, 2013; Rizzo, 2004), and capacity to improve student learning (Arum & Roksa, 2011). Demand for and enrollment in higher education increased between 2002 and 2012. Over this decade, total enrollment in postsecondary institutions

across the nation jumped 28.3%, from 16.6 million students to 21.3 million. Fueled by the economic downturn of the late 2000s, the greatest gains occurred from 2008-2012. This surge of students outpaced the hiring of faculty, raising the national student-to-faculty ratio from 15 to 1 to 15.6 to 1 (Snyder & Dillow, 2013). Over the same time, states have pressured universities to keep down the cost for students and families. In 2013, Moody's Investor Service reported that less than half of public universities anticipated tuition to rise above the two percent inflation rate (Rivard, 2013). The report indicated that public demands for affordability, scrutiny from state legislators, and regulatory pressure prevented universities from placing the burden of lost state appropriations onto students and families. These narrowed revenue streams have forced institutions to cut expenditures. Across institutional types, employee compensation accounts for the majority of costs in higher education. At public research universities, 37% of educational and general spending go directly toward faculty salaries and benefits and 32.8% toward compensation for non-instructional staff (Desrochers & Wellman, 2011). With high demand from students and economic realities that prevent substantial additions to faculty and staff ranks, institutions look to economies of scale and potential efficiencies to cover the costs.

Though higher education continues to be in high demand, critics question the university's capacity to improve students' learning. Arum and Roksa (2011) studied the educational progress of over 2,300 students from 24 colleges and universities over a traditional four-year college career. Using the Collegiate Learning Assessment (CLA), a standardized test designed to measure gains in critical thinking, analytical reasoning,

problem solving and writing, Arum and Roksa (2011) found that 45% of students made no significant improvements in learning over their first two years in college, and 36% made no significant gains over four years. Such assessment tests face their own criticism for their inability to capture learning across diverse disciplines (Banta, 2007) and students' lack of motivation to dedicate optimal time and effort to a low-stakes test (Hosch, 2010). Despite these concerns, the CLA's growing acceptance highlights the national call for accountability and transparency with respect to the undergraduate experience's quality and value.

With traditional higher education under pressure to enroll more students and provide affordable, quality education, MRUs are under pressure to adopt "innovations," including online education, for economics of scale (Christensen, Horn, Caldera, & Soares, 2011; Wildavsky, Kelly, & Carey, 2011). Though available for decades through fully online institutions and degree programs, online courses have become a popular medium for teaching and learning in American higher education over the last decade. In 2002, 1.6 million students, which accounted for 9.6% of all students at degree-granting postsecondary institutions, enrolled in at least one online course (Allen & Seaman, 2014). By 2013, the total jumped to 7.1 million students, 33.5% of total enrollment. The proliferation of fully online, private institutions during the 2000s explains a substantial portion of this rapid increase. However, 93% of public institutions now offer courses or entire degree programs online (Allen & Seaman, 2014).

Presentation of the Research Problem

Background

Online courses are an appealing method of course delivery as public research universities experience increased enrollment, reduced state subsidies, and intensified demands for innovations to the traditional educational model. This potential to “scale-up” the traditional lecture-based, face-to-face course while maintaining or improving the quality of instruction attracts the attention of university administrators, faculty, and policymakers interested in opening access to higher education and expanding the audience of the “sage on the stage.” However, online course design and implementation varies across and within institutions. Consequently, student engagement fluctuates due in part to online courses’ level of academic challenge, active and collaborative learning, student-faculty interactions, and supportive environment. As previous research ties engagement to student learning, retention, and degree completion, it is imperative that institutions, faculty, instructional designers, and policymakers understand these variations in student engagement as they continue to turn toward online courses to increase access, efficiency, and productivity.

Though the enrollment in public universities has increased dramatically in recent years, the interest in state colleges and universities is nothing new. The shift toward public higher education began in earnest with the Morrill Acts of 1862 and 1890, which established funding sources for land-grant colleges (Rudolph, 1990). Between 1897 and 1940, the percentage of students in higher education enrolled in public institutions increased from 22% to 50% (Goldin & Katz, 1998). Furthermore, over the next half

century, overall enrollment in higher education jumped from 1.5 million to 13.1 million students (Clotfelter, 1991), due in large part to Servicemen's Readjustment Act (G.I. Bill) of 1944 (Bound & Turner, 1999). The bulk of this growth occurred in the 1960s, during which time enrollment at public colleges and universities soared from 2.5 million students in 1961 to 6.4 million by fall of 1970. After moderate five percent growth in the 1990s, undergraduate enrollment at public institutions grew by 27% during the first decade of this century (Aud, Wilkinson-Flicker, Kristapovich, Rathbun, Wang, & Zhang, 2013). Though enrollment swelled the most at less selective public and for-profit institutions, the Great Recession of the late 2000s led to an enrollment spike at state flagship and other research-intensive universities as students and their parents sought less expensive options than offered by private institutions.

Also related to the economic downturn, state support for higher education has fallen drastically since 2007 (Barr & Turner, 2013). According to the American Council on Education, state support for higher education has waned over the last 40 years, falling from 60% to 34% of the total cost of education (Mortenson, 2012). This pattern quickly accelerated in 2007 when states cut higher education appropriations from \$75.3 billion to \$73.8 billion by 2010 (Barr & Turner, 2013). Although enrollment levels have started to stabilize, state support for higher education continues to shrink.

This trend highlights the broader policy quandary facing state legislators. Medicaid and K-12 education garner an increasing proportion of state budgets (Bok, 2009; Kane, Orszag, & Gunter, 2003; McLendon, Heard, & Mohker, 2009; Rizzo, 2004). To cover these costs, states have decreased their support of many public services,

including higher education (Kane, Orszag, & Gunter, 2003). In his analysis of state budget trends, Hovey (1999) described higher education as the “balance wheel” for state budgets. In strong economic times, legislators disproportionately increase appropriations to higher education compared to other state services. In lean economic times, higher education sees a disproportionately large cuts in state support. Legislators perceive higher education as having greater flexibility in salaries, capacity to raise revenue outside of state support, and opportunities to reduce costs (Hovey, 1999). Unlike higher education, K-12 education has garnered substantial increases in state support due to public pressure, and in some cases court mandates, for improved school funding. In his study on the competition between public K-12 and higher education over state appropriations, Rizzo (2004) claims that over quarter of the substantial increases to K-12 education have come directly at the expense of public higher education. Such funding priorities contribute to the diminished revenue experienced by public research universities.

While state appropriations decreased, public universities were unable close the revenue gap through tuition and fees. In 2013, Moody’s Investor Service reported that 44% of public universities did not anticipate tuition to keep pace with two percent inflation (Rivard, 2013), which in practical terms equated to a reduced sticker price. The report indicated that public demand for affordability, scrutiny from state legislators, and regulatory pressure prevented universities from placing the burden of lost state appropriations onto students and families. During the fall of 2013, President Obama bolstered calls for college affordability and introduced initiatives to connect student

financial aid to college performance, based upon access, affordability, and learning outcomes; ensure student debt remains affordable; and promote innovation and competition ("College Affordability and Completion," 2013). This final initiative manifested in the Department of Education College Affordability and Transparency Center's College Scorecard, an online tool that allows comparisons of institutions' student costs, graduation and loan default rates, and median student borrowing, and will eventually include alumni employment statistics ("College Scorecard," 2013). Such pressure to reduce costs to tax payers and students have narrowed revenue streams and forced public colleges and universities to cut expenditures.

Recent calls for disruptive and sustaining innovations stress the need for efficiencies to reduce the costs of delivering high-quality post-secondary education (Christensen, Horn, Caldera, & Soares, 2011). However, the arguments for disruptive innovations lean to the side of affordability and largely ignore how a shift toward online courses may affect the quality of student learning and development. For instance, Christensen et al. (2011) argue that online courses, when offered by new or remodeled entrants in the higher education market, begin as simple applications that only compete for the business of potential students who thus far have not sought post-secondary education. The theory of disruptive innovation suggests that this difference in quality is inevitable for a new technology. Students who first adopted online courses and programs were satisfied with their experiences because their alternative was no postsecondary education. Online courses met the needs and values of these students. According to the president of Southern New Hampshire University, one of the largest providers of online

courses and degree programs, students at new, fully online institutions value convenience, completion, cost, and credentials, “not exactly inspiring education ideals, but they reflect the reality facing millions of Americans” (LeBlanc, 2013, p. 166).

Clayton Christensen, who coined the phrase “disruptive innovation,” and colleagues (2011) suggested that online colleges and universities needed to adopt their students’ perceptions of quality education.

Quality can only be measured relative to what customers value in their own context—their job to be done—and relative to their alternative solutions. This element of the theory of disruption—how the very definition of quality changes – is crucially important in understanding the future of higher education. (p. 21)

Disruptive innovation predicts that over time, to meet the demands of students, the capacity of online courses to improve student learning and development will reach or exceed the capacity of face-to-face courses.

A more apt context for online education at campus-based institutions is the sustaining innovation framework. Unlike their disruptive counterparts, sustaining innovations help industry leaders “make better products that they can sell for better profits to their best customers” (Christensen et al., 2011, p. 12). In higher education, online courses have the potential to allow well-established MRUs to keep revenue constant as they reduce instructional costs. With regard to better profits, online courses offer a potential cure for Baumol’s cost disease (Baumol, 1993). This macroeconomic theory suggests that certain industries, including nursing, performing arts, and education, are labor-intensive and have been unable to increase productivity. At the same time, these industries increase employee compensation to compete with other industries. For instance, the student-to-faculty ration has remained roughly sixteen-to-one for thirty

years, but faculty salaries have increased along with inflation and the salaries in related industries (Surowiecki, 2011). As for “best customers,” unlike the MOOCs at many MRUs, for-credit online courses are targeted to institutions best customers—currently enrolled students. The question then becomes whether this new product is “better” than the traditional, face-to-face option.

As MRUs continue to adopt online courses to meet demands for access, productivity, and efficiency, institutions, students, and policymakers must consider online courses’ impact on the “product,” which is not the individual course but the undergraduate educational experience as a whole. Using the phenomenon of student engagement as an indicator of educational quality, this study explores the impact of online course enrollment on student learning and development at a MRU. Therefore, the unit of analysis for educational quality is the student and his or her experience. With a greater proportion of students who hold traditional values of higher education, how do online courses at MRUs affect the quality of undergraduate education?

As campus-based, “brick and mortar” colleges and universities offer an increasing selection of fully online courses, researchers have focused on student technology usage and learning outcomes to analyze the effectiveness of these courses compared to their traditional, face-to-face counterparts (DeNeui & Dodge, 2006; Picciano, 2002). Learning management systems (LMSs) provide advanced diagnostic tools to track usage of and movement within online course modules, documents, and discussion boards. Studies have used such metrics to examine the frequency of and inclination for use of LMS components (DeNeui & Dodge, 2006). Researchers have used more traditional markers

of learning, such as grades and retention rates, to examine the efficacy of online courses. The results are mixed (Frydenberg, 2007; Johnson, Aragon, & Shaik, 2000), but recent research is hesitant to identify the online medium as the cause of any changes in learning outcomes (Baglione, Nastanski, & Bowen, 2011).

In addition to these measures of learning, student engagement offers “a singularly sufficient means of determining if students are engaging with their study in ways likely to promote high-quality learning” (Coates, 2006, p. 4) and student development. The integration of online courses into campus-based university education provides students more flexibility concerning when and where to engage with course content, instructors, and peers (Chickering & Ehrmann, 1996), affording the opportunity to devote more or less time to courses, student organizations, work, family, and social life. Furthermore, these online learning communities reconstitute student interactions with faculty members, peers, and the university at-large, with the potential to strengthen or weaken these relationships.

Statement of the Problem

As campus-based institutions develop online courses to meet demands for greater access, efficiency, and productivity, it is critical to grasp how and why student engagement varies across online courses. Though previous research has focused on student learning in distance education courses (Dare, Zapata, & Thomas, 2005; Garrison, Anderson, & Archer, 2001), there is a dearth of literature on online courses’ effects on the educational experience at campus-based institutions. Research suggests that across multiple course delivery media, from face-to-face to blended to fully online, student

engagement positively influences student learning and development outcomes (Astin, 1985; Chen, Lambert, & Guidry, 2010; Coates, 2006; Hu & Kuh, 2002; Pace, 1984; Pascarella & Terenzini, 2005). It is important to note that student engagement consists of two key components, student behaviors and institutional conditions (Kuh, Kinzie, & Buckley, 2006). Student behaviors include the time and effort dedicated to academic studies, student-faculty interactions, and peer involvement. These student behaviors must be met with appropriate challenge and support through institutional resources, policies, programs, services, and structural features. Institutional conditions should direct students toward educationally purposeful activities, “among the more important of these are the amount of time they study, interact with faculty members and peers related to substantive topics, and use institutional resources such as the library and technology” (Hu & Kuh, 2002). Engaging in high levels of such activities correlate with greater persistence, educational attainment, student satisfaction, learning, and development as measured across grades, standardized tests, and longitudinal student and alumni surveys (Astin, 1993; Kuh, Kinzie, & Buckley, 2006; Pascarella & Terenzini, 2005).

Despite the voluminous studies, many of which researchers conducted at MRUs, that suggest engagement has strong ties with multiple educational outcomes, research on online engagement remains wanting. Studies have examined student engagement with learning management software (LMS) and other online learning tools (Denui & Dodge, 2006; Shi & Morrow, 2006) and the methods students in face-to-face and blended courses use online resources to engage with faculty, academic support staff, and peers (Bowler & Raiker, 2011; Dare, Zapata, & Thomas, 2005; LaPadula, 2003). Yet to a large degree,

Coates' 2006 synopsis of online engagement research still applies today:

To date, student engagement research has largely treated these technologies as a discrete part of the student experience, rather than as part of the fabric of contemporary university education. It is likely, however, that contemporary online technologies may be playing a formative rather than an incidental or supplementary role in the engagement of today's campus-based students. (p. 122)

Coates (2006) has led the charge to better understand the engagement of online learners at campus-based institutions. His Student Engagement Questionnaire (SEQ) includes a seven-scale, 30-item measurement of online engagement for campus-based students. The scales—online engagement, online active learning, online academic relevance, online teaching, online collaboration, online social interaction, and online contact with staff—identify key properties of online engagement based on the five benchmarks of student engagement as proposed by the National Survey of Student Engagement's (NSSE), which provided a foundation for the SEQ survey instrument.

Though valuable for their capacity to monitor, benchmark, and track trends in student behaviors and attitudes, student engagement surveys provide little in-depth information with regard to the student engagement experience (Creswell, 2013). For instance, the SEQ asks students to what degree online materials challenged a student to learn (Coates, 2006), but does not distinguish between types of online materials—text, video, audio, instructor-created, or web-based—or address *how* and *why* the material challenged the student. Moreover, NSSE and SEQ were designed with students in face-to-face courses in mind. The growing number of students enrolled in online courses at campus-based institutions calls for nuanced, exploratory research to understand the student behaviors and institutional conditions associated with this student population.

Statement of the Purpose

The purpose of this phenomenological research study is to identify the educationally purposeful activities associated with student engagement in online courses at MRUs. As such, this study analyzes student and faculty perceptions of the student behaviors and institutional conditions, both online and campus-based, that create and encourage educationally purposeful activities.

Statement of the Research Questions

1. How do students enrolled in online courses at a major research university describe their engagement (categorized by NSSE as level of academic challenge, active and collaborative learning, student-faculty interaction, enriching educational experiences, and supportive campus environment)?
 - a. What meanings do students make of the educationally purposeful activities related to their online courses?
 - b. How do students associate their motivations for enrolling in online courses with the methods and levels of their engagement in those courses?
 - c. What are student perceptions regarding the ways, if any, the temporal and spatial flexibility provided by online courses affects their engagement, both in online courses and broadly with the university?
2. How do students perceive the relationships between their online course environments and their physical workspaces, non-academic commitments, and their campus experience?

3. How do instructors of online courses perceive their course design, facilitation, and direction as having an impact on academic challenge, active and collaborative learning, and student-faculty interaction?
 - a. How do their perceptions compare to student perceptions?
 - b. How do faculty members describe their motivations and incentives to design and teach online courses?

Research Assumptions

Based on my understanding of previous student engagement research, personal experience as a student of an online course, and communication with students and faculty members regarding their online course experiences, I approached this study with three assumptions. First, I assumed that NSSE's student engagement themes and the corresponding educationally purposeful activities described in previous studies have a bias toward face-to-face interactions. The majority of the foundational student engagement studies are based on the face-to-face, on-campus experiences of students (Astin, 1993; Pascarella & Terenzini, 2005). This study explores the unique opportunities for both online and face-to-face engagement available to online learners at MRUs. Second, I assumed that the experiences and consequences of enrollment in an online course cannot be extracted from the undergraduate experience for independent analysis. These courses are now an integral component of students' experiences with faculty, peers, and the university at-large and have direct and indirect effects on face-to-face, campus-based engagement. Though online courses are seen as separate, distant, or parallel experiences from campus-based academic and social experiences, my personal

experience as a student in an online course and my conversations with the faculty and students of online courses contradict such views. Third, I assumed that a student's motivation for enrolling in an online course section over a face-to-face option influences their level of engagement, despite their overall academic motivation and institutional conditions that do or do not encourage educationally purposeful activities. For instance, a student may select an online course with the little motivation beyond fulfilling a degree requirement, or a student may want flexibility to engage with course content outside traditional class times in order to work on or off campus, volunteer in a research lab, or step into a leadership role in a student organization. I assumed motivations influence the engagement methods and levels of students enrolled in online courses.

Significance of the Study

The significance of this study lies in its capacity to capture student perceptions and behaviors to better understand how online courses affect undergraduate student engagement in the modern research university. The practical benefits of this research may include insight on the student behaviors and institutional conditions associated with engagement for students enrolled in online courses. Such information could prove to be valuable to faculty, instructional designers, and policymakers. Understanding their integration of online, educationally purposeful activities into students' face-to-face experiences on campus may help inform the ways instructional designers and faculty members construct online courses. Further, comparing and contrasting student and faculty perceptions, assumptions, and motivations may shed light on where the two groups align and differ. This study advances the student engagement research by

recognizing the unique position of campus-based students enrolled in online courses at their home institutions. Though cognizant of the similarities between distance and online education at MRUs, I explore how campus-based students engage with online and face-to-face campus resources.

Definition of Terms

As concepts related to student engagement and online education holds various meanings, I provide the following definitions for terms used in this study.

The term *student engagement* is the theory of student success used in this study to examine the undergraduate educational experience. The term is often confused for involvement or integration, to the point that “even researchers seem to have muddled the concepts” (Wolf-Wendel, Ward, & Kinzie, 2009, p. 408). Engagement’s closest relative, involvement, is concerned with the physical and psychological energy devoted by a student to the academic experience (Astin, 1985).

Engagement builds upon involvement to include the institutional conditions associated with desirable learning and developmental outcomes. As defined by National Survey of Student Success (NSSE), student engagement is “the time and energy students devote to educationally sound activities inside and outside of the classroom, and the policies and practices that institutions use to induce students to take part in these activities” (NSSE, 2007, p. 3). George Kuh, founder of NSSE, argued that an examination of student success needed to include factors directly controlled by the institution, and found “involvement is not sufficient for advancing institutional efforts—you need to know what the institution is doing as well” (Wolf-Wendel, Ward, & Kinzie,

2009, p. 417). In his early research on NSSE data, Kuh offered five categories of engagement: level of academic challenge, active and collaborative learning, student-faculty interaction, enriching educational experiences, and supportive campus environment (NSSE, 2007). In 2013, NSSE restructured the five benchmarks into four themes, with that notable difference that enriching educational experiences did not become a theme but a list of high-impact practices. This shift primarily affected the grouping and arrangement of survey instrument items, not the experiences and activities explored by the survey. I employ all five benchmarks in this study's theoretical framework.

The Online Learning Consortium (formerly the Sloan Consortium) defines an *online course* as “one in which at least 80 percent of the course content is delivered online” and typically has no face-to-face class meetings (Allen & Seaman, 2014, p. 6). The term *course content* in their definition is open to interpretation and may or may not include live lectures, video and audio recordings, printed materials, and online materials and modules. The essential characteristic of an online course for this study is the replacement of scheduled, face-to-face, instructor-led class meetings with online components and communications. *Online education* is the intersection of teaching, social, and cognitive presences in online courses (Garrison, Anderson, & Archer, 2001).

At this point, it is important to distinguish between online education and distance learning. Many studies assign the same definition to both terms. The changing reality of course delivery at MRUs challenges their interchangeability. The US Department of Education defines *distance learning* as a course “that uses one or more technologies to

deliver education to students who are separated from the instructor and to support regular and substantive interaction between the students and the instructor, either synchronously or asynchronously” (Federal Register, 2009, p. 39500). However, Clayton Christensen and colleagues (2011) argue that this definition applies to the student experience in a large, face-to-face lecture:

Distance learning was alive and well in 1970 when Clayton Christensen was seated with 200 other students in the 45th row of the massive Joseph Smith Auditorium at Brigham Young University in History 170, a general education course that he had to take for his social studies requirement. The teacher was never aware of Clay’s presence or absence because everything was “distance” beyond the fifth row. And the process was asynchronous: Clay was asleep while the teacher was lecturing and the teacher was asleep when Clay was reading the textbook. Asynchronous, distance learning is nothing new. (p. 53)

As the strong connections in the research suggest, online and distance education share many features. However, as MRU students share a campus with their online instructors, I do not consider online courses delivered by instructors to students at the same university to qualify consequently as distance learning.

Chapter Two: Literature Review

Introduction

This purpose of this study was to examine the engagement of students enrolled in online courses at a major research university. The study identified the online and face-to-face educationally purposeful activities designed and promoted by the university in which engaged students participate. In this chapter, I review and analyze the relevant literature to provide a context and theoretical framework for the study. First, I examine student engagement theory and its application in the modern higher education environment. In this section, I review the foundational works on student engagement and analyze the research on the five components of engagement in face-to-face and online contexts. Second, I review the history of online education, from its first applications in higher education to its proliferation in the delivery of distance education to its current use at MRUs. Third, I situate engagement and online courses within the theoretical framework of developmental ecology.

Student Engagement

Foundational Works on Student Engagement

The public, policymakers, students, and other higher education stakeholders look to popular measures of educational quality to better understand a college or university's impact on its students (Hayek, 2001; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2007). Such metrics include reputation, resources, and student inputs and outcomes – typically aggregated into institutional rankings, most notably the *U.S. News and World Report's* annual ranking of American colleges and universities (Astin, 1985; Kuh, 2003; Pascarella

& Terenzini, 1991). Although these measuring sticks are easily quantifiable, they do not address directly the value added by student experiences while enrolled in a particular university.

Student engagement is a broad concept used to describe within-college effects, which are more effective measures of an institution's outcomes than between-college characteristics (Pascarella & Terenzini, 2005). At its heart, student engagement consists of two major factors, the first of which is “the amount of time and effort students put into their studies and other activities that lead to the experiences and outcomes that constitute student success,” (Kuh, Kinzie, Schuh, & Whitt, 2005, p. 4) such as student-faculty interactions and peer involvement. The second component is the capacity of a college or university to “channel students’ energies toward appropriate activities and engage them at a high level in these activities” (Hu & Kuh, 2002, p. 556).

Each component complements the other, and together they reveal a key characteristic that distinguishes engagement from other forms of student-centered measures of educational excellence, such as involvement and integration. Though the first component – student time and effort – accurately reflects common definitions of involvement (Astin, 1985, 1985; Pascarella & Terenzini, 2005), engagement also acknowledges the role of the institution in providing opportunities for and encouraging participation in activities tied to learning and development. This study utilizes student engagement as a measure of educational quality for the growing number of students enrolled in online courses at research universities.

Pace’s quality of effort. Based on over fifty years of research on higher

education outcome measurement, assessment, program evaluation, college teaching, and campus environments, Pace (1979, 1984) proposed two tenets of higher education assessment. First, although measures of educational quality and student success typically focused on a product, such as cognitive skills, knowledge acquired, and ethical development, he argued

is it not also true that some processes are inherently better than others, regardless of whether they produce more learning? The process or experience of trying to see how things fit together, as in making an outline, is a better educational experience than the process of memorizing dates in a history book. The intellectual level of the former is higher than the intellectual level of the latter, and that is so whether or not it leads to a higher score on some achievement test. (1984, pp. 4-5)

By assessing the process, the researcher moved beyond time and frequency toward quality of effort, “the key to judging the quality of the educational process” (1984, p. 6).

Second, Pace proposed a shift in the way educational researchers, university administrators, and the general public viewed accountability in learning. Blame fell on institutions and faculty if a student did not graduate or gain employment. Pace (1979) maintained that institutions were responsible for the provision of programs, services, expectations, and policies necessary to encourage and support learning and development. Yet, students were ultimately responsible for the “amount, scope, and quality of effort they invest in their own learning and development,” (Pace, 1984, p. 6) particularly in their use of institutional support services and structures. The two tenets moved the focus of researchers onto student behaviors and perceptions to determine *how* colleges affect learning and development.

Astin’s theory of involvement. Influenced by his background in industrial

psychology (Wolf-Wendel, Ward, & Kinzie, 2009), Astin (1985) studied educational quality through a student's ability to invest physical and psychological energy in activities that promote learning and retention, such as listening to lectures, discussing course content with peers outside of class, and working part-time on campus. By studying student involvement, his work advanced Pace's assertion that some educational processes have intrinsic value. Astin (1985) defined his involvement theory through a series of five postulates. First, involvement itself is the physical and psychological energy invested by the student. Second, involvement occurs along a continuum. Over time, students can be more or less involved in the same activity. Third, involvement has both quantitative and qualitative features. Though time on task may measure the quantity of a student's investment in a reading assignment, the quality of the effort equally is important. Fourth, student learning and development in an educational – whether academic or non-academic – program is proportional to student involvement in the program. Fifth, the effectiveness of an institutional policy or program directly relates to its capacity to increase student involvement. Though the final postulate connects student involvement with institutional programming, the theory places the responsibility on the student to become involved.

Chickering and Gamson's seven principles. Taking a different approach, Chickering and Gamson (1987) viewed the faculty and administrators as most responsible for the quality of undergraduate education. Along with accrediting associations and state and federal education agencies, university leadership and faculty members create the campus environment that may or may not encourage student learning,

development, and persistence to graduation. By focusing on the processes of *how* high-quality education happens, Chickering and Gamson (1987) condensed over fifty years of student success research into practical concepts with enough specificity to clearly communicate best practices, but nebulous enough to mold their implementation across a diverse range of institutions.

The seven principles argued that good undergraduate education encourages contacts between faculty and students, develops reciprocity and cooperation among students, uses active learning techniques, gives prompt feedback, emphasizes time on task, communicates high expectations, and respects diverse talents and ways of learning (Chickering & Gamson, 1987). These tenets acknowledged the diversity of experience and varying levels of academic preparedness of students and supported the constructivist view of involvement that learning is active, iterative, and requires time and effort.

Kuh's Benchmarks of Engagement

Kuh (2001) acknowledged the contributions of these foundational works, with particular recognition of the seven principles of quality undergraduate education, in his development of the five benchmarks for student engagement for the National Survey of Student Engagement's (NSSE) *The College Student Report* (2013). Though informed by previous research, the benchmarks demarcated a shift toward holding the student and university accountable for the quality of educational experiences (Kuh, 2001; Kuh & Hu, 2001; Kuh, Arnold, & Vesper, 1991). Unlike involvement or best practices, engagement implied a reciprocal relationship between the student and the institution. Kuh, Kinzie, Shuh, and Whitt (2005) found that such a relationship, as represented in the Figure 1.1,

acknowledged the power of both parties to influence the quality of learning and development.

Engagement, and its foundation in exploratory and confirmatory factor analyses of student survey data, is not without its critics. Using NSSE as his primary example, Porter (2011) argued that student engagement is an unreliable and invalid theoretical framework due to students' inability to report on their behavior and attitudes and recall the amount of time spent on certain activities. With regard to the five dimensions of engagement, Porter (2011) speculated that "NSSE researchers seem to have relied on face validity and results of factor analyses to determine the internal structure" (p. 64) of the framework. However, Kuh (2009) offered strong evidence for the reliability—Chronbach alpha of .85 for 22 educationally purposeful activities—and McCormick and McClenney (2012) pushed back on Porter's misinterpretation of survey-item validity versus test-item validity. In light of these criticisms, this study employs research methods to triangulate student reports on their behaviors and attitudes, which I discuss in detail in Chapter Three. The next sections of this review explore NSSE's five benchmarks of engagement within the contexts of campus-based and online student experiences.

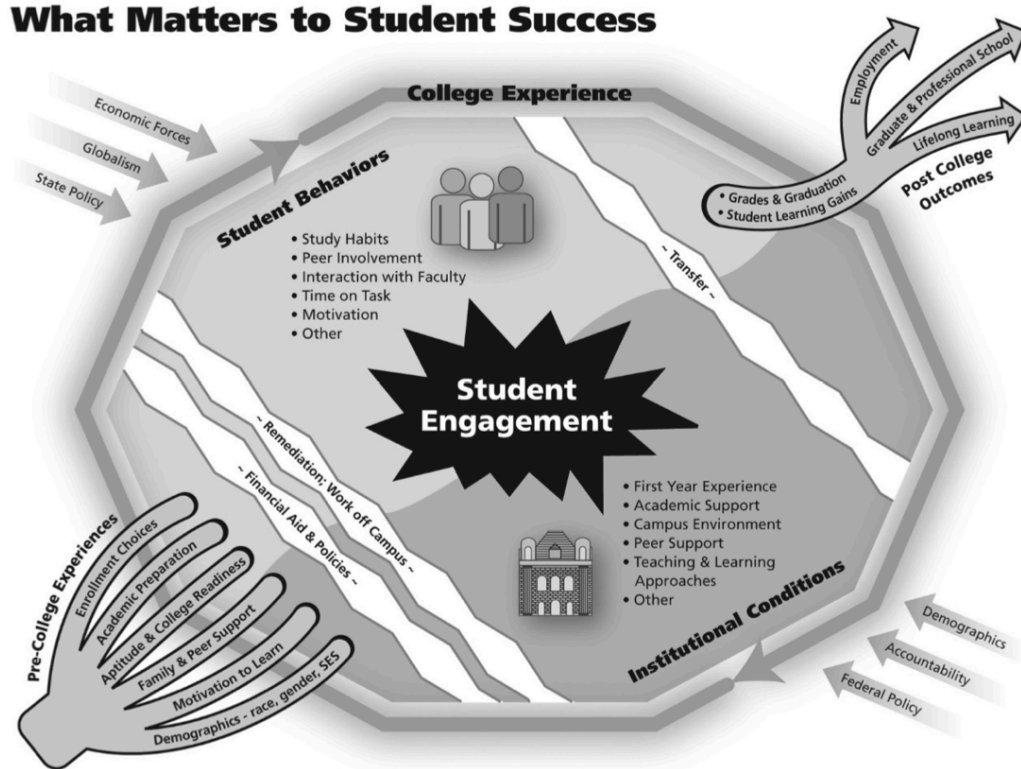


Figure 1.1. Theoretical Model of Student Engagement from Kuh, G. D., Kinzie, J., Buckley, J. A., Bridges, B. K., & Hayek, J. C. (2006, June). *What matters to student success: A review of the literature*. National Postsecondary Education Cooperative (NPEC) Commissioned Paper. Retrieved from http://nces.ed.gov/npec/pdf/Kuh_Team_Report.pdf

Level of academic challenge. Kuh et al. (2005) defined academic challenge as student investment of time and effort into “activities that require analyzing, synthesizing, applying theories, and making judgments, as well as the extent to which instructors set standards that compel students to work harder than they thought possible” (p. 45). Not surprisingly, research overwhelmingly has supported the notion that activities from the first component, such as studying, preparing for class, reading, and writing papers, lead to self-reported increases in educational gains and personal development (Shernoff & Csikszentmihalyi, 2009; Tagg, 2003; Umbach & Wawrzynski, 2005). High faculty

expectations influence students at the cognitive and affective levels (Baird & Penna, 1997). Due to the intrinsic motivation to self-improve and the extrinsic motivation to earn strong grades, students respond to academic challenge by investing more time their studies and coursework.

Faculty expectations and student investment in critical thinking, analysis, and synthesis are not exclusive to face-to-face courses. In their study of campus-based students enrolled in at least one online course, Robinson and Hullinger (2008) found that these students reported completing assignments that required memorization, analysis, synthesis, making judgment, and application in addition to working harder than they thought possible to complete said assignments. However, after disaggregating the indicators, they found that the experience of online learners included an overemphasis on memorization and lower levels of making judgments on course content. This finding supported previous research on online courses that suggested students do not engage in higher order thinking skills in online discussion boards (Garrison, Anderson, & Archer, 2001; Vaughan & Garrison, 2005). Archer (2010) argued that instructors use discussion boards to identify topics and spark initial discussion and debate; it is not the medium of instruction but the quality that matters. Using Bloom's Taxonomy to analyze instructional practices to engage students in online discussion boards, Baglione, Nastanski, and Bowen (2011) identified essential conditions for high-level, critical thinking. Instructors who include personal information and interests, actively manage and participate in discussion threads, and clearly communicate the purpose of the topic report greater indications of Bloom's highest levels—analysis, synthesis, and evaluation.

In recent years, learning management systems have provided new tools for online assignments and interactions, adaptive testing and video “hangouts.” Additional research is necessary to understand the level of effort associated with the expanding set of tools available to online instructors.

Perhaps at a more basic level than student effort is the amount of time necessary to engage in online courses. Ishtaiwa and Abulibdeh (2012) found that the online components of a blended course increased student workload as a result of learning to use technology for academic purposes; reading and watching large amounts of online content; and reading, analyzing, and responding to a wide-range of topics covered by their peers. These findings support previous research on the student perceptions of distance education courses (Hara, 2000). Students reported that troubleshooting technology issues, replying to multiple discussion threads, and reviewing and analyzing additional content as far more time consuming than face-to-face classes and discussions. The research suggests that the time commitments essential for engagement for active and collaborative learning, examined in the next section, in online courses is substantial. Further research should investigate how additional workloads affect students’ overall academic and social engagement.

Active and collaborative learning. Researchers have advocated the positive impact of active and collaborative learning activities on student development and learning (Bruffe, 1993; Goodsell, 1992; Murray & Lang, 1997; Pascarella & Terenzini, 1991). Though possible to have one without the other, learning that is both active and collaborative “reforms classroom learning by changing students from passive recipients

of information given by an expert teacher to active agents in the construction of knowledge” (Goodsell, 1992, p. 7). Its constructivist nature presumes that learning is iterative and occurs when students “seek out materials that relate to and elaborate their current knowledge, rather than memorise the contents of materials” (Coates, 2006, p. 139) in individual silos. Activities found to promote active and collaborative learning include Freshman Interest Groups (FIGs), learning communities, linked courses, class discussion groups, and case study debates (Baxter Magolda, 1998; Goodsell, 1992; Murray & Lang, 1997). However, the most common form of instruction within higher education, the lecture, is largely passive for the student. In her study on redesigning large, introductory courses, Twigg (2009) denounced the lecture for its inability to engage students:

The lecture format neither encourages active participation nor offers students an opportunity to learn collaboratively from one another. It does not provide adequate tutoring assistance, and consequently, students receive little individual attention. Even though individual help may be available during office hours, only a small fraction of students take advantage of this help. Most students simply study the text, turn in their homework, and take quizzes and exams. (p. 147)

Most often the alternative to online and blended courses is not Mark Hopkins on one end of a log, but a passive lecture.

Previous research has debated the capacity of online learning communities to create active and collaborative learning environments for classes with as many or more students than campus-based lectures. Dreyfus (1998) warned of student anonymity online as an obstacle to the formation of “the sort of unconditioned commitments and strong identities necessary for turning information into meaningful knowledge and the passionate involvement necessary for developing the skills to use it” (p. 113). Without

the immediate accountability of face-to-face class time, students are less motivated to delve deep below surface-level content transfer. On the other hand, Chester and Gwynne (1998) found that two-thirds of the students in their study reported higher levels of participation in their online course than their face-to-face courses. Though some students described online anonymity as an opportunity for students to make hurtful comments toward one another, they believed the benefits outweighed these costs. Students indicated that the additional time to form their responses before sharing with the professor and peers and the anonymity of race and gender encouraged them to participate more frequently in online classes. With technological advances, learning management systems now tie course activity to student accounts, which allows faculty to keep students accountable for their (in)actions and maintains the positive aspects associated with online anonymity.

Furthermore, online learning environments create opportunities for students to develop the skills to effectively learn on their own, an important component of becoming a lifelong learner (Aggarwal & Bento, 2000; Robinson & Hullinger, 2008). As Goodsell (1992) noted, such active participation in the construction of knowledge is critical to learning and development. The “guide on the side,” as opposed to “sage on the stage,” approach to teaching commonly associated with online education “allows the students to have ownership over their learning process, encouraging active learning” (Rabe-Hemp, Woollen, & Humiston, 2009, p. 215). In their study of 283 students enrolled in online and face-to-face courses at a campus-based research university, Rabe-Hemp, Woollen, and Humiston suggested that this professor-as-facilitator pedagogy in online education

also promotes collaborative learning. When instructors remove the option to passively listen to a lecture, students work together to construct knowledge and test ideas.

With regard to the iterative nature of active, collaborative learning, learning management systems provide faculty with the tools for quick, constructive feedback. According to Palloff and Pratt (2005), formative online assessment can itself be collaborative through peer evaluation, which encourages the student to engage with the course content and reflect on her understanding of the material. Even with multiple-choice assessments, students who have collaborated to design and critique assessment tools for their courses reported deeper understanding of the material and increased participation (Nicol, 2007). Online assessment needs not to rely solely on memorization; instructors have the capability to challenge student analysis, synthesis, and evaluation of course content.

Despite unique online tools, a student's level of active and collaborative learning may depend more on the student and less on the learning environment. In his study of campus-based students enrolled in online courses, Coates (2006) found that despite the tools provided by learning management systems, online courses at campus-based institutions typically engage the same students who are engaged in their face-to-face courses. New research is necessary to examine the capacity of new online course designs and tools to promote active and collaborative learning.

Student-faculty interaction. In their framework for assessing institution-wide educational practices, Kuh et al. (2005) indicated the impact of student-faculty interactions on academic and developmental elements could be great. With regard to

course content and critical thinking, “students learn firsthand to think about and solve practical problems by interacting with faculty members inside and outside of classrooms” (Kuh et al., 2005, p. 51). Furthermore, cognitive development occurs as a result, whether directly or indirectly, of a wide range of student-faculty interactions, including conversations centered on course content or the student’s development (Astin, 1993; Endo & Harpel, 1982; Kuh & Hu, 2001; Terenzini, Springer, Yaeger, Pascarella, & Nora, 1994). In addition to their ability to improve student cognition, faculty members act as mentors and guides who role model what it means to be an academic and validate students as members of the discipline, institution, and academe, in general (Kuh et al., 1994; Pascarella, 1985).

However, according to a major study on student-faculty interaction by Hu and Kuh (2002), only two types of interaction – talking with a professor outside of class and working with faculty on a research project – have a direct, positive effect on student learning and development. Though this study aggregated learning and development outcomes, Endo and Harpel (1982) found the frequency and quality of interactions outside class, particularly informal conversations, were positively related to desired educational outcomes.

How do these interactions occur in and out of online classes at campus-based institutions? How do they affect student learning and development? The online educational landscape is rich with opportunities for student-faculty interactions, ranging from direct messaging, discussion boards, faculty and student videos, and lecture- and screen-capture technologies. Ishtaiwa and Abulibdeh (2012) found that online

technologies, such as discussion boards, blogs, and email, in a blended course improved student interactions with faculty. Students pointed to the asynchronous nature of these tools and the ability to organize and develop comments and questions as the primary advantage over face-to-face interactions during class or in-person office hours. With recent technological advances in learning management systems and synchronous and asynchronous communications, more research is necessary to understand the impact of online course environments on faculty-student interactions.

Supportive campus environments. In their study of Documenting Effective Educational Practices (DEEP), Kuh et al. (2005, 2010) elaborated on the importance of creating supportive campus environments. In addition to providing support structures for academic and social development, they argued for institutions to cultivate caring and helpful relationships among students, faculty, and staff and aid students with non-academic responsibilities. In conjunction with appropriate levels of academic challenge, Sanford (1967) suggested that such support is essential for student development. Universities should engage students in increasingly demanding challenges, provide opportunities for assistance, and encourage students to actively seek support with regard to learning and development.

Though researchers have referred to this benchmark of engagement as a seamless learning environment (Kuh, Douglas, Lund, & Ramin-Gyurnek, 1994), holistic view of talent development (Astin, 1985), and distributed learning environments (Coates, 2006; Rumelhart & McClelland, 1986), they have agreed that certain campus programs and policies lead to supportive environments. Transition programs, educational programs in

residence halls, academic advising, campus safety nets, leadership development, and support services for special populations – transfer, commuter, and first-generation college students – are some of the broad categories of campus support that previous research has suggested positively affect student learning and development (Astin, 1993; Kuh et al., 1994). More so than other benchmarks of engagement, supportive campus environments represent the “accountability of the university in the educational process” (Coates, 2006, p. 128). Yet, as Pace (1979) noted, these environments are insufficient for student engagement. Institutions must be held accountable for creating supportive environments, but students are ultimately responsible for taking advantage of campus resources in a timely manner.

Within the context of online higher education, the research on supportive campus environments has focused on the technological support necessary to access course materials and remotely communicate with instructors and peers (Taylor, 2002). Many of the studies that investigate online support services do so within the context of distance education and indicate that distance learners want flexible, online access to the same services offered to on-campus students (Dare, Zapata, & Thomas, 2005; LaPadula, 2003). Studies that contrast campus-based students’ engagement in face-to-face and online support services have reported mixed results. Bowler and Raiker (2011) found that students enrolled in a face-to-face course enjoyed the academic and social banter of a synchronous chat during an online tutorial. Students also reported increased participation over their face-to-face tutorials, citing the opportunity to organize and type their thoughts as a key difference. However, Kirkpatrick (2005) argued that students become lost in

high-pace chats and contribute nonsensical chatter when their identities remain anonymous. Though these studies reinforce the notion that students seek out traditional support services online, their findings may not translate well to campus-based learners who enroll in online classes.

The dearth of research on what constitutes a supportive campus environment for such learners, let alone its impact on engagement, highlights the issue's complexity. Robinson's (2006) dissertation on engagement of online learners at both fully online and campus-based institutions provides an example of how support for online learners is a difficult concept to grasp. Although she used NSSE's benchmarks to study engagement in online learning, Robinson decided to exclude this engagement benchmark because it refers to overall support for the student and not exclusively to the online "in-class" experience. Her study's survey did not distinguish between face-to-face and online campus support.

Enriching educational experiences. Much of the student engagement research has focused on out-of-class activities that complement the learning and development found in formal, academic environments (Astin, 1993; Feldman & Newcomb, 1969; Pascarella & Terenzini, 1991, 2005). Such activities provide students the opportunity to experience diversity, synthesize and apply their knowledge, and make their learning more meaningful (Kuh et al., 2005). Coates (2006) distinguished these enriching educational experiences into four clusters. The first cluster consists of social and cultural activities and includes employment and internships, paid or unpaid; intramural or competitive sports; studying abroad; and social student organizations. Academic interactions with

peers make up the second group, which includes learning communities, academic student organizations, and casual academic interactions. The third cluster involves students' out-of-class academic activities, ranging from use of the library and support services – both physical and online – to collaboration on a research project to attendance at academic and developmental workshops. Activities centered on “existential and ethical reflection” (Coates, 2006, p. 143) form the fourth cluster. Such experiences encourage students to test their beliefs, knowledge, and values and engage students in broad discussions with a diversity of ideas.

In their study on the type of social and cultural activities found in the first cluster, Pascarella and Terenzini (2005) concluded that students' “institutional commitments exert an important and positive effect in shaping their persistence decisions” (p. 426). Although not as powerful as out-of-class academic activities, complementary social interactions with peers tend to positively influence measures of student learning and moral development (Astin, 1993; Pascarella & Terenzini, 2005; Rest & Narvaez, 1991; Whitt, Edison, Pascarella, Nora, & Terenzini, 1999). Higher education professionals often view these activities as the primary benchmark of student engagement on campus.

Little literature on enriching educational experiences has addressed online learners, whether distance or campus-based. One explanation for the dearth of research in this area is the difficulty in defining “out-of-class” experiences in an asynchronous online course. In a 2011 “Dear Colleague” letter from the United States Department of Education (DOE) Office of Postsecondary Education, the DOE informed colleges and universities

there is no “seat time” requirement implicit in the definition of a credit hour. An institution that is offering asynchronous online courses would need to determine the amount of student work expected in each online course in order to achieve the course objectives, and to assign a credit hour based on at least an equivalent amount of work as represented in the definition of credit hour. (pp. 6)

If students are able to complete academic work within a structured timeframe yet at the student’s convenience, the line between in-class activities and out-of-class, complementary activities—such as email conversations with a professor, debates on a discussion board, or watching posted videos and tutorials—becomes blurred. This study categorizes such complementary activities as indicators of active and collaborative learning. Indicators of enriching educational experiences include online and face-to-face activities grouped within Coates’ (2006) abovementioned four clusters.

As discussed in the earlier section on level of academic challenge, students in blended courses report an increased workload over traditional, face-to-face courses (Ishtaiwa & Abulibdeh, 2012). Although the asynchronous nature of the online course components provided “enormous amounts of information” and the flexibility with regard to when students completed coursework, the amount of time needed to read, analyze, and respond to the additional content and wide-range of topics covered in her classmates’ posts prevented students from interacting effectively online. Does this additional requirement of time and effort pull students away from enriching educational experiences outside the classroom, be it physical or virtual?

Summary. This section explores the phenomenon of student engagement as a measure of educational quality. Previous research on engagement focuses on either a) students at campus-based institutions exclusively enrolled in face-to-face courses or b)

students enrolled in online distance education programs. Research that has focused on students who are enrolled in online courses at campus-based universities has used large data sets to conduct quantitative studies. Therefore, the current research landscape in this area has adopted traditional norms and definitions of student engagement and lacks the nuance and description provided by qualitative research. This dearth suggests that a study of undergraduate engagement of students enrolled in online courses should allow for students' voices and participant observation to understand how these benchmarks, perhaps along with other unanticipated indicators of engagement, manifest at modern research-intensive universities.

Student Inputs in Student Engagement Model.

As indicated in the model represented in Figure 1 (p. 21), student engagement occurs at the intersection of institutional conditions and student behaviors. A student's academic preparation, family and peer support, motivation to learn, socioeconomic status, and demographics can affect her level of engagement, persistence, and learning outcomes (Kuh et al., 2006). Prior research has shown substantial gaps in retention and graduation rates along lines of gender, race/ethnicity, and socioeconomic status (National Center for Public Policy and Higher Education, 2005). In their review of student characteristics and pre-college experiences, Kuh et al. (2006) argued that the "pronounced differences among men of color and students of moderate of economically disadvantaged means are issues that warrant further consideration" (p. 19). Understanding the impact of online learning environments on their engagement is one line of research that may help improve learning outcomes for these student populations.

Although the research on student characteristics and engagement by online or distance education students is sparse, researchers have examined the effects of student characteristics on the retention of online learners (Ice, Gibson, Boston, & Becher, 2011; Ke & Kwak, 2013). This research has limited application to this study as the focus tends to narrow on differences of distance and on-campus students, often highlighting the age gap between adult, distance education learners and traditional, residential students (Botsch & Botsch, 2012). Cochran, Campbell, Baker, and Leeds (2014) conducted a study on course-level retention of students enrolled in online courses at a campus-based university. Using univariate analyses and logit regression models, the authors examined the capacity of student characteristics to predict student retention in online courses at a regional university. Cochran and colleagues reported that academic experience, as measured by earned credit hours, was the strongest factor determining potential withdrawal from an online course. Upper-classmen, with a greater incentive to remain in a course, more experience with college-level coursework, and who by definition have persisted in college, are less likely to drop an online course. Across the sample, a grade point average below 3.0 and previous withdrawal from an online course significantly increased a student's likelihood of dropping an online course. Other factors found to increase the probability of withdrawal in a majority of the academic disciplines included being male and having a loan or need-based grant, suggesting there is an academic capital component in such courses.

Student use of and comfort with technology is a student characteristic under much scrutiny in higher education research. Many researchers in the early twentieth century

warned of a new generation of “digital natives,” in possession of technological skills and learning styles reliant upon digital media previously unseen (Frاند, 2000; Prensky, 2001). However, beyond the debate on digital natives, prevailing meta-analysis on learning styles contradicts the notion that instruction matched to a student’s preferred learning style results in better performance (Pashler, McDaniel, Rohrer, & Bjork, 2009). Recent research has suggested that the relationship between the new generation of traditional-age college students and technology is far more complex (Bennett, Maton, & Kervin, 2008). Even though students have incorporated digital media into their lives, these skills do not significantly translate into proficiency with online learning technologies or justify their classification within a new “learning style” (Thompson, 2013). Further, faculty members may provide a disservice to students if they assume students will quickly and effectively grasp online learning tools without proper instruction (Ishtaiwa & Abulibdeh, 2012). Difficulties with technology may lead to poor engagement as students invest time in resolving these issues or disengage due to frustration. Further research should examine the role of digital skill sets in the engagement of students in online courses.

The History and Context of Online Education

Rise of online learning through distance education. Online education led to the proliferation of distance education, even while it challenged distance education’s core principle of independent learning. Distance education’s roots are in correspondence courses with materials exchanged between instructor and student through the mail. This model functioned, and to a certain degree continues to function within current distance

education models, on the premise that learning is an individual activity pursued by the student. As such, the student becomes self-paced, self-motivated learner who shoulders “more responsibility for learning, freeing the instructor of the ‘custodial’ duties of teaching” (Saba, 2003, p. 4). By providing media for synchronous and asynchronous content delivery, communication, feedback, and assessment, online courses presented opportunities for students to actively engage, interact, and collaborate with instructors and peers.

The development of fully online courses and degree programs is the result of a decades-long evolution, beginning with electronic communication and data networks that predate the Internet. According to Harasim (2000), many of the early researchers working on the Advanced Research Projects Agency Network (ARPANET) in the early 1970s also held faculty positions at research universities. Though ARPANET was intended to be a file-sharing system, its email and computer conferencing components quickly became mechanisms for collaborative learning across institutions.

Email continued to connect students and researchers across ARPANET throughout the 1970s, but the introduction of networked classrooms in the K-12 system advanced the pedagogical capabilities of online learning in the 1980s (Harasim, 2000). Research studies found these connected classrooms, in programs such as the InterCultural Learning Network (ICLN) and the Canadian Réseau d'Ateliers Pédagogique Pilote (RAPPI), improved student writing skills, cognition, and cultural awareness (Harasim, 2000; Riel, 1996).

These early successes paved the way for the first fully online, college-level courses offered through the Western Behavioral Sciences Institute (WBSI) in the mid-1980s. The challenge for the instructors, and all pioneers in online education and e-communication, was to adapt “the computer from a *tool* for individual users to a *medium* for group activity” (Feenberg, 1993, p. 196). Through trial and error, WBSI faculty developed curricula that encouraged participation and connected students, typically 20 or fewer to a class, with faculty and peers. Although not yet formalized, these faculty members designed online learning environments that engaged students through active and collaborative learning and faculty-student interactions. Campus-based universities began to offer online courses during the late 1980s and early 1990s through their distance education programs to reach students unable to attend classes on campus (Harasim, 2000). These courses typically were offered within graduate degree programs and were designed to expand instruction to students unable to attend classes on campus. In this early phase of online higher education, online courses did not affect the engagement of campus-based undergraduate students.

Emergence of online education at MRUs through blended learning. Garrison (2011) points to the arrival of blended courses as the turning point toward the mainstream adoption of online education in campus-based, undergraduate education. Blended courses provided instructors and students an opportunity to maintain some face-to-face course meetings and supplement course materials and interactions in online environments. The research suggests that blended courses, or flipped classrooms, maintain or increase student satisfaction with faculty interactions and active and

collaborative learning (Dziuban, Moskal, & Hartman, 2005; Twigg, 2009). The replacement of one or two lectures a week with online content, discussion boards, tutorials, or assessments not only requires students to synthesize and apply course materials and interact with classmates, the course design provides the faculty member “more time to give to individual students and enhance the quality of the course through sustained course development and innovation as well as teaching development” (Garrison & Kanuka, 2004, p. 100).

Not all studies on blended learning find positive effects on learning. A recent preliminary study at a small, elite college reported no significant difference between face-to-face and blended course sections across a variety of learning outcomes, including student satisfaction with faculty, students, and academic support (Lape, Levy, Yong, Haushalter, Eddy, & Hankel, 2014). However, the researchers’ suggest their initial findings may be specific to institutions with small class sizes and highly motivated, engaged students.

The obvious distinction between blended and online courses is the retention of face-to-face class time in blended learning environments. A U.S. Department of Education sponsored meta-analysis of face-to-face, blended, and online courses found no significant difference in learning outcomes between students in blended and online courses (Means, Toyama, Murphy, Bakia, & Jones, 2010). Yet, when compared to face-to-face courses, students in blended courses had more substantial learning gains than those in purely online courses. Means and colleagues suggested this inconsistency might stem from other conditions set by the instructor:

Studies using blended learning also tend to involve more learning time, additional instructional resources, and course elements that encourage interactions among learners. This confounding leaves open the possibility that one or all of these other practice variables, rather than the blending of online and offline media per se, accounts for the particularly positive outcomes for blended learning in the studies included in the meta-analysis. (p. 52)

Beyond face-to-face class time, blended courses often include other conditions that lead to greater student engagement. At MRUs, where instructors and students share physical and virtual space, do online courses include these conditions?

Though blended courses are not the focus of this dissertation, the blended course research introduces a foundational concept for this study. Whereas studies on online courses at campus-based institutions largely ignore face-to-face engagement, studies on blended courses acknowledge and analyze both online and face-to-face components of engagement. I embrace this tradition of blended learning research in my examination the engagement of MRU undergraduates enrolled in at least one online course.

Current state of online education. Online learning environments represent a growing portion of the instructional landscape in American higher education. According to the report *Grade Change: Tracking Online Education in the United States*, the number of students enrolled in at least one online course – defined by the authors as a course in which 80% of content is delivered online – increased by 411,000 from 2012 to 2013, raising total online enrollment to 7.1 million students (Allen & Seaman, 2014). The report utilizes data from the Sloan Consortium, an organization dedicated to the integration and proliferation of online learning into mainstream education, but stresses that this 6.1% growth is the lowest recorded since Sloan began their survey in 2002. Despite slowed growth, 6.1% still outpaced overall enrollment growth. Due to this gap in

the online and overall enrollment rates, the 2013 fall semester witnessed the highest recorded percentage, 33.5%, of postsecondary students enrolled in at least one online course (Allen & Seaman, 2014).

Though the research on online education at campus-based universities has not disaggregated public MRUs from other four-year institutions, virtually all of the over 200 doctoral/research universities and 1,700 public universities that responded to the Online Learning Consortium's survey reported having at least one online course or degree program (Allen & Seaman, 2014). Many elite MRUs have joined consortia, such as EdX and Coursera, to offer massive open online courses (MOOCs), to provide course content and instruction at a reduced or no cost (Lewin, 2014). For instance, Coursera, now led by former Yale president Richard Levin, has partnerships with over 100 institutions that offer hundreds of courses, with total enrollment surpassing seven million students. Though MOOCs are largely not for credit, and consequently face retention challenges (Lokken & Mullins, 2014), they represent a substantial investment in and commitment to online courses by MRUs. Online education is no longer a niche delivery model for distance education and fully online institutions.

Online pedagogies. As previously discussed, the medium may not be the key as much as what the instructor and student do within the learning environment. That being said, online courses lend themselves to certain pedagogies. Utilizing Garrison, Anderson, and Archer's (2001) community of inquiry model as a framework, Anderson and Dron (2011) describe three generations of distance education pedagogy. Though classified as distance, the generations apply to online education as defined by this study. The first

generation was the cognitive-behaviorist pedagogy. The primary components of this this pedagogy are transferring course content, clear learning objects, and reduced interactions with instructors and peers. This model often reflects correspondence courses in which instructors supply learning materials and students demonstrate knowledge gains, while critical thinking skills are not a major concern. As communication technologies advanced to become more interactive, online teaching methods and practices evolved.

The second generation, social-constructivist pedagogy, adopted its framework from the theories of Piaget and Dewey with regard to the personal construction of knowledge (Anderson & Dron, 2011). With two-way communication, instructors were no longer limited to providing lessons and guidelines for individual study; they could guide academic and social interactions among students. The social-constructivist model embraced student engagement, in particular active and collaborative learning and student-faculty interactions. The third generation, connectivist pedagogy, relies heavily on networks of information and contacts to apply knowledge to current problems. In this model, the instructor “assumes that information is plentiful and that the learner’s role is not to memorize or even understand everything, but to have the capacity to find and apply knowledge when and where it is needed” (Anderson & Dron, 2011, para. 23). The advent of cloud computing allows for the digitization of information storage, from online calendars to Wikipedia to massive online libraries. The goal of learning is to access the necessary information and build the capacity to apply that knowledge to real world situations. Though presented as generations, these pedagogies represent modern online teaching styles. As it is important to understand *how* students engage, this study

recognizes the importance of *how* faculty members design online courses and either use or do not use technology to create and promote opportunities for engagement.

Transactional distance. In his attempt to define distance education and formulate a theoretical framework for research on the topic, Moore (1993) established the theory of transactional distance, "a psychological and communications space to be crossed" (p. 23) by instructors and students. In essence, the theory emphasized the psychological separation and potential for misunderstanding that is unique to instruction outside the classroom. The transactional distance in an online course depends upon three components: dialogue between instructors and students, the course structure's ability to adapt to the needs and objectives of instructors and students, and the autonomy of students in their learning (Moore, 1993). Subsequent studies have utilized the theoretical framework to examine online persistence (Gokool-Ramdoe, 2008; Parker, 1999) and peer-to-peer learning (Wikeley & Muschamp, 2004).

In their meta-analysis, Gorsky and Caspi (2005) found that as a scientific, empirically tested theory, transactional distance lacks construct validity due to ambiguous definitions for the three components. Without operational variables, transactional distance's value rests in its emphasis on the psychological and communication gaps, more so than the physical separation, that leads to misunderstanding and stifles learning (Gorsky & Caspi, 2005). Founded in distance education research, this theory may add context to the relationships between instructors and students in online courses at campus-based institutions.

Summary. This section examines the context of online education at the American

research university. Though online enrollment has slowed, it still represents a growing portion of the student population in higher education. The advent of blended courses at MRUs has led to research on the interplay of students' face-to-face and online engagement, finding strong a strong association between blended learning and student engagement. Yet, as has been cautioned for decades, online and blended courses as instructional media should not receive the credit for enhancing student engagement (Clark, 1983);

Rather, it is the combination of elements in the treatment conditions, which are likely to include additional learning time and materials as well as additional opportunities for collaboration, that has proven effective. The meta-analysis findings do not support simply putting an existing course online, but they do support redesigning instruction to incorporate additional learning opportunities online. (Means et al., 2010, p. 51).

Along with the conditions that provide opportunities for and encourage engagement, this study explores the behaviors of students in MRUs' online courses associated with increased time and effort on their educational activities.

Theoretical Framework

The above literature review examines student engagement from a modern perspective, reflective of today's college student and the current modes of instruction, challenge, and support at American research universities. This study uses Kuh's student engagement benchmarks not only as measures of educational quality, student investment of time and effort, and institutional support, but also as the backbone of this study's organizational and theoretical structure. This study employs developmental ecology theory to situate engagement in a broader context of the undergraduate student experience.

Developmental Ecology

Student engagement provides a strong theoretical context to examine the student behaviors and institutional conditions associated with quality higher education, often observed and reported as educationally purposeful activities. Yet, this study intends to understand the processes – the *how* and *why* – in which learning and development occur for students enrolled in online courses at MRUs. In their proposal for an ecological approach to researching student learning and development, Renn and Arnold (2003) argue that traditional psychosocial measures isolate the significance of student characteristics and experiences on college outcomes, “but the processes leading to those outcomes have rarely been the focus of research” (p. 263). Just as Pace asserted that certain educational processes have more inherent value than others, regardless of their outcomes, developmental ecology places great value on the individual’s experiences. To supplement student engagement theory, I utilize development ecology theory, which provides a broad perspective of the undergraduate experience.

Developmental ecology is rooted in the anthropological theory of human ecology, which examines human survival and growth with the basic premise that humans are interdependent with their environments (Bubolz & Sontag, 1993). Environments influence development; yet at the same time, individuals influence their natural and social environments to adapt to their needs. Bronfenbrenner (1974) applies this theory to human psychology to build his developmental ecology model. Arguing that development cannot be reduced to a few attributes or the linear progression through a model, “Bronfenbrenner adapted Kurt Lewin’s equation: *Behavior is a function of the interaction of the person*

and the environment to development is a function of the interaction of the person and the environment” (Evans, Forney, Guido, Patton, & Renn, 2011, p. 160). Applied to the research university, student development is dependent upon student characteristics, the campus environment, and their points of transaction. Bronfenbrenner’s person-centered model focuses on the processes in which interactions with the environment influence development.

The four primary components of this model are person, process, context, and time (PPCT). The person is at the heart of this model. The person component includes internal attributes that encourage or inhibit development through the proximal processes. Bronfenbrenner (1993) proposed individuals possess four “developmentally instigative characteristics.” The first type consists of those that invite or deter engagement or responses from others. Bronfenbrenner describes the second type as “selective responsivity,” which describes an individual’s inclination to explore her immediate environment. The third set of characteristics consists of one’s “tendency to engage or persist in progressively more complex activities,” dubbed “structuring proclivities” (p. 12). The fourth type, “directive beliefs,” consists of qualities that shape how one views her place within her environments. For students engaged in online courses, these characteristics may include self-efficacy, motivations for taking online courses, comfort using technology, or other traits that influence their level of interaction with their online and on campus environments.

Process is another vital component of the model and represents the actual interaction between the person and environment. These proximal processes, as described

by Bronfenbrenner (1993), should be increasingly complex and include adequate support for optimal growth. According to Evans et al. (2011), student development theories “recognize these functions as Astin’s (1984) theory of involvement and Sanford’s (1966) idea of challenge and support” (p. 161). Yet, most engagement studies’ “widespread use of regression techniques serves to isolate the effects of pertinent variables rather than investigate the synergistic interactions among traits and experiences” (Renn & Arnold, 2003, p. 263). Discovering *how* these points of interaction affect the engagement of online learners must come before researchers designate these student traits and campus environments as variables in a statistical model.

According to Bronfenbrenner, context consists of four concentric rings center around the individual. The innermost layer, the microsystem, includes the proximal processes; it is the immediate settings of the lived experience (Renn, 2003). This contextual level provides the greatest opportunity for students to engage with campus peers, faculty, and staff. Strange and Banning (2000) suggest that for learning and development to occur, these immediate settings must make students feel safe, supported, and included. Much like engagement’s call for institutions to provide and encourage student investment of time and effort in fruitful activities, developmental ecology posits, “unless appropriate complementary characteristics appear on the environmental side, we can hardly expect developmental processes to be substantially affected” (Bronfenbrenner, 1993, p. 15). This position aligns with Barker’s (1968) theory of behavior setting, which suggests that “that people tend to behave in highly similar ways in specific environments, regardless of their individual differences as persons. Thus, human environments seem to

have a coercive influence upon human behavior” (Banning, 1978, p. 7). These theories highlight the impact of physical and digital environments play on student engagement in online courses.

The second contextual level is the mesosystem, which represents the interaction of microsystems, such as the balance of schoolwork and the responsibilities of a part-time job. In the mesosystem, a student’s immediate settings “may reinforce one another or they may act against one another, drawing attention to discrepancies and causing the student to confront contradictory processes and messages” (Renn & Arnold, 2003, pp. 270-271). This confrontation provides students with further opportunities to engage with campus resources, faculty, and peers or to retreat from the campus environment.

The exosystem includes contexts that do not include the individual but affects her immediate environments (Bronfenbrenner, 1993). For a college student, this level may include curriculum development within an academic department or institutional policymakers’ decision to increase the amount of online course offerings. Though not as direct as those in the microsystem, the actors, interactions, and policies of the exosystem influence the student’s experience in her immediate settings. The outermost context is the macrosystem, which consists of overarching systems such as culture, religion, and values pertaining to gender, race/ethnicity, and meritocracy (Bronfenbrenner, 1993; Renn & Arnold, 2003). Each level of context has the potential to influence inner levels. Renn and Arnold’s (2003) model found in Figure 2.1 applies the Bronfenbrenner’s framework to the higher education landscape.

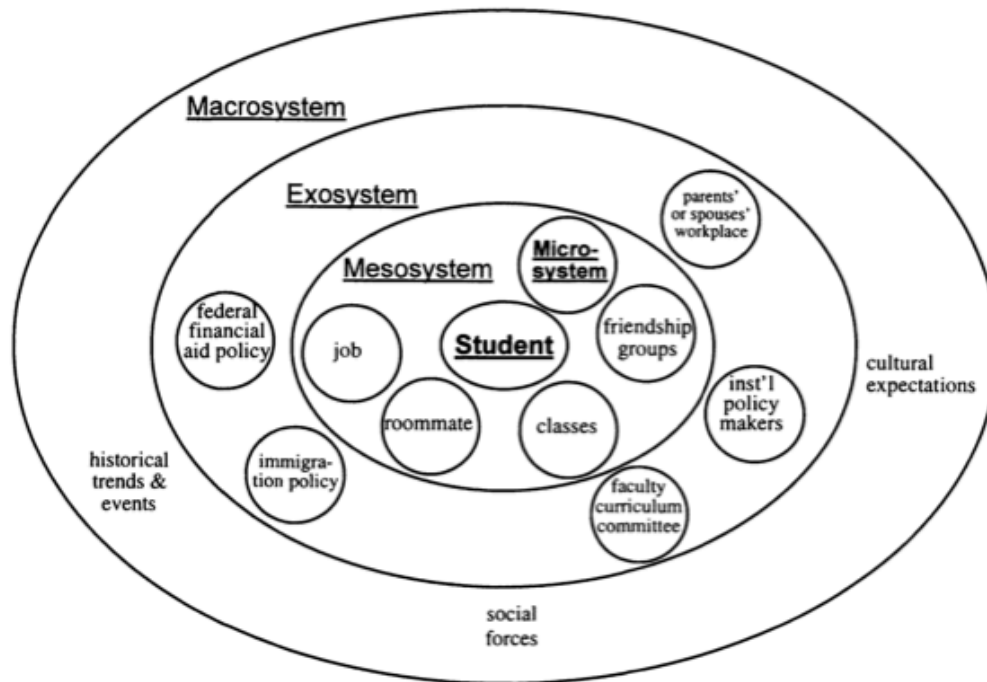


Figure 2.1. Developmental Ecology Model Applied to Higher Education from Renn, K. A., & Arnold, K. D. (2003). Reconceptualizing research on college student peer culture. *The Journal of Higher Education*, 74(3), 261-291.

The model's fourth component is time, both historical and individual (Bronfenbrenner, 1993). Within the context of student learning and development in higher education, Renn and Arnold (2003) suggest the historical time represents the era in which the student attends college and the individual time addresses the sequence of life events experienced by the student. Current students attend college in an age of technological advancement, bringing to campus online competencies and high expectations for online instruction and services (Salaway & Caruso, 2008). As individuals, students have faced and continue to experience major life events, such as marriage, divorce (personal or parental), child rearing, and full-time employment. These

experiences influence student motivations, priorities, and contexts. Bronfenbrenner and Morris (2006) also emphasize the importance of time in the distinction between behavior, which is static, and development, which implies change over time. Viewing engagement benchmarks as measures of the continual processes of learning and development, the component of change over time is essential.

Constructivist Paradigm

As indicated in the developmental ecology frame, this study views the student nested within layers of contexts, within which she interacts with her peers, instructors, and other members of the campus community. How the student constructs their campus engagement sheds light on the impact of immediate layers (e.g. an online course), and distant layers (e.g. institutional policies on online education). Through the adoption of a constructivist paradigm, this study does not assume that truth is objective, but that individuals construct meaning (Glesne, 2011). As opposed to social constructionism's focus on the socially constructed nature of meaning, constructivism "suggests that each one's way of making sense of the world is as valid and worthy of respect as any other" (Crotty, 1998, p. 58). The experience of an individual student or faculty member, and the meaning she makes from it, adds to the understanding of the phenomenon of student engagement. This assumption is key to the foundation of this study's phenomenological approach, which I explore in more detail in chapter three.

Furthermore, the constructivist paradigm provides a strong foundation for the five benchmarks of engagement. Engagement research indicates that learning and development are iterative processes that demand students and instructors explore and

apply challenging course material and reject the passive – and ineffective – transfer of content through lectures and memorization (Smith & MacGregor, 1992). The overarching assumption that meaning derives from an interaction between the person and her environment closely aligns with developmental ecology theory.

Summary

Students' campus experiences, both face-to-face and online, do not exist in a vacuum. Developmental ecology situates student engagement within multiple layers of context. To understand how the context of enrollment in an online course affects engagement, I must recognize the contexts in which students live. Acknowledging the contexts of online education, including the economic, political, and pedagogical, helps in the examination of institutional conditions that may or may not promote educationally purposeful activities. The constructivist paradigm informs my understanding of engagement, particularly active and collaborative learning, and guides my construction of the essence of engagement, the phenomenon I aim to analyze.

Chapter Three: Methodology

Introduction

This study examined the engagement experiences of students enrolled in online courses at a public, major research university. In order to examine *how* online courses influence student engagement with the institution, a qualitative research design was necessary to understand the contexts, processes, and unforeseen phenomena that potentially affect academic and social engagement. The following research questions guided this study:

1. How do students enrolled in online courses at a major research university describe their engagement (defined by NSSE as level of academic challenge, active and collaborative learning, student-faculty interaction, enriching educational experiences, and supportive campus environment)?
 - a. What meanings do students make of the educationally purposeful activities related to their online courses?
 - b. How do students associate their motivations for enrolling in online courses with the methods and levels of their engagement in those courses?
 - c. What are student perceptions regarding the ways, if any, the temporal and spatial flexibility provided by online courses affects their engagement, both in online courses and broadly with the university?
2. How do instructors of online courses perceive their course design, facilitation, and direction as having an impact on academic challenge, active and collaborative learning, and student-faculty interaction?

- a. How do their perceptions compare to student perceptions?
- b. How do faculty members describe their motivations and incentives to design and teach online courses?

To understand the student behaviors and institutional conditions associated with engagement, I collected a variety of data. The primary sources of data included in-depth, semi-structured student and faculty interviews. The study supplemented data from these sources with student journaling and document (e.g. course syllabi) analysis.

Research Perspective

Qualitative Research

This study utilized qualitative research methods to understand the phenomenon—the lived experiences of students enrolled in online courses at MRUs—“from the interior” (Flick, 2009, p. 65). Researchers have defined qualitative research by its ontological and epistemological underpinnings, common research methods, and types of data collected (Ormston, Spencer, Barnard, & Snape, 2014). This study employed Denzin’s and Lincoln’s (2000) definition of qualitative research:

Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self...qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them. (p. 3)

This phenomenological study (re)constructed the essence of being an undergraduate enrolled in an online course at a campus-based MRU through student and faculty interviews, syllabi analysis, and student journaling.

Qualitative research is well suited for a variety of intellectual goals. Maxwell (2013) suggested that one such goal is “understanding the particular contexts within which the participants act, and the influence that this context has on their actions” (p. 30). Informed by developmental ecology theory, this study recognized the layers of context within which student engagement occurs. The online course and campus environments are the primary contexts of interest. A second intellectual goal fit for qualitative research is an understanding of the process related to an event or experience (Maxwell, 2013). The focus on the *how* and *why* “does not mean that qualitative research is unconcerned with outcomes” (p. 30), only “that the major strength of qualitative research is in getting at the processes that led to the outcomes, processes that experimental and survey research are often poor at identifying” (p. 30). This study did not attempt to measure learning outcomes but establish an understanding of the engagement process of students enrolled in online courses at a major research university. This foundation is necessary to inform future research on the learning outcomes produced in online courses.

Phenomenological Approach

Informed by the work of Renn and Arnold (2003) and Foster (2008), a phenomenological approach guided this research design. By examining the lived experiences of individuals, phenomenology calls for the “reduction of individual experiences with a phenomenon to a description of the universal” (Creswell, 2007, p. 58). This approach to qualitative research examines individuals’ experiences with regard to the phenomenon and the impact of contexts on their experiences (Creswell, 2007; Moustakas, 1994). This study explored the phenomenon of student engagement within

the context of online courses at MRUs.

A critical component of phenomenology is the intentional consciousness, which suggests that no phenomenon “can be adequately described in isolation from the conscious being experiencing it” (Crotty, 1998, p. 45). The individual is unable to communicate true experiences, or *noema*, devoid of influence from their prior experiences and beliefs (Moustakas, 1994). The key for the researcher is to remain aware of his biases and values, and those of the research participants, theoretical frameworks, and social and cultural contexts, while interpreting the individuals’ descriptions to understand the essence of their experiences. Creswell (2007) argued that qualitative researchers must address this axiological assumption by “actively report[ing] their values and biases as well as the value-laden nature of information gathered from the field” (p. 18). I address my assumptions regarding online courses and student engagement at the end of Chapter One and will recognize them as I collect and interpret data. Further, Chapter Seven includes my interpretation of data alongside participants’ descriptions of their experiences.

Study Design

Research Site

The site for this study was Western State University (WSU), a large, public flagship institution located in the western United States and designated as a Research University/Very High Research Activity (RU/VH) by the Carnegie Foundation for the

Advancement of Teaching (2010)¹. WSU's membership in the Association of American Universities (AAU) distinguishes the institution as one of 62 American and Canadian research-intensive universities on the "leading edge of innovation, scholarship, and solutions that contribute to the nation's economy, security, and well-being" ("About AAU", para. 2). The 60 AAU universities in the United States award more than one-half of all U.S. doctoral degrees, an indicator of both research and educational productivity. For the purpose of this study, these characteristics qualify WSU as a major research university.

In recent years, WSU has become a national leader in course redesign, the purposeful integration of technology into face-to-face courses, and the development of blended and online courses. According to its website, since 2010, WSU has redesigned over a dozen large-enrollment, lower-division courses that house over 20,000 students annually, which created an opportunity for a substantial impact on student learning and development. On WSU's instructional design department's website, the university indicated that many of the courses have moved to blended course designs and implemented web-based learning tools, including video modules, collaborative learning models, and immediate assessment and feedback. Initial results of student learning outcomes found the courses "have yielded higher grades, improved attendance and lower QDF rates" (percentage of students who drop a class or receive a letter grade of D or F). Students are also showing improved performance in subsequent classes" (WSU website).

¹ Western State University is a pseudonym used to protect the identities of student and faculty participants and solicit honest, robust descriptions of their experiences and meaning-making.

The initial outcomes suggest the transformed, blended courses increase the capacity to engage students in the course, but how do they accomplish this task? What is the affect on the students overall engagement with the university?

According to WSU's website, these early successes have led the university to take steps toward realizing similar transformations across campus. Departments with successful course redesigns are eligible for three-year, \$50,000 institutional grants to further implement the changes across additional course sections and new courses. In the Spring 2014 semester, WSU's Provost initiated a series of campus-wide discussions on the future of the undergraduate educational experience at WSU and MRUs in general. The series of presentations and interactive discussions covered "Leveraging Technology for Teaching and Learning," "Undergraduate Residential Experience," and "Profile of a 21st Century Graduate" (WSU website). The conversations largely centered on how blended and online education affects learning and the undergraduate educational experience and highlighted courses involved in the Course Transformation Program. Faculty, staff, and students in attendance sparked discussion on learning outcomes, the effects on faculty workloads, necessary resources for widespread implementation, and the impact on how students engage with and interact with the university.

Other initiatives, such as the development of MOOCs and for-credit online courses, have the potential to expand online education on and off campus. The 2013-2014 academic year marked the introduction of multiple MOOCs offered by the university and taught by WSU faculty (WSU website). The courses have the capacity to reach a far greater number and more diverse range of students than traditional courses.

Though the MOOCs were tied to course credit, the investment of resources and interest from university faculty and students worldwide indicates a strong belief in online courses' capacity to produce desired learning outcomes. WSU's synchronous, for-credit courses were designed as "live-streamed online-courses that require students to login at specific times to watch live lectures, take quizzes and exercises, and participate in chat room discussions" (WSU website). The four synchronous online courses offered in the Fall 2014 semester expand online course options for students and have the potential to alter how students engage with the university.

Participants and Sampling

To ensure diversity among participants' experience with the context of online courses and are diverse in their characteristics and experiences, I used a purposive sampling strategy (Ritchie, Lewis, Elam, Tennant, & Rahim, 2014). This method allowed me to select "individuals and sites for study because they can purposefully inform an understanding of the research problem and central phenomenon in the study" (Creswell, 2007, p. 125). I began this process by identifying course and faculty characteristics identified by the literature as potentially influential in online student engagement: faculty resources, pedagogy, and academic discipline. I first reached out to faculty members who participated as panelists at the provost's faculty workshops on teaching online courses and self-identified as instructors of online, undergraduate courses. As these faculty members generally received assistance in the form of grants or reduced teaching loads, I also sought the help of recommenders to suggest faculty not involved with the workshop series. Recommenders included instructional designers and

policy specialists in the provost's office. These staff members have frequent contact with faculty who teach, or have colleagues who teach, online courses. This snowball sampling technique relied on information-rich recommenders who grasped the type and range of variation that the study aimed to achieve.

Through these methods, I identified six faculty members who taught fully online courses of various enrollment sizes, pedagogical designs, and academic disciplines. I emailed these faculty members to introduce myself, explain the study's purpose, and to request an in-person meeting. After meeting with four of the professors from this group, three faculty members agreed to grant access to and help facilitate communication with the students in their online course sections, which included one each from a social science discipline, the humanities, and media studies. I provide descriptive data for each course below in Table 3.1.

	Social Science	Humanities	Media Studies
Mode of instructional delivery	Synchronous	Synchronous	Asynchronous
Enrollment Size (approximate)	1,600	900	30
Students included in sample ¹	5	7	1
Professors	2	2	1
Semesters taught online at WSU by Fall 2014	3	3	4
Degree requirement fulfilled	One of many options for core curriculum's social and behavioral sciences requirement	State graduation mandate for bachelor's degree at all public institutions of higher education	Writing-intensive course, meets competency requirements

Table 3.1. Descriptive Overview of Online WSU Courses

These faculty members agreed to be gatekeepers, “individuals through whom potential participants are contacted” (Webster, Lewis, & Brown, 2014), and I worked with them to ensure that all students in the courses received or had access to recruitment messages, all intended information was included, and students did not feel undue pressure to participate or not participate in the study. In the two courses—humanities and media studies—that offered participation points to students who replied to an initial questionnaire, students were informed of other options to earn participation points. To remove bias or the perception of bias in the 30-student media studies course, the faculty member received the students’ names once she tallied their semester grades. For the humanities course, teaching assistants (TAs) did not indicate how students earned participation points, so their participation remained largely anonymous. At the

¹ Two students were enrolled in both the social science and humanities courses.

conclusion of data analysis, each instructor received a course-specific brief on engagement themes¹.

The items on this questionnaire aimed to collect descriptive information about each student, including his or her age, gender, race/ethnicity, academic major, student classification by earned credit hours, general engagement, and comfort level with technology; allowed the student time to reflect on engagement experiences, previous online education activities, and recall specific events; and established an initial investment in the study. With assistance of the course instructors, I sent an email (see Appendix A) notification to their students that described the study's purpose and requested their participation in the questionnaire. The first page of the survey instrument required potential participants to consent to the terms of the study, reproduced in Appendix B, and informed them that participation in this study was voluntary and confidential. This consent form also provided my contact information and that of my dissertation committee chair, Dr. Richard Reddick.

After an initial email failed to garner a sufficient response rate in the social science and media studies courses, I modified the recruitment methods to include a gift card drawing for each course. Through the faculty members, students received a new message that informed them that by including their name and email address and agreeing to be contacted with regard to the interview phase of the study, they would enter a drawing for a gift card to the university bookstore. To increase the pool of potential participants in the social science course, I worked with teaching assistants to provide this

¹ As with all shared data and analyses, I assigned pseudonyms to students and, when at all possible, removed identifying information.

new message (see Appendix C) to students who attended the in-person broadcast of the class. It is important to note that this in-person recruitment method may have had an impact on the sample from the social science course. These students may not represent all students who enroll in the online course section. In particular, this recruitment method did not reach students who did not have the ability or interest to attend the in-person broadcast. These recruitment efforts resulted in six students from social science, three students from media studies, and 468 students from humanities who completed the survey and agreed to be contacted for the interview phase of the study.

Using the characteristics addressed in the survey, I used maximum variation sampling to create a diverse sample of students (Miles & Huberman, 1994). This widely accepted, purposive sampling technique allowed me to acknowledge and explore a diverse range of student experiences (Patton, 2002). The dimensions of variation, as defined in the survey questions, helped the selection of a sample that represented a wide range students enrolled in online classes at WSU, as represented in Tables 4.1 and 4.2.

Along with the student participants, I intended to interview the online course faculty for their perceptions on student engagement in their online course sections. One faculty member each from the two team-instructed courses agreed to be interviewed. Despite a robust email conversation over the course of an academic term and winter recess, the faculty member from the media studies course indicated that she did not have time to sit for an interview.

Data Collection

In a similar fashion to previous phenomenological studies on student engagement (Bambara, Harbour, Davies, & Athey, 2009; Foster, 2008), this study used in-depth, face-to-face interviews to understand the participants' experiences. Interviews were semi-structured to allow for flexibility in the topics discussed and took place in a reserved room in a neutral, non-academic building on the university's campus (Moustakas, 1994). This location provided a space outside students' colleges, which encouraged participants to speak freely about their experiences and lent itself to greater privacy and few interruptions. I piloted interview questions with one student with experience in online education to develop a relevant line of questions and to refine data collection plans, including the production of audio recordings and written field notes (Creswell, 2007).

In general, the interviews addressed the two main themes proposed by Moustakas (1994) as central to a phenomenological study: description of one's experiences with the phenomenon (undergraduate's lived experiences) and the effects of certain contexts (online courses and major research university) on the phenomenon. I interviewed students twice, once at the mid-point in the semester and once near the end of the semester. Phenomenology relies on trust between the participant and researcher, and building a relationship over two interview sessions helped to establish rapport and provided a deeper understanding of student participants' experiences. The topics covered by the interview protocols (see Appendices D & E) included previous experiences with online courses, motivations for taking an online course, expectations and realities related to academic challenge, time and effort commitments, general online and face-to-face

engagement with the university, physical workspaces for online courses, impact on non-academic commitments, and online courses' level of integration into the campus experience. Follow-up phone conversations and member checks improved data integrity, reliability, and accuracy.

Triangulation

While phenomenology typically relies upon participant interviews to explore the phenomenon, such “preferred approaches cannot be seen as a rigid guideline” (Creswell, 2007, p. 131). This study used multiple collection methods and data sources to check the findings from one another (Maxwell, 2013). Such triangulation balances the strengths and weaknesses of different techniques and sources to reduce the biases of a single method. Therefore, I used additional qualitative methods, including syllabi reviews, student journaling, and instructor interviews to compare and contrast participant, peer, and instructor perceptions of student behaviors and institutional conditions to the perceptions reported in student interviews. Though a less common data source than in-depth interviews, “journaling is used in phenomenological research studies to record participant experiences in their natural contexts” (Hayman, Jackson, & Wikes, 2012, p. 27). For accurate descriptions of their physical workspaces and in-class experiences, student participants enrolled in synchronous online courses recorded journal entries during two class meetings. Faculty interviews provided a data source for perspectives that both challenged and reinforced those of the student participants. Through semi-structured interviews (see Appendix F for the protocol), two faculty members shared their

views on student engagement and the integration of the course into the campus experience.

Data Analysis

This study employed a substantive, thematic analysis, “which involves discovering, interpreting and reporting patterns and clusters of meaning within the data” (Spencer, Ritchie, Ormston, O’Connor, & Bernard, 2014, p. 271). Along with a research assistant, I transcribed interview recordings and reviewed all completed transcriptions while listening to the original audio recording. I then organized field notes and document analyses to align my data sources. Moustakas (1994) referred to this stage as horizontalization, during which I highlighted quotes and identified topics that represented the nature of the interviews. This initial open coding, combined with themes from student engagement literature review, provided a basic thematic framework for the analysis. As suggested by Spencer et al. (2014), the next step in data management was indexing and sorting, which involved labeling and annotating data to group responses across participants under certain topics and themes. Subsequently, I reviewed and refined the initial framework for a more accurate account of student engagement.

The final stage of the data analysis called for a further splitting and splicing of data (Dey, 1993) to develop higher level, abstract data classifications. The first step in this stage was to link data points through themes and patterns to make the “connections between experiences, behaviours and perspectives, or between expectations and outcomes” (Spencer et al., 2014, p. 285). Multiple data sources provided deep, and occasionally conflicting, interpretations of teaching presence, student effort, and

institutional support associated with student (dis)engagement. This step in the data analysis process did not strip away the values and contexts of participants but highlighted the essential components of their unique perceptions. In the final step of data analysis, I developed explanations for why the data “hang together” (Dey, 1993). Though participants provided some explanations explicitly, others needed to be extracted through careful analysis of student motivations, expectations, contexts, and characteristics.

Reliability and Validity

Grounded in constructivist theory, qualitative research studies exist within layers of context and complexity, making the quantitative standard of “replicability” a poor indicator of reliability or validity in such studies. Lincoln and Guba (1985) suggested notions of credibility and transferability as substitutes that speak to the essence of reliability without connotations rooted in the natural sciences. For the purpose of this study, I adopt the view that reliability is “confidence that the internal elements, dimensions, factors, sectors and so on, found within the original data, would recur outside the study population or among a different version of the study sample” (Lewis, Ritchie, Ormston, & Morrell, 2014, p. 356). To maximize reliability, I included rich details in my description of the courses and participants and was transparent in my research and data analysis methods. I interpreted validity to be concerned with “the exactitude of research readings, the extent to which they are supported by explanatory evidence and their capability for drawing wider inference” (Lewis, Ritchie, Ormston, & Morrell, 2014, p. 356). This study used triangulation of data methods and sources (discussed earlier in this

chapter), member checks, and reflexivity to meet these standards and combat validity threats.

To ensure the accuracy and credibility of data and interpretations, I included member checks, described by Creswell (2007) as “taking back data, analyses, interpretations, and conclusions back to participants” for their opinions and feedback. In addition to asking follow-up and clarifying questions during the interview process, I provided student participants with transcriptions and preliminary analyses to gain their views of my descriptions and themes. Maxwell (2013) argued that this member checking is the most valuable way to minimize the risk of misinterpreting what is said and identify my own biases in what I observed.

The influence of the researcher, setting, participants, and research design cannot be eliminated or even minimized in a qualitative study (Maxwell, 2013). From the outset of the study, I recognized my research assumptions in Chapter One. I also acknowledged my own experience with a fully online course helped form the lens through which I viewed online education. During my master’s program, I completed an online course over an abbreviated summer term. Overall, I was disappointed with the academic challenge, faculty interactions, and level of active and collaborative learning that resulted from the course design, instructor’s pedagogy and lack of involvement, and classmates’ efforts. I felt the instructor and students implicitly understood the course was designed for minimal engagement, and therefore, minimal learning. Though I remained aware of my biases, I bracketed, or set aside, my experiences to avoid projecting my values on

participants' experiences (Maxwell, 2013). Glesne (2011) suggested a reflexive process to productively use these inherent influences:

You ask questions of your research interactions all along the way, from embarking on an inquiry project to sharing the “findings.” You ask these questions of yourself and record your reflections in your field log. You ask questions of others about the research process and listen carefully to what they say, noting their answers, and perhaps changing the course of inquiry. You listen to the questions asked of you by research participants and consider how the questions may indicate certain concerns or expectations. You answer fully as you can and then examine why you answered in the way you did. (p. 151)

By acknowledging the influence of my presence as an interviewer and researcher, this study's design was more informed by and findings more reflective of the phenomenon.

Limitations

Being qualitative in nature, this study is methodologically limited in terms of generalizability to populations and reliability. Any findings of this study may not apply generally to all students enrolled in online courses. The contexts of their particular courses, situated at a single institution, limit direct application of any findings. However, the qualitative methods employed in this study may produce “the development of a theory of the *processes* operating in the case studied, ones that may well operate in other cases, but that may produce different outcomes in different situations” (Maxwell, 2013, p. 138 [emphasis in text]). After all, this study sets out to understand the processes of student engagement. Though outcomes may vary, any findings from this study may resonate in other settings and research sites.

Another limitation of the study stems from purposive sampling techniques. Other schemes allow for randomized samples or intend to represent the typical student. Though the cost is less data about any *particular* kind of case, setting, or individual, the benefits

of purposive sampling is a greater representation across student inputs and values and educational contexts (Maxwell, 2013).

Conclusion

Unlike studies on blended learning, research on students enrolled in online courses at research universities rarely recognizes their face-to-face opportunities for engagement and focuses exclusively on course-level engagement. The studies that have examined the engagement of this student population have suggested these courses form a “reasonably independent parallel experience” (Coates, 2006, p. 121) from the students’ lives on campus. With advances in online course design and management, do online experiences enhance, worsen, or supplant face-to-face experiences, or do they still fail to intersect with students’ on-campus engagement? What human elements do faculty members incorporate into the online educational experience? For administrators, faculty members, and policymakers to make informed decisions about the integration and design of online courses at these institutions, this research study employs qualitative research methods to allow for student and faculty voices to describe the nuances of undergraduate education at the modern research university.

Chapter Four: Sample Description and Participant Profiles

The purpose of this chapter is to present a brief profile, or biographical sketch, of each student participant to provide context to his or her experiences and perceptions. In an effort to solicit honest and robust responses through ensured anonymity, I assigned pseudonyms for all participants and provide only general information regarding the academic disciplines in which they major. For each biographical sketch, I present the student's age, classification by semester-credit hour (SCH), semester course load, academic major, race/ethnicity, non-academic commitments, and goals while an undergraduate student. I then present the participant's description of his or her general engagement with WSU structured through NSSE's five benchmarks: level of academic challenge, active and collaborative learning, student-faculty interactions, supportive campus environment, and enriching educational experiences. I conclude each profile with participant descriptions of previous online education experiences and motivating factors for enrolling in one or more WSU online courses. At the end of this chapter, I include two tables with key descriptive and online education data for each participant.

Student Biographical Sketches

Eva

Eva is 18-years old and enrolled in 15 SCH, as is the minimum set by her university-sponsored scholarship program. She is a first-semester freshman who lives on campus and has not declared a major, though she plans to study kinesiology. When asked about her goals while in college, she immediately identified a college degree and then noted, "I want to just effectively communicate and place myself in situations that I

wouldn't be comfortable in and learn how to deal with stuff like that.” Eva identifies as a Hispanic/Latina female and first-generation college student. She has residency in the state, but is not a United States citizen.

Watching her parents—neither of whom graduated from high school—struggle financially, Eva recognized the impact a college degree could have on her life and her family.

As a first-generation college student, I found that it would be to the best of my interest to go to college and better myself just to be able to help my parents because they didn't really have much of an education. Neither of my parents graduated high school, and that was kind of more of like my motivation to make them proud and for them to have a child that goes to a university and is doing well.

Eva indicated that the pride and economic opportunities associated with attending a university, along with an internal motivation to “go above and beyond,” drive her to earn a degree that will “pay off in the long run.”

In addition to being enrolled as a full-time student, Eva works 33 to 34 hours each week as a shift manager at a local fast food restaurant. Her family’s economic situation prevents her parents from providing her with financial assistance for tuition or living costs. Unable to receive federal aid without U.S. citizenship, Eva relies heavily on institutional support and wages from her off-campus job to pay for tuition and living expenses. Her friends and classmates have a difficult time understanding how she balances a full-time employment with taking 15 SCH. “It's like, ‘I don't know how you're doing it. You're working, going to school, you don't have money from your parents.’” For Eva, the balance is a lesson in independence. “You have to work hard for what you have, even though it may not be much at times.”

Eva was involved in many student organizations in high school and intends to become active on campus. She describes participation in student organizations as imperative to the residential college experience. “[Campus] is such a big place, and you feel like you won't belong if you're not a part of something.” Eva has researched women’s service organizations on campus, but her work schedule proves to be an obstacle in becoming involved on campus. She shared that her financial responsibilities are the determining factors in her plan to study abroad during the “May-mester” of her sophomore year, as to shorten her absence from work.

Compared to her high school courses, for which she only need to study for “maybe half an hour” for a test, Eva described WSU as “very rigorous” and mentioned that each class challenged her in different ways. Eva found the amount of material covered in her online humanities class to be nearly overwhelming. To do well, “you have to really, really study and put time into the class,” even though the assessments only required her to “remember and call back” facts. Eva suggested that her online social science course was “definitely harder,” even though she had fewer reading assignments each week. “It requires more studying than the [humanities course] does simply because you have to apply what you've learned.” Eva related the academic challenge with the type of assessment, which required application of concepts instead of memorization.

To help meet the level of academic challenge, Eva believed WSU provided a supportive campus environment. She used academic support services for assistance on assignments and appreciated that type of support. For example, Eva met with the writing center for guidance on a research paper. She indicated that the student staff members did

not edit papers for her or tell her how to write. “They were really trying to just get you to learn on your own so you can be an independent learner. But I found it to be helpful.”

When seeking support, Eva preferred to lean on her professors, TAs, and course-based service for academic support. She attended Supplemental Instruction reviews, which she described as study sessions led by undergraduate mentors who performed well in the course over the previous academic year, before tests and visited faculty and TA office hours regularly.

I went to my professor's office hours, and she was really willing to help me with our homework. She was telling me for me to go back if I ever struggled again. And with [humanities course], I went to their TA office hours and they helped me review my quizzes. I've always thought of [WSU] as being a big campus—there's so many students [that] these professors aren't going to have time for me. They're not going to be there to walk with you step-by-step. But I feel like they're way more helpful than I would have expected them to be. They're just really open to trying to help them do better in their courses, even in other courses, too.

Eva noted that after the intimidating first step of attending office hours, she realized that her instructors cared for her and wanted her to succeed. She also connected attending office hours with her collegiate goal to place herself in uncomfortable situations and learn to effectively communicate in those environments.

In addition to being an active learner who seeks out opportunities to discuss and wrestle with course material with her instructors, Eva tried to be collaborative with her classmates. Working around a tight schedule, Eva used online study tools, such as online flashcards—crowdsourced by Eva and her classmates—to study on her own¹. Then in face-to-face study sessions, Eva and the group completed online study guides through

¹ This study group formed over online discussion platforms, including the course LMS and Facebook. I explore the formation of this study group and those of other students in Chapter Five's section on active and collaborative learning.

Google Docs or the textbook publisher's website.

Like a study guide, but we are going off the questions from the study guide. We collectively go, "Well this might be the answer because this and this and this." Then we pick what we most agree on. If it is wrong—that does give you feedback, "This is wrong because this and this and this."

For Eva, the online tools facilitated her collaboration and did not seem to be a passive learning platform.

Eva's only previous experience with online courses was a physical education course in high school that was asynchronous and self-paced and did not include interaction with other students or the instructor. At the time of this study, she was enrolled in two online courses through WSU, one in the social science and one in humanities. As an active student who asked questions during class, Eva had concerns about enrolling in online courses.

Well at first I really didn't want to do it because it was online, and I have to be asking questions. But I found it to be more convenient because I wouldn't have to travel a long distance from one class to the next because I have classes back-to-back.

With a tight schedule, she decided the ability to login from her dorm room or outside the classroom of her next class outweighed her concerns with regard to the level of interaction and communication in online courses.

Paul

Unlike the other participants in this study and most students at WSU, Paul is a non-traditional student. He is a 24-year old Army veteran, currently active in the National Guard, and enrolled in a science, technology, engineering, and mathematics

(STEM) program¹. “I worked in [a STEM] field in the military, and I really enjoyed it. So, I just wanted to expand my knowledge on that.” He expressed an understanding of the need for a degree for life outside the Army.

I want a degree so I can be like, “I know this and I have this to prove it.” And that's what sucks. I did so many [STEM] things back in the Army, and I don't have any certifications besides [one certificate] to show for it.

Paul felt frustrated that he had the opportunity to earn a STEM degree, but other veterans with similar skill sets and knowledge did not. “I think that's the Army's fault. They tell us to do all these amazing things and they throw us out to the world.” In addition to a degree, Paul shared that he wants to graduate with a liberal education. “Just learn as much as I can. I want to learn the stuff that humans have come up with, tested.” Paul identifies as a Hispanic/Latino male and a first-generation college student.

Paul viewed his age and level of maturity—developed from years of military service—as a barrier to relating with traditional students on campus and grasping the more academically challenging coursework. He did not see his appreciation for teamwork mirrored in his younger classmates and generally felt disconnected from freshmen and sophomores, describing them as “very mature 18-year olds, but they are 18, so they can only be so interesting.” Despite the age difference, he prefers to study with classmates. “If I can talk about it and explain it to them, I understand it better.” For Paul, the opportunity to teach course topics to classmates promoted active learning and allowed him to connect with classmates through course material.

¹ I have provided general academic programs, and not specific degrees, not protect student and faculty anonymity.

Paul described WSU as a “really supportive” campus, in large part due to the academic support resources on campus. He regularly used the primary academic support center for help in core curriculum courses. “I go there to do my homework, review my notes, and ask the tutors, talk to them about it, see what they think. It's great.” Paul valued the casual, drop-in nature of the group tutoring sessions over the one-on-one tutoring.

P: I tried one-on-one tutoring before, and I didn't like it.

J: What didn't you like exactly?

P: It's timed. For me, for someone to tell me, "You have this much amount of time" already puts me on edge. I can't do the whole, "Here, you have a set amount of time. Ask me all the questions you have about science," which in science you can start with one question and end up with, "Why are we here?" {laughs}.

The same drop-in environment attracted Paul to faculty office hours when they fit into this class schedule. “[The faculty are] really good. They're very professional. They know their material.” Paul took the extra time to get to know his instructors and ask for their help. “They only care if you care, and that's natural for everyone.” With large class sizes, Paul placed the burden to receive personal attention on himself, not the instructors.

His time in the military led to a gap between high school and a brick-and-mortar university. Paul expressed concern that he had not enrolled in a mathematics course in seven years, whereas for his classmates “it's all fresh in the 18-year old mind because they just, it's just the next year [of school].” Despite these challenges, he expressed solid resolve to dedicate additional time to strengthen his academic foundation through additional study hours and on-campus tutoring services, even as his instructors continued to move forward in the coursework.

In addition to his 12 SCH of coursework, Paul shared that he was involved with a student organization focused on health care needs in the Latino community.

We also have volunteer opportunities that allow us to work with the community regarding health care and helping the Hispanic community understand it by sending us who speak Spanish to be helpful.

Paul typically volunteered on the weekends, even though one weekend each month was dedicated to his National Guard service.

Paul's previous experience with online education consisted of courses he completed through the for-profit American Military University while active-duty. Paul found that the largely active-duty military student body influenced his engagement with faculty and classmates. The instructors were aware of their students' demanding schedules. "They were really supportive. If I had to go to the field for a few weeks, they completely understand and give me time to finish the assignment on my time." When asked if he interacted or collaborated with other students in his previous online courses, Paul said, "never, other than responding to people's posts, which is not interaction." At the time of this study, he was enrolled in one online course through WSU. The online component was not a factor in Paul's decision to enroll in the class, which he needed to complete a state requirement for graduation.

Judy

Judy is an 18-year old freshman majoring in a STEM discipline. From her descriptions, she appears to be an ambitious, albeit seemingly anxious, student enrolled in 17 SCH against advice from the university and friends. When asked about her goals while in college, Judy noted, "I just want to learn something that can help me find a

career later on in the future. Something that I actually like.” Judy identifies as a first-generation Asian American female and first-generation college student. She has no off-campus commitments.

Judy derived her strong work ethic from watching her parents work hard to earn an income that fell below the poverty line. Despite their economic realities, Judy’s parents made education a priority. “They just put so much effort and finances into my education that I just want to have a college education to go out in the job market and find something so I can just pay them back.” Judy related being a first-generation college student to her expectations for the academic challenge of her coursework. With parents who did not attend college and received their primary and secondary education overseas, Judy anticipated a painstaking study schedule.

I feel it's less than my expectations because I still have time to sleep. I don't have to sleep at the [general academic library]. I can go back to my dorm and sleep. So I don't think it's as difficult as people thought it would be because every time someone asks what I'm taking, I say the "tri" classes [chemistry, biology, and calculus], and they give me a surprised look, and I'm like, "no, you just have to manage your time well." So it's not as hard as I thought it would be.

Due in part to a strong work ethic and exaggerated expectations on the time and effort required by college-level coursework, Judy found WSU’s level of academic challenge to be manageable in her first semester.

A significant factor in Judy’s overall engagement at WSU was her participation in a STEM Scholars program through her college that blends the benefits of a small college with the opportunities of a MRU. Judy included a small cohort of students in linked courses, dedicated office and study space, and early course registration among STEM Scholar’s benefits. Though she described herself as “passive” in most class settings, the

small cohort and support staff provided an environment for Judy to engage with students, staff, and coursework. Her connection with STEM Scholars grew beyond the formal program to include a corresponding student organization that consisted of current and former STEM Scholars students. “I joined it because [the STEM Scholars student organization] gives out a lot of volunteer opportunities, and I personally love volunteering.” Outside of STEM Scholars, Judy is a member of the Chinese Student Association. The organization filled a void left from her adolescence.

And growing up, although my family is Chinese, we did not celebrate Chinese New Year, one of the biggest holidays, as much as I wanted to. We didn't go to the, the festivals and everything. And being in CSA [Chinese Student Association], they give out more information than my parents gave me about the holidays, and it makes me more interested. So I feel more Chinese here than at home.

Along with financial incentives provided through scholarships, the diversity on campus and throughout the surrounding city was a deciding factor in choosing to attend WSU. These enriching educational experiences engaged Judy with the campus community and surrounding neighborhoods.

Through STEM Scholars, Judy enrolled in the traditionally challenging “tri courses”—chemistry, biology, and calculus—with her cohort. In these courses, Judy viewed herself as passive at times and active or collaborative at others.

During lectures I don't tend to sit in the front where most ideal students would sit. I would sit in the back, and I would listen. After class I would always ask the classmates around me, because I usually sit with a specific group, after a while we've met each other and everything, so we ask each other, "Did you get that? Did you get that or not?" If we say no, we sometimes sit down at a place and we review over the information. Then before exams, we usually have a little review session before the exams.

Though passive in class, Judy found a small cohort of classmates with whom she would dig into difficult topics. She supplemented these face-to-face study sessions with online collaboration. Judy used multiple online platforms to find flashcards and work with her cohort on study guides. “Academically, I love Google Docs. It makes collaborating easy.” Such online tools made her nervous in the past. Judy created a Facebook group for a course in high school for students who did not want to ask questions in front of the entire class, but the group lost focus as it grew in size. “It then turned into an answer graveyard kind of thing, so I kind of stepped back from that. I didn't want to get in trouble.” She portrayed this online workspace as a grey area in which the lines are unclear with regard to where collaboration stops and collusion and cheating begin.

She preferred online collaboration to visiting faculty or TA office hours.

Concerned she is missing out on an explanation or discussion that may be helpful, Judy became distracted during office hour sessions as she listened to all of the conversations around her.

I like to work in an environment not too quiet but a slight background music, and then when I was trying to study for the exam in the office of the TA, there were other students there too, so I couldn't really focus on my work because it was the same topic, and then people were talking about—the people were talking about same topic, but they were talking about the different concept of what I was learning, and trying to study for that chemistry exam. I kind of wanted to know what they were talking about, too, because it was part of the exam, but then I was trying to focus on my concept that I did not understand. It kind of clashed, and it confused me a little bit.

Though she did not use their tutoring services, STEM Scholars opened their office space to students until 9 p.m., which again brought Judy together with students in her cohort

and those who have completed the “tri courses.”

When asked about her interactions with WSU faculty, Judy provided little description beyond “faculty here is really nice.” Instead, Judy focused on the supportive nature of the graduate and undergraduate TAs in her classes. She recognized that the faculty are responsible for large sets of students and appreciated the ability of TAs to spend time with small groups of students to explain “different ways to do [the problems], not just one way.” Along with her passivity during lectures and motivation for starting a course Facebook page, her preference for TAs suggests she may be intimidated by faculty or by speaking up in front of a large group of students.

Judy previously enrolled in an online course during her senior year of high school. She described feelings of being lost in the class and intimidated to ask for help. The instructor taught remotely from a different high school in her district, and the physical separation created an obstacle to connecting or interacting with the instructor.

But it was hard because I never saw the, I never saw the teacher, but she did offer videoconference from a certain time period. But, and then when I joined the class, I was trying to be spontaneous because I was done with all my credits, so I was like, "I'm going learn something new." But I had no idea what was going on in the class, so I was too scared to contact her. And eventually I ended up failing the class because I didn't ask for help.

Judy did not feel comfortable reaching out to the faculty member, and, despite her failing grades on assignments, the instructor never reached out to Judy to provide guidance or support. Yet, this initial experience did not sour her outlook on online education. She chalked up the failure to her reluctance to communicate with the instructor or classmates and the instructor’s hands-off approach. At the time of this study, Judy was enrolled in one online course in the social science through WSU. Prior to registration, she did not

know the section was online and enrolled in the course due to her interest in the subject matter. Judy completed an Advanced Placement course in the same subject in high school and was excited to continue her studies.

Mike

Mike is a 22-year old engineering major. A fifth-year senior, or a self-described “super senior,” Mike enrolled in 16 SCH in order to lighten his course schedule during his next and final semester, which will include a capstone design course. He aims to graduate from WSU with the skill sets to “network with a diverse group of people” and to apply the knowledge he learns in class to real life issues. Mike identifies as a Hispanic/Latino male. He has no off-campus commitments.

Mike indicated that he has always been an active member of campus. He has held multiple part-time campus jobs and campus-wide leadership positions and served as a first-year interest group (FIG) mentor. Both positions kept him out of his dorm room and interactive with the campus community. Since his freshman year, Mike has maintained active membership in one or more student organizations within the engineering school. He first served on a freshman advisory board of the college.

So it was just a group of freshman that were kind of introduced to [the college of] engineering, it's resources, and at the same time, being introduced to the [upper-division advisory board] and what they do and what's their purpose. At the same time, [they were] taking us to outreach or social activities just so that we can engage with not only our mentors but within ourselves.

After his first year at WSU, he joined two engineering student organizations, which engaged Mike in experiential learning, community service, professional and leadership development, networking, and social bonding. These components created the feeling of a

small college experience at a MRU. Mike repeatedly emphasized the friendliness of engineering faculty, particularly those who were involved in his student organizations.

Actually last night, the [engineering student organization] officers, including myself, we had a dinner social with our faculty advisor, his name is Dr. [redacted]. He mostly teaches [concentration different from Mike's] engineering. But, every year, it's a tradition with our student chapter, the officers do a potluck dinner. So each of us either cooks something or brings desserts or drinks and all that. And we all have it at his house, which is here in [WSU's city]. And it's a good way to get to know our faculty advisor, for one thing. It's a good way to hang with the officers, and our faculty advisor, and his family in a very casual setting. Basically catching up on stuff besides schoolwork, of course.

Though organized through the student organization, the dinner with the faculty member, along with other interactions led by faculty members such as retreats and field trips, positively influenced Mike's perceptions regarding his college's faculty.

When asked to describe the overall academic challenge at WSU, Mike suggested that he valued personal attention from faculty members. "Actually our toughest academic challenges tend to be around our freshman and sophomore year within engineering." Even though the material is not as deep, Mike found that instructors and teaching assistants did not provide individual support for each student. He shared a different perspective on upper-division courses.

Especially the senior courses, they tend to be more group work oriented. Professors give out more challenging problems to get group members to think. Not everything is basic or introduction. It is just more in-depth for the subject matter. I think that makes it more difficult. But as I have said before, because it is a smaller class setting, and so you have more one-on-one with professors, the TA for the class, and stuff like that. And you don't have to worry about waiting like 20 minutes or so for the office hours since its not a class of like 200 plus people.

For Mike, the faculty interaction and active, collaborative learning tended to promote an atmosphere in which Mike and his classmates were "more engaged into" the coursework.

When possible, Mike tended to prefer to study on his own. He indicated that he used online tools, in particular the flashcards developed by his classmates and linked to via the class learning management system or Facebook page, to aid his solo study sessions. Mike did not contribute to these collaborative tools, but used them passively.

A marker of Mike's high level of engagement at WSU was his reported use of campus support services. He was aware of the available services on campus and relied on their support. He listed numerous resources, from a 24-hour hotline for campus members to report their concern for students to a team dedicated to responding to campus climate concerns, that he had not used personally. However, he identified academic support services that helped him progress through his coursework.

I've used [WSU's general academic support center], especially in my sophomore year when I was still taking the basic classes before engineering. I would always need to get help on calculus or physics or even chemistry. All the services are free also, and the tutors are amazing as well.

Taken along with his comments on caring faculty, Mike's praise for tutoring services brought into focus his perception that WSU was a supportive campus.

Prior to this semester, Mike had no experience with formal online education. The university rarely, if ever, offered the courses he needed at the time he needed them in an online format. Based on his preconceived notions regarding online and distance education, Mike thought an online course section would be easier than its face-to-face counterpart.

Probably when I first enrolled I thought it was probably going to be a tad bit easier just because all you have to do is just watch the lecture. Just do the given participation surveys and then just study a little bit for quizzes, and that's it. I wasn't expecting too much investment into the class.

At the time of this study, Mike was enrolled in one online humanities course through WSU. He did not know the course would be online before registration, having selected the course to fulfill a state requirement to graduate on time the next semester.

Jennifer

Jennifer is a 20-yr old senior with a double major in the art design discipline and the honors college. During her first year at WSU, Jennifer was an engineering major. “I realized that, yes, I do like those subjects, but I wanted something with a bit more creativity. I mean engineering is creative and in it's own sense. I wanted something a bit more, I guess, artsy.” She is the recipient of a WSU scholarship that provides full tuition, room, board, and a stipend for four years. Before she graduates from WSU, Jennifer aims to discover a direction for herself, gain the skill sets to accomplish her goals in life, and “be a part of other people's journeys as they do this.” Jennifer identifies as an Asian American/Pacific Islander female. She has no off-campus commitments.

The same instincts for adventure and to follow her passion that guided Jennifer to double major in art design and honors studies seemed to influence Jennifer’s engagement on campus. Though prior to college she had never been on a horse, Jennifer joined the polo team her freshman year. “I guess that ties into the whole, ‘I like to learn about whatever's available.’” Since then, her involvement in student organizations has shifted primarily to two student organizations, a women’s service organization that she co-founded and a art design publication that she reintroduced to campus as editor-in-chief after a decade out of publication. Jennifer dedicated between 20 to 25 hours per week to these two organizations. “It feels like a part-time job.” On top of these responsibilities,

she served as an ambassador to campus for her college and as a member of the art design board. “I commit a bit much, but I really enjoy it and I absolutely love the experience.”

Jennifer was purposeful in selecting other enriching educational experiences, such as an internship with a non-profit organization in Washington, D.C. and a study abroad experience in Italy.

Because I want to do, I think I want to do something in non-profits, actually not really sure. I want to do something with philanthropy and with giving back, that's really important to me. Right now I want to combine that with [art], not exactly sure how those are going to intersect, but that's the reason why I did the Philanthropy and Voluntary Service Program.

Jennifer elected to schedule both the study abroad and internship experiences in the summer to remain on campus and involved in her student organizations. She strived to extract the most benefits from her experiences and aligned her extra- and co-curricular activities to help her reach her goals.

Across colleges and academic disciplines, WSU courses challenged Jennifer in different ways.

I would say that my classes challenge me in different ways. When I was in engineering, they were very academically rigorous. Now I feel like I am being challenged more in like creativity and, I guess, technical skills. So, my construction course I just made a dress and that was a challenge because I've never done that before. I've learned a lot—I wouldn't say that the [art design] classes are not challenging. I think that they are very challenging. I think perhaps the best way to like phrase it is that I enjoy taking challenging courses as long as I enjoy the material. So engineering was challenging for sure, but I wasn't engaged in the material, and therefore I didn't find it to be the most fulfilling.

Jennifer described her enjoyment of the material as more than an interest in the course content. She found a course enjoyable if the instructor was charismatic, enthusiastic, or innovative in their teaching and assessment styles.

Building relationships with faculty was an important method of engagement for Jennifer. She credited the honors college's small class sizes with being an ideal environment for connecting with faculty. The intimate setting made it easier for the faculty member to give each student personal attention. On the other hand, Jennifer's experience with faculty from large lecture-style courses was mixed.

Although my calculus professor, I really liked him. But he somehow was also able to treat people as not just a number. That's how I felt. One of the telling things was when I went and told my professor in [introductory engineering course] that I was dropping, he like didn't even know my name. And I'm like, "Okay, cool. You have no idea who I am, this does not matter to you." But if I went and told any of my [art design] professors I'm dropping [art design], they'd be like, "We need to talk." I think that's the difference.

Though not as ripe for faculty interaction and connection, Jennifer believed that faculty could overcome the perception that large class sizes leave students feeling insignificant. For Jennifer, the faculty took on the role of support services. When asked to describe WSU's supportive campus environment, or lack thereof, Jennifer pointed to her professors. "They are incredibly caring and such supportive individuals, and I think that really makes the difference."

Prior to this semester, Jennifer had no experience with formal online education. She did not recall the university offering online course sections in core classes her freshmen year, and the art design and engineering departments did not offer the courses she needed in an online format. At the time of this study, Jennifer was enrolled in one online humanities course through WSU to fulfill a state graduation requirement. She selected the online section on the recommendation from friends that a different format of the course with the same professors' was "an easy A." When asked why an easy A was

appealing, Jennifer explained:

Jennifer: In a way I'm like prioritizing immediate gratification versus, like long-term gratification. Because if I choose a class that's an easy A that means I have more time now to spend on things that I currently find important. But by doing that—

J: Such as?

Jennifer: Like all of my extra-curriculars or my degree. But by doing that I might be missing out on something that I won't know that I'm missing out on until like a year or five years from now when I think back, and like, "Oh, I should have paid attention because I don't know where my life is going." And that's actually happened a lot. I don't know why I interned at—well, I do—I interned at a non-profit. The value of that internship was not apparent to me at the time because it was just a whole bunch of busy work, but now looking back at it, I find that I think there is more value there than I first perceived. So perhaps in the future, I will look back on this [humanities] class and be like, "It actually taught me a lot."

Though she may have regrets later, the “easy A” enticed Jennifer with the promise of additional time to spend on courses related to her major and on reestablishing the art design publication on campus.

Grace

Grace is an 18-yr old freshman with an undeclared major in the business college. In her first semester at WSU, Grace recently dropped a calculus course, leaving her with nine SCH. Grace identifies as an Asian American/Pacific Islander female. She aims to leave college with “friendship, experience, knowledge, uh, just meeting new people, and finding like what you really want in life, and exploring new things.” She has no off-campus commitments.

Grace found college-level coursework to be more academically challenging than she anticipated. The course she dropped, calculus, administered her first college-level test, for which she felt woefully underprepared.

I didn't really know what to expect. So I went in I'm just like, "Oh my gosh, I really don't know what I'm doing!" Even though I studied and prepared for it, but maybe just not enough. I think it's actually not as hard if you knew what it's going to be like. I think I'm ready to take it next semester.

Grace felt that she had misguided expectations regarding the breadth and depth of material covered in a college course, which led to a poor investment of her time and effort before her first test.

In her face-to-face courses, Grace did not always feel comfortable being an active or collaborative learner. In her small, discussion-based freshman seminar, she appreciated the back-and-forth conversations about coursework and the instructor's life experiences.

Most of the time, I just sit down, and I listen to the professor. And I don't think I've ever asked a question in class. Oh, unless it's like my FIG class because it's small and you can interact with your professor.

Grace suggested that the large lecture format contributed to her passivity and isolation in her economics course. Easily distracted by her classmates, she often "read the textbook instead of going to lectures." She acknowledged the potential costs of this decision included missing out on learning the professor's insights, preferences, and points of emphasis. Yet, in her decision to begin skipping lectures, Grace ultimately decided she would miss these benefits either way due to her struggle to concentrate in a crowded lecture hall with no faculty or student interaction designed into the class meetings. She described her collaboration, both online and face-to-face, as minimal.

Grace was an active member of four student organizations: one service, one academic, and two social. All four groups were geared toward Asian/Asian American students or culture. Though her involvement aligned with her collegiate goal to make

friends, Grace's descriptions of her extra- and co-curricular involvement indicated that she overextend herself as a first-semester freshman. "We had a bake sale just a couple weeks ago, and that's the whole week. So, if I table—we have to table and bake, so I think I spent maybe like, 24 hours?" After dropping calculus, Grace decided to pare down her involvement to the service and academic organizations next semester.

Even in her first semester, Grace took advantage of academic support services. For the convenient hours and one-on-one attention, she preferred peer support services to faculty or TA office hours.

I actually go to the [primary academic support center] for the drop-in tutorial and the one-on-one tutorial. And I think we can get four free one-on-one tutorials for a semester, and that's really helpful because—oh, I went to one, and she really knew what she was doing, and you can ask questions immediately and it was immediate feedback from whoever's helping. For the drop-in tutorial it's really helpful, too, especially when I'm doing homework, and I'm get stuck on the question I can just ask.

After her first calculus test served as a wake-up call for the time and effort required by her courses, Grace sought out support on campus to rise to the academic challenge.

During the summer between high school and college, Grace completed an online social science course through her hometown community college. At the time of this study, Grace was enrolled in one online course through WSU in the same social science discipline as her summer course. She related her previous experience with online education with her expectations for her WSU course. "This summer I actually took an online course at my community college, and I feel like it's easier online. So I was thinking, 'Oh, maybe [the online WSU social science course], if it's online, it might be easier.'" The WSU course fulfills a core curriculum requirement, but Grace selected the

course over multiple face-to-face options in the social science.

Ashley

Ashley is a 19-yr old sophomore who recently changed majors from media studies to humanities. She is enrolled in 15 SCH. While at WSU, she strives to gain insight into a career path and broaden her academic horizons.

I could take classes that were more open and not just in my major, which is something important to me because there's no other time in your life where you're going to be able to take classes that are interesting to you but maybe don't have anything to do with your major.

Ashley wanted to make the most of the tuition benefits earned during her father's military career, so she selected WSU for its academic reputation and affordability. Ashley identifies as a White female. She works in childcare, for a single family, for 8 to 10 hours during the week.

Ashley shared that she was involved in one student organization on campus that served as a public relations firm for non-profit organizations. Though she held a leadership position in the group, Ashley considered the time commitment minimal. "It's actually not—we meet once a week for about an hour. And then outside of that, maybe two to three hours working on other things or going to the client. But other than that, it's not that much more effort." Ashley expressed an interest in joining a social or service organization. However, her goals while in college revolved around academics and preparing herself for a career. She viewed the purpose of her student organization to tie closely to these goals, whereas social or service organizations were distractions.

For Ashley, the level of academic challenge at WSU exceeded her expectations. "I went to a pretty challenging high school where it was—I did have to do a lot of reading

outside of class and a lot of homework.” Ashley believed her WSU instructors made “you think a lot more about the subject as far, rather than just giving you facts.”

Assessed on interpretation, synthesis, and analysis more often than memorization, Ashley found herself spending more time to gain a firm grasp on the course material. Despite the increased level of academic challenge, Ashley described herself as a “passive” learner in the classroom. “I’m not super active in a lot of my classes. I’m not the person that’s sitting there asking questions about what’s going on or really engaging. I’m more, ‘Sit there and take notes.’” The exceptions were smaller class settings with 15 to 20 students, in which she was “more engaged because it’s easier to get your opinion out there.”

Outside the classroom, Ashley took a more active, collaborative role in her learning with friends and classmates instead of instructors and academic support services. Ashley and her roommates reserved Sunday nights for studying in their apartment. If they enrolled in the same class, such as Ashley’s online humanities course, they helped each other study. “Sunday nights usually we all kind of are doing homework together, so we will talk about what we think will be on the quiz, how we studied for the last one, what works for us.” If not, they still met in the common living space and studied in a group setting. With her classmates, Ashley preferred online collaboration to face-to-face study groups.

Ashley: I’m pretty big into social media. All of my classes have Facebook pages where everyone will post questions about the class, which are really helpful.

People post their own study guides, notes.

J: So Facebook for—almost sounds like a study group?

Ashley: Yeah, they really are. I had a few classes that actually did this in high school, but in college so many people do it. But for each semester, almost every professor has a class Facebook page where students will go and post questions, like, “I missed class today, could someone send me the notes?” Or everyone will

make a Google Doc and kind of put their own notes in there for the test. They're extremely helpful.

For Ashley, course Facebook pages and Google Drive documents provided an online, asynchronous substituted for face-to-face, synchronous study groups. Students shared information, commented on each other's work, or were passive members of the group. Ashley suggested that immediate access to these online resources might have disincentivized attendance at student-led tutorials at WSU's academic support centers; she could ask a question online or find an answer in a classmate's study guide. Ashley did not dedicate time or effort to interacting with faculty or utilizing support services outside of class meetings. She expressed a desire to attend office hours and acknowledged that she "always felt that professors get really sad when kids don't go to their office hours, and they're like, 'I sat in my office for two hours the other day, and no one came to visit me.'" The feeling that she did not know the right questions to ask was an obstacle. "I'm not super close to any of my professors."

While in high school, Ashley completed two online courses. These courses did not incorporate interaction with the instructor or classmates and were self-paced to the extent that Ashley "tended to get really far behind in them and kind of had to sit there one whole weekend and take the entire class, which isn't enjoyable." At the time of this study, Ashley was enrolled in two online courses through WSU, one in a social science and one in the humanities. Both courses fulfilled degree plan requirements. "I was trying to get them over with as soon as I could, and I figured that it would be a pretty simple, straightforward way to just knock it out." Friends suggested the online sections of both classes, though for different reasons.

The [social science] class, one of my really good friends took it the semester before me, and he said that it was really entertaining and a class that was interesting and engaged us pretty well. And I agree. And then the [humanities] class, I knew it was online. It mostly fit into my schedule the best out of all of the other classes. And two of my roommates are also in the class so it made it easier to decide.

Mary

Mary is a 20-year old junior with a major in the business college. The business college recently admitted Mary into a program that incorporates graduate-level work, placing her on an accelerated track to earn a master's degree. In her first semester in this program, Mary is enrolled in 12 SCH, divided evenly between undergraduate and graduate courses. She identifies as a White female. Mary repeatedly stressed that building a strong social and professional network is a top priority while she is in college.

More than [gaining knowledge], I think the most important thing, and my mom told me this right before I left for college and she's told since I've been growing up, is that "You can never have enough friends." I feel like college is just a great place [to] meet so many people from different walks of life."

Mary has no off-campus commitments.

Aligned with her goal to create a strong network, Mary served in a leadership capacity within her sorority and chaired two academic advisory boards. Together, these activities accounted for 15 to 20 hours of Mary's week. Next semester, Mary arranged for a 10-hour per week internship that will require her to scale back one or more of these commitments. Both advisory boards placed her in constant contact with faculty members. Within the business college, Mary worked to "make sure that we bridge the gap between student and professors interaction outside of the classroom." Along with satisfaction of connecting students and faculty, Mary found this service to be personally

rewarding.

They recognize how much work I put into it. I love that recognition when they say, "Thank you for doing this, it means a lot to us." The department heads appreciate it a lot because they're busy with the academic side of it that they don't have time to plan something that, with professors and their students. They think that the professors are going to be the ones that interaction. I mean with semester as day-to-day operations go on, it becomes more and more difficult for professors to actually plan something like that.

The relationships built through these enriching educational experiences led to lunches with faculty and letters of recommendations from administrators. Mary expressed that at first, finding her niche where she could engage with faculty, administrators, and students was difficult.

I think it can be challenging. It depends on what type of personality that you have. I've seen with other students that struggle with motivating themselves. They need other people to say, 'Hey, come to a meeting with me.' It's a lot more challenging for them to find themselves. I don't consider myself that way. If I see something that I want to be involved in I try to take the correct steps in order to get involved in it. And that was really challenging at first. I remember freshman year I applied to an array of things for the first two weeks of school, and I didn't get anything that I applied to, so I was very frustrated. And one week I got an email to participate in [dean's advisory board], which is Dean [redacted]. He wants feedback from 15 students, and I was one of the 15 students selected. We meet twice a semester and just talk about what we would like to see [done] differently in [the business college], what we liked about our study abroad programs, what do we like about lectures, and our course schedule. Once I got into that, I realized that I can definitely get into more things, or that the opportunities there, and I just needed to go about it a better way. I think I applied to things that too many students applied to, but it definitely, it all ended up working out, and I would say that I'm probably involved in too much now, which I think is a good problem.

Mary shared that she opted to study abroad during a summer term to honor her commitments to these organizations and stay on pace with the accelerated degree plan.

This arrangement helped Mary diversify her network abroad while maintaining her relationships on campus.

In her first semester with graduate-level coursework, Mary found the level of academic challenge increased. “It's ten time more than what I devoted to my previous classes.” She indicated that devoting more time to studying than socializing was a challenge, but she ultimately appreciated the academic rigor. “I love learning but I probably like being social with people so much more than being in a classroom or sitting down to study.”

Outside of class, Mary was an active and collaborative learner with her instructors and classmates. When she needed help in a course in her academic discipline, Mary preferred to visit professors during office hours. “I attend office hours, I'm always trying to see where I can improve. So I'm definitely very active in my learning.” Although she recognized that campus tutors could help with the immediate academic need, Mary saw the benefit of additional face time. She noted, “It's good to know your professors especially with the [business major] degree because they can be mentors at a lot of times because this is what you're pursuing for your life.” She valued collaborations with classmates and used online tools and smartphone applications to connect with her peers.

All my organizations use it. You can post pictures, there's one for my sorority, one for the [academic advisory board], there's the [online humanities course] one, study abroad group, sorority thing. You can message people, too. It's cool. It's a great app to communicate with people.

She rarely used these tools to directly collaborate with a classmate. Instead, she used these tools to ask questions about course deadlines or to arrange face-to-face study group sessions.

Over the previous summer, Mary completed an online humanities course through a community college. She watched recorded lectures, had no interaction with classmates, and was tested in-person at a local testing center. At the time of this study, Mary was enrolled in one online course through WSU to fulfill a state graduation requirement. Even though the course was in the same humanities discipline as her previous online course, that experience did not affect her expectations for the WSU course. “Junior college is not on par with what's taught here.” Mary shared that she selected the online course section after she read the positive reviews of one of the two faculty members.

I signed up for it because Professor [redacted] had really good recommendations on websites that I was looking at. I have priority registration so I'm able to get the professors that people are very excited about. That's what I was drawn to taking that particular class.

Selecting the most sought-after faculty trumped any concerns over the online format.

Concerned about the time she would need to devote to her graduate-level coursework,

Mary also considered the time saved by taking an online course from her apartment to be a significant benefit of the online course section.

Katie

Katie is a 20-yr old sophomore and liberal arts major. Having grown up near campus, WSU was always her “dream school.” Undeterred by an initial rejection as a freshman applicant, Katie transferred to WSU after one year at an out-of-state university. Enrolling as a transfer has come with restrictions with regard to the college she could select, which prevented Katie from pursuing her preferred major. “I didn't realized when I came here that I would be competing to get my majors while I was in [WSU]. I thought the competition was to get in.” Katie identifies as a White female. She aims to leave

college with “not debt” and “a job,” though she is currently uncertain on a career path. She has no off-campus commitments.

Katie’s enriching educational experiences outside the classroom mostly consisted of activities with her sorority, which accounted for three to four hours of her week. Weekly commitments included a general membership meeting and a one-hour study hall. “We do a lot of studying together. There are study hours at the house where we're required to study, and then we just meet up [outside of required study hours].” After a recent meeting with a career counselor, Katie was enthusiastic about her participation in “as many [internships] as possible” to gain “real world experience.” Katie viewed her experiences outside the classroom as an integral component of preparing for a career after college.

In addition to her sorority’s required study hall, Katie used online tools and face-to-face study groups to collaborate with her classmates. Katie described her courses’ Facebook pages as online hubs. “A lot of people post updates, their own study sheets, their gripes, all that good stuff.” The actual collaboration occurred on other sites, such as Quizlet and StudyBlue, designed for online studying. These sites served as a platform and repository for online flashcards, study guides, and quizzes designed by students, who were not necessarily enrolled in her same course section or even enrolled at WSU. “Everyone used [StudyBlue] and so there was a class for everything. So everyone was involved in your class. So when you made materials, they're public. And everyone was able to view them and study your notes, study their notes.” These online tools supplemented, not replaced, her face-to-face study groups. She met with students in

small, two- or three-person groups to study for certain classes.

Katie used her experiences at her freshman-year university as points of comparison in her descriptions of WSU's level of academic challenge. She found the depth of the material to be comparable between the two institutions, but the amount of time and effort required of her was significantly greater at WSU. Instructors at her previous university based grades exclusively on midterm and final exams, whereas at WSU:

I feel like I have something due for every class before every single meeting. There's a lot more like, "Here's a worksheet. Oh, we're going to have a quiz. Oh, here's participation." Just a lot more smaller grades, and they keep you busy, meaning like constantly trying to balance everything.

Katie expressed that she struggled to balance the workload and dropped a course for the first time in college. The increase in weekly assignments and assessments led Katie to view herself as a passive learner. She felt that her investment of time and effort was just enough to meet minimum course requirements, which left her with no "time to explore [a course topic] or expand on it."

Katie has a complex perspective on WSU's level of support on campus. Compared to her freshman-year university, Katie found WSU to be less invested in each student "because they don't really care if you succeed because there is someone else behind you who will do better if you don't." Katie pointed to the competition to gain admission, and indirectly her initial rejection, as a reason the university does not need to provide personal support.

I love [WSU], but it almost feels like a... machine? Does that make sense? Do you know the reference I'm going for? Where it is just kind of, like, "You're in, do this, and you're out." It's not a whole lot of, at least for me so far, where they

are personally like, "Well, let me help you," or "Here, how do you get this? What's the best option for you?"

Beyond being informed of WSU's policies regarding the colleges and majors available to transfer students, Katie did not highlight a specific interaction with a campus faculty or staff member. "The university as a whole has not struck me as, 'Well, what can we do for you?'" Though she was cognizant of many campus resources, she said she had not utilized their services, yet. Katie intended to use the student writing center for an assignment, but was too sick on the day of her appointment. "It's probably my fault, but I haven't used them, no."

Katie's described her interactions with faculty members as largely positive. Though she found them to be helpful, she believed their expectations were too high. "They just seem a bit presumptuous in knowing that we know what they want. And sometimes I feel like they forget that we have like five other classes." The amount of work and ambiguity in expectations led Katie to reach out to her instructors. "I'm that person waiting down at the bottom when class ends like, 'Hey, let's talk!' I never really take advantage of office hours." Katie cherished the time after class meetings as an opportunity to ask faculty questions and receive immediate feedback.

Katie completed an online biology course at her freshman-year university. This course relied on asynchronous, audio-recorded lectures that the instructor released twice each week. Katie had no other contact with her instructor, but would attend the face-to-face study sessions led by the TA before exams. At the time of this study, Katie was enrolled in one online humanities course through WSU to fulfill a state graduation requirement. She based her expectations for this course on her previous online course

experiences. “I assumed it would be like my [online] biology class.”

Ally

Ally is an 18-yr old freshman enrolled in 12 SCH. Though she has not declared a major, she intends to pursue a major in media studies. She is the recipient of a third-party scholarship that provides full tuition, room, and board for four years of undergraduate study. Ally’s goals while in college are to earn a “good degree,” have a solid foundation for a career path, and “experience different people and different cultures.”

I just feel like college is the time when you can open up your eyes to what the rest of the world is, and you don't have to worry about the stigma of your parents trying to control everything that you do, and you can just kind of find yourself. I guess that's what I hope to find from college, is not only education but realizing what I want from life. {laughs} That's a really cheesy answer.

Across interview sessions, Ally was consistent in her passion to learn about other cultures. Ally identifies as a first-generation Indian American female. She has no off-campus commitments.

Many of the activities to which Ally dedicated her time speak to her efforts to learn about and experience different cultures. As a first-semester college student at the time of this study, Ally was enrolled in a class on deaf culture, a subject matter in which she already had an interest. “We get to read books and watch videos and documentaries about subjects that I would probably watch on my own either way.” Ally mentioned that she was purposeful to coordinate her courses with her passions, goals, and career ambitions. For instance, such coordination was apparent in her selection of student organizations. Along with learning about other cultures, Ally wanted exposure to her Indian background.

Like I said grew up in a not small town but kind of conservative, very monotonous town—everyone was kind of the same. And my culture and my family background was really different [from] who I grew up with and who my friends were. So coming here that was a big part of it. I wanted to be around people that I felt like I could relate to because I've never had that before. So I feel like [WSU] definitely provided a safe environment where I felt like I was accepted for my culture.

She shared that an important part of this acceptance stemmed from joining the Indian student association. Once again in alignment with her interests, Ally participated in many cultural exchange opportunities. “We correspond with other cultural associations as well, so Korean students, and Japanese students and Swedish students, students and people that I normally would have been exposed to before, I get exposed to through that association.” Her biggest time commitment on campus, three hours each week, was for a voluntary student organization for students who received the same third-party scholarship. Ally made her closest friends through this group’s official mentorship program that matched upper-division students with lower division students. In addition to meetings and socials, the organization hosted a weekly two-hour study hall.

These enriching educational experiences were one of Ally’s top priorities and influenced her course schedule.

I've told a lot of people this already, but I feel like my classes have been really easy so far. {laughs} And I'm blessed with that because I purposefully took the minimum hour requirement and classes that I didn't feel like would be too challenging so that I could get involved in groups and test the water and see what I liked and weed things that I didn't like out. I wanted to have more time my first semester to figure out what I wanted to be a part of, so I needed to not have a big academic burden on my shoulders in order to do that. I feel like I got the good end of the stick this semester.

She recognized that the time and effort required by her courses would be a limit her ability to experience multiple student organizations, so she strategically selected number

and subject matters of her courses. As with her deaf culture course, she selected other courses, both core curriculum requirements and electives, that did not feel like work. “It feels like I’m doing something for my own enjoyment.” For Ally, interest in the subject matter made the required readings, assignments, and study sessions less challenging and more fulfilling.

Ally viewed herself as an active and collaborative participant in her learning. She was not one to “ignore it” when she struggled with a concept in class or while studying. “I usually pride myself in my ability to reach out to people and take ownership of things.” In three of her four courses, she felt that the professors, TAs, and students all encouraged each other to continue the discussion outside of class and organize study sessions. Ally described the fourth course as a “learn-from-the-textbook or Google-the-answer type of class,” which disappointed her. Despite the passive learning experiences in her fourth course, Ally found her professors “care about you as a person, that you’re not just another student another number. I feel like everyone that I’ve talked to has just been genuinely interested in what you have to say or cares about how you’re experiencing college.” In her large- and small-enrollment courses alike, Ally felt that her professors were invested in her success in their respective courses and, more generally, as a WSU student. As she emphasized in her comments on gaining exposure to her own and other, diverse cultures, she selected WSU for its culturally supportive and “safe environment.” As for academic support, Ally was aware of campus resources, but had not utilized their services, yet.

Prior to this semester, Ally had no experience with formal online education. Her high school offered courses online, but the courses never fit into her degree plan or class

schedule. At the time of this study, Ally was enrolled in one online social science course through WSU. She enrolled in the course as part of a three-course package. Ally explained that through this arrangement, she enrolled in a FIG course with around 25 students. This cohort also enrolled in two larger courses together. She researched the social science course through third-party course and faculty rating websites. “They said that it was labor-intensive, but it was really interesting.” From her descriptions of her courses, Ally indicated that these two qualities were practically pre-requisites for her to enroll in course.

Elaine

Elaine is a 21-year old senior with a major in media studies. Though a serious illness led her to reduce her course load early in her college career, Elaine will fulfill her degree requirements at the end of this, her fifth, semester. She was able to stay on track—a degree in two and a half years was her goal when she matriculated at WSU—by graduating high school with almost 60 hours of college credit, enrolling in summer term courses, and taking an increased course load over the last two long academic terms. In her final push this semester, Elaine is enrolled in 21 SCH. When asked, “What do you want to get out of your college experience?” Elaine described a shift in her goals over time.

So, [freshman year,] I just really wanted to get ahead. I was the youngest person in [media studies] to be working for a magazine at the time, and yeah, I definitely thought that college was just like the place to jump over some of the steps, does that make sense? But over time I just wanted to learn as much as I could and absorb different things {laughs}. I guess I fell in love with the process of learning things itself, and I feel like I have this encyclopedia of information now that I've gained—so I think it went from like career-oriented to like life-oriented over time.

At first it was just like the thing I had to do to get to work, and now it's the thing that I did to learn a bunch of stuff, and I don't know where I'm going to work forever now {laughs}.

Though on a tight timeline to graduate in five semesters, Elaine's goals shifted from an ambitious pursuit of a career toward the pursuit of knowledge and learning for its own sake. She credited her parents' difficulty in keeping full-time employment as a key influence on her early, career-centered goals.

Neither of my parents graduated from college. And my dad, after the recession especially, kind of hopped around from sales job to sales job. And my mom is a finance director now, but had a really hard time making it, just because she did not have the sheet of paper.

She identifies as a Hispanic/Latina female and first-generation college student. Elaine has a part-time job on-campus and watches over her adolescent brother two to three evenings a week.

With off-campus commitments, such as addressing her illness, caring for her brother, and holding a part-time job, Ally found it difficult to stay active in student organizations. She completed internships during three semesters, which developed her writing and design skill sets and provided a glimpse into a variety of media-related career paths. Yet, at the end of her time as WSU, she expressed disappointment that those off-campus commitments kept her away from being involved in student organizations.

I think mostly it's kind of a ripple effect because I didn't make super strong social connections those first couple of years. I didn't really have them this last semester, and it was kind of too late to jump on the bandwagon. There was a lot of groups I would have wanted to be involved with, but by the time that you know you get to your last semester you're just trying to kind of push through, and you don't have the like social connections that you would have made.

First consumed by a 30-hour per week off-campus job and then by fighting a serious illness, Elaine entered her final semester as path dependent on her track to graduate in two and a half years, despite an interest in becoming more involved with student organizations.

Elaine's experience of being a student while battling an illness influenced her perceptions on WSU's supportive nature. While she acknowledged that some members of campus, in particular the office that serves students with disabilities, were caring and "extremely helpful," Elaine was disappointed with most of her campus interactions as she searched for assistance. She noted her experiences with the financial aid office as representative of her experience.

It was having to drop down to six hours, and like I was technically a full-time student, but they coded me wrong every single year. So every single year I didn't get financial aid until October. So, by this year I was planning on it, and I had saved up money, so I could pay stuff.

Elaine felt that the staff members outside of the student disability services office did not "understand what it is like to be sick in college" and were not empathetic. She described the support she received as a part-time campus employee in very different terms.

Elaine's department was "very accommodating" as they allowed her to work around class schedules and assignments. As for faculty, Elaine had some faculty who understood her situation. One professor partially soured these positive feelings toward faculty. "He didn't think it was wise for me to continue school because I couldn't get the most out of my education." As college was an important part of her life and a motivation during her fight to improve her health, Elaine seemed to have received the recommendation as a

rejection by the campus. Since her illness, Elaine indicated that a higher percentage of courses her courses were in her college and major.

I would say I had my, all of my media studies professors have just been phenomenal, and I've loved them. They're very engaged with the classroom. I feel really comfortable asking questions of them, and I always feel like if I needed to go to office hours I wasn't intruding on their time.

Her experiences since the most difficulty semesters of her illness did not sully her impression of her professors as interactive and welcoming.

Even with her off-campus commitments and health concerns, Elaine described the general level of academic challenge at WSU as quite manageable.

Honestly, I've never had a class where I didn't feel like it was unbearably hard. I've had classes that have a lot of work, as in writing, but if I go to the class, and I sit on a lecture, I don't really have to study after, and I can just kind of recall the information. A lot of my classes were pretty easy for me {laughs}.

By enrolling with close to 60 SCH from a community college as a first-year student, Elaine arrived at WSU with credit for many of the courses described by other study participants as “weed-out” courses, which may help explain the low level of general academic challenge.

Elaine viewed herself as active in her learning and collaborative with her classmates in her WSU courses.

I really feel like I'm pretty active in my learning. I've taken classes that interest me, so I read all of the material, but I also asked questions—I'm definitely a question-asker. I feel like in class I try and make things applicable to real-life situations. My [media studies] courses, we just talk about interpersonal communication, and so I feel like I was trying, always trying to engage with the information—so I definitely didn't just memorize things.

An interest in the course material encouraged Elaine to complete more of the readings.

She shared that she tended to have group projects in her courses and studied with

classmates. “I definitely did a lot of studying with people in my classes. A lot of times because people wanted to study [or join projects] with me.” She often used online tools, such as course Facebook pages, to organize and join face-to-face study groups for their convenience and capacity to reach more students than she could reach in a class meeting.

Prior to this semester, Elaine completed three online courses through a local community college. These courses neither required nor encouraged student engagement, which allowed Elaine to “log on once a week and have an hour’s worth of work.” At the time of this study, Elaine was enrolled in one online course in media studies through WSU and one online course through the local community college. Her previous online courses were in disciplines in which Elaine had no interest, so they did not influence her expectations for her WSU online course, in which she expressed great interest. When asked if the online format of the course was a factor in selecting the course, Elaine noted,

Yes! [laughs] The online is, was a huge part of it, honestly. Because juggling my schedule was so difficult in the past. I had also heard of [course instructor]. She just had glowing recommendations from anyone who had taken her class.

Elaine shared that the flexibility in time and location provided by an online course was significant, especially due to her increased course load and work and family obligations. Yet, the online format was not the sole factor, as Elaine was quick to point to positive student reviews of the course instructor as a motivation to enroll in the course.

Pseudonym	Gender & Age	Class	Race/ Ethnicity	Major	WSU Residence	Additional Descriptive Data
Eva	Female 18	FR	Latino/ Hispanic	Undeclared	On-campus	Full-time, off-campus employment; Not U.S. citizen
Paul	Male 24	SO	Latino/ Hispanic	STEM	Off-campus	Army veteran, National Guard member
Judy	Female 18	FR	Asian/ Asian American	STEM	On-campus	STEM Scholar
Mike	Male 22	SR	Latino/ Hispanic	Engineering	On-campus	“Super senior;” Leadership role in co-curricular engineering organization
Jennifer	Female 20	SR	Asian/ Asian American	Honors, Art Design	Off-campus	Editor-in-chief of campus publication; Founder/president of service organization
Grace	Female 18	FR	Asian/ Asian American	Undeclared	On-campus	Dropped to 9 SCH; Involved in four student organizations
Ashley	Female 19	SO	White	Humanities	Off-campus	Off-campus, part-time employment; Greek life
Mary	Female 20	JR	White	Business	Off-campus	Enrolled in graduate-level coursework; Greek life
Katie	Female 20	SO	White	Liberal Arts	Off-campus	Transfer student; Greek life
Ally	Female 18	FR	Indian American	Undeclared	On-campus	Full scholarship recipient
Elaine	Female 21	SR	Latino/ Hispanic	Media Studies	Off-campus (with family)	Serious illness sophomore year; On-campus, part-time employment; Enrolled in 21 SCH

Note. Class refers to the student’s classification by SCH. FR = freshman; SO = sophomore; JR = junior; SR = senior.

Table 4.1. Participant Descriptive Overview.

Pseudonym	# of Previous Online Courses	WSU Online Courses	Online Course Grade	Online Enrollment Driving Factor
Eva	0	Humanities Social science	H: B+ SS: B	H: State requirement, course schedule SS: Core curriculum requirement
Paul	5+	Humanities	B	State requirement, subject matter interest
Judy	1	Social science	Did not disclose	Subject matter interest
Mike	0	Humanities	B-	State requirement, anticipated level of academic challenge
Jennifer	0	Humanities	A-	State requirement, anticipated level of academic challenge
Grace	1	Social science	B	Core curriculum requirement
Ashley	0	Humanities Social science	A C+	H: State requirement, course schedule SS: Core curriculum requirement
Mary	2	Humanities	A-	State requirement, anticipated level of academic challenge
Katie	2	Humanities	A-	State requirement
Ally	0	Social science	A	Core curriculum requirement
Elaine	3	Media Studies	B-	Online platform

Note. The humanities instructors graded on a scale with “+/-” grades. The instructors in the social science course graded on a scale without “+/-” grades.

Table 4.2. Participant Online Education Overview

Chapter Five: Student Perceptions

In the following two chapters, I present themes that emerged from participant descriptions of educationally purposeful activities in their online courses. These themes build a “description of the universal” (Creswell, 2007, p. 58) experience, representative of the sample or particular sample subsets, with the phenomenon at the heart of this study: the lived experiences of students enrolled in online courses through a major research university. These chapters address this study’s first two research questions:

1. How do students enrolled in online courses at a major research university describe their engagement (categorized by NSSE as level of academic challenge, active and collaborative learning, student-faculty interaction, enriching educational experiences, and supportive campus environment)?
 - a. What meanings do students make of the educationally purposeful activities related to their online courses?
 - b. How do students associate their motivations for enrolling in online courses with the methods and levels of their engagement in those courses?
 - c. What are student perceptions regarding the ways, if any, the temporal and spatial flexibility provided by online courses affects their engagement, both in online courses and broadly with the university?
2. How do students perceive the relationships between their online course environments and their physical workspaces, non-academic commitments, and their campus experience?

In the first five sections of the chapter, I present the themes and corresponding data related to each of the engagement benchmarks: academic challenge, active and collaborative learning, student-faculty interaction, enriching educational experiences, and supportive campus environment. Though these benchmarks provided a framework for data analysis, I employed open coding to understand the role of online course enrollment and the students' ecologies, both on- and off-campus. In the final section, I present themes that emerged the interplay between online courses and the environments in which students live, learn, and develop.

Active and Collaborative Learning

This section focuses on emergent themes from participant descriptions of the educationally purposeful activities, inside and outside of class, that contributed to their active and collaborative learning. The activities included live peer chat sessions; polls, quizzes, and surveys; face-to-face and online study groups; and in-person class meetings and research participation. I first present evidence from student interviews that support the purposeful use of peer chat forums to enhance active and collaborative learning. Students' descriptions of their experiences in the humanities and social science courses highlight the benefits of directed, small group chats that are integrated into the fabric of the course. For the students who were active in the chat rooms, their anonymity increased their capacity to share diverse opinions and challenge their classmates' ideas and stances. I then address the balance between face-to-face and online opportunities for active and collaborative learning.

Engagement Benchmark		Active and Collaborative Learning			
Forum	In-Class		Out-of-Class		
Activities	<u>Collaborative:</u> Chat Sessions	<u>Active:</u> Polls, surveys, quizzes	<u>Collaborative:</u> In-person study groups, online document creation and share	<u>Active:</u> Online simulations, research study participation	
Student-Reported Themes	<ul style="list-style-type: none"> • Small, integrated chat sessions with faculty direction increased active, collaborative learning • Students related online anonymity with open communication a deeper exchange of ideas • Frequent, integrated online activities connected to improved attention and understanding 		<ul style="list-style-type: none"> • Students view online collaborations in their online courses as similar to those in their face-to-face courses • Some students sought face-to-face peer interaction, while other students connected their reduction in face-to-face peer interaction with the online course platform • Academic integrity of online collaboration was unclear • Active learning activities tied to practical application of theory and connectedness with classmates, campus 		

Figure 5.1. Active and Collaborative Learning Themes

In-Class Activities

Chat Room Design, Integration, and Anonymity. For the active and collaborative learning benchmark, the most common theme that emerged from the data analysis was the impact of purposeful design on the utility of online chat forums. All participants, with the exception of Judy, in the social science course described their interactions with classmates while “in-class” as meeting or exceeding their expectations

based on previous online and face-to-face courses. These voluntary interactions largely occurred within live chat sessions, which when utilized were beneficial for their capacity to connect students in the moment and create a safe space to discuss questions. Students in the humanities class described the difficulties of participating in large chat rooms open to the entire class and directly related those difficulties to increased passivity and isolation.

Integrated Design and Anonymity. All students in the social science course, with one notable exception, indicated that the ability to communicate instantly and openly with many classmates on the current course topic was a unique quality of the synchronous online class meetings. As noted in the course profile in chapter four, the social science course utilized two styles of chats: assigned “pods” and random chat rooms. Students could choose to participate in their pods, which included the same group of six to seven students each class meeting and were each led by a TA or undergraduate class mentor. The pods opened 30 minutes before class began and remained open for the duration of the class. The chat rooms ranged in size from two students to 20 students selected at random. Though not facilitated by instructors or academic support staff, TAs monitor chat sessions in class and through reviews of session transcripts. Eva provided a succinct description of the interaction in both forums, likening the experience to an Internet “chat room, so everything's kind of like instant messaging back-and-forth” among classmates.

Ashley explained that the chat rooms elevated her level of active participation and peer interaction over her more passive role during in-person lectures:

I'm a social person so being able to say something in the moment is different than being in a class and being silent for 75 minutes and then leaving the class and trying to talk about the lesson with someone, but it's not in the moment anymore. You might have forgotten.

Ashley kept her pod open in one browser window while she watched the live feed of the class in another. Unlike in a “traditional classroom,” the students who were active in the small chat room selected to actively communicate with classmates. “In my other [face-to-face] large lectures I kind of just sit there and absorb the lecture and then do my readings at home by myself. Whereas in the [social science] class I am talking to other students constantly throughout the class.” Ashley also found this arrangement removed the uncertainty that she may distract or bother other students with her questions.

Other students described the in-class chat sessions as a safe place to exchange and challenge ideas with classmates. Both the intimate setting and anonymity of the chat room removed the intimidation associated with “being opinionated.” For Ally, “it's less scary to ask questions because people can't judge you if you ask something that might not be as intelligent.” The anonymous, online format established a space for her to engage in the class conversation without self-consciousness or the fear of how others would perceive her. For Ally, the anonymous chats proved to more than just a safe environment to ask questions. They allowed Ally to answer classmates' questions and challenge their answers to her questions.

Just my competitive nature. If I can go into a pod chat and correct someone on a wrong answer, then I don't mind it. I also, if I'm confused about something then I would like to learn from other students who might have understood. So I'll go in and ask a question if I don't understand why the answer is that, I'll say, "Okay, why is that the answer?" And I'll get three students who'll explain it to me all at once. So I feel like I participate because I care about my grade, and I recognize that I have to implement different types of resources to get a good grade in a

class.

Ally repeatedly referenced her reliance on campus resources and not being “scared to ask questions” as two of her academic strengths. The in-class chat sessions were an important resource in her online social science course.

In a similar manner as Ally, Grace emphasized the importance of anonymity in the quality of her in-class chat sessions. As a first-semester freshman, Grace appreciated small chat rooms for their capacity to level the social playing field.

It would be difficult in [a face-to-face] class. The professor's like, "I'll give you ten minutes and you talk amongst each other," because then people would probably be like, "I don't want to talk to you, I'll just talk to my friends." But if it's online, they put you into a random group, and you're forced to, not really forced, but you're committed to talk to each other. And I guess the number of people in the class, that's why it's easier to have it online. You have discussions. It's easier to do it typing rather than discussing because then you kind of get distracted by the people around you, too, if you're in a big room and then everyone's discussing.

The anonymous, random assignment of students to groups left one common denominator among students—the course. From Grace’s perspective, peers in the same social group did not have the opportunity to shift the in-class discussions to their personal lives. Thus, the chat room design “committed” students to communicate about the course. Grace connected the anonymous nature of the chat room with a safe environment to pose questions to her classmates without the concern that she would “say an embarrassing question.” Ashley related similar feelings, having found comfort in anonymity’s opportunity to challenge classmates and develop her opinions and thoughts.

[The instructors] give us a topic to say something about, and you can put anything in there. No one knows who you are so it's a lot easier to kind of get out your ideas and interact with other students and talk about your ideas. But maybe they're different from their ideas and you can build off of that. Whereas I think if

it's face-to-face and your name, you don't want to be wrong. You don't want to have different ideas from other people, so you're more inclined to kind of just go with the flow of what everyone else is saying.

The chat rooms stripped the fear of appearing uninformed or expressing an opinion held by a minority of the students. Anonymity lowers the cost of engaging in an exchange of ideas.

One student in the social science course felt the reliance on chat rooms for peer interaction was a barrier to her active and collaborative learning. Judy's concerns over the chat rooms' functionality led her to describe the live chats as a cost associated with online education. Through her STEM Scholars program, the enrollment in three of Judy's five courses was limited to the members of her STEM Scholars cohort. These small enrollment courses allowed Judy to form close relationships in class, which encouraged Judy to ask questions and work through difficult-to-grasp concepts with her classmates. In the social science course, she expressed anxiety about missing important information during lectures, both face-to-face and online. However, unlike in her face-to-face courses, asking a question online removed her attention from the lecture or class activity.

Because when I'm in-class, I could ask the person, whisper to the person next to me and ask, "What did she say? What was going on?" But then, I feel like, the online [social science] class, you have to go to a separate tab to type your question and everything. And then it takes your attention off the lecture. So I feel like it's much more difficult than I thought it was.

In addition to the cumbersome design of the chat room, Judy did not share her fellow participants' perspective on chat room anonymity.

It's kind of harder because you don't know who that person is or what they look like. So it's like, "Will this question offend them?" Whereas in class, it's like,

"Oh, we can be friends and everything." And then you can also ask outside of class because you guys are friends now.

Late in the semester, Judy described her experience with a student who seemed "very aggressive" in a chat session. Unable to view the student's facial expressions, she "didn't know if he was being serious, sarcastic." In response to his behavior, Judy removed herself from the chat and felt robbed of her time and opportunity to exchange ideas with the other students in the chat room. She found the distance and faceless mode of communication to inhibit her impulse to interact and collaborate with her online peers.

Auxiliary Design. All students in the humanities course reported that they rarely or never contributed to the chat sessions. As described in the course profile in chapter four, the humanities course offered a single chat room to all students in the course. Though students connected their passivity with their low motivation to engage in a required course, discussed in more detail in this chapter's section on academic challenge, the auxiliary nature of the chat room contributed to their disengagement. The design deterred participation by students in the study due to the sheer volume of activity and wide range of topics discussed at once.

Mike connected his reluctance to join the single chat room with the large course enrollment. Mike made repeated references to his preference to small, discussion-based courses over large, lecture-based courses. Even in courses with 200 students, Mike expressed concern about the ability to communicate with his peers. Though not a direct attribute of being online, Mike related the humanities large class size with its reason for being online. He believed the university developed an online section "since every student here at [WSU] has to fulfill their [humanities] requirement." With regard to the class

chat sessions, Mike felt his participation was not necessary. “There's over 800 students, sometimes you could let other students do the engagement part of the lecture, which is on the chat.” Similar to Mike, Ashley did not feel compelled to participate in the chat. “I guess they do want you to be in the class chat because they think that that's a good thing, but having 800 people engaged in a chat isn't super productive.” Whereas Mike abstained from discussions under the assumption that the livelihood of the chat room did not hinge on his participation, Ashley felt her contributions would actively hurt the discussion by adding to an already noisy environment. Ashley added:

There's a class chat that goes on the whole time that they're in class, and there's one TA that proctors the entire class chat for all hundreds of people in the class. The chat is kind of disorganized. I feel like a lot of people don't really participate in it at all. It's usually the same group of kids that are posting in there all the time. So it's not as interactive as the [online social science class].

With a large number of students and one TA to help guide the conversation, Ashley did not see a benefit to add to the discussion. Ashley emphasized that the humanities chat room was “open the whole time” and felt like a secondary feature to the course, whereas the social science chat room forced her to “always having to be so involved in the class.” Ashley did not blame her passivity on being online and drew similarities with her typical level of activity in classes. “I don't have a whole bunch of friends in my other classes, so it's not like I socialize in my other courses, either. I just happen to be physically present.” Instead, she credited the “little chat rooms,” which faculty wove into the fabric of social science class meetings, with increased active and collaborative learning.

Three participants enrolled in the humanities class noted a lack of direction in the chat room at the beginning of the semester that subsided once the faculty provided more

direction and called for greater “professionalism” in the student exchanges. At first, Mary felt that students did not use the chat function to engage with classmates, but only to “ask silly questions.” Paul, the 24-year old Army veteran, described the early-semester chat room activity in a similar manner. He believed the majority of questions asked by his classmates could be answered with a cursory review of the syllabus. His questions on the topics brought up in the lecture drowned in his classmates’ questions about the course, which led Paul to view the chat room as “useless.” He placed most of the blame on his peers— “18-year olds who don’t use [the chat function] properly.” A few weeks into the semester, Paul noticed that students responded to the instructors’ attempts to bring order to the discussions. Jennifer described the change in chat room demeanor as dramatic. “It’s been on-topic since the third week of class after [the instructors] lectured us about how off-topic our chat was.”

This direction from the instructors and the subsequent change in chat room demeanor were not enough to entice most of the participants in this study to become active members of the live chats. Despite their inactivity, some students indicated that observing the chats contributed to a better, deeper understanding of the course material, which is a key goal of active, collaborative learning. Though rare, Mary found that sometimes her classmates would pose “really good questions,” which would prompt her to spend more time thinking about the course subject matter.

Jennifer and Katie described themselves as passive in the humanities course, but also related the chat to providing deeper insight from their classmates’ comments. Though Jennifer appreciated the improved chat room activity, she did not join the chat

room discussions. In fact, Jennifer described her general engagement as minimal. “I engage enough to get the grade that I want, hopefully. We'll see. It really just is that it's not a priority for me. And it's not because it's online, it's just a class that we have to take.” Her chat room behavior exemplifies her overall disengagement. “I don't participate in it. I have it open. I read it sometimes. I guess I lurk.” Though not a contributor, Jennifer noted that her classmates’ comments could be “interesting” and added value to her class experience. Katie also admitted to “keeping the window open” but rarely contributing to the discussion. She felt intimidated to join in the fast-paced chat and noted, “I'm just not politically aware enough to contribute anything useful in that conversation.” This comment suggested Katie felt that the conversation in the chat rooms rose above her comfort level with the topics but also pressed her to analyze and synthesize concepts covered in class. Both Jennifer and Katie kept an eye on their classmates’ discussions to hone additional insights on the lecture topics.

Eva also found an unexpected benefit from watching, though not participating in, humanities class discussions. Similar to the other participants, Eva at first did not grasp the chat room’s utility and found it “pointless.” After the first two weeks, she began to pay attention to the content of her classmates’ posts.

They'll talk about if they're having group study sessions or if they found some material that's going to help with the class. Somebody found a Norton study guide for the class and they posted it. And they're, like, “Go to this, and it's going to help you.” So that's really helpful.

The benefit to Eva was not finding a deeper understanding of the concepts covered in class, but in finding a central location for sharing supplemental study materials and organizing study groups. Though they did not solicit participation from the students in

this study, the humanities chats provided additional insight into their classmates' perspectives, enhanced the online humanities course's lecture components, and provided a message board for share course-related materials and activities.

Active learning via online platform. All students enrolled in the synchronous courses connected online activities to increased levels of attention and comprehension. These activities included polls, quizzes, and surveys; solo chat sessions; and online simulations. Students used their face-to-face courses as reference points to describe the methods and levels of active and collaborative learning in their courses. These descriptions bifurcated along course lines: Participants enrolled in humanities viewed the class meetings as passive lectures, and participants enrolled in the social science course viewed the class meetings as interactive and collaborative. This difference indicated that the integration of activities into the class experience is crucial to promote active learning.

Online to face-to-face comparisons. As the synchronous online courses each enrolled over 900 students, the students used their large, lecture-based courses as points of comparison to describe their active learning. The majority of students who made such comparisons described themselves as passive in such face-to-face courses. Ally indicated that she has no interaction with the instructor in her face-to-face, lecture-based course.

My communications course is fairly large, I mean not that big comparatively, but it's the biggest class that I have. I would say maybe like 100-120 kids. There's no interaction in that class. {laughs} We sit there, and we listen to the lecture. Usually kids just go on Facebook. We don't listen to the lecture anyway because the textbook tells us what we need to know. We might just show up to class just to be present and to be in the seat, but we're not actively there. We'll just go home and read the textbook on our own when we have time.

Ashley emphasized that in courses where students have low motivation, such as the

online humanities courses that is required for all students, many students choose not to attend class sessions unless necessary. “If attendance isn't required, a lot of kids aren't going to go. I know in my history class when we have a quiz, the kids will come and take the quiz and literally walk out of the class.” These depictions of the student experience in large, lecture-based courses share similarities with Christensen’s experience as a student nearly 50 years ago when he would sleep through class while the instructor lectured, and the instructor would sleep as he read the textbook at night (Christensen et al., 2011.). Face-to-face courses, like online-based courses, are not immune to feelings of distance.

All students in the humanities and social science courses connected the use of online, in-class activities to either increased attention or a deeper understanding of the topics covered in the course. Students in humanities pointed to weekly, scheduled quizzes and “unannounced” polls—which count toward the participation grade—as a motivating factor to listen to the lecture portions of the course. For Mary, being outside a professor’s watchful eye made her less accountable to stay on task. “I feel like having it online has impacted how much I'm focused during the class.” Mary explained that the online platform presented the opportunity to multitask during class meetings, a behavior she did not engage in during face-to-face class meetings.

So being in my room and watching it I'm probably not as engaged as I would be if it was a lecture in person. I feel like, with a lecture in person, they're up there teaching. This is my dedicated time to it, whereas, while I'm watching this lecture I'm getting ready for class. I leave my room right after I watch the lecture and go to campus. I'm planning on this weekend actually watching the two lectures this week just because I can sit there and study for another class while listening to this, but it's not getting my undivided attention.

With the ability to multitask during class, Mary said she appreciated incentives to watch

the live lectures. “A lot of the grades are participation, which I think is great—doing online simulations, or in -class polls, or the quizzes.” Mary believed that with a grade attached, the activities made “sure that you're watching the lecture.”

Mike’s experiences with multi-tasking echoed those of Mary.

Sometimes during the lecture, actually the way I kind of do it is I split screen my laptop. I have the lecture and then I could do other stuff. I think it was made to multi-task on my laptop. As compared [to] a class where you're focusing on the professor and taking down the notes and stuff so you're not easy as distracted as if you're in an online course.

Mike described the weekly quizzes as an incentive to watch the lecture during the live broadcast. “Of course on Mondays since you have the quizzes, actually that probably forces people to watch the lectures on Mondays just because there's a quiz at the beginning of the online lecture and stuff.” Mike continued to explain that the weekly quizzes—a component unique to his online course—“force” him to login for the 8:30am class meetings. He described this act as a feat in itself, but he also connected this attentiveness to more active note taking and synthesis of the lectures, as the quiz questions often address topics covered in class.

In addition to “have people be awake and active during class,” Katie felt the in-class activities provided the faculty with “an idea of where the class stands” with regard to their handle on the topics covered in class. She noticed that the professors used the real time data provided through formal quizzes and one- or two-question polls to adjust their lectures. In this sense, Katie found the activities helped focus her attention on the lectures while they simultaneously improved the quality of those lectures.

Integration of activities. Though students credited these polls and quizzes as components of their active learning, they reported that the humanities course incorporated the activities too infrequently to have a significant impact. The majority of students indicated that the course felt “just like a lecture.” Mary’s description of the class meetings exemplifies the responses from the participants. “[The instructors] launch into lecture, and usually it's one of them talking for 45 minutes, and then the other's talking for 30 minutes.” The participants did not connect these active learning tools to the heart of the class meetings.

All students in the social science course described active learning as integrated into their class meetings. Ashley and Eva had the unique perspective as students enrolled in both the humanities and social science courses. Ashley noticed a stark difference between how the courses utilized these activities.

Sometimes, [the humanities instructors] have a clip of a newscast or *The Daily Show* or something like that. They'll have a one-question survey that counts as a participation grade. But other than that, it's nothing as interactive as the [social science course].”

She found the variety of activities—quizzes, surveys, interviews with experts—to break up the lectures into 10-to 15-minute blocks, which prevented her from passively receiving the information. In particular, Ashley appreciated the opportunity to reflect on the course material in-class.

They've been doing this new thing where they make us go into a chat room alone... You just write down your thoughts about [the lecture topic]—and it's a way to develop your own thoughts on a subject, which isn't awful. I think it's pretty good for developing an idea. At the same time you're not gaining other people's insight into the subject.

She acknowledged the solo chat sessions lack the collaboration and new perspectives

offered in a traditional chat room. However, the solo chat sessions, which Ashley did not believe were graded or reviewed by her instructors or TAs, provided a unique opportunity to wrestle with her own understanding of the topics. Eva's experiences paralleled Ashley's in the social science course. She credited the professors with making "the class really interactive" and easy to digest. For instance, Eva described the components of a typical social science class meeting: a formal quiz, "[Social science] in the News," multiple 10- to 15-minute lectures, video clips, an informal quiz, and designated time for multiple chat sessions.

Grace ranked the class experience in the social science course ahead of those in her face-to-face courses. In addition to activities, the professors divided the lecture into sections to keep her attentive and engaged.

Yes. I think [social science], even though it's kind of hard, it's actually my favorite class this year because it's just interesting in general. I feel we actually learned a lot. In my journal I was saying how we always have different sections, like, "[Social science] in the News" or, "What's Cooking in Laboratory." It's really different than a normal class, how you just go in there, you listen to lecture, and you leave. For this class, you go in there, and then you expect things that are different. The cool thing about this class is since it's online, they can show you videos or do some video editing. It's different than just sitting there and staring at the same thing. In a normal class you're just sitting there and staring at the board or the teacher, it's kind of boring.

Grace explained that the professors used videos from out-of-class activities with students to highlight certain concepts in class. She participated in the filming of one such activity, which made her feel involved in the construction of knowledge. She saw theory jump into practice.

Judy shared similar descriptions of her active learning in the social science course. She explained that the instructors incorporated the information from student polls

and surveys into their lectures. These methods included using in-class poll data to demonstrate a method of statistical analysis to compare and contrast student responses to those from journal articles assigned as class readings. Judy viewed these activities as imperative to her success.

I feel [the activities are] kind of mandatory. For example, the past two weeks they've been talking about the [social science theory]. After you've taken the survey, they would rate you upon the [theory scale], and then they would give you the type of personality you are at the end of your survey. Then in the quizzes, they ask about this type of personality and the answer would be at the end of those surveys where they give you the results. I guess they're kind of required if you want to pass the [quiz].

Summary. The overwhelming majority of students in the sample related the online platform with in-class activities that promoted active and collaborative learning. Participants described increased participation in class chat rooms with (a) a limited number of students, (b) class time dedicated to the activity, (c) direction from instructors or academic support staff, and (d) anonymity. Students in this sample found the small-group chats to encourage participation, whereas students in class-wide chats, open for the duration of class meetings, felt intimidated to join or that their participation was unnecessary.

All students enrolled in the synchronous courses connected online activities to increased levels of attention and comprehension. These activities included polls, quizzes, and surveys; solo chat sessions; and online simulations. Participants connected these activities to improved attention during lectures and better comprehension of course concepts. Students indicated that integrated, purposeful activities had a greater impact on their active learning.

Out-of-Class Activities

Collaborative Activities. For most students, their outside-of-class, online-based activities in online courses closely reflected such activities in their face-to-face courses. Students reported similar levels of their use of online collaborative tools, such as Facebook and Google Docs. However, the descriptions related to face-to-face collaboration were more nuanced. Though some experiences suggested a strong desire to find face-to-face peer connections, other students who were aware of face-to-face meetings related a hesitancy to connect with classmates due to (a) the faceless nature of online courses and (b) the students' motivation for enrolling in the course.

Online platform's impact on collaboration. With regard to activities outside of class, students tended to describe their methods and levels of collaboration as unchanged in their online courses. Generally passive students and students who expressed little motivation to engage in their online courses did not claim to participate in collaborative activities. For instance, Grace described herself as a “passive” and isolated learner. She expressed an appreciation for the solitude offered by an online course and went as far to say that she preferred online over face-to-face courses, as she “is easily distracted” being around other people. Though she has friends who are also enrolled in her online course, Grace noted, “when I'm studying for the class, I also don't study with my friends.” Her reluctance to collaborate with classmates extended online. Grace said that she had never joined a course Facebook group or worked with students online through Google Docs.

Four students who described themselves as active, collaborative learners described their collaborative activities as mostly unchanged due to the online course

format. Ally, Eva, Ashley, and Katie depicted their general peer collaborations as balanced between online and face-to-face activities. With regard to online courses, all four participants directly or indirectly indicated that online collaborative activities were the standard, but that they made concerted efforts to collaborate face-to-face. For instance, Ally indicated that she used “[LMS] messaging, and Facebook, email, and Google Docs” in her face-to-face courses to interact with students outside of class. Though the LMS became her primary hub of activity in her online course, she continued to connect with students outside of class meetings via online fora. Without a built-in face-to-face component, Ally described her initiative to integrate in-person collaborations into her online experience.

I realized that I have made the conscious effort of going out and contacting people that are in [social science] with me to meet them face-to-face to study. So, had I not purposefully made face-to-face study groups, done that on my own, and made a conscious effort to contact my peers, then [the online course] would probably be separate [from her campus experience].

The online format did not prevent Ally from forming study groups. Instead, it motivated Ally to meet with classmates in person. Ally met regularly with classmates to “discuss the assigned readings and go over topics that were touched in the lecture.” For other courses, she used Google Docs to exchange thoughts on the readings and lectures, but for her online course Ally noted, “anytime that I’ve done it, I’ve done it face-to-face.”

Eva expressed that her preference for collaboration leaned toward face-to-face activities, but that she consistently visited course Facebook pages to connect with students. Through the Facebook page for her online humanities course, Eva learned about an online study guide available through the textbook publisher’s website. “[A

student] put it on the Facebook group. There are a lot of other things people have posted. They've made Quizlets and posted those on Facebook, too. Those are really helpful.”

For her face-to-face collaborative activities, Eva had to move past the initial awkwardness of meeting with students who she only knew online. “For [humanities], we do have group study sessions for the benchmarks, so it's like, ‘I don't even know who you are because I've never seen you in my life, but we have class together.’” Once she began to meet regularly with classmates, she valued the opportunity to connect in person.

I don't know [who organizes the study groups] to be honest. I assume it's one of the students. She just kind of took the initiative to help everyone else. They'll organize the study sessions, and they'll meet in the [general academic library]. It's usually a lot of people that will be there because the class is very large. We really don't have that much space to study, but they're really helpful. Especially for our midterm, we had a huge review session. It was probably a room twice this size [12' by 10' office], and it was packed with everyone. It was like, “We have to pass this mid-term. We have to do well.” Those are cool, too, because you don't know that you have class with them, then you finally see them, and you're like “Oh, okay. Like, we're taking the same class but we don't even see each other.”

Eva and her classmates used the face-to-face study group to prepare for tests and quizzes, share their anxieties, and motivate one another.

Ashley reported similar levels and styles of collaboration and peer interaction in her online and face-to-face courses. She described Facebook as the hub for peer interaction in most of her courses.

Ashley: I'm pretty big into social media. All of my classes have Facebook pages where everyone will post questions about the class and things like that, which are really helpful. People post their own study guides, notes.

J: So Facebook pages almost sounds like a study group?

Ashley: Yeah, they really are. I had a few classes that actually did this in high school. So many people do it. But for each semester almost every professor has a class Facebook page where students will go and post questions like, “Oh, I missed class today, could someone send me the notes?” Or everyone will make a Google

Doc and kind of put their own notes in there for the test. They're extremely helpful.

For Ashley, course Facebook pages and Google Drive documents provide an online, asynchronous substitute for face-to-face, synchronous study groups. In her experience, students share information, comment on each other's work, or show up as a passive member of the group. Ashley shared that she typically participated in face-to-face study groups with her roommates. They met to study whether or not they were in the same courses or if those courses were online or face-to-face. For her humanities course, the online platform had no effect on her decision to study in person with her roommates, two of whom were enrolled in the online section with Ashley.

Ashley: Sunday nights usually we all are doing homework together, so we will talk about what we think will be on the quiz, how we studied for the last one, what works for us.

J: Do you like that face-to-face interaction because you're in an online course? Does that help?

Ashley: I don't know. I think that I would like that if I were in any class with a bunch of people I knew just because it would be easier to kind of see what you're doing right or wrong compared to other people. I don't think it just has to be for the online class.

Katie described a balance of face-to-face and online activities with regard to her collaborative efforts. She used her sorority's required study hours to study for tests and work with classmates on group projects. She also leaned on the websites StudyBlue and Quizlets to find and share study materials. "They're great {laughs}! They're basically flashcard websites." For her online course, Katie met with a classmate to study face-to-face, and they used the online study materials as a foundation.

We have flashcards off the StudyBlue or Quizlet, whichever, of our notes or whatever we deem to be important. Then we basically do the flashcards together, and if we have a term, if I know it, I basically explain it to her. And we're like,

"Oh, okay good." Or vice-versa. And if we don't know it then we look at, we have our notes with us, we try to find it, we try to find out what it means. If we still don't get it, we turn it around—because sometimes they're made by us, sometimes they're made by someone else who put them on the Facebook study group page.

Katie found this arrangement blended online and face-to-face collaboration. Online collaboration provided an ability to find and share study materials, an face-to-face collaboration provided a true discussion to challenge each other's understanding of concepts.

Katie did not know any of her classmates at the beginning of the semester. "The girl that I do my study dates with on Sunday, I met her walking to our first exam, because we could not find it. That's how we met and decided to start studying together." Though she visited the course's Facebook page and was aware of opportunities to connect in person with classmates, Katie only initiated "study dates" from a chance meeting on the way to a required face-to-face exam. Paul shared a similar, seemingly random, interaction with a student that had a great impact on his experience in the humanities course. "Actually, I saw this one girl that was looking at the same lecture I was one day. And I asked her, 'These quizzes are hard.' And she said, 'Oh, yeah, they are. Try this website.'" Paul, who noted scheduling conflicts as an obstacle to attending the organized study groups in the library, suggested the face-to-face interaction led him to the textbook publisher's study guide. The happenchance face-to-face meeting meandered just enough for him to learn about the study guide.

Jennifer's experiences provide insight into the collaborative practices of participants who reported to enroll in an online class to free up time for other courses and

extra-curricular activities. Busy with her responsibilities as editor-in-chief of a campus publication and senior-level courses, Jennifer enrolled in the online humanities course for “an easy ‘A’.” “It really not a priority for me. And it's not because it's online, it's just a class that we have to take.” Jennifer suggested that she committed a minimal amount of time to the course, even though she may regret that decision down the line. “In a way I'm prioritizing immediate gratification over long-term gratification, because if I choose a class that's an easy ‘A’ that means I have more time now to spend on things that I currently find important.”

With regard to her collaboration, Jennifer acknowledged a marked difference between behavior in her face-to-face courses and her online course. Although she often met with classmates in her art design courses, she indicated that she had never studied face-to-face with a classmate for her online course. The decision not to attend study groups related to her busy schedule and not the course's online nature. However, online platforms allowed Jennifer to asynchronously collaborate and study with her peers, behaviors that were common for her in the majority of her courses.

I absolutely love Google Drive, and I just think it's the most wonderful thing in the world. I actually used it a lot in high school, too. We would create huge documents to study for tests, like physics or history. I know it's high school stuff, but it's just so much easier. If you're working on a group project, you don't all have to be in the same place at the same time. Of course only the people who engage in it and contribute will get the most out of it. I think that goes for everything.

Google Drive removed the restrictions of time and space related to face-to-face study groups. Jennifer connected the online platform with the option to take completed study

guides from classmates, but she recognized the advantages to being an active, collaborative partner.

Her appreciation for online collaboration outweighed her low motivation in the humanities course, for which Jennifer created the Facebook group.

They have some [face-to-face] study groups at some point, but I just didn't attend. I made the Facebook group for class. There's like 500 people in it. I guess that's like half the class. I guess that's interesting because a lot of people are really helpful. They'll post their notes for other people, and they'll post transcripts, and they'll post reminders about things.

Much like her propensity to “lurk” in the class chat sessions, Jennifer watched the activity of the Facebook page and gleaned useful advice and jumped on opportunities to collaborate on study guides as they rolled down the page.

Jennifer described the Facebook page as a central hub of class activity. She found it much more difficult to find classmates notes and documents on other collaborative websites, such as Google Drive and Quizlets. Facebook lowered the cost of collaboration by organizing online activities in a single location, which saved valuable time. Jennifer also pointed to the time saved by joining online study groups over their traditional, in-person counterpart for the humanities course.

You don't have a dialogue, and I think it's important to have discussions. But then we stay on topic, I guess in a way. If you're only reading what they wrote about, and what they wrote about is on topic, you can't stray too far from that. Some [in-person] study groups, you'll start on topic, and then 20 minutes later you're like, “I don't know how we ended up talking about this,” and that's just not very productive.

Jennifer acknowledged the trade-off of back-and-forth discussions for a more focused, asynchronous study sessions. Though Jennifer was not motivated to make time for face-to-face study groups, she did collaborate and study with classmates online.

Elaine similarly offered descriptions of her collaboration in her asynchronous media studies course. She identified herself as an active and collaborative learner who used Facebook to keep her finger on the pulse of the class. “[Facebook groups] were really beneficial too, just organizing study groups and things like that. People will check Facebook before they'll check [the LMS].” Even with face-to-face class meetings, Elaine found Facebook groups to be the most convenient forum to facilitate in-person study sessions. “You could post, ‘Hey, I’m available at this time, this time, this time. Whoever wants to meet with me, just message me.’ So, that was nice.”

With regard to her online media studies course, Elaine set aside two nights a week for her course modules, but her activities outside those modules needed to fit her hectic schedule. She was enrolled in 21 SCH, watched over a younger brother some evenings during the week, and held a part-time job on-campus.

This class is definitely the one that gets smashed into the weird little corners of the week whereas the other things can't do that. They have to exist on a certain time frame. I definitely made some 2:00 a.m. posts for this class where—you couldn't do that in a face-to-face setting.

Elaine related the flexibility in time and space to collaborative whenever and wherever fit her schedule to the benefits of online education. Elaine also connected being faceless in an online course with her reluctance to meet classmates in person.

People didn't meet in person for my online classes the way that they did for face-to-face classes. I think you just kind of get used to seeing people in class, and so you know them, and it's not weird to just say, "Hey, let's go study together." Where I would have felt weird approaching people in my online class, because our relationship is computer-based, not people-based.

Elaine’s relationships with classmates in her online courses predominantly lived online.

Academic integrity of online collaboration. Only addressed directly by two participants, a small but interesting student concern emerged regarding online collaboration and academic integrity. Judy and Paul expressed concern over the appropriate use of online collaborative platforms, in particular Google Drive. Throughout the semester, Paul noticed his classmates' posting their personal study materials on the course's student-run Facebook page. He did not contribute to the study guides, but instead used them as a foundation for his own study guide. Even with this comparatively mild use of Google Drive, Paul feared that his actions were "not exactly legal," meaning they violated WSU's academic integrity policies. Paul made a clear distinction between the legality of study guides on Google Drive and study guides made available online through the textbook's publisher.

I would get bad grades on the quizzes. I was like, "What the hell is going on?" That one day I told you I met that one girl, and she was like, "Oh yeah, go just on this website" {laughs}. So, I started going on that website and started getting 13s, 14s [out of 15 points] on the quizzes. I was like, "Really?" I stopped reading and just do these little study guides, and I get better grades on the tests. I feel I'm just memorizing instead of learning.

Paul connected his use of the publisher's study guide with improved grades and less academic challenge, but he did not mention a concern about academic integrity. Yet, his use of the Google Drive study guides felt like a violation of WSU rules on cheating or collusion.

Judy, who professed, "academically, I love Google Docs," became concerned with academic integrity and online collaboration during high school. At first, Judy took the initiative to start Facebook groups tied to her courses "to help students ask questions that they would be too scared to ask in class or face-to-face to the other students." Judy

explained how the groups shifted away from online meeting spaces to pose and solve questions and toward “an answer graveyard.”

Judy: At first it was really nice. I was like, "Oh, okay, I could help you with this and other people could help you with this." But then I made the group, that you had to get approved to enter, so not just any random person can come in and get answers. Then I gave rights to other people who were trustworthy. I didn't want to be the only one that's like, "Oh, you could come in." I didn't want to be the leader or anything, you know. I just wanted to work with other people. So, different people started coming in. And I looked at some, and I was like, “You're not even in this class. I don't know.” So I backed away because they were giving out a lot of answers.”

J: And just to homework, quizzes, or tests?

Judy: Mostly homework.

J: Homework, yeah. Okay. And what kind of class was that?

Judy: They were just pre-AP classes. There were multiple classes.

J: Okay. And at that point you felt you didn't want to really be associated, especially as the leader?

Judy: Yeah, because one time I even saw a past test on it. For pre-calculus, he uses the same test every year, but he just changes the numbers around. And this one time I saw the actual test, I was like, “Hey, I just took that test,” and then, “There's something going on.”

J: That crossed the line?

Judy: Yeah.

Once the Facebook pages became essentially open-access, the group members co-opted the spaces Judy designed “to work with other people” for their own purposes, which included the distribution of previous tests.

These early concerns did not deter her from online peer collaboration. Instead, Judy limited her groups to classmates with whom she had established a relationship, particularly members of her STEM Scholars cohort. “I would ask for their email so I could email them information and I can invite them to the Google Doc.” By forming the groups—either for courses or for specific group projects—and sending the invitations, Judy maintained some control over access to the online documents.

Active Learning. Some students in the humanities and social science courses connected certain online activities performed outside of class meetings to their active learning. These activities were unique to their online courses. Similar to their use of data collected through in-class polls and surveys, participants reported that the social science instructors would weave in student data from “weekly questionnaires that the professors send out to us that relate to the topic that we're doing in the class, like personality questionnaires.” Students in the humanities class appreciated the change of pace offered by out-of-class “simulations.” Mike described these as an “application” of the facts and theories from the readings and lectures to understand certain processes.

[Simulations cover] like "How do Congressmen get elected? What do they need to do to get their campaigns going?" So you do these little simulations of things, how the process works and all that. That's how they get students to engage in the overall course. They have a bigger scope of how things work and how things function.

The application of theory into simulated scenarios forced Mike to work with the concepts in a new way and place them within the larger context of the course. One simulation peaked Eva’s interest and helped her understand how theories play into actual decision-making.

You were the governor of [WSU’s state], and you had to decide whether or not to pass a bill. They give you all these different "What if" or "What if this could happen," people who are already in office are like, "This is a plan because such and such and such." But then people who are going to reelect you to office tell you that they want you to pass this proposition for x, y, and z. It's like you make decisions based on your constituents, people whom you're running for and all that. Those are pretty cool.

In addition to the application, Eva appreciated the online simulations’ immediate feedback. “It is going to give you feedback like, ‘You should have done this, or you

should have done that,' or 'In order to be a more successful governor, you should have done this.' So that gives you feedback." Though the feedback was not tailored to each student, it created an interactive component of the course beyond the classroom.

Some students in the social science course connected increased opportunities for in-person, active learning experiences with the lack of face-to-face class meetings. Judy described one such activity as a "flash mob where you could go meet other [social science] students." Grace tied the social opportunity to concepts covered in the professors' lectures.

We also had these really weird events where they told us to meet in front of the [administrative building] one day, and then we're supposed to talk to random people. We knew all the people who met there are from the [social science] class because it's a cool opportunity to meet students. They're also, videotaping us to do an experiment about how people interact with each other or with strangers. It was part of what we're learning. They incorporated classwork and social things together.

The professors utilized the recordings of the student interactions as original data, which brought to life the theories and research studies covered in the course.

Grace and Judy each described her participation as subjects in on-campus research studies with active learning. Their professors required students to participate in five hours of research studies related to the social science discipline¹. Grace found the experience to be insightful into how faculty members conduct research.

Outside of lecture we have to do a [five]-hour study. They have a list of different studies where you can go to. The one I went to was something about recognizing similarity between different faces. The other one tested how you react to people who reject you, even though I didn't know that was the whole purpose.

¹ Participation in this research study did not count toward this or any course requirement in the social science course.

Judy described a similar experience as a research participant.

Outside of the lecture, we have to do—they're five hours, and you have to sign up for studies. They vary, there's a lot a different types of studies. I don't know what some people have taken, but I've taken one called "frappucino," which I thought there would be something relating to coffee in it, but really it was just a survey about why did you join [WSU] and how do you like [WSU].

According to Judy, students had the opportunity to substitute their participation in the research studies with an essay, which would move the course further online. For Judy, the studies were a way to integrate the online course into her campus experience. “I picked that because it makes me more involved in the [WSU] community instead of just sitting in my dorm and writing an essay about the course.”

Summary. For most participants, the online course platform did not affect their use of online tools for peer collaboration. Though the class chat sessions shifted some of this collaboration to the course LMS, the majority of the sample indicated frequent use of Facebook and online flashcards. Descriptions of the interplay between the online platform and face-to-face collaboration contained more gradation among participants. Though some students took the initiative to organize or participate in face-to-face study sessions, even more students described their peer relationships as “computer-based.” This mindset contributed to less face-to-face collaboration by students with busy schedules or low investments of time and effort in the course.

Summary

The participants related specific, educationally purposeful activities in their online courses with active, collaborative learning. With regard to in-class activities, students differentiated the efficacy of such activities—including peer chat sessions and online

polls, surveys, and quizzes—to increase or encourage active learning and peer interaction. Most students in the social science course connected the small, purposeful chat sessions, which the professors utilized at specific points throughout class meetings, with increased attention and greater and deeper exchanges with classmates. Students in the humanities course found that the single chat room, open for the duration of the class meeting, felt auxiliary to the class experience and did not affect their active or collaborative learning. These students did identify benefits—such as gaining classmates’ perspectives on lecture topics and learning about study guides and supplemental course materials—to watching, though not participating, in the chats.

With regard to activities outside of class, most students described similar methods of collaboration as in their face-to-face courses. Students who preferred to study and work in isolation continued to do so, while most students who preferred to engage with classmates found or created opportunities to do so. A subset of participants described experiences that indicated a more nuanced relationship between online courses and face-to-face collaboration. Some students felt the online course was “computer-based, not people-based” and suggested the online platform constructed a barrier to in-person collaboration with classmates. This obstacle led students, in particular those with hectic schedules or low motivation to engage with the course, to interact in person with classmates less often than in their face-to-face courses. Though mentioned by only two students, academic integrity issues arose as a concern as these students did not see a clear line that distinguished collaboration from collusion in their use of online tools and websites. For active learning outside class meetings, students identified online

simulations and in-person participation in research studies as active and collaborative activities, the benefits of which included the application of theory into practice and the opportunity to connect with classmates and the campus community at-large.

Student-Faculty Interaction

This section focuses on themes derived from participant descriptions of their interactions with faculty members. The NSSE questionnaire primarily investigates student-faculty interactions outside the classroom and not “routine in-class interactions” (Coates, 2006). For the wide range of online course designs, previous research has not established which activities constitute “routine in-class interactions.” From emic codes generated during data analysis of the student interviews, I include in-class interactions in this section to allow for a more complete examination of student-faculty interactions. I found that across the three course designs included in this study, student experiences did not align with expectations based on routine or traditional faculty interactions. However, students in two courses connected the online course platform with opportunities for creative, personable faculty interactions.

Engagement Benchmark	Student-Faculty Interaction	
Activities	Traditional Interactions: Class discussions, office hours	Nontraditional Interactions: Coffee Quizzes, FIG discussion sections, direct online messaging
Student-Reported Themes	<ul style="list-style-type: none"> • Faculty enthusiasm translates online • Predominantly one-way communication is obstacle to meaningful discussions • Enrollment size contributes to students' avoidance of office hours 	<ul style="list-style-type: none"> • Small, intimate settings form stronger student-faculty connections • Students relate personal communications with faculty caring • Faculty-as-celebrity

Figure 5.2. Student-Faculty Interaction Themes

Ill-Suited for Traditional Student-Faculty Interaction

Students in each course included in this study related the online format to the difficulties in developing impactful connections with their respective courses' professors. The majority of students explained that faculty member' charisma, humor, and passion for the course topics translated across the online medium. Despite the quality of the lectures, some students tempered their praise for student-faculty interaction through their experiences with (a) one-way online communications and (b) large class sizes.

Most students in the humanities and social science courses found the professors to be "funny," "witty," and "engaging." Judy assigned a benefit to her social science professors' "funny and cheesy" sense of humor. "I guess it keeps you more focused because you could be falling asleep, and they do something cheesy and you notice it, and then you're awake." She explained that she actually did not sleep through class, but that the humor would draw her attention back to the lecture. Both Mary and Ashley had heard about the "entertaining" lecture styles in the humanities and social science courses,

respectively. Mary read reviews from faculty evaluation and ranking websites, and Ashley learned of their reputations through friends who previously enrolled in the course. Though Mary preferred a more straightforward, on-topic instruction, she described the professors' attempts to create a personal connection with the students. "They're interacting with each other. They're making fun of each other in the lectures or talking about their personal life." Ashley described her professors as "really funny, so the class is pretty entertaining." In the humanities class meetings, during which the faculty members lecture individually, the faculty member who was not lecturing joined the class chat room. Jennifer explained the arrangement between the instructors in the humanities course as, "When they're not the ones lecturing, they'll be in the chat room talking to people, which is neat."

Students in both synchronous courses depicted the instructional delivery as funny and entertaining, but limited in its capacity to facilitate truly interactive discussion. For example, Paul described the humanities instructors as "enthusiastic" and "providing great insight" during their lectures. However, he lamented over the lost back-and-forth dialogue available in face-to-face courses and compared class meetings to chores.

It's annoying because it's a one-way conversation, and most chores are one-way. They're just talking. They're not stopping to see our reactions or what we think about it. They just talk throughout the entire hour and 30 minutes.

Paul's description of the humanities course identified two obstacles to student-faculty exchanges: one-way communication and students who are faceless to the professors.

Paul, who was an Army veteran and current National Guardsman, shared a missed opportunity for a real discussion over military policies with a humanities instructor. He

disagreed with the instructor's comment on military policy but felt the chat forum was an obstacle to sharing his nuanced opinions on the matter. "That day I was like, 'Stupid computer.'" Ashley's experiences with faculty in both of her online courses echoed Paul's frustrations with predominantly one-way communication. "In my online classes there is the option to ask a question for the professors, but you don't have that back-and-forth between you and the professor that you would get in a face-to-face class." Ashley spoke highly of her peer interactions in social science chat rooms, but the forum promoted quick, single-response answers to the detriment of two-way discussions that would have allowed Ashley to wrestle with her ideas.

Eva, who also enrolled in both the humanities and social science courses, found the in-class interactions with faculty restricted. She directly tied the lack of student-faculty interaction during class meetings to the online format. "Maybe I just wish I could get a little more engagement with my professors while in class, not having to go to their office hours." The in-person office hours created a space for true discussion, whereas the one-way broadcast allowed instructors to answer questions, though not always in-depth. "They give you the answer but they don't really tell you why, unless you're going to sit there and have a full-blown conversation during the middle of class." Her sarcastic suggestion that a student would have a "full-blown conversation" speaks volumes to the communication challenges that arise with synchronous, online courses.

Paul and Mary described the obstacle to traditional student-faculty interaction through feelings of feeling faceless to the humanities professors. In addition to his frustrations with the online platform's inability to facilitate robust discussion with the

instructors, Paul indicated that the distance between student and instructors limited his nonverbal communication.

You don't build a rapport with the person. They don't have a sense of how you're asking the question and what you want out of it. You just want a generic answer, I'm sure they'll just give it to you. But, if you want something deeper, they can't see that. And they don't even know you to give you a formative answer.

Paul ascribed significant losses to remaining faceless in class. First, he suggested that nonverbal queues reveal your interest and intentions to the professors. Second, Paul felt that he could not build a connection, or even recognition, with the professors. Mary described this second loss to her online class meetings, which were “definitely the case where you're a number.” She related this feeling to large class size, which she believed to a driver for creating an online section of the course.

Ally connected the volume of questions generated by a large class with the lack of student-faculty communication in the social science course. “It's really difficult to interact with the professors themselves since it's, I think, 1,600 kids, so that's basically impossible. But we can send in questions to TAs, and they're usually really good about responding fairly quickly.” The course design directed Ally's questions to TAs, but prevented direct communication with the professors.

Mary and Mike made similar connections between their humanities course's large class size and their hesitancy to utilize routine or traditional face-to-face venues for student-faculty interactions. Though she was “not really interested” in attending the lecture in-person, Mary described the limited seating as an obstacle to attendance. “They do have an opportunity for you to go in person and watch the class live. That's limited to

30 students, and I think over 1,000 kids are enrolled in this class.” Mike pointed to the large class size as an impediment to visiting faculty office hours.

Especially if there's like 800 plus students, you don't know how long you might have to wait to get to office hours. You don't know how many people are going to be ahead of you. Especially coming around towards midterms, that's probably going to be very packed, also. I remember that because when I was in [introductory] chemistry, they're in the [chemistry building lecture halls], so those classes are at least 300 plus. And I remember it was not even a couple days before the exam, it was probably at least a week, and TAs' office hours would have at least 20 or more students. That's probably a little bit of a challenge when having a really large size class setting, whether it's online or whether it's in class, is just trying to meet with them one-on-one.

Neither student attempted to attend the class in-person or visit faculty during office hours due in part to the large class enrollment.

Creative, Personal Interactions

The student descriptions of student-faculty interactions outside the routine or traditional activities differentiate among the courses. Except for the chat communications discussed in the previous section, the participants from humanities course did not identify outside-class opportunities to interact beyond traditional face-to-face office hours. This section focuses on a) the nontraditional opportunities described by participants in the social science and media studies courses and b) the faculty-as-celebrity effect described by students in synchronous courses.

Multiple students in the social science course described interactions with their professors in small, personal settings. For Ally, her FIG instructor arranged for one of the professors to visit their weekly discussion meeting.

And [a social science professor] came in to talk to my FIG this morning. So that was cool. He sat on a desk and ate a bagel, and talked to us about throwing knives.... It was really cool! I met him before at the studio recording,

but it was really, really brief. I shook his hand and had to leave. I liked talking to him because you usually get to see your other professors in person, so it was weird having that experience of finally see him in person. [Both social science professors], I feel like they're really nice guys who are highly accomplished and really important and kind of intimidating {laughs}. But it was nice talking to him in person and learning about his accomplishments as a [social scientist] and what he's done.

The FIG discussion, which Ally reported had 25 to 30 students, provided the intimacy and time to form a connection with her professor, whom she had briefly met at a live class meeting once. The interaction left Ally with a better understanding of the professor's personal life, hobbies, and professional undertakings, all of which are important indicators of an impactful student-faculty interaction.

Eva made similar references to interactions designed and initiated by the social science professors. Eva described a face-to-face meeting that developed from an online class meeting.

You go into pod chat and discuss whatever it may be that they tell you. They end up choosing groups who had the best discussion, the most intellectual conversation, and you get to have coffee with them. I actually won one of the first Coffee Quizzes, so I got to meet them. I was like, "This is really cool! You're on my computer screen most the time," and I actually get to meet them. That was really nice. We had Starbucks with five other people. They bought us coffee, bought us whatever we wanted. They just talked to us about their research and what they do at [WSU], and the asked us how we were liking the online course, what we liked, what we didn't like. That was pretty cool.

Comparable to Ally's experience, the Coffee Quiz gave Eva greater insight into the personal and professional lives of her social science professors. On top of those benefits, Eva suggested the incentive of meeting her professors in a small-group setting—along with being treated to a coffee and snack—encouraged her and her fellow classmates in her pod chat to elevate their in-class discussions.

Elaine explained that her asynchronous media studies course never met in real time. This course design did not prevent Elaine from distinguishing activities as either in-class or out-of-class and describing their impact on her engagement. Every two weeks, Elaine had to complete an online module to keep pace and progress to the module or assignment. Although these modules included recorded lectures, Elaine noted, “The way that [the instructor] set-up the course is, it's not to simulate a face-to-face, but to actually make it more engaging than a face-to-face would be.” Elaine described a typical module as “two, nine-minute lectures” with links to articles and online content, which always included notes on issues to consider while reviewing the material. For Elaine, the opportunity to read relevant research with her instructor’s guidance improved her understanding of the course topics. “I think [the instructor] is trying to get us to think about that text ourselves instead of just her interpretation of it, which I think is really interesting the way she does that.” Elaine found the efficient use of lectures afforded her more time to probe into the material.

If we were meeting in a class every week, I wouldn't want a teacher to hand me a book and say, "Hey, read this in class with me. We're only going to talk for 18 minutes, but the rest of the time I just want you to read." And so the online component, and not being forced to have 90 minutes of lecture every week, is I think really helpful.

Elaine also described her out-of-class interaction with her professor as immediate, individualized, and impactful. These online interactions included feedback on assignments and personal communications. Elaine credited the course’s online, asynchronous design with her ability to reach the professor and receive a prompt response. “I'll just send her an email because she's obviously online because she's doing

an online course.” Direct feedback from the instructor was important to Elaine.

Every time we do something, we get feedback on it. That is not something I've experienced in my other courses, especially because the instructor is giving feedback. In a lot of my courses the TA was the one that graded my papers, and I communicated with them about grades. I think that that is a really important aspect of the design of the course.

Elaine related the amount of feedback from the instructor to the course's asynchronicity.

The feedback was really in-depth. I knew exactly what they didn't like or didn't want. I don't know, in some ways it kind of felt like they were over doing it because we didn't see them, if that makes sense. I'm an “A” student. I get 100's on my papers, and I didn't on these papers. It was the same quality of work, and the feedback seemed really nit-picky. I mean I could email [the instructor]. I think that was the difference. I could email her and it cancelled out all of the noise of other people's comments. That was really important.

Elaine explained that direct communication with her professor, over email and through the course's LMS, helped her narrow in on the strengths and weaknesses of her writing. She found this feedback much more helpful and direct than her peers' comments posted on the LMS discussion board. The asynchronous, online interactions with her professor exemplify “prompt diagnostic feedback,” (Coates, 2006) a primary indicator of the student-faculty interaction benchmark.

Elaine felt that her professor cared about her well being as a person in addition to her success as a student. Elaine described an incident near the beginning of the semester that showed the professor's support.

She saw I had gotten sick in my biography, because it's a really big part of my college experience. She just went out of her way to email me and tell me that she'd read over that. She just wanted to let me know that she was on my side and that she understood that I'd had professors that weren't. She went out of her way and just sent me an email to let me know that she was here if I needed anything. So, that was really just cool, and I don't know if that happens for everybody in the class. She and I have definitely a connection over that.

In her previous comments, Elaine connected the direct, online communication with the course's design. Through these media, Elaine developed a deep academic and personal connection with her media studies professor.

The theme of faculty-as-celebrity emerged from the interviews of the underclassmen, except Paul, the 24-yr old sophomore. Each student connected this descriptor to the experience of seeing or meeting a professor face-to-face for the first time. For some students, the face-to-face meeting was surreal. As discussed previously in this section, in the moment Eva met her social science professors for the first time, she thought, “‘This is really cool!’ You're on my computer screen most the time.” Ashley also explained the experience of having professors who are “entertaining” but teach online. “When I see my online professors around campus it's like a celebrity is walking by because it's someone you see on a screen but never in person.”

Similar to Ashley's experience, Katie did not meet her professor, but saw the professor for the face-to-face administration of the midterm exam. “Actually I saw our male teacher during the exam, and it was like, ‘Whoa, he's a person.’ It was weird. {laughs}.” Though a humorous observation, Ashley did not connect the images of her professor on the screen to a real person who worked on campus until she saw the professor face-to-face. This theme represents the experiences of only a minority of students, but it provides context for their student-faculty interactions.

Summary

The students in this study generally described their interactions with the faculty in online courses as ill suited when compared to routine interactions offered in traditional

face-to-face courses. In the synchronous class meetings, students found the professors to be enthusiastic and passionate in their lectures. Despite this energy and charisma, most students lamented over the obstacles in two-way communication that arose from the online platform and large enrollment sizes. The chat rooms allowed for short, transactional interactions between student and faculty but were a poor medium for back-and-forth discussion. Further, students felt that without their nonverbal queues, the chat rooms inhibited their ability to effectively pose questions to and interact with their instructors. Other participants suggested the courses did not accommodate traditional interactions, including in-person class meetings and faculty office hours, due to the intimidatingly large enrollment sizes, which they identified as a driving factor behind WSU's development of online, synchronous sections for required and high demand courses.

Participants in two of the three courses in this study connected the online platform with personal, impactful interactions with faculty. From the social science course, students gained insight on professors' personal and professional lives during small, face-to-face group interactions, which contributed to a better understanding of the academic life and a stronger connection with the professors. One student even attributed her increased efforts in online peer discussions with the incentive to interact with her professors over coffee. These interactions were not themselves online, but students described these intimate interactions as unique to their social science course. From the media studies course, the student credited the asynchronous, online design with increased access to and communication with her professor. The course was online, so the student

decided that the faculty member was accessible online, regardless of the time or day. The student related the personal communication—in the form of both academic feedback and caring, supportive messages—with the time available from the elimination of class meetings.

Level of Academic Challenge

This section focuses on themes derived from participant descriptions of the level of academic challenge, with a particular focus on their online courses. From codes informed by NSSE's definition and operationalization of this engagement benchmark, I found themes that related the online course design to students' pre-enrollment expectations, motivations for enrolling in the course, and time dedicated to class preparation. Across the three course designs included in this study, students based their expectations on previous experiences with online courses and reviews from friends and online sources. These expectations often affected participants' drive to do their best work—indicated in their descriptions of class preparation and effort in class—a major component of academic challenge. Participants related their motivations for taking the course with their perceptions of the academic challenge. In particular, students who enrolled in the required humanities course indicated a diminished drive to do their best work. These students connected the platform's capacity to offer a required course to a large body of students as a driving force to develop an online course section, thus relating the online platform with their diminished drive. Students in the study described specific online course features that affected the level of academic challenge. Most students connected rewatching lectures with increased time spent on class preparation and

improved understanding of course concepts. A subset of participants indicated the online platform challenged them to develop as self-learners, which they identified as an important function of higher education.

Engagement Benchmark	Level of Academic Challenge	
Characteristics Student-Reported Themes	Drive to Do Best Work: Student expectations, motivations to enroll in online courses <ul style="list-style-type: none"> • Some students related the online platform with diminished academic challenge • Required courses tied to student reduction in time and effort 	Online Platform’s Impact on Investment of Time and Effort: Rewatch posted lectures, taking responsibility for one’s learning <ul style="list-style-type: none"> • Underclassmen rewatched lectures on a consistent basis, upperclassmen never or rarely watched outside class meetings • Online platform heightened sense of being responsible for one’s learning

Figure 5.3. Level of Academic Challenge Themes.

Drive to Do Best Work

Student Expectations for Online Courses. The majority of students identified traditional factors—such as word of mouth, faculty review websites, and previous experience with courses in the same discipline—that contributed to their expectations for the amount of time and effort that would be required in their online courses. In addition to these factors, most students in the study had previously completed online courses. The majority of these students tied online education to lower levels of academic challenge based on their direct experience with online courses. However, the students who did not make this generalization noted the difference in academic rigor between their previous institutions and WSU.

Elaine's description of how her previous online courses lowered her expectations and initial commitment of time and effort in her online WSU course was representative of majority of the students with previous online education experience. Prior to her online media studies course, Elaine had "taken a lot of [local community college] online classes," none of which challenged her to do her best work or required much of her time.

I was like, "Oh, this is going to be fun!" But I had never gotten a "C" on a paper until this class. That was—but I definitely did "C" papers, just usually I get an "A" for that kind of work {laughs}. [The WSU online course] is a little bit harder, it requires a little bit more thinking.

Based on her experiences with online courses offered through a community college, Elaine equated online with diminished faculty expectations. Along with greater faculty expectations, Elaine was surprised that she spent more time each week on media studies than her face-to-face courses. "She said it would take us six to nine hours a week, but I was like 'Eh, I'll do half of that.' But, it ended up about six. I was thinking about three hours a week." Her previous online courses required far less of her time. "They were a lot easier. I'm actually in an online course [at a local community college] right now. I log on once a week and have an hour's worth of work."

Eva's experience with an online course in high school contributed to her expectations for the level of academic challenge in WSU's online courses. Her self-paced physical education course impressed upon Eva that online courses required less time.

I was really thinking, "Oh, this online, it's going to be an easy class. I won't have to do much work because I'm only meeting online two days a week." And I was really wrong {laughs}. It definitely is a lot of a time commitment. You have to

set aside that time for you to read, review, and study for your quizzes and all that. So it really wasn't what I thought it was going to be at all.

Though her previous experience with online education was limited to high school, it still contributed to Eva's expectations regarding the time and effort required in her two WSU online courses. Eva found that her opinions about online courses affected her initial performance in her courses. "Because I came into the class thinking it's going to be easy, I didn't really spend that much time on the readings. I would read through them, but I didn't take notes like the first two readings that I had." After the first two weeks, Eva realized her WSU online courses were not like her high school class and that she needed to "put way more effort and way more time into doing well." She also identified a learning curve to the course format. At first, she found the class chat sessions as "pointless," but soon realized she could glean studying tips and unique perspectives from her classmates' posts.

Grace shared similar perspectives on the lower level of academic challenge related to online courses. She described her previous online education experience at a community college as "easy." Grace said she could put forth "a couple hours a [class meeting] day and then do really fine in that class." Two months into her online WSU course, Grace shared her initial surprise regarding the amount of time and effort she needed to dedicate to the course. "I thought it would be easy just like my humanity class [at the community college]." She directly connected her lowered expectations with a poor investment during the first few weeks of the semester.

Since I thought it was going to be easier—I was actually trying in the class, but I was more relaxed at first. [The professor] told us he drops the four lowest grades. So, I was like, "Oh, I can bomb this because he's just going to drop it." But

afterwards I realized, "Oh, I'm doing actually really bad, and I'm running out of the four drops. Oh, I actually have to really pay attention and study in this class. It's actually harder than I expected. It's more challenging."

Though she started the semester with the belief that the course would not require much time or effort, Grace eventually realized that her commitment was insufficient to earn her desired grades. Grace shared that her grades early in the course served as a wake-up call to the fact that "[WSU] is just harder in general" than a community college, regardless of the similar online course platforms.

Similarly, Ashley's high school experience with online education influenced her expectations for and initial invest of time and effort in her two online WSU courses. "They offered credit for online classes in high school, but they were self-paced. I tended to get really far behind in them and kind of had to sit there one whole weekend and take the entire class, which isn't enjoyable." Though she knew the WSU courses were not self-paced, Ashley expressed that her friends' experiences with college-level online courses were no different.

There are a lot of people that take classes at [intrastate, two-year] College online. I always heard that those are like, "Oh, you can just spend a weekend taking your class, and then you're done.' So I really thought, like, "Oh, how's it going to be hard?"

Once the semester started, Ashley soon realized the online WSU courses required significantly more time and effort. "I thought my grades would be better just because I was like, 'Oh, it's an online class, how's it going to be difficult?' But it's like a real class. You actually have to work at it." In addition to class preparation, Ashley recognized she faced a learning curve tied to the online course designs.

I think that as soon as they set-up the guidelines for the course after the first week or two of the class, you really get the hang of how it's supposed to go. The lectures are essentially the same format everyday, so it's pretty helpful to know what's going on in the class.

For Ashley, the first two weeks were necessary to make adjustments how much time she dedicated to the class and to the way she approached class meetings.

Paul's previous experiences contributed to his perspective on the academic challenge associated with online courses. Paul matriculated with over 30 SCH, nearly all of which he earned through online courses while in the Army. "They were all self-paced. They were very easy." From his previous course in the same humanities discipline, Paul expected that he "was going to have to do a lot of reading" but that the course would be easy. "I came in with a biased thought of what the class was going to be." Though this bias did not translate into less time and effort, Paul was surprised with the amount of time necessary to prepare for weekly quizzes and his midterm exam.

Three students with previous online education experience did not paint all online education with the same brush with regard to academic challenge. These students found the general level of academic challenge at the institution to be a stronger indicator of a course's academic challenge. For example, Mary had previously completed one of the two required humanities courses through an online offering at an intrastate community college.

The first [humanities] course I took was another online but at a different college. It was just a community college, and I knocked it out during the summer and it was just you listened to the lectures on your own time and then you took the test, monitored in another center.

Even though the community college was online and in the same discipline as the WSU course, Mary expressed that she did not conflate the two courses. “They're at different colleges. A junior college is not on par with what's taught here.” Mary connected academic challenge to the institution, not the method of course delivery and participation.

Katie’s previous experience with online education included an economics course offered through a two-year college while in high school and a biology course offered through the state flagship university she attended as a freshman. Katie indicated that both courses were challenging for different reasons.

Economics was hard. I don't know if I really have a good example for how hard it was since I was in high school and had nothing to compare it to. It just wasn't a topic I was comfortable with. It was my first online course and it was one of my first college courses. However, biology, I would say that it was difficult. It definitely was tedious in the fact that it took a lot of time and a lot of studying. It was one of those courses where if you put the time and effort in, then you got a good grade.

Among many reasons, Katie found economics to be challenging due to her inexperience with online and college-level courses. Though self-paced, her biology course required significant time and effort. With exposure to online courses at a two-year and four-year institution, Katie “assumed it would be like [the] biology course.” Katie did not view online courses as less challenging and indicated an understanding of institutional differences in expectations.

Judy’s experience with online education was limited to a course offered through her school district during her senior year of high school. Judy anticipated that the online WSU course would be a different experience.

I knew it was going to be a little bit different. I said I did not do well in the online course back in high school. I guess I'd give another shot at it. It's a little bit easier

because there's someone actually teaching the material, whereas the other class was like, "Think of an idea and work on it." There was no topic of what it was going on, so I decided to give [social science] another try.

Judy felt that her teacher in the previous online course provided her with no direction or goals. She believed, or at least hoped, the WSU course would have set expectations for student time and effort. Judy did not view all online courses through the lens of her high school experience.

Though this section focuses on the experiences of students who previously enrolled in online courses, Ally's experience provides a sharp contrast with regard to expectations and the initial investment of time and effort into an online course. As she had no previous experience with online education before enrolling in the online social science course, Ally first based her expectations on her online research and on word of mouth. She used course and faculty evaluation websites, including RateMyProfessor and an internal WSU site, and found the student reviews to be generally "positive," though they described the course as "labor-intensive." Ally said her classmates passed along their friends' accounts from previous semesters.

After talking to some members in my FIG, they said that they had friends or roommates that had taken the class previously and said that it was quite labor-intensive, so I learned that I would have to put in more effort than I previously had thought.

Despite these early stories, Ally began class without bias.

I didn't make very many presumptions just because in the course syllabus, before I started class, they said it was nothing we've ever been a part of or of nothing we've ever known before. I thought it would just be an online class where we just watch the lecture, but I knew because they had told us that it would be that, so I kind of came in as a blank slate. I didn't really know what to expect.

Ally credited the syllabus with clearing any preconceived notions that she held with

regards to online education or the social science course. She also related this message to her perception that the class “was really intimidating.” Ally anticipated that she would need to make adjustments, which she indicated took some time. “It took me a while to really get into the course schedule, to understand when I had time to study, and how I needed to study. But once that happened, my grade has improved immensely.” Though Ally was not biased by previous experiences with online education, she still encountered an adjustment period related to her online course’s level of academic challenge.

Motivation to Enroll. The influence of a student’s motivation for enrolling in an online course emerged as a theme from participant interviews. Four of the six non-humanities majors enrolled in the humanities course connected a weakened desire to invest time and effort into the course to the fact that they enrolled in the course for the sole purpose of meeting the state’s degree requirement. All of these students believed that a contributing factor to developing an online section of the course was the platform’s capacity to meet student demand due to this requirement.

Jennifer, a senior in the honors college who holds leadership positions within a service organization and campus publication, enrolled in the humanities course to meet the state requirement. “Someone told me it would be easy. I mean to be honest, I just wanted an easy ‘A’ because this is a required course, and I am not the most politically interested person.” A friend informed her that the online section was not challenging, and this appealed to Jennifer. “It really just is that it's not a priority for me. And it's not because it's online, it's just a class that we have to take.” Jennifer did not make a direct connection between the course’s online platform and her commitment of time and effort.

Instead, she connected her diminished drive to do her best work to the requirement to take the course.

I'll do all the reading at some point before the test. It's just not necessarily when they tell me to do the reading, which can be an issue sometimes because the quizzes are on the reading. Most the time the quizzes are like 90% over the lecture, which I watch, or just general knowledge. I'll usually skim before a quiz—by before a quiz I mean an hour before the quiz and the night before. I think it's probably because I don't prioritize this class and perhaps I should. I just don't, just being honest and frank.

Jennifer tied WSU's development of an online course section with the University's need to offer the course to most students.

I think it's online because everybody has to take this course, and this is the easiest way for the university to facilitate a large number of students to be enrolled in the same course. You can't get a lecture room for however many people are in our course.

Jennifer connected her lack of drive to the requirement to complete the course, which she then related to the online format. These connections highlight the challenge of faculty to motivate students to “work harder than they thought possible” (NSSE, 2007) in courses that students believe are offered online to meet demand for a required course.

Mary shared similar views on the humanities course and her motivation to work hard. She said she enrolled in the course to fulfill the state requirement. Though she would not have enrolled if not for the requirement, she was interested in the topics. “I do like [humanities], I just I never thought about majoring in it.” As a junior, Mary had friends who encouraged her to enroll in the online section.

I just heard in the past that this class was very straightforward and easy, and I wanted two classes like that. I'm taking [humanities] and human sexuality so I could focus more on my accounting classes. I chose [humanities] in particular because I took my other one online, and I thought it was relatively easier than

learning something like physics online or psychology. It's reading really, that's what it is. And so I thought that it's totally manageable.

Mary needed the course to graduate and opted to enroll in an “easy” section to balance challenging courses in her major, accounting. Mary related the online format with the state requirement. “I think that's the easiest way to reach more students because everyone that goes [toWSU] has to take these classes.” This meaning making did not inspire Mary to exceed her expectations or those of her professors.

Katie also enrolled in humanities to fulfill the state requirement. Choosing the course for this reason, Katie indicated that she started the course with low expectations for her investment of time and energy.

I expected to have to put less work in, but I've never really cared about [humanities]. So I was never going to go look into other stuff, or learn more about it, or be active in the class. I'm there for my credit.

From her perspective, the state requirement related to the online offering. “I think that it's online because it is a general requirement. It's part of our core requirement, everyone needs it.” Paul, who expressed that his primary motivation for enrolling in the course was to fulfill the state requirement, shared the same sense that the course was online to meet the demands produced by the requirement.

It is a core requirement. I believe that the department had to find out if online courses would be a suitable way to teach what they had to teach, which is a requirement for all students to have at [WSU]. They knew there were going to be a lot of students, and web-based classes can deliver content to a mass population of students in an effective manner.

Paul felt that the course was still an “experiment” to test its efficacy, which he defined as “the passing rate.” With fulfilling the state requirement as the driving factor behind enrollment, Paul only invests enough time and effort to earn desirable grades on the

weekly quizzes. Once he found an online study guide that helped him pass quizzes, he stopped reading the text and started “memorizing instead of learning.”

Ashley, the only participant who majored in humanities, described how her interest in the subject matter improved her investment of time and energy in the course. “I actually do my readings for [humanities] a lot better [than] other classes really because it's a class I'm interested in. I'm interested in the subject, which makes it better.” She compared her time commitment to her face-to-face courses where she has less interest in the subject matter. Though not the only factor that motivated Ashley to invest in a course, an interest in humanities led her to spend more time on the course reading assignments.

Similar to Ashley’s experiences, two narratives from outside of the humanities course provided a contrast to these experiences. First, though the social science course fulfilled a core curriculum requirement, students selected the online section from multiple offerings. This choice seemed to have an impact on how students in this study described their drive to do their best work. Students described the “interesting” and “entertaining” nature of the online section as their motivations for enrolling. Most students in this study believed WSU designed the online social science section to improve learning and make students actively engage with the course content. Eva explained that this rationale for the online section came from her professors. “They were telling us that they have done research and studies on how if you take an online course, your academic success is more likely to be better in your [subsequent social science] classes as well.” Ally mentioned the professors’ studies and evidence that student learning improved during the course,

too. "They have told us that studies prove that students improve their grades when they communicate about the class as well, which is why there's chats and surveys and various activities throughout the course when it's live to keep you engaged." Grace shared that these comments from the professors positively influenced the amount of time and effort she devoted to the course.

Throughout the course they show us research that's like, "Oh, if you actually do practices or if you're involved in group chats, and pods, you get a better grade." And so I guess by saying that, "Oh, it's proven that if you actually studied, and work hard, you actually get a better grade." And you're like, "Oh, I feel motivated to actually do it, if it's actually proven that it actually helps."

Influenced by their instructors' comments, these students bought into the notion that their time and effort would pay dividends.

Second, Elaine's descriptions of the media studies course created a juxtaposition to the experience of students enrolled in the humanities course. In her collegiate experience, not limited to online courses, Elaine connected her motivation for enrolling in a course with her commitment of time and effort.

I think my freshman and into my sophomore year, it was more of just getting things done, if that makes sense. Checking things off of the list, going to class as much as I needed to go to class to pass the class. Just kind of bare minimum. But, and that's whenever I was like, "Oh, I just have to get this degree so that I can go work for this magazine." But once I switched majors to [media studies], and I actually really liked learning about my classes. I started going to my classes and doing the readings, even though we weren't going to have a quiz on them, and actually reading my textbooks all the way through instead of just, you know, doing the bare minimum. I think I took responsibility for my own learning after about a year of being here.

As long as Elaine enrolled in courses to meet degree plan requirements, she dedicated the least amount of time and energy necessary. She connected an interest in the course, which she indicated in her purposeful selection of a major, with a greater drive to

understand the course material beyond course requirements.

Her motivation for taking the online media studies course reflected this rationale. Elaine acknowledged the course counted toward her degree, but stressed that she enrolled in the course for the flexibility provided by the online format and for the professor.

The online [format] was a huge part of it, honestly. Because juggling my schedule was so difficult in the past. I had also heard of Dr. [redacted]. She just had glowing recommendations from anyone who had taken her class.

As with her other media studies courses, she related her increase drive with an interest in the course. “Learning about myself and myself in a career field has been really interesting so I've really found myself going above and beyond as far as reading because it's interesting to me.”

Summary. The majority of students in this study started the semester with preconceived notions about the academic challenge and level of active learner in online courses. These participants tended to perceive online courses as less demanding of students' time and effort. Some students in the sample were able to distinguish between the level of academic challenge of their previous institutions and WSU. One student indicated that she disregarded peer and online reviews of an online course at the request of her instructors. Motivations for enrolling in the course contributed to participants' perceptions of the academic challenge. Students in the study who enrolled in an online course primarily to meet graduation requirements lowered their commitment to their courses. Participants indicated that their instructors could influence their expectations on the course's academic challenge. When faculty members presented evidence that online course activities, such as pre-class pods, improved student grades, students in the social

science course were more likely to increase the time and effort committed to the course.

Online Platform's Impact on Student Investment

Rewatching Posted Lectures. Although it is not a defining characteristic of an online course, all participants in synchronous, online courses identified the ability to rewatch lectures posted to the course's LMS as a unique component of their online courses. Not all students selected to watch lectures more than once. Interestingly, each underclassman reported to watch the lectures a second time, whereas each upperclassman, reportedly, rarely or never watched the lectures outside the live class meetings. The underclassmen described rewatching to benefit a better understanding of concepts that were difficult to unpack during the live lecture and the ability to pay closer attention at a time or location more conducive to learning. The upperclassmen viewed subsequent viewings as too much of a time commitment or an unnecessary "crutch" for processing the lectures.

Ally's descriptions of rewatching typify the experiences of students who watch the posted lectures to gain a better understanding of the lecture topics. Ally found the lectures in her online social science course to be packed with important points, many of which would appear on the next class meeting's quiz.

I've learned that I learn the most efficiently by watching the lecture the first time when it's live just watching it, not taking notes, just taking in what they're saying, then going back after the video has been uploaded to go back and take notes. Because once the video has been uploaded, I can pause it and write down something that I might have missed otherwise. And since it's the second time I'm watching the lecture, I know what's important and what isn't, so my notes can be more concise.

During the first weeks of the semester, Ally felt she took "notes on everything that's

being said,” the results of which did not help her study for quizzes. During the second viewing, Ally knew what was important “because they might have mentioned it more than once or it's something that you feel like will be tested over.” Ally recognized that rewatching the lectures increased the amount of time she committed to the course.

“Because I'm technically going to lecture twice, I guess that doubles the time that I'm in class. It's a small commitment compared to the difficulty I would have had in a big class, so I don't mind it.” For Ally, the increased time was worth the sacrifice for the opportunity to improve her grasp of the course concepts. This additional time cut into her sleep but did not reduce the time she spent on other classes or student organizations.

Grace, also a first-semester freshman, rewatched for similar reasons as Ally. During the semester, Grace dropped to nine SCH, which left her with only the social science course on two days during the week. She dedicated these days to reading assignments and watching the previous lecture, the latter of which was a 90-minute commitment each class day. “I actually have to wake up early now, rewatch the video, and take good notes. So I actually had to put in more time for this class than I expected.” Grace rationalized the additional time needed to rewatch lectures as a welcomed cost that allowed her to improve her notes.

At first I'm still figuring how much should I study and prepare for this class. For now, the day of the lecture, I listen and I take notes in a notebook. But, they're not good notes because when you're talking you miss what they say. So it's like, “Oops.” And then on the day of the next class, or the day before the quiz, I rewatch the video, and I actually take detailed notes. I pause or I go back if I miss anything. So that's the actual notes I take for the class.

Similar to Ally, who did not take notes during the live class, Grace used the second viewing to take her “actual notes” that she used to prepare for quizzes.

Katie found subsequent viewings of the lectures helpful for both a better understanding and a safety net for the lectures to which she pays less attention. To gain a stronger grasp on the topics covered during the lectures, the subsequent viewings allow her to “relearn” the concepts; she finds them to be more “familiar” the second time. The second viewing also provides an opportunity to walk through the lecture with the study guide, which the professors post toward the end of the week. Katie explained the benefit of rewatching with a study guide was the ability to focus her notes on what the professors found important. She noted that before she rewatched with the study guides, she felt some quiz questions were “irrelevant and arbitrary.” Using the study guide to organize her notes on the second viewing helped her “figure out what [she thought] matters really doesn't matter,” or understand on which topics to focus her time and energy.

In addition to improving her notes, Katie watched the posted lectures to fill in gaps from the first viewings. The live lectures did not always have Katie’s full attention. “Our class is at 8:30 in the morning. As you can see in my journals, I tend to sleep through most of them. So it’s probably good to be awake during one of my go-arounds for the class {laughs}.” She later clarified that she meant that she was tired and still waking up during class, and watching the lectures at her parents’ home on the weekends was more conducive to being attentive. Paul shared that he also has difficulty staying fully awake during the live lectures. “Sometimes I take naps during the lectures. They're rewatchable, so I take advantage of that.” He typically rewatched lectures on Sundays, the night before the weekly quizzes, when he was “wide-awake.”

Ashley, who was enrolled in both the humanities and social science courses,

primarily rewatched lectures or portions of lectures that she missed. As she did not actively participate in the class chat sessions, Ashley viewed the humanities class as largely asynchronous and would sometimes pay less attention to lectures or “skip class.” “If I skip the lecture, I always rewatch it just because a lot of questions on the quiz will come from the lecture.” For social science, Ashley would babysit during one of the two class meetings each week. “There have been times when I'm babysitting that I just don't have the time to watch the whole lecture.” She noted that she rewatched less often for social science, as the interactive participation typically kept her tied to the live class meetings. For Ashley, the ability to rewatch had a greater impact on her time during class meetings than on the time she spend studying.

Similar to Ashley, Eva was enrolled in the online humanities and social science courses. Unlike Ashley, Eva indicated that she rewatched the social science lectures with greater frequency due to its challenging course concepts.

For [social science], I know it's going to be more [time and effort], because the material is based more on not memorization, but whether or not I understand it. So I feel if I watch it again, it will be better for me because I will actually be able to apply it into situations. Whereas for [humanities] it is more like memorization. So I'll rewatch the lectures for [social science] every time so it will be fresh on mind for the quizzes so I can understand the questions better.

With Eva's full-time work schedule and 15 SCH, she does not have time to rewatch lectures for both courses, a six-hour commitment, each week. Eva expressed that having time to rewatch one set of lectures forced her to pay closer attention during the humanities lectures. “For [humanities], I haven't really had to rewatch them because I pay attention or at least I try to pay attention, because then I won't have time to rewatch them.” Eva connected the ability to rewatch social science lectures as a hindrance to her

capacity to stay focused during class meetings. “I'm not really paying that much attention because I know when I rewatch that I'm going to focus on what they're saying.”

The upperclassmen in this study suggested that they chose not to rewatch lectures as the practice would decrease the amount of time they could dedicate to higher priorities. Mary realized that she would not have time to rewatch, so she would dedicate enough attention to the lectures to garner a sufficient understanding of the topics. She indicated that she only rewatched the lectures once due to a particularly busy schedule that caused her to “really zone out” during the live class meetings.

That was the only week [I rewatched] because I had such a busy week. I actually paid more attention than I normally would in the class or on a lecture that I didn't have as busy of a week. On a Sunday I actually came to the [academic center], and I pulled it up on a computer. I was taking notes while I was watching the lecture I found that to be a lot more helpful.

Though she related the subsequent viewing with improved concentration and note taking, she felt that she did not have time to rewatch the lectures on other weeks.

Jennifer expressed a similar concern with regard to the investment of time and effort needed to rewatch lectures.

The lecture is recorded and then put up later so you can rewatch it, although I don't know who has the time to rewatch an hour and a half lecture. I mean I'm sure some people do. I wish I did. Although, I don't think I would watch the lecture.

Jennifer had neither the time nor inclination to dedicate time to viewing lectures outside the class meetings. Similar to Eva, Jennifer tied the ability to rewatch with diminished attention during the live lectures.

J: You've never rewatched a lecture for this course?

Jennifer: No.

J: But the ability to is—

Jennifer: Maybe more of a crutch now that I think about it. Because then I'm like, "Oh, well, I can do this," but then I never actually do it. Then I don't gain as much as I should. So maybe if they didn't record them, I would pay more attention. So maybe I should just pretend they don't record it.

For both Jennifer and Eva, the capacity to view lectures outside of class decreased their motivation to take sufficient notes and concentrate. The difference was that Eva followed through and rewatched the lectures, and Jennifer did not.

Responsible For One's Learning. A theme emerged from a subset of participants that connected the online platform with an enhanced sense of responsibility for "learning to learn." Though many students suggested that college requires students to learn, interpret, and analyze concepts outside the classroom, four students felt their online courses exemplified this expectation. Judy provided a direct connection between the online platform and a heightened awareness that she was responsible for her education.

It feels like a college experience, actually. College is where you go to lecture and then the professor kind of teaches you, but then you kind of have to go back and teach yourself. And an online course is more about teaching yourself.

Judy's description suggests that an undergraduate education involves time spent separate from your instructor during which the student must learn the course material unassisted by the faculty. Judy found her online course to reflect this attribute of college, perhaps more clearly than her face-to-face courses.

Elaine described a change during her second year in college that taught her to be personally responsible in her learning. She changed majors to pursue her passion for media studies and realized that she needed to push herself to do her best work. "I think I took responsibility for my own learning after about a year of being here." She described a heightened sense of this responsibility in her online courses. "Understanding that, I feel

like there's a lot less hand-holding in online classes. Being responsible for what's available to you and understanding it is a big part of this.” As did Ally, Elaine connected the online platform with a greater awareness of the role she plays in her learning.

Ally found that most of her professors challenged her to be comfortable “learning from your peers, teaching yourself how to learn, how to use your resources.” Ally recognized that college-level courses cover a far greater amount of material with only three hours of instruction each week, leaving students to use their resources to learn on their own.

So you have to take the liberty of taking notes and making sure you go back and you research topics that you didn't understand completely. If you need the puzzle to fit together more clearly so you understand what's going on, you have to make sure you go and take the liberty for yourself to research what it is so that you totally understand the topic. It teaches you that you have to go and learn it on your own because no one else is responsible for your own learning. And you also can't be scared to ask questions.

In her online social science course, Ally felt she was one more degree removed from the instructors and classmates. As a result, she further relied upon the “overwhelming options” for support resources. Ally emphasized that her personal initiative to join optional, pre-class chat rooms and her “conscious effort” to organize face-to-face study groups with classmates were necessary to take advantage of the supportive course environment.

Eva related a similar discovery of responsibility for her own learning to her online social science course. She shared her initial surprise in the amount of learning she would do outside of class meetings.

A lot of the learning you have to do on your own outside of class with readings. Every week they assign us about two to three readings that you have to do for the

next class. It's like a day to complete all the readings. So, it's really a lot of reading sometimes. Then they'll give us videos to watch, too. They always tell you, "Okay this will be in more extended in the reading. You will learn more about this in your reading." I feel [social science] is really a class where you have to learn on your own.

In high school Eva could study for “maybe half an hour” in addition to class meetings to prepare for exams. In her online social science course she invested more time in studying course materials outside of class meetings. This dedication of time and energy included spending additional time with the class lectures on her own.

Well the whole with being able to rewatch the lectures, I think that's a really big advantage because if you have questions that you had about that specific lecture, you can just go back and rewatch it and answer your own questions rather than having to go ask them like, "Okay, I don't know what you said between this time and this time." I think that's really helpful. Also, the whole having to teach yourself. I found that to be helpful because you need to be able to know how you learn. Online has taught me that I need to communicate with someone rather than just watch a lecture online. It gives you an idea of what type of learner you are and how you interact with your classmates and your professors. So it helps you find your study habits.

The ability to rewatch lectures taught Eva that she can find the answers to her own questions without relying on her instructor. Eva's lessons in self-learning extended beyond her online courses. Her online course taught Eva about her natural inclinations as a learner and how to integrate her best study habits across course formats and disciplines.

Summary

In addition to traditional predictors of a course's level of academic challenge—online and word-of-mouth faculty reviews, previous courses in the academic discipline—most participants based their expectations for the three online courses included in this study on their generalizations of online courses. These students tended to view online courses, regardless of other course characteristics, as requiring less time and effort. The

students in the sample who did not make this presumption typically distinguished between the level of academic challenge of other institutions and WSU. One student indicated that she disregarded peer and online reviews of an online course at the request of her instructors.

Participants related their rationale for enrolling in the course with their drive to do their best work. Students who enrolled in the humanities course to fulfill a graduation requirement related the requirement to a diminished investment in the course. As these students connected the development of an online course section as a mechanism to meet enrollment demand created by the requirement, they tied the online platform to their weakened resolve to dedicate time and energy to the course. Participants in the study related certain online course features to the degree of academic challenge. The sample's majority connected rewatching lectures with a greater investment of time and better understanding of course concepts. A minority of students indicated that the online platform heightened the challenge to develop as self-learners, which they identified as an important feature of undergraduate education.

Supportive Campus Environment

This section focuses on themes that emerged from participant descriptions of online course characteristics that contributed to their perceptions of WSU's supportive environment, or lack thereof. These characteristics included online, course-specific instructional support and class meeting flexibility with regard to space, location, and time. I first present evidence from student interviews that connect online, pre-class meeting study sessions with the perception of improved and more accessible instructional

support. Student descriptions of their experiences in the social science course believed the sessions resulted in greater quiz preparation, grasp of key concepts, and a sense of individualized attention. I then proceed to provide student descriptions with regard to the impact of online courses on their involvement in extra- and co-curricular activities. Though some students connected the spatial and locational flexibility to a slightly increased ability to participate in campus organizations, the majority of students found the temporal inflexibility of synchronous online courses to temper any effect on their involvement in activities.

Engagement Benchmark	Supportive Campus Environment	
Characteristics Student-Reported Themes	Instructional Support: online, course-specific <ul style="list-style-type: none"> • Online study sessions related to more accessible, convenient, and timely academic support, which students tied to: <ul style="list-style-type: none"> • better quiz preparation; • improved understanding of key concepts; • and feeling the course to be smaller, more intimate. 	Class Meeting (In)Flexibility: locational, spatial, and temporal <ul style="list-style-type: none"> • Synchronous courses' locational and spatial flexibility connected to increased ability to become involved on campus. • Synchronous courses' time constraint tempers impact of such flexibility.

Figure 5.4. Supportive Campus Environment Themes

Instructional Support Made More Available

In addition to the active and collaborative learning features of in-class chat rooms, all five students enrolled in the social science course related their online “pod” chat rooms with increased and more accessible academic support. They explained that the

Pods, which consisted of one graduate TA or undergraduate class mentor and up to 30 students, opened 30 minutes before the start of class meetings and remained open for the duration of class. These students suggested the pods prepared them for quizzes, improved their understanding of course concepts, and helped make the course experience feel smaller and more intimate.

For Ally, the pod provided all of these benefits. She described the pre-class pod sessions as the space in which she has had “the most interaction” with her classmates and TAs. These interactions allowed Ally to have robust discussions over course concepts.

The [TA] gives you practice questions that reflect what the questions on the quiz that day will look like. That's what I found to be the most beneficial, is to go in and communicate with my peers about why I think this answer is correct or why it's not correct. The TA will come in after we've discussed for a little while and say, "Okay, Susie, you're right because of this answer."

Her pod's TA prompted the students' interactions with practice quiz questions and allowed Ally and her peers to defend their answers and explain the reasoning behind their responses. Ally felt this design helped her improve her quiz grades and understand why one answer was correct and other answers were incorrect. Ally mentioned that the TAs continued to actively help students during the class meetings through the pods and randomly assigned chat rooms.

I feel like there's a lot of TAs and a lot of mentors available through the class that are just waiting for people to send in questions. So if you ever have a question it's not hard to get an answer, it's step to look for an answer.

Ally hyperbolically described the number of human, albeit online, resources in the course as “overwhelming.” “Not afraid to ask questions,” Ally used the TAs and class mentors

to clarify topics from the lecture or the reasoning behind the answer to a practice quiz question.

Ally also indicated that the pod made such a large class size feel smaller and more personable. She illustrated this point through a comparison between the pod and the discussion section of her freshman seminar course in terms of the TA interactions.

The quantity [of contacts] is probably more because the pod interaction is before every lecture. So, twice a week I go on for the pod discussion. But for my [freshmen seminar] class where the discussion is required, I only go once a week. Every other class, I don't think I've ever—well that's a lie, I've been to office hours, but that's pretty rare. It's maybe once, twice a month. So the quantity is definitely a lot more. Quality is probably the same as my required discussion class with the TA for my [freshmen seminar] because it's the same amount of students to one TA. It's about 25 to 30 students. So the quality is probably the same because we're still getting immediate feedback, but the quantity is definitely more.

Ally's description of the pod suggests that she viewed the sessions as similar in quality to small class discussions and TA office hours but more convenient to attend. She felt the pod provided the attention that was she thought would be missing in a course with “1,600 kids.” “They have to have the TAs because in a class so vast you have to have people who can be in small groups and can help students who have questions.” For Ally, the TA was necessary in a large-enrollment course. Along with the quiz preparation and opportunity to improve her understanding of course concepts, the personal attention from the TA encouraged Ally to participate in the voluntary pod sessions before each class period.

Judy utilized the pre-class pod to prepare for the quizzes and used the platform as a foundation to receive individual attention from her class mentor. Judy indicated that her primary motivation for logging into the pod sessions was the quiz preparation led by

a class mentor. “In that pod before lecture you could ask [the class mentor] questions. She also gives practice questions that may be on the future quizzes.” Judy explained that with pod sessions available twice each week, they were timely opportunities to review materials before quizzes. Judy appreciated the pod design, which brought the same group of students together each week with the class “mentor who has taken the class previously and performed well.” Judy viewed the class mentor as a reliable resource and reached out to her outside the pod for additional help with the course.

Judy: I did directly contact the mentor because I know she'd done well before, that's why she's a mentor for [social science] now. And then she emailed me some advice. I tried to follow those, and I've been doing better on my benchmarks.

J: You contacted her via email?

Judy: Yes.

J: But you didn't meet face-to-face?

Judy: No.

Similar to Judy, Grace reached out to her class mentor and TA. “When we have questions about the quizzes we can email them and ask them, “Oh, why is the answer for question ‘A’ or ‘B’?” Then they email you back explaining why. It's pretty helpful.” In a large-enrollment course, the pods helped create connections between these students and their class mentors and TAs.

Eva and Ashley, the two participants who were enrolled in both online synchronous courses included in this study, described the social science pod sessions as more focused than the humanities chat sessions. Eva connected the pod with quiz preparation and small-group interaction led by the class mentor. She viewed the humanities chat room as a medium for peer interaction, but not necessarily academic support from class mentors or TAs.

Well, I feel like they are more different than they are similar. In [social science] the pod chat is more of a way where you review and study, because we have quizzes before the lecture at every class. And for [humanities], it's kind of more a way of interacting with your classmates that you don't get to see.

Eva found the discussion with her pod's class mentor was an opportunity to address pressing issues and potential quiz questions, whereas the humanities chats were "not really as relevant to the course."

For Ashley, the pod differed from the humanities chats in its narrowed focus and small-group setting. She described the humanities chat room as "limited" and "kind of disorganized." "There's one TA that proctors the entire class chat for all hundreds of people in the class." She later explained that the faculty member who was not leading the lecture would also join the chat room to spark conversation and answer questions. Even so, Ashley connected the understaffed chat room with having never "interacted with the professors or the TAs really in that class." She did not associate this experience as a cost of the online platform. Instead, she compared the experience to a face-to-face "lecture hall" in which she would "sit through class and then leave at the end of class and never talk to anyone." Ashley paints a different picture of her pod experiences. Similar to the other participants, she credited the interactive nature of the TA-led discussions with her increased participation. She explained that she kept her pod open throughout the class meetings as "the TA will interject with what they think's going on as well." Ashley felt the online platform allowed for in-class, "in the moment" interactions, which she preferred over waiting until after class or office hours to gain the TA's insights.

Flexibility Related to Small Impact on Extra- and Co-Curricular Involvement

The participants in this study, with one notable exception, did not relate their

enrollment in an online course to their participation in extra- or co-curricular activities, which are an important component of a supportive campus environment. The ten students enrolled in the synchronous online courses tended to describe the inflexibility of class meeting times as standard; “you still have to go to class.” However, a few students related the flexibility in location with convenience and improved participation in extra- and co-curricular activities. One outlier made a direct connection between taking an online course and an increased capacity to perform her leadership duties for her extra- and co-curricular activities.

When asked about the impact, if any, that their online enrollment had on their involvement with extra- and co-curricular activities, the students enrolled in synchronous online courses typically identified little to no impact. For instance, Eva viewed her humanities and social science courses in the same light as a face-to-face course. “You still have to go to class. You still have to be taking the class, even though it's not in a set classroom. Like I said, you still have to be in attendance to the classroom.” Eva did not relate her online courses with more or less time to dedicate to extra-curricular activities. She suggested that the flexibility in space freed up her schedule. “I guess it's more convenient just simply because you don't have to walk to a room, to a specific building, and that just gives you time to get to wherever you need to go faster.” Eva indicated that her course and work schedules did not allow for participation in extra- or co-curricular activities, so the additional time saved as a result of spatial flexibility had no effect on her involvement.

Grace and Judy shared similar experiences with the flexibility in space offered

through the online course design, and they connected the flexibility with a slight increase to their ability to participate in extra- and co-curricular activities. They shared that their online course allowed them flexibility to view the class lecture in a place convenient for other class and student organization meetings. For Grace, the flexibility allowed her to attend meetings she would have otherwise missed.

I feel in online classes all we need is a laptop. So if I have a meeting to go to at 3:00 or 2:30, I can actually go there, tell them like, "Oh, sorry, I have class at 3:30," and just maybe sit somewhere near wherever I was and then just start class. But if I actually have a class at 3:30, then I'll have to leave or I'll be like, "Oh, I can't go to the meeting because I have a class at 3:30."

Grace connected her involvement in student organizations to her collegiate goals of developing "friendships," "meeting new people," and "exploring new things." Though perhaps too involved—she was active in four organizations and dropped a calculus course—the flexibility allowed her to participate in groups tied to volunteerism, cultural awareness, the business school, and socialization. Judy shared an example of how she planned to use the flexibility in location to attend a student organization meeting. She described her commitment to a 5:00pm meeting on the far side of campus, knowing that her social science class meetings did not end until that time, and the relief that the online course's spatial flexibility provided. "I don't have to worry about it during class like, "Oh, no, am I going to make it? Do I have to leave class early?" I could focus fully on the lecture and then go where I need to go." For Judy, who planned to attend the meeting regardless of class, the benefit was peace of mind during class.

Ally and Mike described their participation in extra- and co-curricular activities as unaffected by their online course enrollment. Ally found no flexibility in time due to the

synchronous online course. She shared that she watched the lecture “live the first time, either way.” From her perspective, the subsequent viewings had the potential to decrease the time and energy that she dedicated to extra-curricular activities, but she managed her time to avoid this effect. With regard to the days that she rewatched lectures, Ally noted: “I don't try to change what I have planned for the day. It just means that I sleep less. If I have to sacrifice sleep for getting what I want to get done then that's what I do, {laughs}.” Making the time for student organizations was important to Ally, due in part to balance her online course enrollment and lack of face-to-face interaction. “I'm still a part of different activities, so I don't feel like I'm secluded from other students in any way because of an online class.”

Similarly, Mike viewed attendance for his online course the same way he did for face-to-face courses. “You still have to treat it the same way as if you're in an in-class setting.” Though he did not consistently rewatch lectures, Mike did not feel that the online format took time away from his involvement in student organizations.

I guess for me since I've been heavily involved in student organizations, I [have] been very good as far as managing my time and balancing out extra-curricular activities and classroom work. Even if I didn't have an online setting, I think this would be the same thing for me.

For both Ally and Mike, the live lecture did not open their schedules to increased involvement in extra-curricular activities, and the decision to rewatch lectures—weekly for Ally, rarely for Mike—did not pull them away from those activities.

Jennifer was the one exception to this theme. She directly related her enrollment in the online humanities course with an increased capacity for leadership responsibilities in her extra- and co-curricular activities. As previously discussed in the section on level

of academic challenge, Jennifer recognized that she enrolled in the online humanities course solely for the purpose of fulfilling a graduation requirement and selected the online section based on a friend's opinion that, during a previous semester with a previous course design, it was an "easy 'A.'"

In a way I'm prioritizing immediate gratification versus long-term gratification. Because if I choose a class that's an easy 'A' that means I have more time now to spend on things that I currently find important, like all of my extra-curriculars or my degree.

Jennifer related her motivation for enrolling in the online course section with her prioritization of extra- and co-curricular activities over her investment in the humanities course. In her class meetings journal, Jennifer described the ways in which this prioritization manifested. During one class meeting, Jennifer indicated that she "didn't take notes today." When asked why this day differed from her other entries, she looked up the date in her daily planner and remarked, "Oh, the [campus art publication] launch party was that night. So I probably was just doing a whole bunch of [publication] stuff and had it on in the background, to be honest." Though she did not rewatch the lecture for that class meeting, the option to rewatch opened that time for her other responsibilities. While she did not suggest this behavior was typical for every class meeting, it was clear Jennifer related this behavior exclusively to her online course.

Summary

This section showcased the impact of online course design on student perceptions of campus support. One design characteristic mentioned by all participants enrolled in the social science course was a pre-class meeting study "pod," in which a student had the

opportunity to meet with the same small peer group and TA or class mentor before each class meeting. The students indicated that the pods made academic support more convenient, accessible, and timely. Student interviews also provided rich data on the effects of synchronous class meetings on the ability to participate in extra- and co-curricular activities. While some participants indicated that the opportunity to log into the online course platform from any location on campus allowed them to attend events immediately before and after class meetings, the majority of participants described their classes' temporal inflexibility as restriction on any such effect on their capacity to become more involved in a supportive campus environment.

Enriching Educational Experiences

The fifth engagement benchmark, enriching educational experiences, includes using technology to discuss or complete coursework (NSSE, 2014) a topic covered in extensive detail in the first three sections of this chapter. The biographical sketches in Chapter Four provide participant descriptions of their overall enriching educational experiences at WSU, which included internships, studying abroad, FIGs, and using academic resources. The interview and syllabi data suggest little connection between online courses and such experiences. One student shared that her online course was a component of her FIG, which NSSE designates as an enriching educational experience and a high-impact practice on student learning and retention (NSSE, 2014). However, two students described their experiences using the online course tools as independent enriching educational experiences. Though not representative of the essential experience of the majority of participants, these experiences were significant to the engagement of

this subset of students.

Ally was the lone participant to make a direct tie between her online course and an enriching educational experience. She shared that her online social science course was one of three courses in her FIG. Along with the social science course, her 25-student cohort enrolled in a crime fiction course and met as a group in a freshman seminar. Ally described in-person components of her FIG as beneficial to her campus and online course experiences. For instance, the instructor in her freshman seminar invited guest lecturers from across campus to expose students to student resources and build relationships with faculty and staff. “The [academic support center] might come in. He had our professor from crime fiction come in, and this morning [social science professor] came in. They have [student health services] come in talk to us, or they talk to us about advising.” Ally shared that meeting one of her online course professors in her freshman seminar helped her connect with him personally and understand his life as an academic.

And [a social science professor] came in to talk to my FIG this morning. So that was cool. He sat on a desk and ate a bagel, and talked to us about throwing knives.... It was really cool! I met him before at the studio recording, but it was really, really brief. I shook his hand and had to leave. I liked talking to him because you usually get to see your other professors in person, so it was weird having that experience of finally see him in person. [Both social science professors], I feel like they're really nice guys who are highly accomplished and really important and kind of intimidating {laughs}. But it was nice talking to him in person and learning about his accomplishments as a [social scientist] and what he's done.

Ally indicated that as a first-semester freshman, she used her peer relationships from her FIG to form social science study groups. “Twice I have watched the class and studied with two other girls from my FIG. And we put in a lot of effort that week. I mean, we studied probably three times as much as I would usually study for a class.” Though she

did not find the additional effort to be fruitful with regard to her quiz performance, the FIG helped Ally as a new WSU student to form strong peer connections around her academics.

Both Elaine and Ally described their online course platforms not as means to an educational end, but as independent, enriching educational experiences. For Elaine, the online media studies course covered relevant theory and practical application, and she found the actual practice of online communication was beneficial during her internship. “You get used to communicating with people online, you kind of know what's effective and what's not.” Ally also connected the online platform of her course with the skill sets that she anticipated would be valuable in the job market. In particular, she described her use of the LMS’s collaboration and teleconferencing tools as an educational experience independent of the course or its content.

I have to know how to use new, emerging software because even if it's not needed in everyday life, if it does come up for one thing or the other I might be in better chance of getting that volunteer position, of getting that internship, or getting the job.

For both students, the online platform served as both an educational medium to experience a specific course and as an education experience in itself.

In summary, this section builds upon the descriptions of enriching educational experiences in Chapter Four. Though only one participant identified her online course as part of a traditional enriching educational experience—her FIG—this arrangement played an important role in her course engagement. The shared experiences and small cohort provided an immediate support network for Ally. Additionally, two students described their participation through the online platform as an enriching educational experience.

They found the experience of communicating online—synchronously and asynchronously—to consume materials and engage with classmates as more robust than NSSE’s “using technology to discuss or complete an assignment.” It is also important to note that the majority of participants did not relate online course enrollment with an impact on traditional enriching educational experiences, such as internships, FIGs, and participating in cultural activities. Their descriptions suggest a that, even though they are enrolled in online courses, these students engaged in a wide range of educationally purposeful activities outside the traditional classroom.

Online Courses and Developmental Ecology

Each of the participants in this study described his or her experiences as a student enrolled in an online course at a major research university situated within the broader context of their lives and the environments in which they live, learn, and develop. In particular, students described (a) the physical spaces in which they engage with online courses, (b) the interplay between online course enrollment and commitments to work and family, and (c) the integration or isolation of online courses to their campus-based academic lives.

This section explores this study’s second research question: How do students perceive the relationships between their online course environments and their physical workspaces, non-academic commitments, and their campus experience? I first present participant descriptions of the physical environments where they participate in their online courses. I then present interview data from participants who held work and family commitments, which details the relationship between online course

enrollment non-academic commitments plus the impact that each has on the other. I conclude this section with emergent themes with regard to the degree to which participants perceived their online courses were integrated into or isolated from their campus environments.

Theoretical Framework		Developmental Ecology	
Environments	Physical Workspace	Non-Academic Commitments	Campus Integration/Isolation
Student-Reported Themes	<ul style="list-style-type: none"> • Students preferred their living spaces for convenience and comfort. • Small subset of students related workspaces outside their living environments with improved focus. • Though not a preferred workspace, many students participated in synchronous courses near the location of their commitments immediately before or after class meetings. 	<ul style="list-style-type: none"> • Temporal and spatial flexibility related to increased capacity to meet work and family commitments. • Full-time employment connected to less time to rewatch lectures but improved focus during live class meetings. 	<ul style="list-style-type: none"> • Majority of participants described their online courses as integrated into the campus experience. • All students who identified as Latino or Hispanic described their online courses as separate from the campus experience, but still viewed themselves as members of the WSU community.

Figure 5.5. Developmental Ecology Themes

Physical Learning Environments of Online Courses

The overwhelming majority of participants identified their living spaces—on-campus housing and off-campus apartments—as their preferred spaces to participate in

their online courses. According to student interview data and their coursework journals, these participants logged into their classes at their desks, in communal living spaces, or while in bed. Their explanations for this preference typically leaned toward either the convenience and comfort of being in one's home or the improved capacity to concentrate in one's personal space. Two participants expressed a preference for learning environments outside their living spaces. These students connected their preferred spaces, such as libraries or coffee shops, with fewer distractions and an improved capacity to concentrate. Nearly half of the students enrolled in synchronous online courses indicated that they had watched the lectures from a location near a classroom or meeting space to ensure they would not miss a commitment directly before or after a class meeting, though no students mentioned a preference for such a space.

Living Spaces. The preference of one's living environment as the physical space in which to participate in an online course was a predominant theme from the interview and journal data. Nine students indicated that, when possible, they logged into class meetings from their on-campus residence or off-campus apartment. All but one of these participants connected this preference to the convenience or comfort of their living space. One outlier selected her dormitory for its controlled environment, which improved her ability to focus.

Judy and Ally both lived on the WSU campus and expressed similar motives for their desire to participate in class meetings from their respective dormitories. Each student noted the convenience of her personal space as a key feature to the preferred space for her online class meetings. Judy described her days with social science class

meetings as packed with back-to-back classes and study times. The opportunity to stop by her dormitory provided her some reprieve from the hectic pace.

It's convenient. Like I said for that day, I don't eat except for when I'm watching [social science]. And I feel if it was an in-class course, I wouldn't eat then because I don't like to eat while a professor's teaching. I feel you should pay full attention to them. So then I feel I would be hungry throughout the day, but then the online course gives me a chance to eat my lunch/dinner.

Judy connected this comfort and her decision to eat during class with a drop in her attention. She noted that she always rewatched the lectures, so she did not feel pressure to take down complete notes. Judy combatted this impulse for passivity with her choice of workspace. “I know some people who lay in their bed and watch lecture, but I actually sit [at my desk].” She understood that her environment influenced her behavior.

Ally indicated that she also used the class meeting time to fit in a meal. “I actually like that it's online because that means I can be in the comfort of my dorm and eat in between classes if I need to while watching the lecture. It's great. I don't mind it.” She also indicated that she takes more complete notes during a subsequent viewing of each lecture. In her class meeting journals, Ally shared a preference similar to Judy's for a workspace. “Today I watched [social science] in my usual place; my desk in my dorm. I just cleaned off my desk, so everything is neat and orderly.” In a later entry, Ally indicated why she tends to select her “orderly” desk over other, limited options in her room.

Today my room felt extra cold, so instead of taking [social science] at my desk like I usually do, I decided to take [social science] on my bed, since it would be warmer. That was not the best idea, since I got drowsy, but about 15 minutes before class I splashed my face with water and made myself stay awake.

Ally's experience seemed to confirm Judy's suspicion that a bed would be too comfortable to be an effective workspace. For both students, their respective dormitories provided an opportunity to participate in the course from a location that offered a break from the pace of daily life.

Jennifer and Ashley expressed a preference for logging into class meetings from their off-campus apartments, when possible. Jennifer indicated that she always wakes up at least an hour before the early-morning class meetings, but chose to "attend" class from her apartment.

The class is 8:30[am] to 10[am]. It ends at 9:45[am]. And it's online so I usually wake up, get breakfast, sit in my bed, and watch this in my PJs, to be completely honest. Because my next class is either at noon or it's at 2[pm]. So I don't have to be anywhere.

Jennifer connected the chance to stay in comfortable clothes, in a comfortable space, kept her in her apartment and off campus. She compared the days with her online course to the days that she had 8:00am class meetings on campus. Between classes on those days, she would eat, "study, email, and do work" on campus, the same activities she reported to do from her apartment after her humanities class meetings. "Nothing I do is all that location-specific." Much of Jennifer's out-of-class engagement with campus—class preparation, studying, and involvement in co- and extra-curricular activities—did not require her to be on campus.

Ashley, who was enrolled in two online courses through WSU, explained that she typically logged into three of her four weekly class meetings from her apartment. For the 8:30am humanities classes, she tended to watch "sitting in bed" to avoid the distractions of roommates getting ready for their days. For the 3:30pm social science classes, Ashley

mentioned, “since this class is later in the day, I watched the lecture from my living room since none of my roommates were home.” Though she preferred to participate in class from her apartment, Ashley’s afternoon childcare job required her to log into class from the child’s home once a week, an experience addressed in the next subsection on the interplay of work and online courses. Ashley described her online courses as part of a larger shift away from campus, which also included moving from an on-campus dormitory to an off-campus apartment. She noticed that less time on campus meant that she “definitely [had] more time to be focused on other things.” The two online courses and off-campus residence were new to Ashley, and she expressed that she could not parse the experiences to determine the unique impact of each factor. Though both Ashley and Jennifer preferred to participate in their online courses from their off-campus apartments, the separation from campus did not affect Jennifer’s investment in WSU-related activities.

Mary and Katie described similar experiences with their humanities class workspaces. Both students related that the early-morning class meetings to their preference to participate in the class meetings from their bedrooms. Mary explained that she always had the lectures open on her computer, but she often used the time for “getting ready for [campus].” “I watch the course in my bedroom just because it's early in the morning, and I'm not on campus yet. I just wake up and turn on my computer and watch it.” Mary used the online platform to sleep later into the morning, which had the additional effect of class meetings receiving less than her “undivided attention.” For Mary, the benefits of convenience outweighed the costs.

Katie also described benefits and costs associated with this convenience. In her class meetings journal, Katie noted, “my workplace is my bed. It’s unmade and all my sheets are wadded up. My laptop is next to me, and I made chai tea this morning, so that is on my nightstand.” This description paints her workspace as built for comfort and convenience, perhaps to the detriment of her capacity to focus on lectures. She connected the increased comfort with the cost of “being all but asleep” while she struggled to take notes. Unaccustomed to 8:30am courses, Katie viewed the early-morning online class meetings as a better option than face-to-face alternatives.

Because of the time I feel like I'm more engaged. I don't ever really skip classes, but I feel like I would be so much more likely to if I actually had to get up and leave at 7:00 or 7:30[am] to get there for the 8:30[am] class. Most of the time, especially if I have a big project the night before, it wouldn't happen. Whereas I really don't have an excuse; I never not login to [humanities].

For Katie, the online platform reduced the costs associated with early-morning class attendance, which she partially offset with her decision to participate in class meetings from the comfort of her bed.

Paul and Mike suggested that their living spaces were their preferred workspaces, but both students tended to login near the classrooms for their 10:00am classes that immediately followed humanities. Paul connected his preference for his apartment with the opportunity to sleep-in “because sleep is always good.” With a class that always followed humanities, he could only log in from home on the rare occasion that a friend drove him to campus. Paul mentioned that the majority of the time, he rode the bus to campus before the humanities course. “The class starts at 8:30[am], and it goes until 10[am]. And then my 10am class is in [the chemistry building]. I go to the geology

building, and I just sit there and listen.” Instead of increased comfort or capacity to focus, Paul selected “a lobby with chairs everywhere” for its proximity to his next class.

Similar to Paul, Mike attended a class immediately after humanities, though it only met once a week. Interestingly, Mike found that his ability to concentrate on lectures was unaffected with his workspace environment.

You would think so just because when you're in the engineering building—or I guess more broad, just any other building on campus—I guess you could probably tend to be more engaged, or you would think so, just because you're already dressed up. You're fully awake and stuff as compared to if you're just watching it in your dorm. But I think I found out it is kind of the same thing.

Despite the comparable levels of engagement, Mike indicated a preference for his dormitory in his interviews and journal entries. Mike suggested the online platform provided the opportunity to sleep-in, which he related to the ability to work longer into the previous night. “If I'm having to stay up late the night before, especially Tuesday night, I could stay up late if I need to finish either a project or homework and knowing that I could sleep-in until like 8:20[am].” Mike’s class meeting journal supported this rationale. Mike wrote how his plan to watch from the engineering building “was thrown out the window.” “I stayed up really late cause I had to finish structural analysis homework due at 5:00pm, and I had a differential equations exam that I hadn’t studied too much due to weekend plans.” On the mornings he logged in from his dorm, he watched the lectures from “the comfort of [his] bed” with headphones on as to not disturb his sleeping roommate. Mike indicated that, when possible, he opted for his dorm over logging in near his next class.

Grace was the only participant to connect her preference for her living space to an

improved capacity to concentrate on the lecture. Her concern over distractions and her ability to focus during class emerged as a theme across her interviews. Grace shared that she was “easily distracted” by the “lights and the people around” her in face-to-face classes. Though she attempted to login from other locations on campus, she found her dorm was best for her. “When I switched from being in my dorm, which I’m usually used to, to being somewhere else. It was a different environment so I got distracted more easily.” During the semester, Grace felt the dorm became a better workspace once her roommate, also enrolled in the course, found a workspace in the library. From Grace’s descriptions, the dormitory was a personal classroom environment, free from outside distractions.

Non-living spaces. The two students who preferred non-living space environments shared Grace’s appreciation for workspaces that improved their concentration. For instance, Elaine, who lived at home with her mother and adolescent brother, believed she did her best work outside the home environment.

Whenever I’m working on this class, I definitely have to be somewhere, like a coffee shop, or a library, or somewhere quiet because I really have to engage with what’s going on. So on the nights whenever I’m working on this class in particular, I spend more time on campus because I want to be in study mode.

Though she could complete discussion board posts and reply to peers’ posts from home, Elaine preferred a quiet environment for work on her online modules, which she equated to class meetings.

Eva shared similar experiences with her social science course. She described her on-campus dormitory as less than ideal for optimal concentration. Eva explained that she viewed her living space as a non-academic environment. “A traditional classroom

setting, you have to walk out of your room to go somewhere. So there is a boundary set for the two.” She found that her online courses blurred this boundary, which affected her performance in class.

If I'm in my room, I won't really be paying attention to the actual class, the lecture. So I do find hard to kind of engage myself in the class. Not because it's early, but because I have to go find somewhere where I can focus more.

Eva indicated that the room itself was not the issue. Despite her intention to concentrate, other environments on campus also influenced her behavior. Eva described how her participation in a research study pressed against the class meeting time, which led her to scramble to find a location to log into the online platform.

So I'm like, “There's no way I'm making it back to my room or anywhere.” I ended up going to one of the like research labs that they have and logging into the class from there. It was really kind of awkward because I'm outside of my comfort zone for taking the class.

Eva was taking the class from a computer lab on campus, which she felt improved her capacity to focus. Though she referred to the computer lab as her “comfort zone,” Eva indicated that her concentration, not necessarily comfort, was the driving factor in her selection of that workspace for her online class meetings.

Although she watched the live lectures from her apartment, Mary once rewatched the lectures from the main library. “On a Sunday I actually came to the [academic center], and I pulled it up on a computer. I was taking notes while I was watching the lecture. I found that to be a lot more helpful.” Other factors, such as the time of day and the ability to pause the lecture, likely contributed to the better academic experience. Yet, the behavior setting of the library helped induce greater attentiveness and more active learning.

Summary. This section explored participant descriptions and meaning making of the physical environments that they select for their online courses. A wide majority of students in this study preferred to participate in their online courses from their living spaces for reasons of comfort and convenience. When possible, two students opted to login from outside their living spaces in coffee shops or places on campus to reduce distractions and improve concentration. The interview and journal data suggested that physical workspaces tended to affect student behaviors. For instance, students in this study who watched from bed tended to report difficulty with staying awake during class. Most participants indicated that they also participated in their online course from less-preferred locations, including academic building hallways and research laboratories, to accommodate class, student organization, or work schedules. The next section of this chapter discusses the relationships between these online courses and participants' non-academic commitments.

Interplay of Online Courses with Work and Family

Within the developmental ecology framework, students live and develop within multiple contexts, only some of which fall within the direct purview of their colleges and universities. When these microsystems interact, they form a mesosystem. For the two students in this study who held part-time jobs, their descriptions of the linkages between their online course enrollment and their employment suggest such a mesosystem. Their perceptions of these linkages support the assertion by Evans et al. (2009) that “mesosystems may be consonant, reinforcing developmental effects, or dissonant, sending competing messages or creating inconsistent influences that may provoke or

inhibit development” (p. 164). The one student who worked more than 30 hours each week made few connections between her online course enrollment and her employment.

Ashley and Elaine credited their online course enrollment with their capacity to work part-time while maintaining full-time enrollment at WSU. For Ashley, her synchronous online courses provided her with flexibility in location that she used to participate in class meetings while she worked as a babysitter. Ashley indicated that she realized that she needed a part-time job once the semester began. The opportunity arose to babysit for a family friend. However, for one afternoon each week, her social science class meetings overlapped with her work schedule. She noted that she realized the online platform provide the freedom to watch from the family’s home. “I would be able to sit there and do my homework while the boy did his homework.” Ashley also connected the flexibility in location to time saved in travel. Even if she had the option to bring the child to a face-to-face course, she would not have the time to do so. “I pick up the boy from school at 2:30, so I wouldn't be able to pick him up and then drive back to campus on time.”

Ashley’s descriptions of the interplay between her babysitting and online course suggest a complex relationship with regard to her learning and development. Her off-campus employment required Ashley to manage her time and be responsible for the care of a young child, both certainly complex tasks. However, her childcare duties occasionally pulled Ashley away from the synchronous class meetings. “There have been times when I'm babysitting that I just don't have the time to watch the whole lecture.” Ashley noted that although she watched the portions that she missed once they

were posted online, she missed out on the interactive nature of the live class meetings. For Ashley, class activities were a way to “develop your own thoughts” and gain “other people’s insights into the subject.” While the online platform made possible her afternoon employment, the complex interplay between her job and course seemed to have both positive and negative effects on her learning and development.

Elaine made similar connections between her enrollment in asynchronous online courses and her capacity to hold part-time employment. She credited the flexibility in time with this increased capacity.

I wouldn't be able to have a part-time job if I had to be in class. That was kind of one of the main factors [for enrolling in the online courses] because I only work 12 hours a week. But if I was in six more hours [of synchronous courses], I would have six less hours to work. Taking these online courses definitely gives me flexibility in every aspect.

Elaine indicated that her daily schedule pushed her online coursework to evenings and nights. If her two online courses met during the day, Elaine suggested those hours would displace half of her 12 hours at her on-campus job. Much like Ashley’s experience with her synchronous online course, Elaine’s courses allowed her to take on employment responsibilities and forced her to become “better at time-management.” Elaine worked on her online courses late at night and early in the morning, which provided the opportunity to refine her online communication skill sets. “You get used to communicating with people online you kind of know what's effective and what's not.” The potential friction points between her job and online courses contributed to Elaine’s improved online communication, which she noted was crucial in her desired career field.

Elaine also shared that family commitments dictated when and where she

completed coursework for her online courses. She explained that she moved back home this semester to live with her mother and 10-year old brother. Though she preferred to work on course modules on campus to help her focus, Elaine cared for her brother two to three nights each week while her mother was at work. Similar to Ashley, Elaine viewed her childcare time as an opportunity to work on her online courses. “I definitely feel like I have more time because, especially in taking care of my little brother. I can do that at home, but I can also be working on my class if I need to.” Though Elaine did not find the environment ideal for learning, the temporal and spatial flexibility allowed her to honor her family commitments and complete her coursework.

Eva, who worked 30 to 33 hours each week in addition to her 15-SCH course load, did not connect her enrollment in two online courses with her employment. Eva shared that she worked Friday through Sunday as a shift manager at a local fast food restaurant. For Eva, this arrangement separated work and online courses for two reasons. First, the synchronous class meetings provided little to no flexibility in time. “You still have to be taking the class, even though it's not in a set classroom. Like I said, you still have to be in attendance to the classroom.” The course quizzes and activities forced her to attend the class meetings. Second, unlike Ashley’s childcare duties, the nature of Eva’s job eliminated the opportunity to work on coursework or attend class while at work. Eva’s descriptions of her humanities course suggest that her busy work schedule did affect her live lecture experiences. “I haven't really had to rewatch them. I pay attention, or at least I try to pay attention, because I won't have time to rewatch them.” Her work schedule made time management key to her success and was a factor in

decision to pay close attention to lectures during her early morning humanities class meetings.

In summary, the two students who held part-time jobs indicated that enrollment in online courses and their employment influenced one another. The spatial flexibility of a synchronous course allowed Ashley to participate in class meetings while she cared for a young child. Elaine indicated that the temporal flexibility of her asynchronous course allowed her to work on-campus during the day and complete coursework in the evenings while she often watched over her adolescent brother. Though these students recognized their learning environments were not ideal, the online platform helped them balance academic life with non-academic commitments. Eva held a full-time job and indicated that her hectic work schedule reduced her opportunities to rewatch lectures, which motivated her to pay close attention in her live class meetings.

Integration and Isolation of Online Courses with Campus Environments

Most participants described their online courses as integrated into their campus-based WSU experiences and felt the courses had little to no affect on their feelings of belonging to the campus community. The students tended to connect their online courses with their campus experiences through face-to-face interactions with classmates, professors, and TAs and through faculty efforts to include WSU culture in lectures. Some students viewed the course as no different from their other WSU courses. However, they expressed concern that enrollment in additional online courses could lead to viewing online courses as separate or to feeling personally isolated from the campus experience. Though they did not make a direct connection to their race or ethnicity, the

subset of students who identified as Latino or Hispanic described their online courses as separate or auxiliary to their campus experiences.

Integrated With Campus Experience. Many of the students in this study connected the opportunities for face-to-face, campus interactions with their understanding that their online courses were integrated into their WSU experiences. Ally suggested that her online social science course could have felt separate if not for her initiative to create campus-based interactions.

I would say it's integrated into my campus experience. I was about to say separate, but then I realized that I have made the conscious effort of going out and contacting people that are in [social science] with me to meet them face-to-face to study. So, had I not purposefully made face-to-face study groups, done that on my own, and made a conscious effort to contact my peers, then [the online course] would probably be separate [from her campus experience].

Ally made the course a part of her campus experience by organizing in-person study groups and peer interactions. She implied that the class meetings feel separate, but she integrated the course into her campus experience. Ally laughed off the question of online course enrollment's influence on feeling a sense of belonging at WSU. "I thought I would like it before, and I do."

Grace also connected the opportunities for face-to-face interactions to her online course's integration into her campus experience. Unlike Ally who organized peer interactions, Grace preferred to study alone and even voiced her preference for the private workspace of her online course over the distractions of a crowded classroom. Even so, Grace felt comforted by the opportunity to meet in-person with her professors and TAs. "We could still go for help if we wanted to." She indicated that proximity contributed to her sense that the online course was as much a part of her campus experience as her face-

to-face courses. “The professor is actually still on campus talking about the class. It's just that I'm somewhere else listening to him. It just feels like a class at [WSU], but just online.” Grace’s comments suggest the knowledge that her online professors teach from campus contributes to her perception that the course is integrated into her campus experience.

Similarly, Mary connected the online humanities’ integration into her campus experience to the campus-based, in-person access to the faculty. “The professors kind of bring it up that we [faculty and students] are all here.” Mary expressed that their message helped her frame the course as a WSU course, similar to her face-to-face courses. In addition to the faculty reminders about their proximity on campus, they also incorporated campus news into the course. Mary related these comments to the course’s integration into her campus.

They make references to what's going on in the [WSU’s city] community and on campus, and so it's not completely disaffiliated from [WSU]. I feel like they do a good job of integrating what's going on in campus. Like if our football team just won, they talk about it. I mean they do it to the same extent that it would be done in another class I feel like where the professor says, "Oh, what a great game this weekend."

Mary, a junior by SCH classification, described the efforts of her humanities’ professors to integrate campus culture and issues as comparable to those of other WSU professors. Mary appreciated the ability of these references to reinforce a sense of community on campus, to which Mary still felt she belonged. “I still love [WSU]. It wouldn't prevent me from going to any football games {laughs}.” Her enrollment in an online course did not affect her affection for or membership in the campus community.

Jennifer did not view her humanities course as a priority, but still felt the course was part of her campus experience. “It's part of [WSU]. It's part of my semester. It's not a separate entity.” Jennifer explained that despite being a part of her WSU experience, the course had no effect on her sense of belonging to the campus community.

I think it's just because I'm taking only one [online] class. Maybe if I took all my classes online I wouldn't feel like it. But it's also because I participate in so many things on campus, so this class is not the only thing that's tying me to the university. There's so many other aspects.

For Jennifer, a senior involved in multiple co- and extra-curricular activities, the required humanities course was not a crucial connection to campus.

Judy also found that her online course to be integrated into her campus experience, but unlike Jennifer, she noted its impact on her sense of belonging. In particular, she related the synchronous class meetings, predominantly WSU-student enrollment, and enhanced sense of responsibility for her own learning to the course's integration into her WSU experience. Before her online social science course, she believed all online courses followed the same format: “You go online, and you watch the videos whenever you want, and then you just answer a couple questions.” Judy noted the synchronous nature of the class meetings as an important factor that contributed to her belief that the course felt like her other courses. “There's a set time so you kind of have to manage your time. You have to go somewhere to watch it, like an actual class.” Judy credited the composition of the students and course design with her sense that the course was a part of her campus experience.

I don't think it affects me. Other [WSU athletic team nickname] are taking this course. I'm still a [WSU athletic team nickname]. It feels like a college experience, actually. College is where you go to lecture and then the professor

kind of teaches you, but then you kind of have to go back and teach yourself. And an online course is more about teaching yourself. So, it just doesn't change anything.

For Judy, her fellow WSU students in the course made it a WSU course. Additionally, the physical separation from the professors was not a cost of online education to Judy. She found the greater onus for her own learning to be characteristic of undergraduate education, one that was more pronounced in her online course.

As for the course's effect on her sense of belonging, Judy explained that the engaging course design and anonymity made her feel more connected to campus. Judy described how some in-person class meetings made her feel less connected to her peers. "When I walk into a lecture, I feel upper-division, it's like, 'Look at those two people in front of me. They're talking, and I'm just sitting here alone. I don't have anyone to talk to.'" Judy found the online platform leveled the social playing field. "When you're in an online course, everyone's alone, so it doesn't really matter." She noted, "I don't feel alone when I'm watching it alone. I just feel engaged in the course." Judy's depiction of the class meetings indicates that her active and interactive learning strips away the physical separation and connects her to others in the course.

Similar to Judy, Ashley connected the interaction with WSU students with her sense that the course was a part of her campus experience. She found her face-to-face encounters with classmates to be a driving factor behind the course's integration.

If you meet someone in another class that's in [your online] class, it's kind of a good way to get to know someone. Or for the [social science] class we got to go on campus, and I met people through that who were at the live broadcasting of the show. I met people who were in the class, and it was kind of nice to meet some different people. And I have watched it on campus before and kind of had people come up to me and be like, "Yeah, I'm in that class, too."

That she took the course with fellow WSU students contributed to the course's integration into her campus experience in two ways. First, she indicated that she used the course as a shared experience to bond with students in other courses. Second, through the in-person class meeting, or "broadcast," Ashley connected with a new group of students and expanded her class network. Ashley suggested that she took advantage of on-campus experiences, which resulted in a greater sense that the social science course was a part of her WSU experience. Ashley found it difficult to assess the effect of her online courses on her sense of belonging. Along with her enrollment in two online courses, she stressed the impact that her move to an off-campus apartment had on her connection with the campus community. She mentioned that she no longer walked by a campus landmark, a sight that typically filled her with campus pride. Though not the only reason, her enrollment in two online courses allowed her to spend less time on campus and lessened her sense of belonging to the WSU community.

Katie also viewed her online course as integrated into her WSU experience. She found the course to be an experience that she shared with her fellow WSU students. "I still say, 'I'm in [humanities].' I still complain about it like all my other classes {laughs}." To Katie, the difference in her face-to-face courses was that she "just happen[ed] to be physically present." These descriptions indicate that her online humanities course was an integral part of her WSU experience. With regard to the course's effect on her sense of being a member of the campus community, Katie suggested any potential impact was negligible with only one class online. "If all of my courses were online, maybe. But just one doesn't really hurt anything."

Isolated From Campus Experience. All students who identified as Latino or Hispanic felt that their online courses were isolated from their campus experiences. They did not relate this separation to their racial or ethnic identity. Instead, these four participants offered two explanations: (a) the courses lived online and not in a physical classroom and (b) their own lackluster efforts to integrate the courses. Despite their perception that their online courses were not integrated into their campus experiences, the majority of this subset expressed that their online courses did not affect their sense of belonging to the campus community.

Both Mike and Eva connected the course's isolation with the lack of a consistent, physical classroom environment. For Mike, the in-person classroom setting felt more "traditional" and contributed to the collegiate and academic atmosphere.

I guess it puts you in that mindset, like you're going to school and that you know you're walking there down the hallways or between classes and you're going into a classroom setting. And it makes you feel part of the university, whereas online, sometimes you don't even need to be on campus to watch the online lectures. As long as you have wifi or working internet, you can pretty much watch it anywhere.

He related the campus environment—in the classroom and walking between classes—as an important component of his WSU experience. Eva shared a similar perspective. As discussed in more detail earlier in this chapter in the section on active and collaborative learning, Eva preferred face-to-face, peer interactions during class. Two of her five courses were online, which removed Eva from the classroom environment for a significant portion of her class meetings. "I don't get to fully experience a classroom at [WSU] for [humanities] or for [the social science]. I don't have as much interaction with other students because it's online." Similar to Judy, Eva felt the online course enhanced

her sense of being responsible for her own learning. Unlike Judy, Eva described this component of online education as a factor that pulled the course away from her campus experience. “You have to learn how to answer your own questions if you don't have the opportunity to do that.” Interestingly, both students had the opportunity to attend in-person class meetings, though neither took advantage.

Tangential to the lack of a physical classroom environment, Elaine and Paul found the courses to live online and disconnected from campus, even if they tended to participate in the course on campus. Elaine shared her preference for completing online course modules from on-campus libraries and coffee shops. “On the nights whenever I'm working on this class in particular, I spend more time on campus because I want to be in study mode.” She did not connect this physical, campus workspace with a sense that the course was integrated into her campus experience. Instead, Elaine portrayed her relationships with the professor and classmates as digital. “I feel like I would have felt weird approaching people in my online class because our relationship is computer-based, not people-based.” Elaine explained that regardless of where she logged in, the coursework and relationships lived online.

For Paul, the course did not help him “be more a part of [WSU].” He expressed frustration with his course’s chat room design, which hindered his ability to communicate with peers through “a computer screen.”

I think that it affects my [WSU] experience. Maybe there are some politicians in that class I might want to be friends with, future politicians or lawyers, or people who just have a keen liking for [humanities], and I could learn their insight from their engagement in the class, and I'm totally missing that. And I like [humanities], you know. I was in [the military] for the last six years. I wanted to see the civilian side. I got kind of bummed out when I found out that this was an

online class. Like I said, I came in with a biased perspective of it, so kind of a negative perspective.

After years of online education while in the Army, Paul seemed to anticipate a traditional, residential undergraduate experience. He recognized that his classmates influenced the class environment, and the absence of meaningful discussions damaged the humanities class environment. When his online course did not align with this expectation, Paul was disappointed and did not view the course as part of his campus experience.

Both Elaine and Mike expressed that their own inaction isolated the course from their campus experiences. Elaine, who described her experiences with the online media studies course to be “computer-based, not people-based,” believed that she was primarily responsible for not integrating the course into her WSU experience.

If I would have taken the initiative to go and visit my professor—because she was always giving her office hours, always saying come and hang out with us, come talk to us—if I would have had the time to take advantage of those things, then it would have been more integrated. But because I took it for time convenience, it was definitely separate.

Similar to Ally, Elaine recognized that her online course’s design empowered her with the choice to integrate the course into her campus experience to the degree she desired. Unlike Ally, and due in part to demanding school, family, and work schedules, Elaine chose to separate the course from life on campus. Elaine explained that this choice did not diminish the academic experience, as her online interactions with her professor provided a balance of tremendous support and academic challenge. Mike also indicated that he chose not to integrate the course into his campus experience. He did not relate this isolation to the online platform but to the course being a requirement outside of his academic college.

I would just say it is a separate entity from my overall academic experience, which is being a part of the [engineering school], the student organization, the other stuff. And [humanities] is just something that came along for the ride. Once I finish it, then I can continue my other path of engineering and stuff.

Like Elaine, Mike made the decision to separate his online course from his campus experience. Mike's perception of the WSU experience was his academic college and his extra- and co-curricular activities; the online course did not fit inside this definition.

Despite the sense that their online courses were not integrated into their campus experiences, the majority of this sample subset still identified a sense of belonging to the campus community. Elaine compared her sense of belonging to the WSU, where nearly all of her courses were face-to-face, to her sense of belonging at a local community college, where nearly all of her courses were online.

I would say I took a ton of classes online through [local community college], and I don't feel like I belonged to [local community college] because I was just meeting requirements. It almost felt like an add-on. But at [WSU], I never took an online course when I wasn't also on campus, so it didn't really affect that.

Elaine never identified as a member of the community college, despite the number of their courses she completed. She related her sense of belonging to the core of her academic experience was always campus-based, face-to-face courses at WSU. Paul, the Army veteran, shared that even though "people think that's just too touchy feely," he still used the WSU mascot to describe himself and connected his identity to the campus community. Eva, who enrolled in two online courses through the university, felt that her on-campus experiences tied her to the campus community. She shared that if she only experienced WSU via her online courses that she "wouldn't really know what being a [WSU] student is like." Mike was the exception as he felt the online course diminished

his sense of belonging, though “just every now and then.” Together, their descriptions suggest that their enrollment in online courses through WSU had little impact on their sense of belonging to campus.

Summary. Most students in this study viewed their online courses as integrated into their campus experiences. These participants related in-person interactions—both student-initiated and faculty-organized—with their peers, instructors, and TAs as a driving factor for this perception. Some students found faculty efforts to incorporate WSU events and issues into lectures as contributing to their feelings that courses were part of their campus experience. Overall, these participants viewed and discussed their online courses as they did their face-to-face courses at WSU. The subset of participants who identified as Hispanic or Latino described their online courses as isolated from their campus experiences. Except for Mike’s comments, the depictions of overall engagement suggest that these participants have fewer extra- and co-curricular connections to campus, which may make them more susceptible to an online course’s impact on their campus experience. While this subset of students felt that online courses were separate from their campus experiences, they shared that they identified as members of the larger campus community.

Summary

This section highlighted the interplay between online course enrollment and students’ environments, both on and off campus. With regard to their physical workspaces, participants’ descriptions suggest they selected their living environments for comfort and convenience. Only one student indicated that she chose her dormitory for its

advantages as a learning environment. Participants who preferred alternative workspaces, such as campus libraries and coffee shops, selected these environments to improve their capacity to focus on the lectures and coursework.

Participant interview data depicted a give-and-take relationship between online courses and non-academic commitments. The student in the sample enrolled in an asynchronous course found the course design provided her with the necessary temporal and spatial flexibility to hold a part-time, on-campus job during the day and care for her adolescent brother at night. Though she did not describe her home as an ideal learning environment, the ability to watch after her brother and complete coursework allowed her to enroll in 21 SCH and graduate early. Participants found synchronous online courses to provide little temporal flexibility, though the spatial flexibility allowed one student to care for a child during her class meetings. The student who worked full-time and was enrolled in two online courses tied her work schedule to her improved focus during class meetings because she did not have the time to rewatch recorded lectures.

The majority of participants described their online courses as integrated into their campus experiences. They credited interactions with peers, faculty, and support staff and the professors' incorporation of WSU events and news into lectures as contributing factors that made the course part of the campus experience. All students in the sample who identified as Hispanic or Latino described their online courses as separate from their campus experiences. These participants tended to have fewer connections outside of coursework to WSU, which suggests that these students may be more susceptible to a weakened relationship with the university. Despite their perceptions on their online

courses lack of integration, this subset largely still felt they belonged as members of the campus community.

Chapter Six: Faculty Perceptions of Student Engagement in Online Courses

The purpose of this chapter is to explore faculty perspectives with regard to student engagement in their online course sections. I present data from interviews with two WSU faculty members, one each from the social science and humanities courses in which ten of the eleven students in this study were enrolled. As discussed in Chapter Three, the faculty member from the media studies course declined to be interviewed for this study. The faculty participants' views on student engagement address this study's final research questions: How do instructors of online courses perceive their course design, facilitation, and direction as having an impact on academic challenge, active and collaborative learning, and student-faculty interaction? Within the scope of each of these engagement benchmarks, the faculty members shared views that align with the themes that emerged from the student participants and views that indicate a different perspective than those of the students. This chapter presents their views on each of the five engagement benchmarks and on the ecology of their respective online course sections.

Active and Collaborative Learning

Faculty interview data suggests that the instructors view online course activities in a similar manner to the students in this study. Both faculty members viewed in-class activities, such as quizzes, polls, and surveys, as tools to keep students' attention. However, the social science professor connected this improved attention with opportunities for active and collaborative learning via in-class chat sessions, whereas the humanities professor connected improved attentiveness with opportunities to refine

lectures in real time based on open, anonymous feedback and questions from students. With regard to online activities outside of class meetings, both professors agree these exercises helped apply material to students' lives, which matches the descriptions provided by student participants.

Both faculty members related in-class activities with a desire to improve student attention during the live class meetings. The humanities professor viewed the one-to-two-question polls, participation in which could improve students' grades, as a method to "to kind of keep them there." He noted that the activities "keep them paying attention because you never know when the in-class activity is going to come." The social science professor made a similar connection between the frequent quizzes and questionnaires and student attention.

So this idea of the [quizzes] is a very high incentive to watch. We were worried. The previous year what happened was a lot of people would take the benchmark at the beginning, sign off, go do something else, and then watch the archived [class meeting] later, which is specifically why we implemented this idea of this mid-class questionnaire where they might get some kind of extra question on that day's class content. If they turned off, they would miss that.

Along with his co-instructor, the social science professor altered the class meeting design to increase the quantity and quality of student viewership over that of previous semesters. The humanities professor indicated that he and his co-instructors "learned from where [the social science professors] succeeded and where they failed" with regard to in-class activities. Thus, the two faculty members shared similar views on the purpose and effectiveness of polls, quizzes, and surveys.

Their perspectives differed slightly on the how to best use the improved attention of their students. Both professors found the frequent quizzes—literally referred to as

“benchmarks” in the social science course—to serve as an accurate gauge of their students’ grasp of key concepts. As described by the humanities professor, the quizzes “made sure [students] didn’t fall behind” as they built upon each week’s course material. While they shared a common perspective on quizzes, the professors expressed different views of the in-class chat sessions. For instance, the humanities professor found the chats to be a valuable tool for students to voice their questions and concerns during lectures.

One of the things you know is that students can get confused quickly. A lot of the time you're using new terminology, they get confused very quickly. The great thing about the chat is that you can stop the confusion immediately. A lot of them are scared to raise their hand, ask a question, things like that. The chat reduces that a bit.

This professor noted that despite some class meetings in which the comments drifted off topic, the students in the chat room this semester were “on point and focused.” The improved attention allowed him to address concerns in the chat or by spending additional lecture time to clarify a term or concept.

The social science professor expressed that he used the attentive class to create interaction and collaboration. He indicated that the chat rooms were first developed for face-to-face course sections, but they transitioned well to the online format.

We started initially teaching together and, through [co-instructor’s] initiative and energy, we started creating various tools that were initially designed for in-class interactions. The general idea being, how can we use technology to try to initially do some of the things that you typically can't do in a large-scale class. Probably the best example is having a chat, having a discussion. In a 500-person class it's very hard to have students interact with each other in any good way. So [co-instructor] created this software that allowed students to all be in the same class, sign on, and that would allow us to put students into small groups and have discussions in chat rooms—and this is crucial—that we could study, where everything is saved, and we could analyze.

For the social science professor, peers working through difficult coursework to better

their understanding was the driving factor to keep the course synchronous.

I mean the whole course is really designed to promote engagement. That is the whole point. Otherwise, why have them all watch at the same time? I would say the whole course is explicitly designed to try to promote engagement in multiple ways. Engagement, in terms of interactions with other students, this idea of the pods where they have their community and where they're having the group discussions, this idea of—we don't know this, we don't have the data on it—but our sense is that there's something about the idea of all learning together at the same time, of all being in this thing, which I think is part about being a class, the excitement of being in the class together. We wanted to maintain some of that, which is why we've done lots of things to try to promote people watching.

The social science professor directly ties efforts to encourage students to actively watch live lectures with the ability to increase peer interactions. To a greater degree than student discussions in large, in-person lectures, chat sessions focus the conversation to a small group of students and provide transcripts for the instructors to review their content and quality.

These faculty perspectives align with those of the students in this study. Students in the study enrolled in the two courses viewed the in-class polls and quizzes as tools to incentivize viewership and widely credited the activities with greater focus on the lecture. However, student participants in the humanities course did not express that they felt a need to contribute to or participate in the class chat sessions. In a class with over 900 students, they felt that other students' comments addressed their questions and concerns and that their own posts would only contribute to the “noise.” Student participants in the social science course felt “committed” to the chat rooms and that these sessions were safe spaces to voice their opinions and challenge their peers' views. Their comments suggest the social science professor succeeded in his efforts to parlay an attentive class into active and collaborative learning.

Both professors tied online exercises completed outside of class to active learning that required students to build upon course materials and construct knowledge. The social science professor shared that he used the activities to apply course topics to students' lives.

We have this experience sampling method. They got emails two to three times a week, and we're asking them questions about all kinds of things, often related to class. When we were talking about sleep, we'd ask them maybe about their dreams. When we're talking about emotions, we'd ask them how they feel in different places and so on, so they could become [social scientists] about themselves, so that they could track things like their stress levels, their activity levels, their sleep levels. So we're really trying to stay connected with them inside and outside class, the whole time.

This professor indicated that he and his co-instructor used the responses to the ESM questions in class to illustrate key concepts or bring life to a research or statistical method covered in the readings. The practice of collecting their personal data allowed the students to become active researchers and social scientists. The humanities professor's descriptions also connected the out-of-class activities with the application and synthesis of course concepts. He singled out the purpose of the online simulations.

The simulations are there to make [humanities] relevant to where they're like, "Oh, this is something that I can actually use." So talking about current events in class, doing simulations, it lets you actually apply what you've learned with the hope being that by applying it, you'll better understand it, but also you'll better understand how it's relevant to your life.

The professor intended to improve learning and build an interest and investment in the course by making the subject matter relevant to the students. Whereas the quizzes addressed substantive knowledge, the simulations required students to apply their knowledge.

Students in the social science course found the use of their personal data helped

draw back the curtains on social science as a practice and allowed them to actively participate in the construction of knowledge. These perceptions closely match those of the students in this study. Students related the simulations in the humanities course with the active application of the course's subject, which they viewed as a change of pace from the quizzes, which relied more on memorization and recall of facts.

Student-Faculty Interaction

Although both faculty members recognized that the online platform led to one-way communication—instructor to student—they presented divergent views on the platform's impact on student-faculty interactions. While the social science professor found the students in the online class meetings to be more “engaged and connected” than their peers in previous face-to-face course sections, the humanities professor described the inability to engage in back-and-forth discussions as the primary cost of the online platform. This latter perspective aligns with the views of most students in this study enrolled in the synchronous courses. With regard to the faculty-as-celebrity theme, both faculty members reinforced the student participants' view that faculty do not appear to be “real” until they are met in person, though they offered unique takes on the repercussions of faculty-as-celebrity.

Both faculty members recognized that although the chat rooms provided a medium for in-class, student-faculty interaction, the online platform prescribed primarily one-directional communication through broadcasted lectures. The social science professor described the intentional communication style of speaking directly into the camera, as opposed to speaking with students who were observing the broadcast in the

studio, as making “a subtle but important difference” with regard to connecting with students.

If you’re filming a class, we talk to the audience and the cameras film us. If we're doing a TV show, we talk to the cameras and the audience watches us. I think in terms of connecting with the students at home we very quickly realized that it was the TV show thing that was much more appropriate. And so we do, we look into the cameras. We don't look at the audience at all, and the studio audience is like a TV studio audience. And I think that works well in having students feeling they are engaged and connected to us.

This professor indicated that looking and speaking into the camera shortened the transactional distance between the online students and himself.

The humanities professor, who uses a similar delivery system of speaking into the camera instead of broadcasting an in-person class meeting, associated a cost with this communication style.

You can't actually have a conversation with them. One thing about the face-to-face class is I'm talking with them as opposed to talking at them. In this [online section], I'm mostly talking at them, and you lose a lot in doing that. There's benefits to the way we have it set-up, but there are also clear costs.

He expressed that this obstacle, one-way communication, stood in the way of true dialogue and disproportionately affected less motivated students. “The in-person classes are where I can actually call on a student, whether motivated or not, where here the only time I deal with students it's the motivated students.” Due to the limitations of the online class meetings, the humanities professor felt he lost the singular opportunity to interact with less motivated students who did not reach out to instructors on their own accord.

The social science professor similarly used face-to-face sections as points of comparison, but viewed the online interaction more favorably. As an introductory course that fulfills a core curriculum requirement, the face-to-face social science course’s

enrollment often approached 500 students. When moving the class online and opening the course to more than triple the number of students, the social science professor and his co-instructor were at first concerned the class experience would become even less personable.

We were worried that now we're not even in the same room, they can't even see us, they would feel less connected. But, in fact, we found the opposite. They found they were more connected. And I think part of that is because well look, you know, what are we comparing it with? Well, we're comparing it with a 500-person class, that's hardly an intimate experience anyway. And now they can be sitting in their bedroom, their kitchen, or a cafe, and they're with us, and we're looking right at them. They just feel connected.

For this faculty member, the online section displaced an in-person classroom experience that came with its own transactional distance, namely that instructors could not engage one-on-one with a meaningful percentage of students. Though he did not suggest the online platform solved this issue, the social science professor found that the medium allowed students to feel as if the physical distance was less relevant to their connection to the instructors.

According to the humanities professor, the lost connection reverberated throughout opportunities for face-to-face interactions with the instructors. “Because of that lack of personal contact, students automatically assume that you are dismissive and distant. Because of that, they won't come to office hours. So the distance between the two grows even more, especially among the students who are not motivated.” Again, the professor found that the distance disproportionately affected students who had less investment in the course. He shared that in previous semesters, he and his co-instructor opened the live, in-studio class meetings to students. “I don't think we ever had more

than eight students in the studio, even though we could seat about 20 to 25 [students], easily.” The social science professor indicated that students took advantage of opportunities for face-to-face, personable interactions with the instructors. He shared that students joined waitlists to attend in-studio class meetings and accepted invitations to meet through “Coffee Quizzes.” Based upon quiz scores or random selection from the group chat rooms, the instructors selected students on a regular basis to “take them to coffee and have a conversation with them, and just kind of get to meet them.” The instructors’ experiences with student-faculty interactions suggests that factors besides the online platform, such as the student’s motivation for enrolling in the course, may weigh more heavily in a student’s decision to attend a live class meeting or in-person office hours.

Overall, the professors’ descriptions of student engagement in the humanities course match those of the student participants enrolled in the course who tied the broadcasted lecture with lost opportunities for student-faculty discussions. The professor’s comments with regard to an underutilization of office hours reflects the participants’ descriptions, which were notably void of office hour attendance. The social science professor’s experience with students feeling connected with their instructors provides a slightly different narrative than offered by a majority of participants enrolled in the course. Though some students agree with the social science professor that student-faculty interaction matched the non-existent discussion of large, face-to-face lectures, more students felt that the absence of meaningful, two-way communication negatively affected their interactions with instructors.

Faculty perspectives supported the faculty-as-celebrity theme that emerged from the student interviews. The social science professor explained that students in his 500-person lectures would introduce themselves with great excitement, but the students from the online section surpassed this enthusiasm.

It's almost like they're meeting a celebrity. They will come up and can't believe they're seeing us. They say, "I can't believe you really exist! How amazing!" Sometimes they don't talk. They want to take photos with us, and they're posting it to Instagram straight away.

This professor shared that similar to the perception of a television personality, with whom the viewers “feel they know them,” students felt they knew their online professors through the course’s online format. The humanities professor agreed that students tended not to view him as a real person. Unlike his social science colleague, he indicated that this physical distance made it difficult to build relationships with students.

One of the things is that they don't talk to you on a regular basis. They have an image of who you are but don't talk to you. They come in, and they just want to challenge you that you're unfair or you're distant, things of that nature.

This professor explained that once he established an in-person connection with the student, the students appeared to be more empathic and civil. This effect of face-to-face interactions contributed to his policy on email communication, which directed students to attend office hours or schedule an appointment to discuss most course matters. Though student participants did not connect this celebrity effect with a propensity to challenge faculty members, the underclassmen in the study did acknowledge that the broadcast-format made the faculty members seem less “real.”

Academic Challenge

The faculty interview data tend to support the themes from student participant

descriptions of the academic challenge in their synchronous, online courses. Both faculty members shared the perception that students view online courses as less demanding of time and effort than face-to-face courses. Similar to his students in this study, the humanities professor connected the state mandate to complete the humanities requirement with students' diminished commitment to the course. The faculty members described the ability to rewatch lectures as an improvement over studying class notes alone and as a tool to cover a greater amount of material in their lectures.

The faculty members in this study found that students tended to begin the semester with preconceived notions about online courses, in particular the amount of time and effort required of such courses. The social science professor mentioned that students shared their previous online education experiences with him. He noted his attempts to combat the perception that online courses were “boring” and had little to offer with regard to peer and instructor interactions or academic challenge. “What we've been trying to do is sort of brand this in a way that's saying, ‘This is ameliorated over the internet, but it’s not what you think of as an online class. It's dynamic and synchronous.’” This explanation matches Ally’s description of the professor’s email that warned the class that the social science course was unlike their previous online educational experiences.

The humanities professor directly tied the online platform with both lowered expectations for the time and effort required and the students’ actual investment of time and effort.

So I think the commitment level of students is lower, and they expect it to be lower because it is online. Because it is online they expect to do less work. So

we run into several problems. One, it is a course they are forced to take, so they don't want to be there. They also expect it to be easy, and the fact that it is online, they are even more checked out and they expect it to be even easier. Those are the problems we run into.

These perceptions closely align with those of student participants enrolled in the humanities course. The professor noted how the low expectations of online courses compounded the challenges associated with students' low motivation to enroll, which resulted in diminished investment of time and effort. Contrary to student expectations, the humanities professor found the additional online components—simulations, polls, and surveys—demanded “a little bit more work than you see in the other classes.” Students in the study enrolled in the humanities course noted that the activities kept their attention on the lectures, but the class meetings felt “just like a lecture.”

An additional online activity available to students in both courses was rewatching class meetings posted online. Aside from Ally who indicated that she sacrificed sleep if needed to rewatch the posted social science lectures, students in the study tended not to identify from which activities or commitments they pulled the time needed to rewatch three to six hours of class meetings each week. The humanities professor suggested that rewatching the lecture would not take time away from another activity, but rather it would enhance student efforts to review their notes from class meetings. “It should be the same as going over their notes. To me this is a more efficient way of going over your notes. That's why I don't necessarily see it as a problem or see it as extra work.”

Descriptions from the majority of student participants confirmed their use of the posted lectures to take more detailed and focused notes.

Students in the study explained the need to rewatch lectures arose from their pace

and density of information. The interviewed faculty members expressed a similar view on the lectures. The humanities professor noted that the online format allowed him to “speak at a conversational pace” without extended pauses.

It gives me more freedom to give my lecture, which is what I enjoy. Being able to just clearly get the information out instead of putting something up, everybody writes it down, you just sit there, move to the next slide. I think it keeps the flow going.

He explained that without those pauses, he could include more information into the lectures and more activities into class meetings. The social science professor offered a similar description of lectures in which “there's a lot of information coming, and people find it hard to keep up.” The posted lectures provide students with the opportunity to spend more time with the concepts covered in class meetings. “The idea is we hope people can just listen to it, and not have to try to write everything down, and then go back again.”

Supportive Campus Environment

The faculty participants in this study focused their descriptions of WSU's supportive campus environment on the instructional support, the form of support over which they had the most control. Their perceptions tended to match those of the student participants enrolled in this study's synchronous courses. The social science professor described the academic support and community building found in the pre-class “pods,” while the humanities professor's comments suggest he had fewer graduate and undergraduate assistants, which restricted the support components that he could offer. Neither faculty member provided a perspective on the social or academic support provided to students on campus outside of their respective courses.

Similar to most of the students in the study enrolled in his course, the social science professor perceived the pre-class chat groups, also known as “pods,” as a key mechanism for both addressing academic support needs and building an intimate sense of community in a 1,600-person course. He shared that he informed students at the beginning of the semester that data indicates that students who participate in the pods earn significantly higher grades in the course. While quiz preparation and access to a TA or class mentor drew students to their pods, the professor shared that the pods’ capacity for community building was its greatest attribute. “[It is] this idea of people who you would know, they would be your community throughout the whole semester.” Designed to bring the same students together in small, 20- to 25-person groups before each class meeting, the social science professor speculated that the sessions created a sense of “being a class, the excitement of being in the class together.”

The humanities professor indicated that he and his co-instructor did not have the same level of academic support staff as the social science course had. For previous semesters, the course demanded additional TAs to grade essays, which were the primary method of assessment.

We have five [TAs] where in the past we’ve had like seven or eight. First off, the situation with [co-instructor], she wanted to do exams instead of papers. We still do the quizzes, we still do the other stuff, but she wanted to do face-to-face exams.

The TAs led face-to-face study sessions before exams and held regular office hours, but the humanities course design did not adopt the pods from the social science course. Contrary to student participants’ perception that one TA facilitated the in-class chat room, the humanities professor shared that “two to three TAs” monitored those sessions.

Ecology of Online Course Engagement

Though not as robust as their descriptions of students' engagement, the faculty members in this study shared perceptions of their students' physical workspaces and the level of their respective courses' integration into the student campus experience. The social science professor's view of physical workspaces matched closely with those provided by the student participants enrolled in the course. "Now they can be sitting in their bedroom, their kitchen, or a cafe, and they're with us, and we're looking right at them. They just feel connected." Though the professor recognized the students' ideal workspaces, he did not identify the workspaces that students utilize out of necessity, such as work environments, academic building hallways, and empty research labs. Students described these conditions as less than ideal for learning, but necessary to fulfill other commitments on and off campus. The humanities professor founded his perceptions of physical workspaces on reports from his students. "I had several students say, 'I didn't do these things in class because I fell asleep. I was watching in bed and fell asleep.' Or, 'I was making breakfast.' I tell them, 'That's on you, not on me.'" Based on these student descriptions of their workspaces, the humanities professor determined that "lack of face-to-face kind of means people will tune out very quickly." This insight reinforces the theme from student interviews that online courses enhance the sense that students are responsible for their own learning.

With regard to their courses' integration into the campus experience, both faculty members indicated that they consciously incorporated the campus into their lectures. The social science professor utilized green screen technology to create the appearance that he

and his co-instructor were broadcasting from locations across campus. He also used campus news and personalities in the lecture to make the material more relatable to students. The humanities professor described a balance between tailoring the course to WSU students and students who enrolled through the extended campus, which allowed students from across the country to take the class alongside WSU students.

The way we present it is that it is part of the [WSU] experience, so we try to make a lot of references to what's going on here at [WSU] to make sure that we're clear that we are part of the larger [WSU] body. But, at the same time, we see it as packaging it outside [WSU] so that people who might be interested in [WSU] might be able to benefit from the class.

He shared that although not saturated with campus references, the humanities course folded in current campus events and issues into the class meetings to establish the course as part of the WSU experience, which had the additional benefit of branding the course to non-WSU students who had an interest in the university.

Summary

With few exceptions, the faculty participants' perceptions on student engagement in their online course sections tend to align with the perceptions of the students in this study. The faculty members connected the online, in-class activities with increased attention, which the humanities professor used to gauge students' comprehension in real time and the social science professor used to encourage rich peer interactions. Similar to the student descriptions, the social science professor shared that he and his co-instructor wove peer discussion and active learning into class meetings, whereas the humanities professor indicated that such in-class activities were largely supplemental to the class experience. On the topic of student-faculty interactions, the professors agreed with

students that the courses used the online platform in a manner that prevented meaningful, two-way communication. However, the professors provided divergent comparisons regarding the interactions with students in their face-to-face course sections. The humanities professor lamented over the lost back-and-forth discussions with students, while the social studies professor explained that few students even have such interactions in any large format college course. Just as student participants described taking or refining their notes during subsequent viewings of the lectures online, the faculty members in this study viewed rewatching lecture as an efficient and effective method to review class notes. With regard to his course's online, pre-class study groups, the social science professor described pods as a community building tool rather than an academic support service.

In their interviews, the faculty members depicted different views on students' physical workspaces, but those views align with those of the student participants in their respective courses. For the 8:30am humanities course, the professor shared that some students informed him of their tendencies to log into class meetings from their beds and fall asleep during lectures. The social studies professor, whose online class meetings began at 3:30pm, perceived students to login from their living spaces or cafés and to stay engaged in the lectures and activities. Interestingly, on issues that faculty shared their views with students, the student participants tended to adopt those views. Many students echoed the professors' assertion that participation in the pods correlated with better grades on the quizzes. Additionally, the professor's request for students to approach the class without biases toward online courses' level of activity and academic challenge

made an impression on Ally. Thus, instructors' shared perceptions and expectations seemed to have an impact on the perceptions and expectations on student participants.

Chapter Seven: Discussion and Implications for Research and Practice

The purpose of this exploratory study is to better understand the lived experiences of students enrolled in online courses at MRUs. Informed by student engagement and developmental ecology theories, the preceding chapters present emergent themes and their supporting data—student and faculty interviews, student journals, and course syllabi—with regard to the student behaviors and institutional conditions that influence student investment of time and effort in educationally purposeful activities in and out of online courses. In this chapter, I analyze and distill these themes into five key findings. I then present the subsequent implications on the research, practice, and policies related to online courses at campus-based MRUs and conclude with directions for future research on this subject.

Discussion of Findings

Five key findings arose from the analysis of participant interviews, student journals, and course syllabi. These findings highlight (a) online activities, (b) spatial and temporal flexibility (c) one-way communication (d) student anonymity, and (e) student expectations and motivations for online course enrollment.

Key Finding #1: Online Activities Have The Capacity To Deeply Engage Students

All students in this study related online activities, both in and out of class meetings, with their investment of time and effort in online courses. Students highlighted the positive impacts of pre-class study sessions in “pods,” in-class chat rooms,

simulations, class modules, and recorded lectures. However, student descriptions indicate that design matters, which supports the finding from previous research that it is not the online medium but the manner in which it is used that affects engagement (Archer, 2010; Baglione, Nastanski, & Bowen, 2011).

Student perceptions of in-class chat rooms exemplify the importance of design in an online component's ability to increase the time and effort put forth by students. All participants in the social science course, except Judy, connected the in-class chat room design with their engagement, in particular active and collaborative learning. These students pointed to specific features of the chat rooms—the limited number of students, the time built into class meetings for chat sessions, and directed focus on a key topic or course concept—that helped weave their use into the class meetings' fabric. With time set aside throughout class to participate in small-group chats, the participants assigned value to the sessions and to their personal contributions to the dialogue. Two students in the study enrolled in the social science course connected their occasional solo chat sessions with deep analysis of and reflection on course topics. Participants enrolled in the social science course did not perceive the chat sessions as supplemental or even voluntary; the sessions were an essential part of class. This finding supports previous research that argued when instructors take away the option to passively listen to a lecture, students work together to construct knowledge and test ideas (Rabe-Hemp, Woollen, & Humiston, 2009).

Unlike their peers in the social science course, participants in the humanities course described the in-class activities as auxiliary to the class meeting experience. For

instance, student participants reported that the course offered one chat room, which stayed open for the duration of the class, for its 900 students. Participants rarely, if ever, joined the chat room's "noise." They noted that, with 900 students, their participation was, at best, unnecessary and, at worst, contributory to the deluge of posts. These descriptions support Kirkpatrick's (2005) finding that students become lost in high-pace chats. The students in this study's humanities course opted to review classmates' posts or "lurk" in the chat rooms. Though students did not describe this practice as active or collaborative, they did identify specific benefits of lurking, such as gaining classmates' perspectives on lecture topics and learning about study guides and supplemental course materials. They described these insights as advantages over their experiences in large, in-person lectures that lacked peer communication. To varying degrees, each course utilized the synchronicity of class meetings to improve active and collaborative learning over face-to-face course sections.

Similar to their experiences with in-class chat rooms, participants in the social science course connected the design of online, pre-class study sessions with increased engagement, in particular an increased sense of a supportive campus environment. These five participants described their "pods" of 25 to 30 students as small student discussions during which a TA or class mentor facilitated conversations over key concepts and helped prepared students for quizzes. For these participants, the pods seemed to replace their need to attend face-to-face TA office hours. Bowler and Raiker (2011) found that students enjoyed the academic and social banter of a synchronous chat during online tutorials and reported increased participation over their face-to-face tutorials. The data in

this study suggest that in an online course with 1,600 students, such staff-led chats have the capacity to create a sense of community, make the instruction feel more personable, and provide a safe space to debate ideas with classmates.

Students in the synchronous courses connected other online activities with elevated levels of academic challenge and active learning. Again, students in this study indicated that the manner in which the courses employed these activities—polls inside and outside of class, quizzes, and simulations—with their effectiveness. The instructors in the humanities course utilized polls and administered mid-class quizzes as a way to interact with the class. Students tended to credit these activities with improved focus on the lectures, which the instructors adapted based on the real-time quiz results. Despite these benefits, students felt the activities were too infrequent to affect their sense that the class meetings were “just like a lecture.”

All students in the study enrolled in the social science course described the class meetings as interactive and unlike face-to-face, large-enrollment courses. These participants shared that the instructors often incorporated the results of polls and activity logs to demonstrate a research method, statistical model, or key concept from an assigned reading. They shared that this personalization included them as active participants in their construction of knowledge. Along with the class chat sessions and pre-class pods, students found these activities to be most engaging when they viewed (a) their contributions as necessary and valued, (b) the activities as directed and connected to the course material, and (c) integrated into the course experience. These perceptions support findings from Baglione, Nastanski, and Bowen (2011) that the instructor’s inclusion of

personal information and interests, active management and participation in discussion threads, and clear communication of the activity's purpose engage students in Bloom's highest levels of learning—analysis, synthesis, and evaluation.

The perceptions of faculty members from the two synchronous courses tended to align with those of the student participants. Both faculty members tied the online, in-class activities with improved attention and focus on the lecture. The social science professor explained that he and his co-instructor viewed student attentiveness as means to establish peer interaction and reflection via the chat rooms, whereas the humanities professor described the attentiveness as an end itself. The humanities chat room activity provided insight into students' level of comprehension, but the sessions were supplemental to the lecture and their purpose typically was not to promote active or collaborative learning. With generally low student motivation due to the required nature of the course, attentiveness was no small feat in humanities. With regard to the pre-class pods in the social science course, the professor identified the same academic and social benefits as the students in the study. However, the students found the quiz preparation and opportunity to discuss course topics as the primary benefits, while the professor pointed to the pods' ability to build a sense of community in a large-enrollment course.

The single participant in an asynchronous course expressed that even though she viewed her media studies course as “computer-based,” the instructor used online activities to push her to be active in her learning, challenged her to do her best work, and was academically supportive. Elaine considered the online modules, with their brief lectures and guided reading assignments, to be the course's class meetings. She credited

the course's asynchronous, online nature with the ability to move away from "being forced to have 90 minutes of lecture every week" and toward being an active participant in her learning. Elaine explained that in addition to her interest in the course material, the required participation on the online discussion boards motivated her to dedicate more time and effort on her reading assignments. Similar to the finding of Ishtaiwa's and Abulibdeh's (2012) study of asynchronous, online components in a blended learning course, Elaine's experience indicates that required discussion board posts encourage students to invest more time reviewing course materials and crafting their messages. Ishtaiwa and Abulibdeh (2012) also found that the instructor in their study provided insufficient direction and management of the message board. Elaine's experience suggests that such instruction is not indicative of all courses that incorporate online activities. She found her professor's comments "cancelled out all the noise" on the message board.

Key Finding #2: Spatial and Temporal Flexibility Related To a Heightened Sense of Responsibility for One's Learning

Though only four participants made the direct connection, all students in the study indicated that online courses' spatial and temporal flexibility related to greater awareness that they were responsible for their own learning. This ownership over their education manifested in the students' physical workspaces, level of participation in class meetings, drive to do their best work, and reliance on non-faculty resources. Despite any transactional or spatial distance, most students felt the face-to-face interactions and the professors' inclusion of campus issues into lectures integrated the online courses into

their campus experiences.

The majority of students in this study identified their living spaces as their preferred learning environment for online courses. These participants shared that the convenience and comfort led them to participate from their dormitories or off-campus apartments. However, students who reported to log into the online platform from their beds, as opposed to bedroom desks or communal living spaces, described themselves as disengaged and inattentive. Two participants expressed a preference for environments outside their living spaces, such as on-campus libraries and coffee shops. These students found these spaces improved their in-class focus and concentration.

This finding aligns closely with ecological models of student development that suggest, “environments can be considered ‘behavior settings’ (that is, settings or contexts in which somewhat predictable behaviors will occur)” (Evans, Forney, Guido, Patton, & Renn, 2011, p. 168). In this study, students tended to prefer physical environments that reinforced desired behaviors; students who logged in from bed were much more likely to report falling asleep than students at a dining table or in a computer lab. Within the developmental ecology context, these workspaces help shape online courses’ microsystems. Evans, Forney, Guido, Patton, and Renn (2011) proposed that the physical contexts of online courses “may provoke or retard engagement with the environment,” which includes online activities with peers and instructional staff. The data in this study support this argument within the context of online courses at a campus-based MRU. Ecological models of student development also suggest that students have an effect on their environments. In this sense, the passivity that stems from logging in

from one's bed influences the learning environment for one's peers. Paul highlighted this phenomenon in his humanities chat room. He felt robbed of a potentially engaging experience due to the absence of widespread participation in the chat room.

As discussed in the section on the first key finding, online activities have the capacity to draw students into active and collaborative learning experiences. In contrast, students related the physical and transactional distance from the instructor with opportunities to multi-task, tune out, or concentrate on the lecture and activities during their online class meetings (Moore, 1993). Whereas the activities made "sure that you're watching the lecture," the distance removed any pressure from professors or peers to stay on task. Many students shared that they never ate meals, answered emails, or browsed social media during a face-to-face class meeting, yet the online platform removed the external stigma attached to these activities.

Participants from all three courses in this study described a heightened awareness of being responsible for their learning in online courses. Most students in the study expressed a sense that undergraduate education shifts ownership of learning from the instructor to the student. A subset of students directly connected the additional distance in class meetings to this enhanced awareness. Students in the synchronous course stressed their sense that "an online course is more about teaching yourself" and "is where you have to learn on your own." As argued by Aggarwal & Bento (2000), online learning environments provide a space for students to develop the skills to learn on their own. Though these depictions paint an isolated or solitary learning experience, the students in this study reported to use in-person and online peer study groups and TA-led

study sessions to supplement their individual efforts. Elaine found her online courses, all of which were asynchronous, to provide “a lot less hand-holding.” She described the media studies professor’s purpose in the module as “trying to get us to think about that text ourselves instead of just her interpretation of it.” This “guide on the side” approach contributed to Elaine’s sense that she was responsible for her own learning. In addition to encouraging active learning, such instruction “allows the students to have ownership over their learning process” (Rabe-Hemp, Woollen, & Humiston, 2009, p. 215). As Goodsell (1992) noted, such active participation in the construction of knowledge is critical to learning and development.

Faculty interview data supported the connection between spatial and temporal flexibility and an enhanced sense of being responsible for one’s own learning. The humanities professor’s anecdote about the student who fell asleep while logged into class from bed, and who subsequently slept through a graded activity, exemplified the faculty members’ view that students must employ greater self-discipline without an instructor present. Both professors provided a message in the course syllabus to clearly express that all students could drop the same number of low grades and that no exceptions would be made for technical difficulties, falling asleep, or any other extenuating circumstances.

Interestingly, despite the distance during class meetings, most students in this study viewed their online courses as integrated into their campus experiences. These participants credited this feeling to the in-person interactions with their peers, instructors, and TAs. For some students, these interactions were built into the course design through test preparation sessions, flash mobs, and FIGs. Other students highlighted interactions

initiated by students (e.g. group study sessions) and by happenstance (e.g. coming across a student who is logged into the same class or in search of the same test room). Some students in the study found faculty efforts to incorporate WSU events and issues into lectures as contributing to their feelings that the courses were part of their campus experience. Overall, these participants viewed and discussed their online courses as they did their face-to-face courses at WSU. The subset of participants who identified as Hispanic or Latino described their online courses as isolated from their campus experiences. Except for Mike's comments, the depictions of their overall engagement suggest that these participants had fewer extra- and co-curricular connections to campus, which may have made them more susceptible to an online course's impact on their campus experience. While this subset of students felt that online courses were separate from their campus experiences, they shared that they identified as members of the campus community. Elaine's comparison of her sense of belonging at a local community—through which she enrolled in “a ton of classes” online—and her sense of belonging at WSU connected this belonging to campus experiences and her motivations for enrollment. “I don't feel like I belonged to [local community college] because I was just meeting requirements. It almost felt like an add-on. But at [WSU], I never took an online course when I wasn't also on campus, so it didn't really affect that.”

All students in this study who reported to hold work and family commitments described interplay between those commitments and their online courses. Ashley credited the spatial flexibility of her social science course with her ability to work part-time as a childcare provider. Her job responsibilities occasionally pulled her away from

the synchronous course. To compensate, she used the recorded lectures to watch the portions that she had missed. Elaine shared that her enrollment in six SCH of asynchronous courses allowed her to complete coursework in the evening and work six additional hours on campus during the day. The spatial freedom to work from home those evenings allowed her to watch after her adolescent brother two to three nights per week. She expressed that the arrangement was not ideal—her preferred workspace was a library or coffee shop on campus—but allowed her to stay on pace and graduate at the end of the semester. Eva, who worked full-time and enrolled in two online courses, realized early in the semester that her work schedule prevented her from rewatching six hours of class meetings. She shared that the demands on her time motivated her to concentrate and do her best work during her humanities class meetings.

Students without non-academic commitments described rewatching the lectures as a greater investment of their time. While most underclassmen rewatched lectures, upperclassmen tended to only watch the live class meetings to avoid the additional time commitment¹. Interestingly, students who rewatched lectures, with one notable exception, tended to have difficulty identifying from which activities they took the time to rewatch lectures. Ally shared that rewatching the lectures never cut into studying or extra-curricular activities; when necessary, she sacrificed sleep to rewatch. Ishtaiwa and Abulibdeh (2012) found that such asynchronous course components increased student workload in a blended course. The participant perceptions in this study support the

¹ The two underclassmen enrolled in two online courses each indicated that they only rewatched lectures from one course due to time constraints and level of academic challenge.

extension of this finding to recorded lectures in fully online, synchronous courses. In addition to an investment of time, Jennifer, a senior honors student, viewed the lectures “a crutch” that justified a student’s decision to not pay attention during the live class meetings. From her perspective, the option to rewatch lectures was not supportive but detrimental to active, attentive learning during class.

Key Finding #3: One-Way Communication Impedes Meaningful In-Class

Discussion

The majority of students in this study described their in-class communication with the professors in their online courses as primarily one-way. In the social science course, the faculty taught as a team throughout the class meetings and used TA-led chat rooms to solicit questions from students. In the humanities course, one professor led instruction while the other participated in the open chat room. In the asynchronous media studies course, the professor included lectures, approximately 18 minutes each, in the course modules.

Though students in the study found the lectures were an effective conduit to convey the professors’ enthusiasm and charisma, the participants largely viewed communication with the instructors as one-way. While some students found this arrangement to hinder their ability to engage in meaningful, back-and-forth discussions with professors, many students found the experience to reflect the student-faculty interactions in their face-to-face courses. Besides freshmen seminar courses and discussion sections, students shared that they did not often interact with faculty in their lower-division, in-person courses. Perhaps more than an actual loss, the perception of

diminished communication affects how students describe their in-class interactions with faculty. The faculty participants' divergent perceptions supported both student views. The social science professor made a similar comparison as the majority of students; the absence of two-way discussion mirrors the experience in large, in-person class meetings. The humanities professor's depiction of one-way communication as a cost of online education supported the view of a minority of students in this study. Based on these descriptions, the online platform's primarily one-way communication does not seem to be a substantial cost for the majority of students who do not engage in discussions with their instructors in large-enrollment, face-to-face courses,

Due in part to the barriers of in-class communication, students related improved student-faculty interactions to nontraditional activities with their professors. In the synchronous social science course, students described small-group meetings over coffee and visits from professors during FIG discussion groups as opportunities to learn about the personal and professional lives of their online professors. The social science professor confirmed this perception and indicated that they constructed these opportunities to connect with students. With regard to the asynchronous media studies course, Elaine shared that her frequent email correspondence with her professor—a new experience to her as a senior—left her feeling personally and academically supported. These descriptions add a new dimension to previous research on student-faculty interactions in online courses. Elaine's "computer-based," email interactions with her faculty reinforce findings by Ishtaiwa and Abulibdeh (2012) that indicate that asynchronous communication tools, including email, led to positive student perceptions

of their contact with faculty. However, in the synchronous courses with 900 or more students, participants did not identify online activities, either in- or out-of-class, as effective means of faculty interaction. Instead, these students tended to connect with faculty in small, face-to-face settings.

Though instructors in courses large and small may implement similar activities, the students in online courses assigned additional value to small-group encounters or personal emails with their professors. Viewing the professor on the screen, in the same manner one would watch a television personality, led to a faculty-as-celebrity effect. In addition to sharing about themselves and learning about the professors' personal and academic lives, the students changed their perceptions of their instructors from "the man on my screen" to "a real person." One faculty participant expressed that this revelation led students to have greater civility and empathy in their subsequent online interactions.

Key Finding #4: Anonymity's Relationship with Online and In-Person

Collaboration

While most students in the study connected their online course anonymity to improved in-class engagement, a small subset of students indicated that it detracted them from forming or participating in face-to-face collaborations. For many participants, the anonymous chat rooms and pods reduced the risk of embarrassment when they posed questions to their peers. Being faceless removed the self-consciousness of asking a question face-to-face, whether to your neighbor or in front of the entire class. Some students in the study related anonymity with the freedom to share potentially unpopular opinions and to challenge the arguments presented by their classmates. The humanities

professor noted a similar effect, which he credited to anonymity's ability to reduce or remove the fear of sharing an opinion or sounding uninformed. Further, one student found the anonymous chat rooms equaled the social playing field. Unlike in face-to-face courses,, cliques and friendships did not exclude her from discussions with her peers in her online course.

The interview data tend to reinforce the findings of Chester and Gwynne that “the online environment allowed students to find a strong and confident voice” (1998, para. 20). The anonymous chat rooms, when used effectively, stimulated opinionated commentary and established a safe space to engage with peers. Only Judy's perspective on social science's pods and chat rooms supported Dreyfus' (1998) warning that anonymity hindered the development of “unconditioned commitments” among classmates. Grace's explanation that peers were “committed to talk to each other” due to the anonymity of small, guided chat rooms was more representative of participants in the social science course.

Key Finding #5: Student Motivations and Expectations

Previous research has argued that students invest less time and effort into courses required for graduation and those with little career relevance (Payne, Kleine, Purcell, & Carter, 2005). The student interview data from this study suggest that this first notion on required courses may extend to online courses. All participants in the humanities course shared that the state requirement to complete the humanities course was a, and usually the, motivating factor for their enrollment. Further, the majority of these students believed WSU developed the online course section to meet enrollment demands that

stemmed from the state requirement. Though not a direct connection, students related the required, online course with diminished determination to invest time and energy in the course and described their commitment as sufficient to meet minimum requirements.

In addition to these motivations, student expectations and generalizations of online courses—based on personal experiences or peer reviews—contribute to the initial drive to do one’s best work. Six participants reported to have previously completed online courses while in high school, as a freshman enrolled at a separate institution, or through co-enrollment at a community college. All of these courses were asynchronous and most were self-paced. Based on these experiences, the majority of these participants expected their online WSU courses to require little time and effort and include minimal interaction with faculty and peers. Students in the study with no online course experience shared similar perceptions. Multiple participants anticipated “an easy ‘A.’”

Students in this study who did not hold this expectation tended to indicate that the academic rigor at the institutional level, not course level, was a more appropriate predictor of a course’s academic rigor. Thus, their previous experiences online courses in high school or at a community college did not influence their expectations for courses at WSU. The majority of first-time online course enrollees in the study also described a “learning curve” to the online format. They noted that during the first two weeks, they had to adapt to the pace and delivery of lectures and decide how to best utilize live and recorded lectures to learn course material. Overall, students in the study found their online courses to surpass their expectations with regard to the level of academic challenge and the necessary investment of time and energy.

Key Findings and the Student Experience

These key findings shed light on the overarching question of this study: as online course offerings and enrollment grow, what are the essential components and attributes of an undergraduate experience at a modern major research university? Online courses' spatial and temporal flexibility certainly does not look similar to "Mark Hopkins on one end of a log and a student at the other" (Peskin, 1999, p. 34). Yet, this study's key findings suggest that through online and face-to-face activities, online courses at an MRU can provide students with the intimacy, challenge, autonomy, and support implied in President Garfield's description of the ideal college. Online courses have the capacity to improve the quality of undergraduate education at MRUs while maintaining many components of the traditional residential model. In this context, online courses could prove to be a sustaining innovation for well-established, campus-based MRUs.

The experiences and attitudes depicted by the participants in this study indicate that students enrolled in online courses through their home institution want to incorporate online activities along with in-person experiences. In a broad sense, no student in this study leveraged the spatial or temporal flexibility of his or her online course(s) to pull away from peers, instructors, or campus. Even those students who were less invested in their online courses attempted to build or maintain connections to the campus community through co- and extra-curricular activities, on-campus employment, online collaborative tools, or face-to-face academic support services. As Mary speculated about her peers, "No one wants to be alone in their bedroom learning the rest of [his or her] life." This finding challenges early research on the use of LMSs and online tools at campus-based

institutions that found online experiences were “reasonably independent parallel experience[s]” (Coates, 2006, p. 121) from the students’ lives on campus. Though an important subset of participants, comprised of all students in the sample who identified as Latino/Hispanic, found their online courses to be at least slightly removed from the campus experience, the majority of students felt the courses were integrated into their campus experiences and all students still viewed themselves as members of the WSU community.

As such, online courses offered at campus-based MRUs provide a unique opportunity to weave opportunities and requirements for online and face-to-face activities to enhance engagement and create a seamless campus environment. Students in this study indicated that the transactional and spatial distance of and anonymity within online courses enhanced their sense of being responsible for their learning and had the capacity to displace the “sage on the stage” model with active, peer-to-peer learning. Yet, along with this independence, participants identified components that expanded academic support. Such assistance manifested online primarily through assigned, pre-class study groups and frequent emails from faculty that were academically and personally supportive. For students like Eva who preferred face-to-face interactions, these online courses provided students with opportunities to organize in-person, peer study groups and attend office hours and test preparation sessions. Participant descriptions depicted online courses as learning environments prime for a heightened awareness of being individually responsible and for myriad forms of academic support.

Contributions to the Research Literature

This study contributes to the engagement and online education research in three distinct ways. First, the majority of the research concerning the undergraduate student experience in online education has examined distance education programs (Dare, Zapata, & Thomas, 2005; Garrison, Anderson, & Archer, 2001) or has based its analysis on LMS analytics (DeNeui & Dodge, 2006; Paul & Cochran, 2013) or graduation and persistence rates (Frydenberg, 2007; Johnson, Aragon, & Shaik, 2000). This study's key findings address the growing population of students who enroll in online courses at campus-based institutions, in particular MRUs. By examining student learning within the theoretical framework of student engagement, this study adds to the limited literature regarding the student behaviors and institutional policies and practices correlated with high-quality online learning at campus-based institutions (Coates, 2006; Robinson & Hullinger, 2008).

Second, the few studies that have employed a student engagement framework to analyze student experiences with online education have relied on large-scale survey data, typically based upon NSSE (Coates, 2006; Robinson & Hullinger, 2008). Such research provides a broad context for online course engagement and benchmarks trends in student behaviors and attitudes. However, the survey data utilized in these studies were limited in their capacity to disaggregate between engagement tied to online and face-to-face courses (Robinson & Hullinger, 2008) or among the countless variations of courses categorized under online learning systems (Coates, 2006). This study adds to the research through the phenomenological exploration of *how* and *why* students relate components of fully online courses to their investment of time and effort in educationally

purposeful activities. As previously defined in this study's methodology section, validity concerns "the exactitude of research readings, the extent to which they are supported by explanatory evidence and their capability for drawing wider inference" (Ritchie et al., 2014, p. 356). As such, this study adds to the student engagement model's validity. From the constructivist perspective, the qualitative data supported the use of NSSE's four themes and high-impact practices, or enriching educational experiences.

Finally, previous research has called for analysis of online learners' environments and the broader contexts in which they live, learn, and develop. Coates (2006) argued, "Conversations about student engagement cannot ignore context, or the systems and dynamics which shape the environments in which students learn." Guided by an ecological model of student development, this study acknowledges the interaction of microsystems and mesosystems—the physical workspace, spatial and temporal flexibility's interplay with non-academic commitments, sense of belonging to campus—that are unique to students enrolled in online courses offered through campus-based MRUs. Evans, Forney, Guido, Patton, & Renn (2010) posited, "The advent and omnipresence of technology and Internet-enabled communication and community building create new areas for ecological examination" (p. 175). Based on this study's findings, an exclusively digital or virtual ecology model appears to be more appropriate for a distance education program or university. However, the physical workspaces, sense of the course's integration into the campus experience, and online peer communities represent online environmental factors to consider in ecological models. Therefore, this study contributes to a nascent body of research on the ecology of campus-based, online

learners with a particular focus on those students at an MRU.

Implications for Practice and Policy

Online courses at campus-based MRUs provide students with a unique opportunity to restructure their levels and methods of engagement with faculty, staff, and peers. This opportunity for students does not render instructors and administrators ineffective. On the contrary, student interview and journal data from this study suggest that faculty and institutional practices and policies create requirements and expectations, both explicit and implicit, that wield great influence. Within the context of online course enrollment at MRUs, this study's key findings demonstrate the instructor practices and policies and student behaviors related to undergraduates' investment of time and energy in educationally purposeful activities. Though addressed less frequently in the data, the findings also suggest institutional and state policies that have the potential to promote engagement by students enrolled in online courses offered through the campus.

Instructor Practices and Policies

From the perspective of students and faculty members in this study, the use of online, in-class activities draws students' attention to live class meetings. When tied to a quiz or participation grade, the exercises are particularly effective. Without an instructor's watchful eye in their workspace, mid-class polls and quizzes help maintain focus on the class proceedings. At a minimum, instructors of synchronous, online courses should embed such activities into class meetings. Best practices suggest instructors use the data collected through these activities to (a) gauge student understanding to address troublesome topics in real time and (b) tie student data and

opinions to the lecture to involve students in the class or bring a key concept to life.

Instructors must capitalize on the gains in student attentiveness. As explained by the social science professor in this study, “otherwise, why have them all watch at the same time?” As crucial and hard earned the focus of students may be it is a minimum requirement for in-class active and collaborative learning. Instructors should parlay the attention into student interactions with peers, support staff, and course material. The best practices described in this study recommend the targeted, purposeful integration of chat rooms into online courses. When a chat room is available throughout the class meeting and open to all students in a large-enrollment course—with the opportunity to pose questions and provide opinions—students find the sessions “useless” and their personal contributions “pointless.” By pausing the lectures to divide into small, TA-guided chat rooms, students felt “committed” to one another. The descriptions of participants in the social science course indicate that they interacted with “other students constantly throughout the class,” even though no grade was attached to their chat contributions. When assigned to a solo chat room, students in this study appreciated the opportunity to “develop your own thoughts on a subject.” Interspersed among small group chats, the one-person sessions established a time and space for students to wrestle with their understanding of course materials and topics, which is central to active learning’s constructivist foundation.

The findings in this study also emphasize that anonymity typically reduces students’ fear of asking questions or “being wrong,” leaves students unencumbered to voice minority or controversial opinions, and encourages peers to challenge each other’s

claims. As Ashley mentioned, in face-to-face classes, students “don't want to have different ideas from other people, so you're more inclined to kind of just go with the flow of what everyone else is saying.” In addition to these benefits identified by the majority of students, Grace felt that anonymity leveled the social playing field. By protecting student identities, the student who is less social or has fewer contacts among her classmates can be a confident and active contributor to chat sessions. Although the students and professor in this study from the humanities course reported an initial tendency for comments to stray off-topic, instructors should protect students’ identities. With sufficient guidance and facilitation from instructors, TAs, or undergraduate class mentors, in-class chat rooms can be ripe for active and collaborative learning and academic support.

While some students in the study identified scheduling conflicts or an insufficient investment in the course as reasons not to collaborate with peers face-to-face, others recognized their reluctance was in part due to the faceless, “computer-based” relationships they had established with classmates. Participants enrolled in the humanities course described bonding with classmates in libraries, in hallways, and in search of testing locations, which suggests they craved in-person connections. Whereas increased efficiency and temporal flexibility drew Jennifer to online collaborations, the inefficiency—sidetracked conversations, community building, and established timeframe—may attract other students to in-person collaborations. To facilitate student connections, instructors should arrange face-to-face meetings and incent attendance through course participation grades. A requirement to attend in-person activities, in

particular those outside of class meeting times, may misalign with the needs and expectations of students. The humanities professor's experience with low turnout at 8:30am in-studio class meetings should not discourage instructors from arranging face-to-face meetings but highlight the significance of timing with students' schedules.

Another online course component of importance in this study is the absence of meaningful, back-and-forth discussions during class meetings. As communication technology advances, instructors and instructional designers may consider new applications or entire LMSs that improve two-way telecommunication. With the current restrictions, instructors should encourage office hour attendance or adopt nontraditional avenues for online or face-to-face interactions to mitigate the effects of diminished student-faculty interactions. The media studies professor bridged this communication gap with frequent email communication, both personal and academic, to the individual student. The social science professor connected with students in face-to-face, intimate settings, such as coffee shops and small discussion groups. Neither of these practices is exclusive to instructors of online courses, yet their impact may be more meaningful to students who do not have regular, in-person interactions with their online instructors.

Further, instructors should leverage the spatial flexibility offered by the online platform to provide online academic support services. The humanities professor in this study explained that the online platform did not allow him to engage students, both motivated and unmotivated, in discussions during class meetings. To offset this cost, instructors could offer online study sessions similar to the assigned "pods" in the social science course. Though not a student-faculty interaction, the pods provided a forum for

students to ask questions to knowledgeable support staff who had an understanding of the assessment materials. Attracted by the incentives of quiz preparation and synchronous discussions, students also built communities in their pods, which made the large-enrollment course feel smaller.

The student interview and journal data portrayed participant workspaces that they described as less than ideal learning conditions. Students in the study often logged into synchronous class meetings from hallways and lobbies in academic buildings in order to attend class or student organization commitments immediately before or after class. Multiple participants mentioned that they noticed other students in the same workspace logged into class. Instructors should take an active approach to connect these students in a manner that safeguards academic integrity. With sufficient academic support staff, instructors could arrange small class meeting spaces around campus. Monitored by a TA, each space could aid students who are tied to a particular location on campus or interested in face-to-face peer and TA interactions. Such environments could exist in libraries, academic buildings, tutoring centers, or residence halls, among other campus locations.

Student Behaviors

In addition to institutional conditions, engagement consists of the student behaviors related to educationally purposeful activities. With the understanding that undergraduate students are neither the intended nor likely readership for this study, the findings did highlight best practices for students enrolled in online courses at MRUs. One key takeaway from the interview and journal data is that workspace settings

influence student behavior. As posited by Wicker and August (2000), the setting may better predict behavior than the characteristics of the individual. Thus, with regard to their physical workspaces for their online class meetings, students should select the environments that promote attentiveness and concentration. For some students, this space may be a dormitory desk, a secluded corner in a library, or an off-campus coffee shop. Grounded in the experiences of students in this study and the anecdotes provided by the humanities professor, the findings indicate that students should not participate in online classes from their beds. Though convenient and comfortable, especially for early morning class meetings, the setting closely correlates with sleep and passivity and should be avoided.

This study's findings also highlighted the subsequent viewings of posted lectures as an effective tool for improved note taking and quiz preparation. Yet, some students in the study explained that they did not always or often rewatch lectures. Upperclassmen tended to be less committed to the course and were not inclined to invest additional time outside of class meetings and reading assignments. Students who held full- or part-time employment pointed to time constraints as the reason they rewatched lectures less often. Understanding that they would not devote the time to rewatch, these students indicated that they put forth greater effort to concentrate and take notes during the live lecture. As Jennifer recommended in her interview, students enrolled in synchronous online courses that offer the option to rewatch posted lectures may want to "pretend [the instructors] don't record it." She suggested that this strategy would remove the "crutch" of knowing the lectures will be available to rewatch and force students to commit to the live class

meetings. Students would still have the option to rewatch but could do so in a targeted manner to sharpen their understanding of specific portions of the lecture that proved to be difficult to grasp during the live broadcast.

Perhaps hyperbolic of the actual experience, the finding that some students view the faculty on their screens as celebrities indicates that these students do not view their online instructors as “real” or accessible as the instructors in face-to-face courses. In practical terms, this effect led students in this study, except for those who attended in-person broadcasts or meetings, to describe a distance between themselves and their online instructors. Furthermore, the humanities professor related the spatial and transactional distance to diminished civility and empathy in his online interactions with students. However, student and faculty participants who interacted with one another in small group settings reported greater connections. For instance, Ally shared that she gained a better understanding of her professor’s personal and academic lives after interacting with him in a small discussion group. Therefore, office hours and nontraditional meetings, such as the flash mob that Grace attended, help bridge the transactional gap through meaningful dialogue between students and faculty. Students should recognize that their instructors are “real” and take advantage of their proximity through in-person interactions.

Institutional and State Practices and Policies

As discussed in the students’ biographical sketches, the students in their first semester at WSU did not realize the course was online at the time of registration. Upperclassmen tended to realize the course section was online from word of mouth. Institutions could avoid such confusion by creating a field in the course registration to

designate a course section as fully online. The same field could denote sections that are blended or diverge from the traditional, face-to-face class meeting format. A more substantial step that institutions could take would be to create a core competency related to online education. Some students identified the use of an online platform as an enriching educational experience in itself, and most students connected online education with an enhanced sense of being responsible for their own learning. By requiring students to fulfill an online education core competency, institutions would recognize the value of online communication and collaboration in their students' roles in a modern economy and as lifelong learners.

This study's key findings indicate that institutions should address two additional aspects of online education for consistency across campus. First, institutions should consider a limit on online SCH for first-year students. The vast majority of students enrolled in one online course speculated that the course did not impact their campus experience or sense of belonging, as it was "just one class." However, of the three students in this study enrolled in six SCH of online courses, two students indicated that they felt their WSU online courses were isolated from their campus experiences¹. With a smaller peer network and less experience with the academic challenge of coursework at an MRU, first-year students may benefit from a three- or six-SCH limitation for online courses per academic term. Second, institutions should clarify appropriate uses of online collaborative tools, including as Google Docs, Facebook, StudyBlue, and Quizlets.

¹ Though Elaine enrolled in one online course through a local community college during the study, she directed her comments about the online course feeling separate from her campus experience toward her WSU online course.

Institutions could either address online academic integrity within their current codes of student conduct or adopt new policies to specifically address cheating and collusion online. Students in this study explained that they used these applications just as frequently in their face-to-face courses, which implies these policies would have far-reaching implications.

Related to the findings that connected face-to-face interactions with community building, policymakers should utilize current programs, such as FIGs, to tie online and face-to-face courses. Ally described her cohort as a built-in network of 25 students with whom she shared three courses, including the online social science course. The incorporation of the online course into the FIG creates shared experiences among cohort members and requires students to meet face-to-face multiple times throughout the week, which removes one barrier to forming peer collaborations in an online course. Helpful for any student, this arrangement would have a greater impact on first-year students with a limited peer network on campus.

Finally, any conversation on institutional and state policy should address funding. Faculty descriptions in this study indicate that the number of academic support staff, including TAs and undergraduate class mentors, may dictate which online activities they can design into class meetings. For instance, the humanities professor indicated that the course had five dedicated TAs. Based on student accounts of their pods, the social science course employs a sufficient number of TAs and class mentors to facilitate 25-student pods for 1,600 students. These pods helped to meet students' academic preparation needs and build small communities in a large-enrollment course. In-class

breakout sessions do not require, but may benefit from, TA or class mentor guidance. Colleges and universities should consider the funding needed to provide robust academic support staff for synchronous online courses. In a recent *Inside Higher Ed* article, Kim (2015) posited that the economies of scale associated with large enrollment courses might not always apply to online courses.

The widespread effort across the postsecondary sector to redesign larger enrollment classes is one of the most underreported stories in all of higher ed. The real question is how are our colleges and universities going to find the resources to invest in our large enrollment classes. These were the classes that have always made the small seminars economically viable (through revenue sharing), but are now requiring investments commensurate with their size. (para. 10).

Though not the focus on this study, the interview data support the classification of such funds, along with instructor pay and IT support, as fixed costs in online course budgets.

Limitations and Delimitations

Though this study had several key findings, it was limited and delimited through its methodology and participant recruitment and selection. The research methodology limited the study in two key ways. First, the data sources relied heavily on the perceptions of the student participants. While I conducted faculty interviews and analyzed course syllabi to triangulate student descriptions of their engagement, the perceptions of additional campus representatives may have shed light on a unique or deeper understanding of the phenomenon. For instance, participants in the social science course credited TAs and class mentors with greater academic preparation and community building. Future studies may capture the views of such academic support staff to further triangulate student and faculty data. Additionally, the data on the effects of online course

enrollment on students' investment of time and effort into other educationally purposeful activities, in particular co- and extra-curricular activities, were sparse. More robust and frequent journaling exercises may have provided students with additional and immediate opportunities to shed light on any potential impact.

Another methodological limitation of this study was the selection of a single institution as the research site. Though selected for its college- and university-level support of online course development, these coordinated efforts on campus may narrow the range of online components designed into the courses. The humanities professor suggested as much in his explanation that he and his co-instructor had learned from the social science course's successes and challenges. The inclusion of more than one campus may have expanded the variety of online courses and institutional conditions that affect student engagement.

Two factors related to participant selection may have limited the study's findings: recruitment and diversity. After initially low response rates from students in the social science course, I expanded recruitment efforts to target students who attended the in-person class broadcast. This practice favored students with the inclination and ability to attend a face-to-face class meeting, which presumably shrunk the recruitment pool. Also related to recruitment, only one student in the media studies course remained in the study through the interview phase. Though her descriptions shed light on asynchronous courses and her unique experiences, the study would have benefitted from additional participants from the course. The study also was limited in the diversity of student participants. Although the students varied by many academic and demographic

characteristics, the sample consisted of nine females to two males and included no African American/Black students. Findings regarding the integration of online courses into the campus experience divided along lines of race. Latino/Hispanic students described the courses as separate or isolated from their campus experience. This finding highlights the need to study the experiences of all underrepresented students enrolled in online courses at MRUs.

Future Research

The purpose of this qualitative study was to explore the lived experiences of students enrolled in online courses offered through MRUs. As a result, this study provided useful findings with regard to the student behaviors and institutional conditions that affect the time and effort that students devote to educationally purposeful activities. However, throughout data collection and analysis, I identified additional areas of examination related to online education at MRUs. These areas of investigation for future research include enhancements to the continued use of student engagement survey data and quantitative research methods; a sustained, longitudinal study on first-year students; and a focus on faculty.

This study provided insight into the engagement of students enrolled in online courses through their interviews and journal entries, course syllabi, and faculty interviews. The phenomenological approach addressed *how* and *why* online components related to students' investment of time and effort in their online courses and in educationally purposeful activities across campus. From my perspective, students may not always connect online courses with the subtle, but perhaps significant, impacts on

their campus experience. Current engagement survey instruments, such as the National Survey of Student Engagement (NSSE) and the Student Experience in the Research University (SERU), allow researchers to collect basic data on students' prior and current online enrollment. Tying online enrollment data to general campus engagement data may shed light on the effects that students do not or cannot identify. Modifications to these survey instruments would allow researchers to compare online to face-to-face courses and disaggregate the blanket "online course" by key components. Course- and institutional-data captured through end-of-course surveys and LMS analytics provide another rich source for engagement research. The addition of questions on students' physical workspaces and their perceptions on the utility of online course components could allow for research on both student behaviors and institutional conditions tied to students' investment of time and effort in their online courses.

Through the course of this study, I became interested in the potential long-term effects of online enrollment, particularly with regard to first-year students. A longitudinal study with this population could explore the potential impact of online course enrollment on students' peer connections through social network analysis. A long-term study could also address the ways students use online courses in subsequent semesters. The student population in this study tended not to realize that they had enrolled in online courses at the time of registration. Now armed with their experiences in an online course at their home institution, will students enroll in other online courses at WSU or elsewhere? Will they be strategic with their online enrollment to become more engaged in educationally purposeful activities, or will they use online courses to pull

away from campus?

In addition to the student experience, future research should explore the experiences of faculty of online courses at MRUs. The faculty in this study stressed the intrinsic motivations that compelled them to develop and teach an online course section. A study focused on the faculty experience may consider institutional incentives that motivate, if not create, online course development. Additionally, what are the personal and professional benefits and costs to investing time and energy into such an endeavor? How do tenure and promotion structures encourage or discourage the necessary commitment to design and implement an online course section at MRUs? An enhanced understanding of the faculty experience would complement this study's findings on the relationship between enrollment in online courses and student engagement at MRUs.

Appendices

Appendix A: Recruitment Email

Dear [Course Name] Students,

I am leading a research study on student engagement by undergraduates within the context of the modern research university. In particular, I am interested in how you engage with your peers, faculty members, and staff at [WSU] and how the campus community engages you.

As an undergraduate student, you may have many activities and responsibilities that compete for your time and effort. In our highly connected age, students have greater flexibility with the time and space in which they engage with course content, instructors, classmates, and support services. This reality begs the question: How do you engage with the [WSU] community? Further, what university conditions encourage or discourage you from participating in educationally beneficial activities, both academic and social?

To gain insights into your engagement experiences, I ask that you complete an approximately 5-minute questionnaire at: [Survey URL] **by October 22, 2014**. After an initial analysis of your responses, I will follow up with interested participants to arrange interviews to learn more about your engagement. Your responses will be confidential, and I ensure your anonymity. Your responses will be scrubbed of identifying information after data collection. Your participation is very important to better understand the engagement experiences of undergraduate students and inform future practices and research.

Thank you for your time and help with this project.

Jeffrey Mayo
Doctoral Candidate, Department of Educational Administration
The University of Texas at Austin

Appendix B: Terms of Consent

Consent for Participation in Research

Title: Student Engagement at a Modern Research University

Introduction

The purpose of this form is to provide you information that may affect your decision as to whether or not to participate in this research study. The person performing the research will answer any of your questions. Read the information below and ask any questions you might have before deciding whether or not to take part. If you decide to be involved in this study, this form will be used to record your consent.

Purpose of the Study

You have been asked to participate in a research study about the student engagement experiences of undergraduates at a modern research university. The purpose of this study is better understanding of the student behaviors and institutional conditions associated with educationally beneficial activities.

What will you be asked to do?

If you agree to participate in this study, you will be asked to

- Participate in two interviews
- Record brief descriptions of your course-related engagement experiences

This study will take an estimated one hour of interviews (over two sessions) and twenty minutes of journaling exercises and will include approximately 16 study participants.

Your participation in the interview process will be audio recorded.

What are the risks involved in this study?

There are no foreseeable risks to participating in this study.

What are the possible benefits of this study?

The possible benefit of participation is the opportunity to reflect on and examine your academic and social engagement.

Do you have to participate?

No, your participation is voluntary. You may decide not to participate at all or, if you start the study, you may withdraw at any time. Withdrawal or refusing to participate will not affect your relationship with [WSU] in anyway.

Will there be any compensation?

You are eligible for a random drawing to win one of two \$50 gift cards to the [Campus Bookstore]. Participation through the conclusion of the interview phase is not required for drawing eligibility. You may leave the study at any time without penalty.

How will your privacy and confidentiality be protected if you participate in this research study?

All responses will be kept confidential. Data will be collected and stored confidentially. When analyzing, sharing, and publishing any data related to the study, only pseudonyms will be used to refer to participants to protect confidentiality. The University will only be identified by a pseudonym and by general descriptors. Colleges, departments, and offices will be referred to with generic titles. Courses will not be identified by title and only by descriptive information, such as the academic college and department, the general range of student enrollment, status as an online course, and classification as a flagged course for writing, cultural diversity, ethics and leadership, global cultures, independent inquiry, or quantitative reasoning. Before data analysis, names and contact information will be scrubbed from online survey data and interview transcripts, and only pseudonyms will be used from that point forward.

If it becomes necessary for the Institutional Review Board to review the study records, information that can be linked to you will be protected to the extent permitted by law. Your research records will not be released without your consent unless required by law or a court order. The data resulting from your participation may be made available to other researchers in the future for research purposes not detailed within this consent form. In these cases, the data will contain no identifying information that could associate it with you, or with your participation in any study.

If you choose to participate in this study, you will be audio recorded during the two interviews. Any audio recordings will be stored securely and only the research team will have access to the recordings. Recordings will be kept for transcription (two to four weeks) and then erased.

Whom to contact with questions about the study?

Prior, during or after your participation you can contact the researcher Jeffrey Mayo at 512-232-8280 or send an email to jeff.mayo@austin.utexas.edu for any questions or if you feel that you have been harmed.

Whom to contact with questions concerning your rights as a research participant?

For questions about your rights or any dissatisfaction with any part of this study, you can contact, anonymously if you wish, the Institutional Review Board by phone at [IRB phone number] or email at [IRB email address].

Participation

If you agree to participate please return the signed form to Jeffrey Mayo jeff.mayo@austin.utexas.edu.

Signature

You have been informed about this study's purpose, procedures, possible benefits and risks, and you have received a copy of this form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time. You voluntarily agree to participate in this study. By signing this form, you are not waiving any of your legal rights.

Printed Name

Signature

Date

As a representative of this study, I have explained the purpose, procedures, benefits, and the risks involved in this research study.

Print Name of Person obtaining consent

Signature of Person obtaining consent

Date

Appendix C: Social Science Recruitment Handout

Dear [Course Name] Students,

I am leading a research study on student engagement by undergraduates within the context of the modern research university. In particular, I am interested in how you engage with your peers, faculty members, and staff at [WSU] and how the campus community engages you. **For your participation, you may be entered into a drawing for one of two \$50 gift cards to the [Campus Bookstore]. Also, as prescribed by your instructors, participation in the study will earn course participation points.**

As an undergraduate student, you may have many activities and responsibilities that compete for your time and effort. In our highly connected age, students have greater flexibility with the time and space in which they engage with course content, instructors, classmates, and support services. This reality begs the question: How do you engage with the [WSU] community? Further, what university conditions encourage or discourage you from participating in educationally beneficial activities, both academic and social?

To gain insights into your engagement experiences, I ask that you complete an approximately 5-minute questionnaire at: [Survey URL] **by November 7, 2014**. If you agree to participate in the study's interview phase, **you will be entered into the drawing for \$50 [Campus Bookstore] gift cards**. Your responses will be confidential, and I ensure your anonymity. Your responses will be scrubbed of identifying information after data collection. Your participation is very important to better understand the engagement experiences of undergraduate students and inform future practices and research.

Thank you for your time and help with this project.

Jeffrey Mayo
Doctoral Candidate, Department of Educational Administration
The University of Texas at Austin

Appendix D: First Student Interview Protocol

Introduction

- Welcome and thank you for participating in this research study
- As you may know from our email correspondence, I am interested in understanding how students engage with faculty, students, staff, and the university in general.
- In this interview, I want to know about your motivations for attending college and [WSU], in particular; educational goals; previous academic and social engagement; general level of academic challenge at [WSU]; and your engagement within [NAME OF COURSE].
- Confidentiality and anonymity
 - Participation in this study is voluntary and confidential. You may withdraw participation in this study at any time without giving any reason and without penalty.
 - Your responses will be kept confidential. Audio recordings will be labeled with pseudonyms only, stored securely in a locked cabinet in the office of the primary research, and only the researcher team will have access to the recordings. Following transcription of the interviews, audio recordings will be destroyed.
 - When analyzing, sharing and publishing any data related to the study, only pseudonyms will be used to refer to participants to protect confidentiality.
 - Please take a few minutes to read this consent form.
 - Do you have any questions?
 - If you have no additional questions, please sign at the bottom of the final page.
- As mentioned in our email, the recording should take between 60 to 90 minutes. Can you give your verbal consent to begin audio recording? If you need a break at any point, please just let me know.
- Do you have any questions for me?
- Let's get started.

Questions

1. What is your major?
2. And can you tell me what influenced you to attend college and why specifically [WSU]?
3. I would like to talk to you about your general engagement with WSU. Student engagement has been defined as "the time and energy students devote to educationally sound activities inside and outside of the classroom and the policies and practices that institutions use to induce students to take part in these activities." So there's two parts: there's the time and effort by the student and the university's policies and practices. Having said that, have you participated, or plan

- to participate, in enriching educational experiences outside the classroom such as student organizations, study abroad, or an internship? Why or why not?
4. Can you describe your experiences with student organizations? Can you describe the time and effort you put into these groups?
 5. Overall, how would you describe the academic challenge of your undergraduate experience thus far?
 6. Do you feel that you are an active and collaborative participant in your learning? The opposite would be a passive recipient of information or instruction. What experiences would make you feel this way?
 7. Do you feel your courses or instructors or fellow students encourage you to collaborate and be active?
 8. Please describe your overall experience with WSU faculty members both in and out of the classroom.
 9. Has WSU provided a supportive campus environment? How so?
 - a. Do you use any academic support services offered through your class or across campus?
 10. Tell me about what commitments you have outside your campus life? Do you have commitments to family, friends, work, or community service?
 11. Now let's talk about [course name]. What were your motivations for enrolling in the class?
 - a. Did you know it was an online section? Was that a factor in your decision?
 12. Tell me about the course. Walk me through a class meeting or your online coursework.
 - a. How do you interact with the course materials? What activities are required or available?
 - b. How would you describe the level of academic challenge in this class? This includes the challenge of the course content and the time and effort required of you.
 - c. In what ways, if any, do you interact with instructors, classmates, or support staff online? Face-to-face?
 - i. How do you feel about these interactions?
 - ii. How do they add or take away from your academic experience?
 - d. In what ways, if any, does your instructor encourage you to be an active participant (and not just a passive recipient) in your learning, both in an out of class?
 - e. How does the flexibility in time and/or location related to this course affect your engagement? When and where do you watch course videos, complete modules, and work on assignments?
 13. How does your engagement in this course differ from your face-to-face courses that have a similar number of students?
 14. What is your experience with online technologies in general (social, work, and academic)?
 15. Had you taken a fully online or blended course before [course name]?

- a. If so, what was your experience in those courses?
 - b. In particular, how would you describe the level of academic challenge? What was required of you?
 - c. Student-faculty interactions? Did you feel the faculty member cared about you?
 - d. How did you collaborate and interact with classmates?
 - e. In what way, if any, did your instructors encourage you to collaborate or interact with classmates?
 - f. In what ways, if any, did your instructors encourage you to be an active participant in your learning process both in and out of class?
16. If not, what reasons have prevented you from enrolling in a fully-online or blended course?
17. Any other comments, experience, thoughts, or opinions that you would like to share?

Appendix E: Second Student Interview Protocol

Introduction

- Thank you for meeting with me again to conduct your follow-up interview for my study. Last meeting, you signed the informed consent document so that you know the intention of this study and how I will keep participant information confidential. Do you have any follow-up questions about that process?
- Your participation is voluntary and you may choose not to answer any questions in this interview. With your permission, I would like to audiotape this interview. Can I get your verbal consent to begin recording our interview? [If yes, begin digital recorder]
- As you may remember, the purpose of this qualitative study is to understand the engagement experiences of students enrolled in online courses.
- In the previous interview, we discussed your overall engagement with the university and touched on your experiences with online courses. This interview will focus on your engagement experiences related to [course name(s)] and the impact, if any, these courses have on your overall engagement with the university. I would like to begin with follow up questions from our first interview. But first, do you have any questions for me?

Questions

1. What were your expectations for how much time and effort you would dedicate to [NAME OF COURSE]?
How did your expectations compare to your experiences thus far with regard to Level of academic challenge? Student-faculty interactions? active and collaborative learning?
2. Describe your experience with engaging in [NAME OF COURSE]. In what ways do you dedicate your time and effort to the course?
 - a. How would you describe the level of academic challenge?
 - i. How does the instructor motivate you to engage with the coursework and subject matter?
 - ii. In what ways does the instructor assess your learning?
 - iii. What type of feedback do you receive on your work?
 - iv. What sense do you make from these methods of assessment and feedback?
 - b. How does the flexibility in time and/or location related to this course affect your engagement? When and where do you watch course videos, complete modules, and work on assignments?
 - c. In what ways, if any, do you engage face-to-face with the following people? How would you describe the quality of these interactions?
 - i. Instructor and teaching assistants? Classmates? Campus staff?
 - d. In what ways, if any, do you engage online with the following people? How would you describe the quality of these interactions?

- i. Instructor and teaching assistants? Classmates? Campus staff?
 - e. In what ways, if any, do your instructor encourage you to be an active participant in your learning process both in and out of class?
- 3. In what ways do the course design and requirements encourage you to engage in the course? How does the instructor's teaching encourage you to engage in the course?
 - a. What are your perceptions/feelings about these methods of engagement?
 - b. What sense do you make of the course design and requirements and the instructor's teaching?
- 4. Based on your experiences, what sense do you make of the course design and requirements and the instructor's teaching?
- 5. Is the course designed, in the way the class meetings are structured or in your assignments, to require you to be active or collaborative? Do any of your other large-enrollment courses require you to be active, work with other students, use campus resources, or visit with TAs or faculty?
- 6. From descriptions of the lectures, the course might provide flexibility in time as well as space. How do you see the live lecture time?
 - a. Is it exclusively set aside for class?
 - b. Is it a time to work on other classes, student organizations, or as down time?
 - c. Do you see this as a benefit or a cost?
 - d. [If appropriate] Is this the same level of multi-tasking as your face-to-face courses?
- 7. How do you feel your motivations for enrolling in an online course influence your methods and levels of engagement?
- 8. What are the benefits and costs to being anonymous in an online course?
- 9. Does your enrollment in an online course provide you with more or less time to get involved on campus?
 - a. How does the flexibility in the course's time and/or location affect the amount of time you spend on campus or outside your living space? Can you provide examples from your everyday life/schedule?
 - b. Do you feel that you have more, less, or the same amount of time to dedicate to other activities? This may include activities off campus, such as part-time or full-time employment or caring for a family member.
- 10. Do you feel that taking an online course affects how you feel about your WSU experience?
- 11. Does your enrollment in an online course affect your feelings of how you belong on campus?
- 12. What benefits have you experienced from taking an online course?
- 13. What are the costs you experienced from taking an online course?
- 14. Would you take another online course in the future? Why or why not?
- 15. Do you feel like [course name] has been a quality educational experience? Can you compare it to the overall quality of large face-to-face lectures?

16. Do you see your online course as integrated into your campus experience, or do you see it as separate?
17. What do you hope to get out of college?
 - a. What do you do to make sure this happens?
 - b. What does the university do to make sure this happens?
18. Any other comments, experience, thoughts, or opinions that you would like to share?

Appendix F: Faculty Interview Protocol

Introduction

- Thank you for agreeing to participate in this study. I have provided you with a copy of the informed consent document so that you know the intention of this study and how I will keep participant information confidential. If you agree to the conditions and give your informed consent, please sign on page two of the document.
- Your participation is voluntary and you may choose not to answer any questions in this interview. Your responses will be kept confidential. Audio recordings will be labeled with pseudonyms only, stored securely in a locked cabinet in the office of the primary researcher, and only the research team will have access to the recordings. Following transcription of the interviews, audio recordings will be destroyed. When analyzing, sharing, and publishing any data related to the study, only pseudonyms will be used to refer to participants to protect confidentiality.
- With your permission, I would like to audiotape this interview. Can I get your verbal consent to begin recording our interview? [If yes, begin digital recorder]
- As you may remember, the purpose of this qualitative study is to understand the engagement experiences of students enrolled in online courses. In this interview, I want to better understand your motivations and incentives for designing and teaching an online course, perceptions and past experience with online education, and how you create opportunities and encourage student engagement—in particular student-faculty interactions, active and collaborative learning, and academic challenge.
- But first, do you have any questions for me?

Questions

1. Tell me about yourself and your teaching experience.
2. What motivated you to design and teach an online course? What incentives, if any, motivated you?
3. What were your impressions of online education before deciding to develop an online course? Did you have any experience with online education before [NAME OF COURSE]?
4. Describe your general approach to teaching. Is your pedagogy different in your online course(s)? If so, in what ways?
5. Describe your experience designing [NAME OF COURSE]?
 - a. The course syllabus suggests students have these online tools available to them.
 - i. Why did you include these components in the course?
 - ii. What are your perceptions on the ways students use these tools?
 - b. Did you design face-to-face elements into the course? Why or why not?
6. Student engagement has been defined as “the time and energy students devote

to educationally sound activities inside and outside of the classroom, AND the policies and practices that institutions use to induce students to take part in these activities.” So there are two parts: time and effort by the student AND the university’s policies and practices.

- a. That being said, what were your expectations for this course regarding student engagement? Said another way, did you have expectations on how the course’s policies and practices would affect students’ time and energy spent on educationally sound activities inside and outside of class?
7. How would you describe the level of academic challenge in your online course?
 - a. How do you motivate students to engage with the coursework and subject matter?
 - b. In what ways you assess student learning?
 - c. What type of feedback do you provide to students?
 - d. What sense do you make from these methods of assessment and feedback?
8. In what ways, if any, do you engage face-to-face with students? How would you describe the quality of these interactions?
9. In what ways, if any, do you engage online with the students? How would you describe the quality of these interactions?
10. How do you encourage students to interact or collaborate in and out of class?
11. In what ways, if any, do you encourage students to be active participants in their learning process both in and out of class?
12. How has your experience with student engagement compared to your expectations?
13. What benefits have you experienced from teaching online? What do you perceive as the benefits to students?
14. What costs have you experienced? What do you perceive as the costs to students?
15. Any other comments, experience, thoughts, or opinions that you would like to share?

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