#### University of Missouri, St. Louis

## IRL @ UMSL

**Dissertations** 

**UMSL Graduate Works** 

11-18-2021

# A Comparison of First and Continuing-Generation Student Success and Engagement in an Online General Education English course

Maya Scruggs Hicks University of Missouri-St. Louis, scruggsm@umsl.edu

Tchule S. Moore University of Missouri-St. Louis, mooretc@umsl.edu

Follow this and additional works at: https://irl.umsl.edu/dissertation



Part of the Higher Education Commons

#### **Recommended Citation**

Scruggs Hicks, Maya and Moore, Tchule S., "A Comparison of First and Continuing-Generation Student Success and Engagement in an Online General Education English course" (2021). Dissertations. 1131. https://irl.umsl.edu/dissertation/1131

This Dissertation is brought to you for free and open access by the UMSL Graduate Works at IRL @ UMSL. It has been accepted for inclusion in Dissertations by an authorized administrator of IRL @ UMSL. For more information, please contact marvinh@umsl.edu.

# A Comparison of First and Continuing-Generation Student Success and Engagement in an Online General Education English course

# Tchule Moore M.Ed., Adult & Higher Education, University of Missouri St. Louis, 2016 M.B.A., Webster University, 2002 B.A. Business, Webster University, 2000

Maya Scruggs Hicks
M.A. Organizational Communication, University of Missouri St. Louis, 2007
B.A. Communication, University of Missouri St. Louis, 2004

A Co-Authored Dissertation submitted to The Graduate School at the University of Missouri-St. Louis in partial fulfillment of the requirements for the degree Doctor of Education with an emphasis in Educational Practice

December 2021

**Dissertation Committee** 

Shawn Woodhouse, Ph.D.

Chairperson

Christiane Hubbard Jackson, Ph.D.

Jennifer Simms, Ph.D.

#### **ABSTRACT**

Online learning has become a significant part of the strategic plan to increase enrollment and college access (Crawley, 2012). Allen & Seaman (2013) noted that more than 65% of U.S. higher education institutions believe that online education is necessary to sustain and continue progress toward their strategic planning goals to increase enrollment. The purpose of this convergent mixed-methods study was to examine the difference between first-generation and continuing-generation undergraduate student engagement and success in a 100% online Jr. Level English course at a university located in the Midwest region. The researchers conducted independent samples (two-tailed) ttests, one-way ANOVA, and one-way MANOVA to determine if there were statistically significant differences in course success (self-reported final course grade of C- or higher) and levels of student engagement (social presence, cognitive presence, teaching presence and overall engagement for first-generation college students compared to their continuing-generation peers. The findings suggested that there were not any statistically significant differences in course success or levels of student engagement for firstgeneration college students compared to their continuing-generation counterparts.

#### ACKNOWLEDGEMENTS

This dissertation would not have been possible without the support of our committee. I would like to thank Dr. Shawn Woodhouse, Dr. Jennifer Simms, and Dr. Christiane Hubbard Jackson for your guidance and support throughout this research process. You have been great mentors to me on this research and my career.

I dedicate this dissertation to my family and friends. My husband Tim and my son Christopher, I am grateful for all the sacrifices you have made on my behalf throughout the years. To my parents, thank you for always believing in me, and teaching me the value of perseverance. I also dedicate this dissertation to brothers and sisters for your support throughout my career and this process.

To my colleague and a good friend Dr. Maya Scruggs-Hicks, thank you for the knowledge that we have gained throughout this dissertation process. I cannot express enough how your dedication to learning and patience motivated me to research this goal. I wish you all the best in your professional endeavors.

Lastly, a special thank you to the UMSL School of Social Work and the UMSL Higher Education Student Services cohort and faculty for all the support you have provided me.

#### **ACKNOWLEDGEMENTS**

I'm forever grateful to have experienced this journey with a village of individuals to who I'm forever indebted. Thank you to our dissertation committee, Dr. Shawn Woodhouse, Dr. Jennifer Simms, and Dr. Christiane Hubbard Jackson! Your support, knowledge, and kindness didn't go unnoticed. You've all left a lasting impact on my life. Also, thank you to my dissertation partner, Dr. Tchule Moore. Thank you for your friendship, positive attitude, and support throughout the program. I'm thankful to have shared this experience from start to finish with you. Thank you to the Higher Education Student Services cohort. You all are incredible practitioners, and I'm honored to work alongside each of you.

Thank you to my colleagues in the Division of Student Academic Support

Services! Your unwavering support and encouragement will forever be appreciated.

Special thanks are extended to my colleague and friend, Dr. Antionette Sterling. Thank
you for challenging me to embrace a growth mindset throughout this journey.

Throughout this program, a few of my peers became family. Natasha Winston and Javania Webb-Grice kept me grounded throughout. Dr. Latishua Lewis, thanks for being my first doctoral role model. Your tenacity and resilience influenced my decision to pursue this program. Thank you for simply being you.

I would be remiss if I did not acknowledge my family. Your wisdom, support, and reassurance were appreciated. To my adoring husband, Mikal, you've been remarkable. Thank you for allowing me to be me. I appreciate everything you've done for our family.

Last but not least, thank you to my three heartbeats outside my body, Madison, Malcolm, and Mikal Jr. You all have kept me humbled and grounded in the process.

You're the absolute best! Thanks for reminding me to not take myself so seriously.

## **Table of Contents**

ABSTRACT	i
ACKNOWLEDGEMENTS	ii
List of Tables	viii
Chapter 1: Introduction	9
Statement of Problem	10
Purpose of the Study and Research Questions	13
Significance of the Study	15
Social Justice Implications	16
Impact of COVID-19 on First-Generation College Students	18
Access to online courses	19
Financial Hardships	20
Mental Health	20
Local Context of Study	22
Enrollment Trends of Undergraduate Degree-Seeking Students	23
Online course enrollment for undergraduate students	23
Online Jr. Level English Course Summary	24
Assumptions, Delimitations, & Limitations	24
Delimitations of the Study	25
Limitations of the Study	26
Chapter Summary and Organization of the Study	26
Chapter 2: Literature Review	28
Research Questions:	31
Theoretical Framework	
Kuh's Theory of Student Engagement	
Community of Inquiry (CoI) model	33
Social Capital	34
Connection of Theoretical Framework to this Study	35
Characteristics of First-Generation College Students	35
Online Course Completion	37
First-Generation College Students Online	42
Online Student Engagement	46
Online Student Engagement Scale (OSE)	50
Academic and Social Engagement	53

First-Generation College Student Engagement	55
Chapter Summary	61
Chapter 3: Methodology	63
Mixed Methods Design	63
Research Questions	64
Method	65
Research design	65
Measures	66
Participants and Setting	67
Data Collection	68
Data Analysis	69
Ethical Considerations and Design Limitations	73
Researcher Positionality	73
Faculty and Staff Anonymity and Confidentiality	74
Student Data	74
Chapter Summary	75
Chapter 4: Results	75
_Purpose and Research Questions	77
_Overview of Theoretical Frameworks	78
_Data Analysis	78
_Participants	79
_Research Question 1: Independent samples (two-tailed) t-test results	80
_Research Question 2: Independent samples (two-tailed) t-test results	80
_Research Question 3: One-way ANOVA results	82
_Research Question 4: One-way MANOVA results	87
Qualitative Data Analysis	89
_Open-ended questions	90
_Constructs from Qualitative Data Analysis	90
_Qualitative Data Analysis Summary	92
Chapter 4 Summary	92
Chapter 5: Executive Summary	93
_Purpose and Research Questions	93
_Overview of Theoretical Frameworks	94
_Participants	95

Summary of Findings	95
Conclusions and Recommendations	96
Engagement is critical for all students	96
Benefits of the CoI model for GTA	97
CoI model can educate and inform the practice of GTA	97
GTAs involvement on campus	98
Professional Development opportunity for GTA	98
CoI model can provide holistic engagement opportunities for professors and GTA to capitalize on each other's strengths	
Minimum/no cost	99
Continuation of the CoI training	100
Assessment	100
Conclusion	100
REFERENCES	101
APPENDIX A: SURVEY INSTRUMENT	122
APPENDIX B: SURVEY INVITATION EMAIL (student)	128
APPENDIX C: SURVEY INVITATION EMAIL (Support from Faculty)	130

## **List of Tables**

Participants	79
Table 2 Group Statistics	81
Table 3 T-test Equality of Means	81
Table 4 One-way ANOVA Mean and Standard Deviation scores for levels of Engagement by Generational Status	84
Table 5 One-way ANOVA Student Engagement Scores by Generational Status	85
Table 6 One-way ANOVA Mean scores between and within groups (Generational Status)	87
Table 7 Means and Standard Deviations for Final Course Grades and Student Engagement levels by Generational Status	89

#### **Chapter 1: Introduction**

Ask any higher education leader in the country and they will declare that student success is a priority. Student success can be defined as attaining an educational objective (Kuh et al., 2007). A standard measure of student success is successful course completion. Successful course completion for this study is measured by receiving a final grade of C- or higher in a given course subject. The dramatic increase in online courses and degree programs have gained notoriety over the past 20 years and contributed to the improvement in student success. Online learning was defined as "the use of the Internet to access learning materials; to interact with the content, instructor, and other learners; and to obtain support during the learning process, in order to acquire knowledge, to construct personal meaning, and to grow from the learning experience synchronously and asynchronously". (Anderson, 2008, p.4). According to NCES (2018), in Fall of 2018 undergraduate enrollment in online courses exceeded 5.7 million students. In the Fall of 2018, there were more than 5.7 million undergraduate degree seeking students enrolled in online courses (NCES, 2018b).

Online learning opportunities have increased access for non-traditional students such as first-generation college students (Seay, 2006; Stone & O'Shea, 2016). Non-traditional students are defined as "students who meet one of seven non-traditional characteristics: delayed enrollment into postsecondary education; attends college part-time; works full time; is financially independent for financial aid purposes; has dependents other than a spouse; is a single parent, or does not have a high school diploma" (Choy, 2002, p.2). Also, non-traditional students are defined as "students who

are usually age 25 or older" (Choy, 2002, p.1). First-generation college students are defined as "students whose parents or guardians have not completed a college degree" (Choy, 2001, p.1). Specifically, for this study, first-generation college students will be defined as students whose parents haven't completed at least a bachelor's degree. While there is a recognizable overlap between first-generation college students and non-traditional student populations, it is essential to note that not all first-generation college students are non-traditional students. In 2018, approximately 54% of first-generation college students were also classified as non-traditional adult learners (25 years old or older) (NCES, 2018b).

Online course enrollment has rapidly shifted toward a wave of non-traditional aged students, including first-generation college, and returning student populations (Ilgaz & Gulbahar, 2017). Higher education institutions should acknowledge and respond to first-generation college students' experiences, as this impacts overall student enrollment, student engagement, and student success metrics. First-generation college students continue to be a significant student population in higher education institutions across the United States. The U.S. Department of Education noted that in 2018, more than one-third of undergraduate students in U.S. colleges and universities were first-generation college students.

#### **Statement of Problem**

As first-generation college students enroll in postsecondary institutions, they are met with multiple and unique challenges which may serve as a disadvantage to their academic success in distance (online) learning environments. These additional barriers may impact their student engagement and, therefore, inhibit their successful course

completion (Saenz et al., 2007). First-generation college students are considered an academically at-risk student population. At-risk students have risk factors that include background, individual, or environmental characteristics such as race or ethnic origin, health, family obligations, academic preparedness, mindset, and transportation difficulties (Horton, 2015). As a result of the risk factors associated with being a first-generation college student, first-generation college students tend to have lower student engagement than their continuing-generation peers (Pascarella et al., 2004), impacting their success in online courses. According to Kuh (2003), student engagement is "the time and energy students devote to educationally sound activities" (p. 25). More specifically, and in this study, student engagement is "the extent to which students actively engage by thinking and interacting with the instructor and other students in the course, as well as interacting with the content of a course" (Dixson, 2015, para 3). When students don't have the necessary skills to engage in a course, they may withdraw from courses or receive failing grades. Excessive withdrawals or failing grades can have a lasting impact on a student's grade point average (G.P.A.), which negatively impacts their ability to graduate.

First-generation college students enroll in online courses because online courses provide more flexibility to accommodate work schedules and family responsibilities (Jehangir, 2010; Lippincott & German, 2007). Online learning is perceived as convenient and easily accessible. However, there hasn't been equitable attention to address student engagement and outcomes, specifically online student engagement and course success rates for first-generation college students compared to their continuing-generation counterparts. Continuing-generation college students are classified as "students who have a parent (or guardian) who graduated from college with a bachelor's degree" (Giancola et

al., 2008, p.2). Most research studies do not differentiate between first-generation and continuing-generation college students and do not take into consideration the unique characteristics of first-generation college students. Although first-generation college students experience more challenges with successful online course completion (defined as earning a C- or higher in a given course), they have a history of enrolling in online courses at higher rates than their continuing-generation peers due to other commitments (employment, family, caregiver responsibilities) that prevent them from coming to campus (Allen & Seaman, 2015). According to the National Center for Education Statistics (NCES, 2018a), during the 2011-2012 academic year, approximately 8%-10% of first-generation college students enrolled in distance learning courses. In comparison, their continuing-generation student counterparts only accounted for 5% of students who enrolled in distance learning classes (NCES, 2018a). First-generation college students may pursue online learning because they assume that it will better align with their established schedules (Seay, 2006; Jehangir, 2010).

Successful online course completion remains a challenge for students enrolled in postsecondary institutions. Despite the appeal, flexibility, and convenience of online learning for first-generation college students, researchers have found that a higher percentage of students taking online courses tend to withdraw from them at a higher rate than students enrolled in on-campus courses (Frankola, 2001; Oblender, 2002). Boston et al., (2011) noted that the successful course completion rate for online courses is 20% lower than its face-to-face counterparts. Consistent with these findings, other researchers have found that online courses have high unsuccessful course completion rates that range from 10% to 90% as compared to traditional courses offered in the on-campus classroom

setting (Croxton, 2014; Jaggers & Xu, 2010; Xu & Jaggers, 2011, You, 2016). Seay (2006) pointed out that successful online course completion, specifically in general education courses, can severely impact students' academic planning toward timely degree completion. An examination of the factors contributing to student engagement and successful online course completion is essential to support institutional strategic goals of timely course completion and degree attainment.

#### **Purpose of the Study and Research Questions**

The purpose of this study was to examine the difference between first-generation and continuing-generation undergraduate student engagement and success in a 100% online Jr. Level English course at a university located in the Midwest region. The following questions will guide our research:

- Are first-generation college students less likely to complete a 100% online Jr.
   Level English course as compared to their continuing-generation peers?
- 2. Is there a significant difference in success (self-reported final course grade of Cornigher) for first-generation and continuing-generation college students in a 100% online Jr. Level English course?
- 3. Is there a significant difference in student engagement levels for first-generation and continuing-generation college students who enroll in a 100% online Jr. Level English course?
- 4. Is there a significant difference in the relationship between student engagement and success (self-reported final course grade of C- or higher) for first-generation and continuing-generation college students in a 100% online Jr. Level English course?

To meet the varied needs and demands of an evolving student population that is increasingly shifting to online learning, we must take a closer look at factors impacting student engagement for first-generation college students. First-generation college student status is an essential factor that should be considered when examining student engagement and successful online course completion rates. First-generation college student status allows students to identify if they're first-generation or continuinggeneration students. First-generation college student profiles will "continue to evolve (i.e., increasing overrepresentation of students from lower-income households, less social capital, and diverse levels of academic readiness), and concern for their college success will remain high" (Bransberger & Michelau, 2016; as cited in Dong, 2019, p.18). Firstgeneration college students may lack the awareness of the importance of student engagement. The first-generation college student status is relevant to student engagement because first-generation college students lack knowledge regarding the benefits of engagement opportunities (i.e., research opportunities, building relationships with faculty and staff, student involvement, etc.) (Yee, 2016). The lack of student engagement can provide additional barriers to successful course completion. First-generation college students are less likely to utilize academic support. They're also less likely to communicate with professors when they experience course content challenges (i.e., tutoring, supplemental instruction, attending office hours, or peer support) (Dumais et al., 2013). In this study, we planned to gain insight into the factors that impact firstgeneration college student engagement and successful course completion. A comprehensive understanding of the profiles of first-generation college students as learners in the online environment and the supports they need to be successful can aid

postsecondary administrators and faculty to develop holistic best practices to support student engagement for this group of learners.

#### **Significance of the Study**

Online learning has become a significant part of the strategic plan to increase enrollment and college access (Crawley, 2012). Allen & Seaman (2013) noted that more than 65% of U.S. higher education institutions believe that online education is necessary to sustain and continue progress toward their strategic planning goals to increase enrollment. During the Fall of 2018, there were more than 5.7 million undergraduate students enrolled in any distance learning course at degree-granting institutions (NCES, 2018b). Despite this increase, successful online course completion remains a significant concern. It is estimated that 40% to 80% of online students withdraw from online courses (Smith, 2010). Online courses continue to have low completion rates, which need to be addressed by examining why online learners withdraw or fail and what can be done to eliminate or mitigate these causes. If these high withdrawal or failure rates are not addressed, first-generation college students may have difficulty succeeding in online courses or may not enroll in online courses at all. As a result, this could lead to a decrease in enrollment and an overall decline in tuition revenue.

The postsecondary institution in this study is a public university in the Midwest region of the United States. There are profound financial implications that impact online learning at the research site. Many public postsecondary institutions receive a large portion of their funding from their state, thus, when that funding decreases it can severely impact the institution's ability to provide educational offerings and student support services. Over the past several years, the institution has received reductions in state

allocations that could support funding academic initiatives. To account for the shortfall in state funding, this institution has increased their online course and degree offerings, which have provided additional tuition revenue for the institution. If there is a decrease in online enrollment due to course completion challenges, it can have severe recruitment, persistence, and student retention implications. This study can support and inform fiscal operations, strategic planning, and aid in the creation of initiatives to enhance student engagement in online courses. Wojcjechowski and Palmer (2005) stated that the online learning structural configuration requires students to be accountable to facilitate their own learning.

As a result, it is equally important to understand the characteristics of first-generation college students and factors that can lead to their successful experience and student engagement in online courses. Student engagement impacts successful course completion, which impacts retention and graduation rates.

#### **Social Justice Implications**

Completing a college degree is one of the most significant pathways that leads to opportunity, social mobility, and economic progress (Carey, 2004). Education can change the career trajectory of first-generation college students (Gray, 2013). One of the challenges is that completing a college degree is more complicated than it sounds. This concept is especially true for students who will be the first in their family to embark upon this journey (Harding, 2008) as they may lack the resources and or knowledge necessary to successfully navigate the college process.

Although access to higher education has drastically increased over the last 60 years, there is still a disproportionate achievement gap for underrepresented students, including first-generation college students. As online learners, first-generation college students, when compared to continuing-generation students, are not as academically prepared (Chen, 2005) as their counterparts. Chen (2005) noted that there were differences when comparing first-generation college students to their continuing-generation peers. First-generation college students embark upon college less prepared, earn lower grades, and are more likely to withdraw. His research confirmed that at least 55% of first-generation college students were underprepared for college, as compared to 27% of their continuing-generation peers, therefore, the students entered college with the need for academic support in the form of developmental courses.

Another factor contributing to course withdrawal for first-generation college students is family income (Jaggars, 2012). In 2005, the National Longitudinal Survey (NLS) revealed that first-generation undergraduate students' family income is substantially lower than the family income of continuing-generation students (Chen, 2005). First-generation college students who experience financial barriers may struggle to afford college tuition and the technology tools necessary to be successful in online courses such as high-speed internet and laptops. It is important to note that although 66% of all adults have broadband connections at home, only 45% of families with an income below \$30,000 have broadband connections (Smith, 2010). It is safe, therefore, to assume that factors such as academic under-preparedness, low income, and access to technology can significantly make online learning more challenging for first-generation college students as online learners.

The next section examines the effects of the global pandemic, COVID-19, and its impact on first-generation college students' abrupt transition to online learning. Also, the barriers experienced by first-generation college students, including inadequate access to online courses, financial hardships, and mental health challenges will be discussed.

#### **Impact of COVID-19 on First-Generation College Students**

As a result of the COVID-19 pandemic, many higher education institutions shifted their courses to the online platform. While this impacted all students, it created additional barriers for first-generation college students who were already at a disadvantage. According to research conducted by Soria et al. (2020), COVID-19 was more impactful for first-generation college students as compared to continuing-generation college students. The COVID-19 pandemic negatively impacted first-generation college students who enrolled in large public research universities that transitioned to online learning and were compelled to adapt to online instruction. Soria et al. (2020) stated that "first-generation college students encountered challenges when adapting to online learning, which may have contributed to an unsuccessful course completion rate for first-generation college students who completed courses in the online learning environment" (Soria et al., 2020, p.7). Additional factors such as lack of access to technology and unfamiliarity with technology contributed to first-generation college student challenges with online learning.

Soria et al. (2020) conducted a Student Experience in the Research University (SERU) Consortium survey to 28,198 undergraduate students during the of summer 2021 at nine universities in the United States. The purpose of their study was to explore first-generation college students' experiences during COVID-19 (Soria et al., 2020). An online survey was utilized to collect data, 26 percent of the student respondents (n = 7,233) were

first-generation college students (those whose parents have not earned a bachelor's degree).

The researchers found that first-generation college students experienced more challenges navigating the online learning platform which made it more difficult for them to successfully complete online courses than continuing-generation college students (Soria et al., 2020). Factors such as a lack of proper technology, high-speed internet, and computers made it more difficult for first-generation college students to complete online courses. Fifty-seven percent of first-generation college students were students from low-income family backgrounds as compared to 12% of continuing-generation college students. The lack of finances made it more difficult for first-generation college students to purchase high-speed internet or proper technology to navigate online courses and successfully adapt to online learning (Soria et al., 2020).

#### **Access to online courses**

First-generation college students had a challenging time adjusting to virtual learning environments. First-generation college students were less likely to attend meetings during scheduled virtual class times due to a lack of internet access (Soria et al., 2020). The students also missed virtual meetings due to other family obligations, such as work or childcare. Forty-four percent of first-generation college students adapted well or very well to online instruction when compared to 52% of continuing-generation college students (Soria et. al., 2020). Additionally, the researchers also reported that first-generation college students, when compared to continuing-generation students, lacked familiarity with the necessary technology tools essential for online learning. These factors might have contributed to the students' inability to attend virtual meetings or access their learning management systems. These factors may have also contributed to the challenges

that first-generation college students experienced when they transitioned to online learning, consequently lowering the successful online course completion rate for these students during the COVID-19 pandemic (Soria et al., 2020).

#### **Financial Hardships**

Financial hardship is one of the major factors that disproportionately negatively impacted first-generation college students when they enrolled in online classes (Soria et. al., 2020). Results from the survey suggest that first-generation college students experienced more financial problems during the COVID-19 pandemic (Soria et al., 2020). An overwhelming majority of first-generation college students (87%) reported experiencing some type of financial difficulty during the COVID-19 pandemic (Soria et. al., 2020). Continuing-generation college students were less likely to experience the loss or reduction of income from family members (32%) when compared to their first-generation college student peers (52%) (Soria et al., 2020). Additionally, first-generation college students were also more likely than continuing-generation college students to have experienced increased living expenses (39%) and unexpected increases in technology expenses (27%) (Soria et al., 2020).

#### **Mental Health**

First-generation college students were more likely to experience challenges impacting their mental health during the pandemic as compared to continuing-generation college students (Soria et al., 2020). Soria et al (2020) highlighted the work of Stebleton et al., (2014) regarding mental health disparities. They asserted that disparities in mental health existed pre-pandemic for first-generation college students compared to their continuing-generation counterparts. In order to assess the well-being of first-generation college students during the COVID-19 pandemic, Soria et al. (2020) used the Patient

Health Questionnaire-2 (PHQ-2). The PHQ-2 is a two-item scale designed to evaluate common depression symptoms (Kroenke et al., 2003) and the Generalized Anxiety Disorder-2 (GAD-2) is a two-item scale that is designed to screen students for generalized anxiety disorder symptoms (Kroenke et al., 2007). Based on these evaluation methods, first-generation college students were more likely to experience mental health challenges during the pandemic compared to continuing-generation college students. The results suggest that first-generation college students are 6% more likely to screen for generalized anxiety disorder compared to continuing-generation college students (Soria et al., 2020). Addressing mental health is particularly important for first-generation college students who take online courses in order to improve their online learning success rate. As a result of mental health challenges such as anxiety, students who have a lack of confidence or fear of failure may feel unfit in the online learning environment (Canning et al., 2020). If these mental health challenges remain unresolved, students who have selfdoubts or a sense of failure may choose to drop their online courses or withdraw from college altogether.

The following sections will describe the local context of this study and provide information on enrollment trends of undergraduate degree-seeking students, online course enrollment for undergraduate students, and data related to the online Jr. level English course, which is the course that will be explored to understand the differences in successful course completion rates and student engagement for first-generation and continuing-generation college students.

#### **Local Context of Study**

This study will be conducted at a Midwest public university in a metropolitan area, herein referred to as Midwest Public University (MPU). The university offers undergraduate and graduate programs. During Fall 2019, there were 6,992 undergraduate degree-seeking students enrolled at the research site, and undergraduate students account for 70% of the university's student population (Anonymous, 2019). First-generation college students accounted for 33% (2,336) of all undergraduate students enrolled during the Fall of 2019 (Anonymous, 2019).

More than 75% of the undergraduate student population at MPU received financial aid funding through grants, loans, or work-study (Anonymous, 2019). In-state undergraduate tuition is approximately \$12,000 annually for full-time commuter students. There is an additional \$65.00 cost per credit hour for hybrid (blended) courses as well as asynchronous courses that are defined as 100% online courses. Online course fees were waived during the COVID-19 pandemic. Prior to the COVID-19 pandemic, if a student was enrolled in 12 credit hours of either hybrid or fully online coursework, they would pay an additional \$780.00 per semester. The university is conveniently located in a metropolitan area, has reputable programs, and is affordable, attracting a diverse population of students from different backgrounds.

As of Fall 2019, the average age of undergraduate and graduate students in combination was 27.4 years. The average age of all undergraduate degree-seeking students was 25.3 years, and 50% of all undergraduates ranged in age from 21 to 27. Most of the undergraduate student population (75%) were transfer students. More than

75% of the total students enrolled at the research site reside in the metropolitan area, including 83.9% of the undergraduate students.

#### **Enrollment Trends of Undergraduate Degree-Seeking Students**

During the Fall 2019 term, undergraduate degree-seeking students (n= 6,992) enrolled in an average of 12 credit hours. Full-time undergraduate degree-seeking students (4,834) enrolled in an average of 14 credit hours during the semester. Part-time undergraduate degree-seeking students (2,158) enrolled in an average of six credit hours during the Fall 2019 semester. Throughout the Fall 2019 semester, first-generation college students (2,336) enrolled in an average of 11 credit hours (Anonymous, 2019). Full-time undergraduate degree-seeking first-generation college students (1,574) enrolled in an average of 14 credit hours for the semester. At the same time, part-time undergraduate degree-seeking first-generation college students (762) enrolled in an average of seven credit hours for the semester (Anonymous, 2019).

#### Online course enrollment for undergraduate students

More than 59% (4,158) of undergraduate degree-seeking college students were enrolled in at least one online class in Fall 2019. First-generation college students accounted for 1,533 undergraduate students who enrolled in at least one online course. The institution offers undergraduate degrees that can be fully completed online. There were 851 undergraduate students (12%) who exclusively enrolled in online classes. In Fall 2019, 341 first-generation undergraduate degree-seeking college students completed courses entirely online.

#### Online Jr. Level English Course Summary

The online Jr. level English course in this study is an upper-level intensive writing course. It builds upon knowledge from the 1000 level First-Year Writing course. The objective of this course is to enhance students' analytical skills. Students develop proficiency in the course content through the successful completion of a series of academic readings, writing, reasoning, and documentation. The skills and knowledge acquired in this course can improve students' communication and persuasive skills. This course is included in the university's general education requirements. During Fall 2019, there were 12 online sections of the Jr. Level English course. Two hundred twenty-two (222) students were enrolled across the 12 sections of the online Jr. Level English course.

#### **Assumptions, Delimitations, & Limitations**

Assumptions are generally understood as "beliefs, expectations, or considerations that are taken for granted about how the world works" (Nkwake & Morrow, 2016, p.97). The researchers in this study anticipate the presence of prescriptive and external assumptions. The researchers define prescriptive assumptions as those assumptions that are expected to happen within a particular situation, and external assumptions are those conditions that happen outside of the scope of the research study (Nkwake & Morrow, 2016). There is a prescriptive assumption that online instructors have received training on how to design and teach the course content online. Also, there is a prescriptive assumption that each online section of Jr. level English uses the same curriculum and grading scale to measure student performance. Lastly, the researchers have a prescriptive assumption that online sections of the Jr. Level English course would be taught during the Spring 2021 semester for the purposes of data collection. Historically, at least 10

sections of 100% online Junior level English courses were offered each semester at the research site during the last three years.

One external assumption is that participants in the study would provide honest responses. The researchers assume that students will be transparent regarding their perceptions and experiences related to student engagement, successful course completion as measured by their self-reported final course grade, and factors that impacted their course success. Another external assumption is that the same participant who participated in the survey would be identical to the participant who was enrolled in the online course and used the corresponding student identification number. There is also an external assumption based on previous research on student engagement that all continuing-generation college students are aware of the advantages of both academic and social engagement (Dumais et al., 2013; Moore, 2014; Soria & Stebelton, 2012; as cited in Yee, 2016).

#### **Delimitations of the Study**

This study was delimited to participants who are upperclassmen degree-seeking students who are enrolled in a 100% online section of a Jr. level English course. The participants were identified based on their enrollment in online sections of the designated course. The target population for this study has earned at least 56 credit hours.

Researchers of this study will explore the differences in course completion outcomes for first-generation and continuing-generation college students in a 100% online Jr. Level English course. This study also examined students' perceived course engagement and course success.

#### **Limitations of the Study**

Participants can misinterpret definitions of first-generation college students. As a proactive measure to address potential misinterpretation, the researchers determined that first-generation college students' institutional definition would be shared with participants to guide their responses. The researchers received approval from the Institutional Review Board (IRB) to request course completion data for first-generation and continuing-generation college students who completed online sections of the Jr. level English course. In order to attempt to correlate student engagement with successful course completion, the researchers collected self-reported data. The researchers are aware of the risk that students may exaggerate (i.e., present outcomes that are better) self-reported course outcomes data (Price et al., 2004). Additionally, the researchers understand that students' perceptions of student engagement are subjective. Finally, the researchers observed a small sample of upper-level first-generation college students, so the findings may not be generalizable to all first-generation and continuing-generation college students enrolled at the research site.

#### **Chapter Summary and Organization of the Study**

Chapter 1 introduced the study and introduced the statement of the problem, purpose of the study and research questions. Next, the significance of the study was explained, and social justice implications were discussed. Subsequently, the impact of COVID-19 on first-generation college students and the shift to online learning was examined. Also, an overview of the local context of the study was provided. Finally, the researchers identified the assumptions, delimitations, and limitations of this study. Chapter 2 provides a review of the literature that will begin with an overview of the two

theories that comprise the theoretical framework. The first theory is the Community of Inquiry (CoI) model which will be used to conceptualize student engagement. The second theory is social capital which will address the stark disadvantages of first-generation college students' lack of knowledge and resources to navigate higher education settings. The remaining literature will focus on the following: (a) characteristics of first-generation college online students, (b) online course completion, (c) first-generation college students in online courses; and (d) online student engagement. Chapter 3 describes the research design, methods of data collection, and methods of data analysis. Chapter 4 describes the results of the data collection. Chapter 5 includes the plan of action and recommendations for executive leadership to improve student engagement and success in online courses for first-generation and continuing-generation college students.

#### **Chapter 2: Literature Review**

Online learning has become a significant part of the strategic plan to increase enrollment and college access (Crawley, 2012). Allen & Seaman (2013) noted that more than 65% of U.S. higher education institutions believe that online education is necessary to sustain and continue progress toward their strategic planning goals to increase enrollment. During the Fall of 2018, there were more than 5.7 million undergraduate students enrolled in any distance learning course at degree-granting institutions (NCES, 2018b). Despite this increase, successful online course completion remains a significant concern. It is estimated that an average of 60% of online students withdraw from online courses (Smith, 2010). Consistent with these findings, other researchers have found that online courses have high unsuccessful course completion rates that range from 10% to 90% as compared to traditional courses offered in the on-campus classroom setting (Croxton, 2014; Jaggers & Xu, 2010; Xu & Jaggers, 2011; You, 2016). First-generation college students enroll in postsecondary coursework with multiple and unique challenges that could interfere with their success in online courses. Chen's (2005) research confirmed that at least 55% of first-generation college students were underprepared for college, as compared to 27% of their continuing-generation peers, therefore, the students

entered college with the need for academic support in the form of developmental courses. First-generation college students embark upon college less prepared, earn lower grades, and are more likely to withdraw (Chen, 2005)

The purpose of this study was to examine the difference between first-generation and continuing-generation undergraduate student engagement and success in a 100% online Jr. Level English course at a university located in the Midwest region. There are profound financial implications that impact online learning at the research site. The institution, referred herein as Midwest Public University (MPU), is a public university in the Midwest region that offers undergraduate and graduate degree programs. Since MPU is a public institution, a large portion of their funding allocations is received from the state government, and over the last several years, MPU has been impacted by reductions in state allocations. Like most other higher education institutions in the U.S., MPU invested in online learning as a strategic initiative to address this financial shortfall. During Fall 2019, 59% of undergraduate students enrolled in at least one online course, and nearly 40% (1,553/4,158) of those students were first-generation college students (Anonymous, n.d.).

"First-generation college students are students whose parents or guardians have not completed a college degree" (Choy, 2001, p.1). More specifically, in this study first-generation college students are defined as students whose parents haven't completed at least a bachelor's degree. In contrast, "continuing-generation (CGS) college students in this study are defined as students who have a parent (or guardian) who graduated from college with a bachelor's degree" (Giancola et al., 2008, p.2). While first-generation college students seek out online learning opportunities that provide flexible learning

options, they are considered an academic at-risk student population (Horton, 2015). At-risk students are students who have risk-factors that include background, individual, or environmental characteristics. (i.e., race or ethnic origin, health, family obligations, academic preparedness, mindset, transportation) (Horton, 2015). As a result of the risk factors directly linked with characteristics of being a first-generation college student, first-generation college students tend to have lower student engagement as compared to their continuing-generation peers, which impacts their success in online courses (Pascarella et al., 2004). For the purposes of this study, student engagement is defined as "the extent to which students actively engage by thinking, talking, and interacting with the content of a course, the other students in the course, and the instructor" (Dixson, 2015, para 3). Successful course completion is obtaining a grade of C- or higher.

If there is a decrease in online enrollment due to the lack of student success, it can severely impact recruitment, persistence, and student retention. In this study, the researchers examined the difference between first-generation and continuing-generation undergraduate students' engagement and success in a 100% online Jr. Level English course. This study can support fiscal operations and strategic planning for online learning by providing factors that contribute to online success and increase persistence for first-generation college students who enroll in online courses. This research will provide information that can be used to develop effective services that support online students' needs. These findings could further inform institutional leaders as they implement support services designed to improve student engagement and success for first-generation college students.

In order to gain a holistic understanding of the factors that contribute to student success and engagement for first-generation and continuing-generation college students in an online Jr. level English course, the following questions will be examined:

#### **Research Questions:**

- Are first-generation college students less likely to complete a 100% online Jr.
   Level English course as compared to their continuing-generation peers?
- 2. Is there a significant difference in success (self-reported final course grade of Cornigher) for first-generation and continuing-generation college students in a 100% online Jr. Level English course?
- 3. Is there a significant difference in student engagement levels for first-generation and continuing-generation college students who enroll in a 100% online Jr. Level English course?
- 4. Is there a significant difference in the relationship between student engagement and success (self-reported final course grade of C- or higher) for first-generation and continuing-generation college students in a 100% online Jr. Level English course?

The online learning structure encourages students to take responsibility for their learning. Given the additional barriers that characterize the experiences of first-generation college students, it is necessary to explore the course outcomes, perceptions, and characteristics of first-generation college students who enrolled in online courses in order to eliminate potential obstacles that first-generation college students may encounter in the online environment where self-regulation is expected. Past research findings have suggested that first-generation college student status has an adverse impact on student

engagement for these learners as compared to continuing-generation college students. Also, there is limited research available regarding first-generation students' college experiences and the way those experiences compare to the experiences of students who have one or more college-educated parents (Pike & Kuh, 2005). From this study the researchers will gain insight regarding the factors that contribute to student engagement and success for first-generation and continuing-generation college students enrolled in a 100% online Jr. level English course.

#### **Theoretical Framework**

The Community of Inquiry (CoI) Model and Social Capital Theory served as the theoretical frameworks for this study. Both frameworks allowed the researchers to holistically compare first-generation and continuing-generation college students' engagement and success in an online general education course.

#### **Kuh's Theory of Student Engagement**

The Community of Inquiry (CoI) Model is grounded in Kuh's (2003) theory of student engagement and its impact on student success. According to Kuh (2003), "student engagement represents the time and effort students devote to activities that are empirically linked to desired outcomes of college and what institutions do to induce students to participate in these activities" (Kuh, 2003, p. 25). Engagement consists of "time and energy in educationally purposeful tasks: studying, interacting with their peers and teachers about substantive matters, applying what they are learning to concrete situations and tasks, and so forth (Pace, 1990 as cited in Kuh, 2009, p.6).

#### Community of Inquiry (CoI) model

Social presence, teaching presence, and cognitive presence are all grounded in the Community of Inquiry framework. These three components are needed to effectively enhance participatory engagement between students and faculty in the online learning environment (Garrison et al., 2000 as cited in Dixson, 2015). Social presence is a learner's ability to be congenial, share more information than what's required rather than "just the facts," and feel they have tangible human interactions with people in online learning settings (Garrison et al., 2000 as cited in Dixson, 2015). Social presence is a critical factor in online student engagement because students must interpersonally connect with their peers through an expression of attitudes and emotions (Garrison & Arbaugh, 2007 as cited in Dixson, 2015). At the core of social presence is an emotional sense of belonging and students' self-perception of their involvement as part of a safe and trusting learning community (Garrison & Arbaugh, 2007 as cited in Dixson, 2015). Cognitive presence is the degree to which student learning starts based on a cue and subsequently transitions from reflection and discourse to idea exploration, integration, and problem resolution (Dixson, 2015; Garrison & Arbaugh, 2007 as cited in Dixson, p.3, 2015). Teaching presence implies that it is the responsibility of the instructor to develop a course curriculum that enhances student learning in order to facilitate and promote critical thinking and direct instruction (Garrison & Arbaugh, 2007; Garrison et al., 2000 as cited by Dixson, 2015). Teaching presence is intended "to support and enhance social and cognitive presence to realize educational outcomes" (Garrison et al., 2000, p. 90). The Community of Inquiry (CoI) model emphasizes "the need for student engagement with content, other students, and the instructor" (Dixson, 2015, para 11) in an online environment to ensure that students are successful. A major demographic factor that

impacts student engagement with their peers, the instructor, and the online environment is social capital.

#### **Social Capital**

This study used Bourdieu's (1986) framework of social capital as the second theory in the theoretical framework for this study. Social capital is defined as "privileged knowledge, resources, and information received through social networks" (Bourdieu, 1986, p. 248). "Comparisons between first-generation college students to their peers provide evidence concerning the distinct disadvantages of first-generation students before college years, during college years, and after college years" (Gofen, 2009, p. 105). Social capital is a significant indicator of success in the postsecondary education environment because it can inform students' engagement (academic and social) (Pascarella et al. 2004). More specifically, social capital impacts a student's ability to engage and be successful due to a student's academic preparedness, college transition experience, family support, and understanding of campus rules and culture. (Soria & Stebleton, 2012). Firstgeneration college students' "do not possess the same levels of social capital as their nonfirst-generation peers, they are likely to face more challenges in navigating the university and in becoming fully engaged in their academic pursuits" (Soria & Stebleton, 2012, p. 673). Some examples of student engagement experiences include "participating in advising, tutoring, and mentoring by faculty and peers" (Engle & Tinto, 2008, p.4). Students who lack social capital are not aware of the advantages that student engagement can bring to their overall experience and success.

## Connection of Theoretical Framework to this Study

A major challenge of online learning is that online students may feel isolated due to a lack of social presence in online learning, negatively impacting their engagement. Students who lack social capital, such as first-generation college students, may perceive the online learning environment as a static environment that lacks interactivity between students and instructors. Online students may also feel that the learning environment is a self-taught academic space in which instructional materials are available to students for self-paced learning (Dixson, 2005). As mentioned above, Bourdieu's (1986) social capital theory explains the impact of first-generation college student status on student engagement, and the Community of Inquiry (CoI) model of student engagement is composed of three elements: social presence, teaching presence, and cognitive presence (Dixson, 2005). The CoI model provides an understanding of the most significant components of the learning environment which impact student engagement. It is critical to note the relationship between the lack of social capital for first-generation college students that influences their engagement levels, particularly in online courses. Ultimately, first-generation college student status impacts social capital, which impacts student engagement and student contributions to online course success. The subsequent sections will present the literature review for this study.

## **Characteristics of First-Generation College Students**

As postsecondary access continues to increase, campuses will be comprised of more students who never considered continuing education beyond high school (Crawley, 2012). Some of these diverse student populations that are enrolled in online learning are first-generation college students. First-generation college students are classified as students whose parents or guardians have not completed a college degree (Choy, 2011).

More specifically, students whose parents haven't completed at least a bachelor's degree comprise the first-generation college students in this study. Due to a lack of social capital, most first-generation college students lack the support as well as knowledge regarding the function of the postsecondary education system. When compared to continuing-generation college students, first-generation college students tend to be less prepared while enrolled in college (Thayer, 2000). In addition to a lack of social capital and being underprepared to undertake the rigors of postsecondary enrollment, first-generation college students exhibit other characteristics that negatively impact their course completion and educational success.

First-generation college students typically come from lower-income families, are affiliated with an underrepresented ethnic minority group such as African American or Latino and may come from a home in which English is not the first language (Harding, 2008). Additionally, first-generation college students tend to enter college for the first time at 24 years of age or above, and this group is referred to as non-traditional adult students (Harding, 2008). As adult students, they are married, might attend college part-time, and tend to work full-time (Harding, 2008). These factors are positively associated with why first-generation college students prematurely withdraw from college courses (Adelman, 2006) and are twice as likely to leave college before their second year (Harding, 2008).

Research literature suggests that these additional risk factors not only create barriers to success, but these risk factors may also place them at a higher risk as online learners (Crawley, 2012). It is essential to note that each risk factor to which first-generation college students are susceptible may contribute to a decreased successful

course completion rate. Higher education institutions should aim to understand the impact of first-generation college student characteristics on course completion and success.

Understanding first-generation college students' characteristics will help higher education leaders to determine the interventions and resources that are needed to support first-generation college students, and especially those first-generation college students who enroll in online classes.

## **Online Course Completion**

Online learning was defined as "the use of the Internet to access learning materials; to interact with the content, instructor, and other learners; and to obtain support during the learning process, in order to acquire knowledge, to construct personal meaning, and to grow from the learning experience synchronously and asynchronously" (Anderson, 2008, p.4). The expertise of online course delivery in postsecondary institutions has massively increased since the twenty-first century. In 2003, only "15.6% of undergraduate students enrolled in online courses, and 4.9% of undergraduate students chose 100% online programs" (NCES, 2018a, p. 1). For example, Ohio State University's online enrollment has increased by 73%, and online enrollment at the University of Arizona has increased by 75% from 2015 to 2018 (Lederman, 2019). However, the researcher noted that online students were less likely to graduate within eight years, especially those students who enrolled entirely online. While undergraduate student completion rates are 20% to 60%, students who only enrolled in online courses experienced a dismal completion rate of 13% to 48% (Lederman, 2018).

Because institutional leaders are often concerned about the academic performance of students who are enrolled in online courses, college preparedness is paramount to

ensure student success in an online environment (Peterson & Bond, 2004 as cited in Figlio et al., 2013). Therefore, underprepared students would be better served to take face-to-face courses according to the research (Peterson & Bond, 2004 as cited in Figlio et al., 2013). Students who enroll in online courses may not have direct access to services that can directly address transition issues related to executive functioning (i.e., planning and organization skills learning strategies, and metacognition) required for online student success (Metzler, 2014). These issues are exacerbated for first-generation college students who only enroll in online courses.

Postsecondary institutions should recognize that they have a commitment to ensure that students persist to graduation once they are accepted for admission. To be active in their students' success, postsecondary institutions must be familiar with their student profiles, factors that could contribute to their success, and risk factors that threaten course completion (Kuh, 2008). Persistence is defined as "a student-initiated decision to maintain continuous enrollment measured through a series of status-to-status ratios" (Mortenson, 2012, p.23). Researchers have highlighted eight key risk factors that impact course completion, college persistence, and graduation: academic preparedness for college-level coursework, delay in college admission immediately after high school, maintains part-time enrollment, have other responsibilities, such as caregivers or parents, are financially independent, works at least 30 hours per week, and holds first-generation college student status (Berkner et al., 1996; Carroll, 1989; Horn & Premo, 1995 as cited in McCormick & Horn, 1996). It is critical for institutions to know that students with at least two of these major risk factors are more academically at-risk to withdraw from

college than their peers (Choy, 2001; Muraskin et al., 2004; Swail et al., 2003 as cited in State of Higher Education Executive Officers, 2005).

As compared to face-to-face courses, online courses continue to experience high withdrawal rates, which decreases course completion and persistence rates. Park and Choi (2009) conducted a study at a Midwestern university to examine elements that impact student withdrawal in online courses. The purpose of their research was to determine whether student characteristics such as first-generation college student status impacted student success in online courses. Park and Choi (2009) study identified characteristics such as age, gender, educational level, external factors (i.e., family and organizational supports), and internal factors (i.e., satisfaction and relevance as subdimensions of motivation) (p. 207). Their study participants were non-traditional adult learners who enrolled in a large Midwestern university's job-related online courses. Data was collected from Fall 2002 to Summer 2005; 18 distance courses were examined, with 378 learners registering and 204 learners completing (withdrawal rate = 46.0%). From Fall 2005 to Summer 2007, three online courses were offered three times, and 107 out of 234 participants completed the courses (withdrawal rate = 54.2%). The study's researchers concluded that <sup>20</sup> there was an 8% increase in withdrawal rates after changing to a new learning management system (Park & Choi, 2009).

Further analysis was conducted using the online survey, which included the learners' ages, gender, educational level, perceptions of family support, perceptions of organizational support, and motivation in terms of satisfaction and relevance (Park & Choi, 2009). Of the 147 participants, 66.7% (n=98) were persistent learners while 33.3% (n=49) withdrew; 71.4% (n=105) were female, while 28.6% (n=42) were male. More

than one-half of the participants were non-traditional students. Several students also received prior college education (n=79) (Park & Choi, 2009). Organizational support and relevance were statistically significant predictors of learners' decision to withdraw or persist to completion in online courses (Park & Choi, 2009, p.214). The result implies that learners are more likely to withdraw from college when they do not receive the academic support needed to enhance their ability to learn. For instance, adult learners should have the flexibility to take time off from their jobs and receive encouragement from their colleagues to engage in learning activities that contribute to successful course completion. The results also imply that learners who perceive that the course is relevant to their job or life are less likely to withdraw. Adult learners tend to prefer knowledge that is relevant outside of the classroom. Therefore, online courses should be structured to include learning objectives and outcomes that are applicable in real life scenarios and contexts (Park & Choi, 2009). The results imply that a decrease in withdrawal rates can stem from course enhancements by curriculum designers or instructors find ways to enhance the course (Park & Choi, 2009) and engage students. The authors also recommended that adult learners need to be supported by their employers to pursue personal professional development opportunities through their higher education pursuits.

Other factors contributing to high withdrawal rates for online courses are a lack of direction and information before course enrollment (Crawley, 2012). Crawley (2012), an online instructor and an online course developer, researched various colleges to gain useful knowledge of online students' support services and deliver services to improve academic success. Crawley (2012) defined online student services as, "all administrative academic and personal services that online learners need from their institution from their

first institutional contact to the last interaction that they have with that institution" (p.10). According to her findings in her extensive research on supporting students, Crawley (2012) indicated that one reason which contributed to high withdrawal rates in online courses is that institutions might not have support services that appeal to online students. Additionally, since online students do not come to campus, they are sometimes unaware of departments and services available to support their success. Course instructors may be the only person at the institution, outside of their peers, that they contact. The lack of access to support services may serve as a barrier to their success, and eventually, students' frustrations, leading to withdrawal (Crawley, 2012). Based on online students' expectations, Crawley (2012) suggests that supporting online students should be a collaborative effort of faculty, staff, and technology services to design, develop, and deliver services to facilitate students' success and persistence toward completion for online students.

Wavle and Ozogul (2019) investigated the impact of online course outcomes on degree completion using existing graduation outcomes, course enrollment trends, and student grades for undergraduate students at a multi-campus institution. The purpose of their study was to determine the impact of online learning on successful degree completion The researchers controlled for student demographics, individual characteristics (e.g., age, first-generation college student status, socioeconomic status, SAT/ACT scores, and first semester GPA), and institution type (traditional flagship, urban research, and regional). The researchers' findings indicated that by taking at least one online course undergraduate students were more likely to successfully complete their degrees regardless of institution type or student characteristics.

As the student characteristics of higher education continue to change, the changes are also documented in online enrollment in postsecondary education courses.

Undergraduate students who maintain full-time employment, with parental and family responsibilities, have veteran status, and students with disabilities were also more likely to enroll in online courses (Ortagus, 2017). Online courses increase college access and enrollment for at-risk and non-traditional students, such as first-generation college students. Online learning is beneficial to first-generation college students because if they complete at least one online course during their study program, they are more likely to complete their degree, which will advance their careers (Wavle & Ozogul, 2019). First-generation college students may choose online learning because in addition to their flexibility, virtual learning helps reduce some of the obstacles or challenging experiences that arise from cultural and ethnic differences for first-generation college students (Lei & Gupta, 2010).

## **First-Generation College Students Online**

Online learning has also presented new opportunities for first-generation college students to attend college and progress towards degree completion. Pontes and Pontes (2012) conducted a research study to determine whether online first-generation low-income college students were likely to make more significant academic progress than similar students enrolled in on-campus courses. Their study used data from the National Postsecondary Student Aid Survey (NPSAS) of 2008 from about 114,000 undergraduate students in the US. The findings of this study showed that first-generation college students from lower socio-economic statuses who enrolled in online courses were significantly less likely to have an enrollment

gap in 2008 than first-generation college students from lower-socio-economic statuses who didn't enroll in online courses. The results from a large nationally representative sample suggested that providing first-generation college students who have a lower household income threshold with greater access to online classes may increase course completion rates which leads to an increase in degree completion rates for first- generation college students (Pontes & Pontes, 2012). Additionally, due to online learning access, these students were also more likely to enroll part-time. The authors also noted that first-generation college students from lower socio-economic statuses might be more likely to value the flexibility and convenience of online classes, which allows them to maintain continuous enrollment toward degree completion for the entire academic year (Ponte & Pontes, 2012).

Dumais and colleagues (2013) examined the differences between first-generation and continuing-generation college students regarding the barriers, institutional supports, and other factors that impact their online course completion in their mixed-methods study. Data used for the Dumais and colleagues (2013) study was taken from more extensive research on adult learners' educational attitudes in Louisiana. The more extensive study was conducted through the Center for Adult Learning in Louisiana (CALL), a statewide initiative to increase adult learners' degree completion at public institutions throughout the state (Dumais et al., 2013). Telephone and online surveys were used to obtain information on participants' educational history, online educational experiences, access to student services, work-life balance s, and level of perceived support from employers, (Dumais et al., 2013). Three hundred-eight CALL participants fully completed the survey (Dumais et al., 2013). Dumais and colleagues (2013) reported

that first-generation college students accounted for 152 survey respondents while continuing-generation students accounted for 150 survey respondents. Six respondents didn't provide information on their parents' education level (Dumais et al., 2013). In addition, all participants were asked if they would continue with the study by agreeing to engage in a follow-up interview. Ultimately, 30 interviews took place from March 2011through through May 2011 (Dumais et al., 2013). Interviews included 10 openended questions inquiring about adult learners' original interest in CALL, "past educational experiences, family and friends' feelings about college, their feelings about fitting into college and desire for a degree, the kinds of knowledge the student attained in several domains, the institutional supports and barriers to student success, and their best memory/favorite experience with CALL" (Dumais et al., 2013, p.103).

When Dumais & colleagues (2013) controlled for student characteristics and academic achievement, their findings suggested that continuing-generation college students were more academically engaged than their first-generation college student peers. Sense of belonging on campus was the only variable that was consistently and positively predictive of academic engagement (Dumais et al., 2013). Dumais & colleagues (2013) also found that first- and continuing-generation adult online learners expressed similar perceptions about some components of online learning. Both groups equally shared concerns about their ability to complete virtual group assignments, a common challenge in the online learning environment. The researchers' findings further support the need for training and curriculum design to facilitate team-based activities in online courses.

Stone and colleagues (2016) conducted a qualitative research study financed by the Australian Office of Learning and Teaching to investigate the experiences of 87 first-generation undergraduate students in the Open Universities online program. The qualitative methodology included in-depth interviews and surveys with open-ended questions. Forty-three students were interviewed, and 44 students completed an online survey. The researchers used in-depth semi-structured phone interviews to explore the same themes as the interviews and the students' experiences at the institution.

Demographic information was collected from each respondent, including age, gender, relationship status, and dependent status. The overwhelming majority of participants (n=71) were non-traditional students, ranging from 26-61 or older. Females were primarily represented in 82% of survey respondents (n= 36) and 79% of interviewees (n= 34). Sixty-eight percent of survey respondents reported that they worked full or part-time (Stone et al., 2016).

Most participants decided to enroll at Open Universities Australia (OUA) because they were motivated to have a better life for themselves and their families (Stone et al., 2016). Themes for career and employment, using higher education as a catalyst for change, and pursuing an unfulfilled dream of education emerged from survey respondents and interviewees. Participants chose online studies because of their flexibility without interrupting work or family obligations (Stone et al., 2016). Also, participants found the open admissions policy at OUA to enter higher education that they may not have access to otherwise.

Despite online learning growth, institutions' primary concern is to address course completion and first-generation online college students' needs. Stone et al., 2016 found

that although first-generation college student participants responded favorably regarding the benefits of online learning and college access at an open-enrollment institution, there is a need to continue to study how institutions can provide proactive support for online learners. It is necessary to research the barriers and success strategies first-generation college students identify that support success in online learning (Stone et al., 2016). A further consideration for research on first-generation college students' experiences in online courses should continue to provide a diverse perspective internationally. This study provides a limited scope of first-generation college student experiences at an open-enrollment institution in Australia. The results from the study may not be generalizable for first-generation college students enrolled at open-enrollment online institutions internationally.

## **Online Student Engagement**

The online learning environment requires a significant degree of self-regulation. Online learning environment is very largely self-driven and dependent on the learners' ability to manage academic responsibilities, with fewer props than those available in face-to-face classes (Bawa, 2016, p.4). As such, student engagement is a critical component for online course success. Some examples of student engagement include "participating in advising, tutoring, and mentoring by faculty and peers" (Engle & Tinto, 2008, p.4). First-generation college students comprise one of the groups who lacks social capital and may not comprehend the advantages of student engagement, overall experience, and student success (Engle & Tinto, 2008).

Howland and Moore (2002) recognized the impact of online learning and the student experience and the need to improve course design and delivery. They conducted a qualitative study which explored the perceptions and experiences of students enrolled in online courses. Participants were asked to respond via email to answer 12 open-ended questions. The results from 48 online students who participated in the survey identified that self-management, self-reliance, and accurate expectations of learner responsibilities were critical elements for successful online learning experiences. Students who reported positive attitudes about their online course experience felt that the online courses helped them to be more proactive and became more independent self-learners. However, the study also revealed that some students questioned their ability to understand the expectations of assignments and felt that they needed the verbal feedback provided through on campus instruction (Howland & Moore, 2002). Online students stated their desire to feel like they are "important and valued participants in the class," even though they are separated from instructors and other participants by distance and time (Howland & Moore, 2002, p. 192). The findings from the study imply that online courses should be accommodating for those who need additional support for learning and feedback (Howland and Moore, 2002). Feedback is essential in online education because some students questioned their ability to understand expectations of assignments and felt that they needed verbal instruction that on campus courses provides (Howland & Moore 2002). The researchers recommended that program developers and educators work as a team with online students because online students desire to communicate with educators and students through organized group chat sessions (Howland & Moore, 2002). Moreover, the authors also recognized that as more institutions continue to expand for

different types of students, instructors must incorporate strategies that maintain student engagement without increasing the amount of work for the faculty and decreasing course rigor. Online courses can provide an alternative option to deliver instruction for students who have traditional perceptions from their experiences in face-to-face learning environments.

Mupinga et al., 2006 conducted a study to explore the student engagement needs of students taking online courses. Communication with professors, instructor feedback, and technology support were the top three needs with a high rate of reoccurrence from the open-ended question responses (Mupinga et al., 2006). Most (83%) of the online students anticipated that professors would initiate communication. For instance, students voiced the need for coaching guidance through assignments or well-defined expectations on assignments and grading. This consistent communication with the professor assured students that they had submitted all assignments and that they were a part of an online community (Mupinga et al., 2006). Students valued instructor feedback, indicating it was essential for online student success. As such, 79% of the students expected timely graded feedback on a regular basis (Mupinga et al., 2006). Most students (93%) wished for technical support with logging on to the university network and navigating through the learning management system (Mupinga et al. 2006). The students conveyed a request for "a singular course management platform, that is accessible and easy to navigate for all online courses" (Mupinga et al.,2006, p. 187).

Mupinga et al. (2006) recommended that institutions determine students' instructional and technological needs, such as students' learning styles, ability to navigate technology, assess previous knowledge of the subject matter, and motivation prior to

enrolling in a class to adequately address their students' needs. Mupinga et al. (2006) especially emphasized the importance of social presence via faculty-student interaction and student-student interaction. Communication with peers and professors could foster a sense of belonging in online learning settings and reduce disconnectedness (Mupinga et al. 2006).

For online courses, student success and satisfaction have been viewed as synonymous terms (Dahl, 2004). Moore (2014) examined "student success, failure, withdrawal, and satisfaction in online Public Relations (PR) courses based on instructor-student interaction, student-student interaction, and instructor presence" (p. 271). The study took place at a large Mid-Atlantic university using data from Summer 2009 to Fall 2010. Data was collected from online PR courses including, Introduction to PR, PR Writing, Applied PR, and Capstone in PR (Moore, 2014). There were 23 online course sections of PR in Summer 2009 and 28 sections of PR online course offerings in Fall 2010 (Moore, 2014). Twelve online instructors taught online PR courses in Summer 2009 and fourteen instructors for Fall 2010 (p. 276). Seven of the Summer 2009 instructors returned in Fall 2010 (Moore, 2014). All courses had the same course notes, readings, written assignments, and discussion topics. (p. 276). There was an expectation in Fall 2010 that online PR instructors would increase the amount of instructor-student interaction.

The researcher used independent samples t-test to confirm considerable variation in the number of comments from Summer 2009 to Fall 2010 (p. 277). Data was collected from the institution's course evaluations, final grades from students, and communication

records for the learning management system (Moore, 2014). Data analysis for the study consisted of t-tests and multiple regression analysis. Moore (2014) found that online course completion's most significant predictors were self-discipline and peer to peer interaction. Instructor to student interaction, instructor presence, nor student satisfaction had a substantial relationship with successful course completion (Moore, 2014). Implications for additional research suggested that on-campus sections of PR courses are examined, investigating PR instructor interactions' quality and the separation of evaluating technology apart from the course experience (Moore, 2014).

# Online Student Engagement Scale (OSE)

Student engagement has reoccurred as a "fundamental concept that supports student success in online learning" (Dennen et al., 2007; Kehrwald, 2008; Robinson & Hullinger, 2008; Shea et al., 2006; Swan et al., 2000 as cited in Dixson, 2015, p.2). Building online learning atmospheres that are cohesive and interactive can help address specific barriers faced by online students. When students are actively engaged in online learning communities, it decreases opportunities for students to feel isolated, creating occasions for students to develop connections with the instructor and other students (Young, 2006; Lewis & Abdul-Hamid, 2006; Ortiz Rodriguez et., al 2005; Russo & Campbell, 2004; Song & Singleton, 2004, Gaytan & McEwen, 2007, as cited in Dixson, 2015 ). According to researchers, online courses can be as valuable and meaningful as traditional on campus courses (Maki & Maki, 2007; Robertson et.al, 2005; Zhao, Lei et. Al., 2005 as cited in Dixson, 2015). Given the current increase in online learning, institutions must create and assess the effectiveness of research methods to measure many attributes of the online teaching environment to advance research about online

learning (Roblyer & Wiencke, 2004). According to Dixson (2015), student engagement is defined as "the extent to which students actively engage by thinking, talking, and interacting with a course's content, the other students in the course, and the instructor" (para 5).

"Student engagement is critical to student learning, especially in the online environment, where students can often feel isolated and disconnected" (Dennen et.al 2007; Kehrwald, 2008; Robinson & Hullinger, 2008; Shea et.al., 2006; Swan et.al 2000 as cited in Dixson, 2015, p.1).

In 2012, Dixson (2012) created the OSE using a four-step process: "reviewing existing measures of student engagement; conducting a focus group to discuss how those measures would need to be changed for the online environment; creating a pilot of that initial instrument; and performing a test of the instrument" (Dixson, 2015, p. 5). Dixson used the OSE to measure student engagement in the online course. The Community of Inquiry (CoI) model was used as a theoretical framework to test whether OSE substantially and conclusively correlates with examining learning activities in an online course and whether the OSE substantially correlates with application learning activities in an online course (Dixson, 2015). Students were recruited to participate in a study about their experience with online learning via email from online communication instructors at a Midwestern University's regional campus. Five upper-level undergraduate courses were represented in the study, of which there were 13 sections that included 23 female and 11 male respondents. The survey was facilitated through Qualtrics using a 5-point Likert scale. The OSE assessed student perceptions of behaviors, thoughts, or feelings that were characteristic of them in an online course. Students were asked to indicate which

variables, behavior, thought, or feeling, was characteristic of them. Data analysis consisted of running two independent Pearson's correlations: one between the OSE and the number of observation learning behaviors and the second between the OSE and the application learning behaviors (Dixson, 2015, p. 8). Dixson (2015) concluded that there is a significant relationship between the OSE scale and learning behaviors. The presence of the relationship between learning behaviors and the OSE scale strongly supports the validity of the scale in measuring students' engagement. The study provided evidence that there is a relationship between self-reports and observable (by a learning management system) learning behaviors, which validates the scale with fact-based data about behaviors. Passive learning activities such as reviewing posts, e-mails, or course content alone is not enough to be "engaged" in the course (Dixson, 2015). These findings then support the notion that increasing the number of passive learning activities is less significant to student engagement unless more active learning strategies are employed (i.e., posting in the discussion forums, answering e-mails, and other application learning behaviors). Online learning can be as valuable and meaningful as face-to-face learning as long as students effectively interact about course content with their peers, maintain active communication with instructors, and incorporate feedback with the course material (Dixson, 2015). The OSE is a useful tool to measure online student engagement because it provides information beyond what can be obtained from a course management software. The course management software is comprised of course activity data which includes e-mail activity, discussion posts, and the completion of written assignments including quizzes. Findings from the Dixson (2015) study supports the benefits of OSE as it contributes to research in online course development as a useful method to inform

instructors about their students' level of engagement based on the student's degree of activity in the course (Dixson, 2015). Finally, the OSC can provide evidence of teaching effectiveness. Social presence, cognitive presence, and teaching presence are necessary to support online student success and engagement (Dixson, 2015).

## **Academic and Social Engagement**

One of the challenges faced by online courses as compared to on campus courses is the assumption that there are no engagement benefits (i.e., automatic connection). Due to the lack of face-to-face instruction, professors and students do not have the ability to interpret nonverbal communication and real-time interactions (Holzweiss et.al 2014). Furthermore, faculty are also concerned that online courses may not allow their students to fully engage in meaningful learning environments and become critical thinkers (Huang, 2002). Online learning "is a popular form of education being adopted at both undergraduate and graduate levels in higher education" (Sato and Haegele, 2019, p.181). As a result, there is a need for online courses to provide practical learning experiences and activities that support the recruitment and retention of college students (Bryan, 2014).

Due to the lack of research on the effectiveness of online course development,

Sato and Haegele (2019) examined academic and social engagement among physical
education majors enrolled in an online kinesiology course. The authors used the theory of
transactional distance to examine the impact of online courses. This theory posits
"physical distance between the teacher and students, which is inherent to distance
learning, "leads to a communication gap, a psychological space of potential
misunderstandings between the instructors and the learners" (Moore & Kearsley, 2005, p.
224 as cited in Sato and Haegele, p. 182).

Moore (1997) explained that "there are three essential variables necessary to establish a high or low transactional distance and interaction level: teachers and students engaging in distance learning need to consider dialogue, structure, and learner autonomy" (Moore, 1997, p. 95). A qualitative explanatory case study design was conducted at Midwestern University (MU). There were seven participants (5 female and 2 male) who were practicum students enrolled in an online Kinesiology course who completed two open-ended question interview sessions with the lead researcher. All students who participated in the study were expected to engage in the course each week via modules that included quizzes, videos, PowerPoint lectures, chapter summaries, exams, and writing assignments. The researchers collected data via interviews, which they crosstabulated with discussion board posts and writing assignments. Sato and Haegele (2019) found that students' experiences in face-to- face courses (i.e., social interaction and student advocacy) supported their transition to online learning. Students thought instructors helped them by providing detailed feedback and midterm evaluations, which showed their progress. Sato and Haegele (2019) findings also suggest that students were more engaged when they actively asked questions in the online course format. Two students of color identified online courses as a resource to alleviate some of the biases of racial or gender discrimination. Despite this additional social and teaching presence, students still struggled with transitioning from face-to-face instruction. These were found to be lacking adequate writing and critical thinking skills, written communication the only form of communication, and being overly concerned with providing politically correct responses. The results of the Sato and Haegele (2019) study concluded that practicum teaching students could have valuable experiences when enrolled in online

Kinesiology courses. The authors recommended that online instructors incorporate small group learning activities, as they are more constructive than whole-group discussions in online courses (Sato and Haegele, 2019). According to Lewis et al. (2015), small group activities provide feedback while also promoting social engagement. Based upon the fact that the students lacked adequate writing and critical thinking skills, the authors recommended that instructors confer with students who lack these skills and suggest that they contact the academic or technology support centers that can provide the necessary assistance (Sato and Haegele, 2019). Staff members who serve in student support services roles can contribute to academic skill development among students who are enrolled in online courses.

# First-Generation College Student Engagement

Research suggests that students from diverse backgrounds benefit from various student engagement activities. Based on student characteristics and demographics, some students benefit more than others from certain activities (Pascarella & Terenzini, 2005). First-generation college students usually come from families with a lower socioeconomic status and they were less academically engaged than their continuinggeneration college student peers in high school (Terenzini et al., 1996). Continuinggeneration college students are defined as "students whose parents or guardians earned at least one baccalaureate degree" (Giancola et al., 2008, p.2). According to Kuh (2009), student engagement is composed of the time and effort that students dedicate to behaviors that are directly linked to student success (i.e., faculty and peer interactions and student involvement) (Kuh, 2001, 2003, 2009). Both in-class (academic) and out-of-class (co-curricular) engagement activities are essential to student success in academia (Kuh, 2009).

Most of the research on first-generation college students has indicated that firstgeneration college students are less likely to develop relationships with faculty members than their continuing-generation peers. They also work more hours, which impacts their ability to engage with others (Richardson & Skinner, 1992; Terenzini et al., 1996). Also, first-generation college students are less inclined to initiate and maintain strong relationships with students and engage in peer learning opportunities. (Billson & Terry, 1982; Richardson & Skinner, 1992; Terenzini et al., 1994 as cited in Pike and Kuh 2005). To address these achievement gaps in student engagement, a quantitative study by Pike and Kuh (2005) examined the differences in student characteristics, college experiences, and learning outcomes of first- and second-generation students. Astin's (1970) inputenvironment-output (I-E-O) model of college effects and Pascarella's (1985) model of environmental influences on college outcomes were used as conceptual models for the study (Pike and Kuh 2005). Student engagement and integration of experiences are the emphasis of this conceptual model. Data analysis was conducted by using multigroup structural equation models with latent variables. The latent variables were employed to analyze relatively objective estimates of the effects in the model. Multigroup modelling identified the relationship between group membership and the effects of student characteristics and engagement on learning outcomes. The researchers would then measure variation s in the degree of engagement and learning for first- and secondgeneration students and determine whether the differences were a correlation based on first-generation college student status.

One thousand one hundred twenty-seven (1,127) students were selected to complete the College Student Experiences Questionnaire (CSEQ). There were 439 (39%)

survey respondents who identified as first-generation college students and 688 (61%) were second-generation college students. There was representation from various types of higher education institutions. Thirty-two percent (32%) of the respondents were from Doctoral/Research universities 30% were from Master's institutions, 27% attended Liberals Arts colleges, and 11% were from four-year universities. Although the majority of the participants were female (66%), members of underrepresented minority groups only accounted for 16% (5% African American, 3% Asian/Pacific Islander, 4% Hispanic/Latino, 2% Native American, and 2% Multiracial or Other) of the total number of survey respondents). Approximately 85% of the students lived on campus, and twothirds aspired to complete post-baccalaureate degrees. The goodness-of-fit statistical analysis results revealed that the baseline measurement model, which included factor means for the latent variables, provided an adequate representation of the observed data  $(\chi 2 = 890.753; df = 317; p < 0.001)$  (Pike and Kuh, 2005, p. 283). Good fit was confirmed by both the RMSEA coefficient of (0.058), and the SRMR coefficient (0.061 and 0.048). Results from the study confirmed that there were significant differences in terms of student characteristics, college experiences, and learning outcomes between first- and second-generation college students. Although there was limited male representation, first-generation college students were significantly more likely to be males from underrepresented minority groups. Other findings on examining the factor mean for the college-experience indicated that first-generation college students were significantly less engaged both academically and socially as compared to their secondgeneration peers. First-generation college students were more likely to have negative

perceptions of the college environment compared to their continuing-generation peers (Pike and Kuh, 2005).

Institutional goals should include prioritizing improving the level of student engagement for first-generation college students who are considered members of an academically at-risk population in higher education (Coates & Ransom, 2011). The findings from this study suggest that "low levels of engagement are an indirect result of being the first in one's family to go to college and are more directly a function of lower educational aspirations and living off campus" (Pike and Kuh, 2005, p. 290). First-generation college students are often less engaged, and they may struggle with integrating into their campus communities. First-generation college students also perceive the college environment as less supportive, and they are more likely to make less progress in their learning and intellectual development. Based on these study findings, Pike and Kuh (2005) recommend that institutions provide academic support services to mitigate the challenges that first-generation college students may encounter to increase their likelihood for more student engagement and successful integration into the campus community (Pike and Kuh, 2005).

Soria & Stebleton (2012) examined differences in academic engagement and retention of first-year first-generation and continuing-generation college students at a large public research university in the United States (p. 673). The Student Experience in Research University (SERU) online survey was used to collect data on the undergraduate student experience for participants who were enrolled during the Spring 2010 term. First-generation college students accounted for 401 participants, while continuing-generation college students accounted for 1,167 participants who completed the entire survey. First-

generation college students were more likely to be students <sup>46</sup> from underrepresented minority groups and have lower socio-economic status, and as a result, the researchers decided to control those variables (Soria & Stebleton, 2012).

The academic engagement variables in this study were taken from central survey items. Those items inquired about the occurrence of their participation in <sup>12</sup> educational - related activities during the school year (i.e., contributing to class discussions, asking questions, and connecting content from other courses) (Soria & Stebleton, 2012). A likert-scale was used to rank items from 1 to 6 ('never' to 'very often'), and the average scores in the data analyses. The study also examined control variables for student r perceptions of campus climate and their sense of belonging if they corelate with retention and engagement (Soria & Stebleton, 2012). The study results suggested that first-generation college students are more likely to drop courses or withdraw completely than their continuing-generation peers, even when controlling for additional factors. First-generation college students were more likely to be less academically engaged than their continuing-generation peers when controlling for other variables.

Yee's (2016) ethnographic study investigated undergraduate students' academic engagement strategies from different social classes throughout their freshman and sophomore years of college. The researcher conducted a longitudinal study that included semi-structured interviews, participant observations, and transcript analysis (Yee, 2016). The study took place at a public university referred to as Central University. Yee (2016) chose a public university to capitalize on diversity amongst social class and race. Participants were recruited during the summer at New Student Orientation to focus on incoming freshmen throughout their sophomore year. Purposeful selection was used to

confirm diversity social class of the participant pool (Yee, 2016). For this study, social class was defined as the parent education since the participants knew that information (Yee, 2016). The study consisted of two phases of interviews and observations. The first phase included thirty-four students (N=19 first-generation; N=15 middle-class-continued generation) who were interviewed, then eight students were then chosen for the second phase, which included longitudinal participant observations (Yee, 2016). The semistructured interview questions included topics of college expectations, inconsistencies between students' "expectations and experiences, decision-making processes around courses and majors, and evolving beliefs, skills, and strategies for achieving academic success" (Yee, 2016, p. 838). The participant observations took place as students attended classes, studied, met with campus constituents (faculty & staff), and spent time with friends throughout the 2011-2012 academic year (Yee, 2016). Data were collected from July 2011 through May 2013 (Yee, 2016). The researcher attempted to immerse in the student community by not providing mentor advice and focusing on forging bonds to build an authentic rapport with the participants (Yee, 2016).

Yee (2016) indicated that interview transcripts and field notes from observations were read multiple times, after which they were coded deductively and inductively using Atlas. Ti. Both first-generation and middle-class college students recognized the need to be active participants in their coursework, but they engaged differently (Yee, 2016). The concept of interaction was central to middle-class students' academic success. Interactive academic engagement strategies (i.e., attending office hours, communication with the professor/teaching assistants to seek clarity, submitting drafts of assignments before their

due date, building casual rapport with faculty, and using campus resources) were highlighted as crucial engagement strategies by middle-class students.

In contrast to continuing-generation college students, their first-generation college student counterparts valued independent engagement strategies. First-generation college students believed that it is their responsibility to succeed (Yee, 2016). There was a common theme of relying on themselves. When faced with obstacles, they attempted to solve the problem independently (i.e., re-reading chapters and other labor-intensive independent study strategies). First-generation college students seemed to avoid interaction, or if they encountered a negative experience when seeking assistance, they were less likely to do so again (Yee, 2016). The researcher suggested that higher education practitioners should broaden the concept of engagement to promote equal recognition of all undergraduate students' engagement strategies (Yee, 2016).

# **Chapter Summary**

Chapter 2 introduced the student engagement theory, and two theoretical frameworks for this study (Community of Inquiry and Social Capital) were examined. The relevancy of the theoretical frameworks to this study was explained, and a review of the literature was provided. The literature reviewed in this study contributes to several aspects of the proposed research, primarily focusing on student engagement in online environments and first-generation college students' engagement and performance levels as compared to their continuing-generation peers. Since the purpose of this study is to compare first-generation and continuing-generation college student success and engagement in an online Jr. level course, the literature reviewed in this chapter is appropriate. There has been minimal research focused on first-generation online college

students' levels of engagement and course outcomes in an upper-level general education course within the same study. Previous literature has supported a need for ongoing research that focuses on students' perception of online learning coupled with course outcomes. This study will address this gap in the current literature. Chapter 3 will present the methodology of this study.

# **Chapter 3: Methodology**

Online course offerings are becoming commonplace in higher education. In Fall 2018, were "5.7 million undergraduate degree seeking students enrolled in online courses across the United States" (NCES, 2018b, p.1). With an increase in online education, it is necessary to conduct research that supports student success in online learning specifically for one of the most academically at-risk student populations, first-generation college students (Crawley, 2012; Majer, 2009; Park & Choi 2009; Seay, 2006; Stone et al., 2016). Subsequently, the purpose of this mixed methods exploratory study is to examine the difference between first-generation and continuing-generation undergraduate student engagement and success in a 100% online Jr. Level English course. The researchers chose the term continuing-generation college students to capture all students who have a parent (or guardian) who graduated from college with a bachelor's degree (Giancola et al., 2008, p.2).

#### **Mixed Methods Design**

... A mixed methods research "design is defined as a type of analysis that involves collecting quantitative and qualitative data, integrating the two forms of data, and using a theoretical framework" (Creswell & Creswell, 2018, p. 215). Mixed methodology "emerged in the late 1980s and early 1990s in its current form based on work from individuals in diverse fields such as evaluation, in education, management, sociology, and health sciences" (p. 215). A convergent mixed methods approach was selected because it "allows the researchers to capitalize on the strengths of both qualitative and quantitative methodologies, which minimizes limitations when using one single methodology" (p. 216). This method is a beneficial strategy to leverage a holistic understanding of research problems and research questions at a procedural level. When comparing differences, perspectives are drawn from quantitative and qualitative data. The qualitative data expands upon the quantitative results through data analysis. Mixed methods designs "develop better-contextualized measurement instruments by first collecting and analyzing qualitative data and then administrating the instruments to a sample and developing a complete understanding of changes needed for a marginalized group through the combination of quantitative data" (p. 216).

This study utilized a convergent mixed method design rather than a qualitative design or mixed methods design.

...A convergent mixed methods design "is a type of design in which qualitative and quantitative data are collected in parallel, analyzed separately, and then merged" (Creswell & Creswell, 2018, p. 216). The mixed methods design "relies on the idea that quantitative and qualitative data provide different types of data interpretation meanings" (p.217). Detailed views of participants' experiences are measured qualitatively, whereas the scores on instruments are measured quantitatively (p. 217).

This study's primary purpose was to examine the differences in student engagement and course completion outcomes for first-generation and continuing-generation college students in a 100% online Jr. level English course at a Midwest public university. The quantitative methodology will also support a geographically dispersed online student population and generate a large sample size for statistical purposes.

According to Creswell & Creswell (2018), "quantitative research approach may include "(a) identification of factors that influence an outcome, (b) the utility of an intervention, or (c) understanding the best predictors of outcomes, then the quantitative approach may be best" (p.19). When employing quantitative analysis "the problem is best addressed by understanding what factors or variables influence an outcome" (Creswell & Creswell, 2018, p. 104). The convergent mixed methods approach guided this study's exploration, examining the differences in online course completion and student engagement.

## **Research Questions**

Are first-generation college students less likely to complete a 100% online Jr.
 Level English course as compared to their continuing-generation peers?

- 2. Is there a significant difference in success (self-reported final course grade of Cornigher) for first-generation and continuing-generation college students in a 100% online Jr. Level English course?
- 3. Is there a significant difference in student engagement levels for first-generation and continuing-generation college students who enroll in a 100% online Jr. Level English course?
- 4. Is there a significant difference in the relationship between student engagement and success (self-reported final course grade of C- or higher) for first-generation and continuing-generation college students in a 100% online Jr. Level English course?

#### Method

### Research design

This study utilized the Community of Inquiry (CoI) model framework to guide the development of the research design. Specifically, we focused on the three components of the CoI model: social presence, cognitive presence, and teaching presence to measure student engagement. Generational status (first-generation or continuing-generation) was used as the independent variable. The researchers believe that there was a need to explore the demographic of first-generation college student status influence of successful online course completion, particularly demographics such as age, gender, or ethnicity (Lee & Choi, 2011; Park, 2007; Willging & Johnson, 2004, Lee et al., 2013). The dependent variables of the study are completion status (complete or withdrew), course success (self-reported final grade), and student engagement (CoI: social presence,

cognitive presence, teaching presence, and a total student engagement score). Successful course completion is defined by the metric of obtaining a grade of C- or higher.

#### Measures

The researchers developed an online survey to measure the levels of social presence, cognitive presence, teaching presence, and overall student engagement total. The survey consisted of a total of 35 items that were modified based on previous studies. The researchers consulted with the program's faculty mentor team at the research site during the development of the survey instrument. The researchers modified questions from Soria & Stebleton (2012), Shah & Cheng (2019), and Dixson's (2015) Online Student Engagement (OSE). Some examples of the modified questions to measure student engagement are listed below.

Some social presence survey questions are:

I feel a sense of belonging at MPU (or I feel a sense of belonging as a student at this institution)

I enjoyed participating in my online ENGL 3100 Jr. Level English class

Some cognitive presence survey questions are:

I am able to write clearly and effectively in English

I submitted all assignments on time

I regularly accessed course materials in Canvas

Some teaching presence survey questions are:

I believe my professor had good knowledge

The course information was useful

My professor was available to answer questions and/or had office hours

In terms of the internal reliability of survey questions, Nunnally (1978) suggested that a "reliability coefficient represented by a Cronbach's alpha of 0.70 or higher is considered acceptable in most social science research situations" (p.101). In this study, the internal reliability of the questions was assessed using Cronbach alphas. Since the questions are based on questions from other studies, the values from those studies will also be used for this study. An alpha of at least 0.80 is predicted for the variable "a sense of belonging" (Soria & Stebleton, 2019) and it is predicted that the alpha will be 0.95 for the student engagement variable (i.e., social presence, cognitive presence, and teaching presence) (Dixson, 2015). As a result, the researchers are confident in the validity and reliability of the survey questions to measure student engagement and sense of belonging.

Pearson's correlation was used to establish the relationship between the variables. Subsequently, an exploratory factor analysis will be conducted to determine which variables should be used in the final measure. If a question has a score of .7 or higher, it will be included in the final survey.

# **Participants and Setting**

This study was conducted in a midsize public research university located in the Midwest region, referred to as Midwest Public University (MPU). MPU has a diverse population of students ranging across socio-economic status, generational status, racial and ethnic backgrounds, and age groups studying in various degree programs. The diversity within the student population will include first-generation college students. The student population will consist of undergraduate degree-seeking students enrolled in a

100% online Jr. level English course. All undergraduate degree-seeking students must complete a Jr. level English course with a letter grade of C- or higher.

This study examined the Jr. level English course requirements for students pursuing majors in the School of Arts & Sciences. The Jr. level English course was selected because it is required for all undergraduate students enrolled at the research site. Although the research site serves a large population of transfer students, all degree-seeking students must complete a Jr. level English course before earning a bachelor's degree from the institution. Students who enroll in a Jr. level English course have received at least 56 credit hours and completed a First-Year Writing course or the equivalent at a two-year or four-year institution in the Midwest. This course is offered entirely online as an on-campus course in a hybridized format. There are approximately 10-13 sections of the 100% online Jr. level English course. Each section of has an enrollment capacity of no more than 20 students. Participants in this study were enrolled in a 16-week 100% online section of the Jr. Level English course.

## **Data Collection**

The researchers obtained Institutional Review Board (IRB) approval to request email addresses of students enrolled in the 100% online Jr. Level English course at the census date of the Spring 2021 semester at research site. An online survey was used to collect data through Qualtrics. It included demographic questions and modified items from Shah & Cheng (2019), Dixson (2015), and Soria & Stebleton (2012). Email messages that provide an overview of the study and a link to the survey were sent to all students enrolled in the online Jr. Level English course during the Spring 2021 semester. Participants were offered five \$20 Visa gift cards as an incentive for completing the

survey to encourage engagement. If the participant would like to enter the drawing for one of five \$20 Visa gift cards, they accessed a second survey at the end of the student engagement and course outcomes survey.

## **Data Analysis**

This study determined if there were differences in course success (self-reported final grade), completion rates (complete or withdrew), and student engagement (CoI: social presence, cognitive presence, and teaching presence) between first-generation students and continuing-generation students enrolled in the online Jr. level English course in Spring 2021. Students will were asked to indicate their agreement with each statement presented in the survey using a 4-point Likert scales from 1 (*strongly disagree*) to 4 (*strongly agree*).

The data analysis for this study included three statistical methods, independent samples (two-tailed t-test), One-way ANOVA, and One-way MANOVA analysis, to examine if the two groups of students (first-generation or continuing-generation) were different on a set of dependent variables. For the qualitative portion of the convergent mixed methods design, open-ended questions were designed to collect data. Qualitative research is "an explanatory research method whereby data is collected to gain insight into the specific meanings and behaviors experienced through the participants' individual experiences" (Polgar & Thomas, 2000, p. 27). The strength of qualitative research design is "its ability to capture detailed information on the participants' experiences in the study that may not have been obtainable through statistical sampling techniques" (Polgar & Thomas, 2000, p. 27). We have designed open-ended questions to collect data and gain insight into first-generation experiences compared to continuing-generation students

while enrolled in the 100% online Jr. level English course. We plan to analyze the qualitative database by coding the data and categorizing into broader themes. Where appropriate frequencies will also be provided. Otherwise, participant comments will be provided to show insight into student engagement, course completion, and course success.

Data analysis for each research question will consist of descriptive and inferential statistics. Descriptive and inferential statistics were analyzed using SPSS. Two independent samples (two-tailed) t-tests, an Analyses of Variances (ANOVA), a Multivariate Analyses of Variances (MANOVAs), and post-hoc analyses (where needed) were performed to answer the research questions.

# Question 1: Are first-generation college students less likely to complete a 100% online Jr. Level English course as compared to their continuing-generation peers?

An independent samples (two-tailed) t-test was performed for research question one. The independent variable (IV) was generation status, and it also contained two descriptor levels (first-generation and continuing-generation status). There is one dependent variable (DV), which is completion. The DV contains two descriptor levels (completed or withdrew). "A t-test is the most basic statistical test that measures group differences, which analyzes significant differences between two group means.

Consequently, a t-test is appropriate when the IV is defined as having two categories" (Mertler & Reinhart, 2017, p. 15). Because the IV contains two categories and the researchers are examining differences between the two groups, an independent samples (two-tailed) t-test was used. An independent samples (two-tailed) t-test will be used

because the researchers are unsure of the direction (positive or negative) of the differences between the descriptive categories of the IV.

Question 2: Is there a significant difference in success (self-reported final course grade of C- or higher) for first-generation and continuing-generation college students in a 100% online Jr. Level English course?

Research question two will require the use of an independent samples (two-tailed) t-test. Self-reported final course grades will be used as the dependent variable. The DV variable contained two descriptor levels: successful (final grade C- or higher) or unsuccessful (D, F, Excused Grade (EX), Excused Failing (EX-F)). The independent variable is generation status, and it also has two descriptor levels (first-generation and continuing-generation status). "A t-test is the most basic statistical test that measures group differences, which analyzes significant differences between two group means. Consequently, a t-test is appropriate when the IV is defined as having two categories" (Mertler & Reinhart, 2017, p.15). The researchers used an independent samples (two-tailed) t-test because the IV contains two categories and the researchers are examining differences between the two groups. An independent samples (two-tailed) t-test was used because the researchers were unsure of the direction (positive or negative) of the differences between the categories of the IV.

Question 3: Is there a significant difference in student engagement levels for first-generation and continuing-generation college students who enroll in a 100% online Jr. Level English course?

For research question three, an Analyses of Variance (ANOVA) was performed to determine the difference between first-generation and continuing-generation college students in regard to their levels of student engagement in a 100% online Jr. Level English course. The independent variable is generation status, and it contained two descriptor levels (first-generation and continuing-generation status). The dependent variable, student engagement, included four levels: social presence, cognitive presence, teaching presences, and a total student engagement score. An ANOVA "tests the significance of group differences between two or more means as it analyzes variation between and within each group" (Mertler & Reinhart, 2017, p. 15). Since the IV contains two categories, the DV is quantitative, and the researchers are exploring the possibility of differences between the two groups, an ANOVA was used. If the ANOVA is statistically significant, a post hoc analysis will be used to "determine specific group differences" (Mertler & Reinhart, 2017, p. 15).

Question 4: Is there a significant difference in the relationship between student engagement and success (self-reported final course grade of C- or higher) for first-generation and continuing-generation college students in a 100% online Jr. Level English course?

For research question four, a Multivariate Analyses of Variances (MANOVA) was performed. The independent variable is generation status, and it also contained two levels (first-generation and continuing-generation status). The first dependent variable is student engagement and included four levels: social presence, cognitive presence, teaching presences, and a total student engagement score. The second dependent variable is success (self-reported final course grade) and it contains two descriptor levels:

successful (final grade C- or higher) or unsuccessful (D, F, Excused Grade (EX), Excused Failing (EX-F)). A MANOVA is "used to simultaneously study two or more related DVs while controlling for correlations among the DVs" (Vogt, 2005 as cited in Mertler & Reinhart, 2017, p. 16). Since the IV consists of two categories, there are two or more DVs, and the researchers are examining differences between and within the two groups, a MANOVA will be used. According to Mertler & Reinhart (2017) if the MANOVA is statistically significant, a post hoc analysis should be used to determine the difference.

# **Ethical Considerations and Design Limitations**

#### Researcher Positionality

Both researchers are currently employed at the research site in a full-time capacity in student services roles. One is an Academic Advisor for the School of Social Work, and the other is an Assistant Director of Support Services in an Academic Support unit.

Having dual roles as a staff member and researcher could present a challenge as it pertains to this study. As student services practitioners, the researchers have access to student records and course information they would not otherwise have as an outside researcher. There may be times when the researchers can't use the access granted to them for work purposes to protect student information confidentiality for research purposes.

The researchers adjusted their perspectives to separate those roles to comply with ethical research regulations. On the other hand, being an insider in the process provided more insight into its culture. The researchers had more of an opportunity to build relationships with the English department chair to gain buy in to examine course outcomes and student perceptions of barriers and success strategies in a fully online Jr. level English course.

#### Faculty and Staff Anonymity and Confidentiality

Fowler (2014) identified that "response bias is a risk associated with quantitative research" (p.10). Response bias is the result of nonresponses on survey evaluations (Fowler, 2014, p.10). Bias implies that if non-respondents had responded, those responses could significantly modify the results. The researchers worked with their faculty mentor team, our dissertation chair, the Office of Research Administration, and IRB to ensure compliance with ethical research requirements. The standard informed consent protocol included a one-time consent. The informed consent document stated that participants can opt out of the process at any point in time.

#### Student Data

It was also necessary to address Internet-based survey methods' ethical issues. Baker (2012) identified several other problems with Internet-based survey methods to consider in this study, "including the ability to securely store data, replicating responses, and required-response items" (p.8). With permission from the IRB and the Registrar at the research site, the researchers requested the campus email addresses of students who were enrolled in the 100% online Jr. Level English course during the Spring 2021 semester through census. No student-level information will be shared with the researcher. All responses to the questionnaire were anonymized. The researchers used university servers to implement and store questionnaires and data because they are viewed as the most secure method, but they cannot guarantee confidentiality. Survey respondents will be required to read a cover page on the questionnaire and proceeding with the survey means they consent to participate in the study. If participants are interested in entering the drawing for a \$20.00 Visa gift card they were directed to another survey to enter their email address.

The researchers were aware to some extent of the sensitive subject matter disclosed in some survey questions inquiring about final course grades, cumulative grade point average, and degree of student engagement. Girard (2015) stated that there is the possibility of experiencing negative emotions when participants were asked to "recall situations when they did not achieve a goal they set for themselves" (p. 62). A discussion of this risk was included with informed consent procedures.

# **Chapter Summary**

This chapter provided an overview of the convergent mixed methods research methodology and the procedures used to collect and analyze data throughout the research process. Overall, the research team aspires to incorporate student feedback on the collaboratively authored survey instrument. The goal is to create a data-driven springboard to strengthen persistence through online course completion resources and create a lasting, comprehensive student support culture.

#### **Chapter 4: Results**

The COVID-19 pandemic has transformed higher education access, support services, and course delivery. Although online courses existed pre-pandemic, the number of students who will continue to gravitate to online learning will increase. (Ali, 2020; Nambiar, 2020). Before the COVID-19 pandemic, "there were already high growth and adoption in education technology, with global EdTech investments reaching \$18.66 billion in 2019" (Li & Lalani, 2020, p.1). Some students who may have been resistant to online learning have started to embrace the idea of enrolling in online courses as a regular occurrence. (Li & Lalani, 2020). As a result, in the increased interest in online learning, "higher education institutions across the globe are expected to invest more than \$350

million in online education technology by 2025" (Li & Lalani, 2020, p.1). Due to the expected expansion of diverse student populations pursuing online course options, institutions should continue to explore online teaching and learning practices that promote student success.

Among the diverse students pursuing online learning are first-generation college students. At the research site, referred herein as Midwest Public University (MPU), which is a public university in the Midwest region that offers undergraduate and graduate degree programs, 33% (2,336) of all undergraduate students enrolled during the Fall of 2019 were first-generation students (Anonymous, 2019). Over half (65.6%) of the first-generation undergraduate students at MPU enrolled in at least one online class in Fall 2019. First-generation college students are defined as students whose parents haven't completed at least a bachelor's degree. In contrast, "continuing-generation (CGS) college students in this study are defined as students who have a parent (or guardian) who graduated from college with a bachelor's degree" (Giancola et al., 2008, p.2).

While first-generation college students seek out online learning opportunities that provide flexible learning options, they are considered an academic at-risk student population (Horton, 2015). At-risk students are students who have risk-factors that include background, individual, or environmental characteristics. (i.e., race or ethnic origin, health, family obligations, academic preparedness, mindset, transportation) (Horton, 2015). As a result of the risk factors directly linked with characteristics of being a first-generation college student, first-generation college students tend to have lower student engagement as compared to their continuing-generation peers, which impacts their success in online courses (Pascarella et al., 2004). For the purposes of this study,

student engagement is defined as "the extent to which students actively engage by thinking, talking, and interacting with the content of a course, the other students in the course, and the instructor" (Dixson, 2015, para 3). Successful course completion is obtaining a grade of C- or higher. If there is a decrease in online enrollment due to the lack of student success, it can severely impact recruitment, persistence, and student retention.

# **Purpose and Research Questions**

The purpose of this study was to examine the difference between first-generation and continuing-generation undergraduate student engagement and success in a 100% online Jr. Level English course at a university located in the Midwest region. The research questions are as follows:

- Are first-generation college students less likely to complete a 100% online Jr.
   Level English course as compared to their continuing-generation peers?
- 2. Is there a significant difference in success (self-reported final course grade of C-or higher) for first-generation and continuing-generation college students in a 100% online Jr. Level English course?
- 3. Is there a significant difference in student engagement levels for first-generation and continuing-generation college students who enroll in a 100% online Jr. Level English course?
- 4. Is there a significant difference in the relationship between student engagement and success (self-reported final course grade of C- or higher) for first-generation and continuing-generation college students in a 100% online Jr. Level English course?

#### **Overview of Theoretical Frameworks**

The theoretical frameworks that guided the study include Garrison and colleagues (2003) Community of Inquiry (CoI) model and Bourdieu's (1986) Social Capital theory. The Community of Inquiry (CoI) model was used to conceptualize student engagement. The Community of Inquiry (CoI) Model is grounded in Kuh's (2003) theory of student engagement and its impact on student success. Social presence, teaching presence, and cognitive presence are all grounded in the Community of Inquiry framework. These three components are needed to effectively enhance participatory engagement between students and faculty in the online learning environment (Garrison et al., 2000 as cited in Dixson, 2015).

Bourdieu's (1986) Social capital theory was used to address the stark disadvantages of first-generation college students' lack of knowledge and resources to navigate higher education settings. In addition, lack of social capital places first-generation college students at a disadvantage related to their expectations of understanding the value of student engagement (Soria & Stebleton, 2012). Social capital is defined as "privileged knowledge, resources, and information received through social networks" (Bourdieu, 1986, p. 248).

# **Data Analysis**

A convergent mixed methods research design was used to collect and analyze data for this study. A mixed methods research design is defined as "a type of analysis that involves collecting quantitative and qualitative data, integrating the two forms of data, and using a theoretical framework" (Creswell & Creswell, 2018, p. 215). An online survey including three questions that provided an "other" option to solicit open-ended

responses was used to collect data through Qualtrics. The data analysis for this study included two statistical methods, independent samples (two-tailed) t-test, and a one-way MANOVA analysis, to examine if the two groups of students (first-generation or continuing-generation) were different on a set of dependent variables. All statistical analysis tests were conducted in SPSS. For the qualitative portion of the convergent mixed methods design, open-ended questions were designed to collect data. The researchers realized that there were limited open-ended responses from participants in the study. There were only 10 open-ended responses across the three questions that included an "other" option.

# **Participants**

Participants were 104 participants from a random sample of 330 students enrolled in the Jr. Level English course during the Spring 2021 semester. This is a response rate of 31%. The majority of respondents were white (63%) and identified as female (75%). First-generation college students accounted for 42% of all respondents (n = 44) and continuing-generation college students represented (58%) of the remaining respondents (n = 60).

Table 1
Demographic Characteristics of Participants

- ·	•		
Characteristic	Ν	%	
Generational Status			
First-Generation	44	42	
Continuing Generation	60	58	
Gender			
Male	25	24	
Female	78	75	

Non-binary	1	1
Age		
18-24	67	64
25-40	35	34
41-60	2	2

#### Research Question 1: Independent samples (two-tailed) t-test results

The first research question explored if first-generation college students were less likely to complete a 100% online Jr. Level English course compared to their continuing-generation peers. There were only five survey respondents from the 104 total respondents who withdrew from the course. First-generation college students represented 60% (n=3) of the total respondents who withdrew, and continuing-generation college students accounted for the remaining 40% (n=2). This sample was too small to determine any statistically significant differences when comparing completion rates among first-generation college students and their continuing generation college student counterparts enrolled in a 100% online Jr. Level English course during the Spring 2021 term.

#### Research Question 2: Independent samples (two-tailed) t-test results

An independent samples (two-tailed) t-test was conducted to determine if there was a statistically significant difference in success (final grade of C- or higher) between first-generation and continuing generation college students in the Jr. Level English course. Self-reported letter grades were interpreted by the following numerical values as follows:

Of the 41 first-generation college students who completed the online Jr. Level English course, 93% (n=41) of the first-generation college student respondents

successfully completed the course with a C- or higher final grade. Comparably, fifty-eight (n=58)continuing generation college students completed the Jr. Level English course with a C- or higher. One continuing generation college student reported having earned a D or D- as a final grade. There was not a statistically significant difference in the scores for course success for first-generation (M = 1.86, SD = 1.55) and continuing generation college students (M = 1.90, SD = 1.21) conditions; t(102)= -.134, p = .894. These results suggest that generational status does not significantly affect success in the 100% online Jr. Level English course. Note, this result could be due to the small sample size. A larger sample, which includes more first-generation college students, may yield a different result.

Table 2
Group Statistics

						Std. Error
	Generational status	N		Mean	Std. Deviation	Mean
Final course grade	First-generation		44	1.86	1.549	.234
	Continuing		60	1.90	1.217	.157
	generation					

Table 3
T-test Equality of Means

Levene's	t-test for Equa	lity of Means	t-test for Equality of Means 95% Confidence Interval of the Difference	
Sig. (2- tailed)	Mean Difference	Std. Error Difference	Lower	Higher

Final course grade	Equal variances assumed	.894	036	.271	574	.502
	Equal variances not assumed	.898	036	.281	597	.524

#### **Research Question 3: One-way ANOVA results**

A one-way analysis of variance (ANOVA) was conducted to examine statistically significant differences in student engagement levels for first-generation and continuinggeneration college students who enrolled in a 100% online Jr. Level English course. The independent variable is generation status, and it contained two descriptor levels (firstgeneration and continuing-generation status). The dependent variable, student engagement, included four levels: social presence, cognitive presence, teaching presences, and a total student engagement score. ANOVA and descriptive statistics analysis results of student engagement levels for first-generation and continuinggeneration students as indicated in Table 4 showed slight differences in the student engagement level of scores. The mean social presence score for first-generation was 10.61 (SD=1.93); this is slightly lower for continuing generation college students with a mean of 10.75 (SD 2.33). The cognitive presence mean score for first-generation college students is 16.31 (SD 3.10), while the mean score for continuing generation college students is 16.15 (SD 2.69), slightly lower than first-generation students. The mean teaching presence score for first-generation college students was 17.23 (SD 2.44) was higher than the mean for continuing generation students of 16.40 (SD 3.13), thus slightly lower than first-generation college student survey respondents. The data analysis showed

that the teaching presence score is highest for first-generation college students with a mean of 17.23~(SD~2.44) than all other groups' scores.

Table 4

One-way ANOVA Mean and Standard Deviation scores for levels of Engagement by Generational Status

95% Confidence Interval for Mean

		N	Mean	Std. Deviation	Std. Error	Lower Bound
Social Presence	First-generation	44	10.61	1.932	.291	10.03
Score	Continuing generation	60	10.75	2.333	.301	10.15
	Total	104	10.69	2.164	.212	10.27
Cognitive	First-generation	44	16.32	3.109	.469	15.37
Presence Score	Continuing generation	60	16.15	2.692	.348	15.45
	Total	104	16.22	2.862	.281	15.66
Teaching	First-generation	44	17.23	2.448	.369	16.48
Presence Score	Continuing generation	60	16.40	3.136	.405	15.59
	Total	104	16.75	2.882	.283	16.19
Total Student Engagement Score	First-generation	44	44.16	5.685	.857	42.43
	Continuing generation	60	43.30	6.046	.781	41.74
	Total	104	43.66	5.883	.577	42.52

Table 5
One-way ANOVA Student Engagement Scores by Generational Status
Descriptives

		95% Confidence Interval for Mean		
		Upper Bound	Minimum	Maximum
Social Presence Score	First-generation	11.20	6	15
	Continuing generation	11.35	5	16
	Total	11.11	5	16
Cognitive Presence	First-generation	17.26	5	20
Score	Continuing generation	16.85	8	20
	Total	16.78	5	20
Teaching Presence	First-generation	17.97	9	20
Score	Continuing generation	17.21	5	20
	Total	17.31	5	20
Total Student	First-generation	45.89	27	53
Engagement Score	Continuing generation	44.86	21	52
	Total	44.81	21	53

The one-way ANOVA was also conducted to determine whether the difference in mean scores reaches significance in the student engagement level scores for first-generation and continuing-generation students. The ANOVA results in Table 6 revealed that there aren't any statistically significant differences in student engagement levels for

first-generation and continuing-generation college students who enroll in a 100% online Jr. Level English course. The social presence score, cognitive presence score, and teaching presence for both first-generation and continuing-generation scores, p>.005 for the two groups F(1, 102) =.539, p=.465. Post hoc tests were not performed for Social Presence Score, Cognitive Presence score, Teaching Presence score, and total student engagement because there are fewer than three groups (i.e., first-generation and continuing-generation) and the ANOVA was not significant.

Table 6
One Way ANOVA Mean scores between and within groups (Generational Status)
ANOVA

		Sum of Squares	df	Mean Square	F	Sig
Social Presence Score	Between Groups	.472	1	.472	.100	.753
	Within Groups	481.682	102	4.722		
	Total	482.154	103			
Cognitive Presence	Between Groups	.718	1	.718	.087	.769
Score	Within Groups	843.195	102	8.267		
	Total	843.913	103			
Teaching Presence	Between Groups	17.373	1	17.373	2.114	.149
Score	Within Groups	838.127	102	8.217		
	Total	855.500	103			
Total Student	Between Groups	18.735	1	18.735	.539	.465
Engagement Score	Within Groups	3546.486	102	34.769		
	Total	3565.221	103			

# Research Question 4: One-way MANOVA results

A one-way multivariate analysis of variance (MANOVA) was conducted to determine differences in student engagement and success for first-generation and

continuing-generation college students. Before the test was conducted, variables were analyzed to determine if there were any outliers with a student engagement score of zero. The researchers determined that the respondent sample didn't include any outliers. MANOVA results revealed that there wasn't a significant difference among generational status on the dependent variables of student engagement and course success [Wilks'  $\lambda$  = .974, F(4, 99)= .673, = 1.78, p = .612]. Univariate ANOVA was conducted as a follow-up test. ANOVA results indicated that student engagement doesn't differ based on generational status. Course success doesn't significantly differ for generation status. Table 4 presents the adjusted and unadjusted means for course success and student engagement scores.

Table 7

Means and Standard Deviations for Final Course Grades and Student Engagement levels by Generational Status

	Generational status	Mean	Std. Deviation	N
Final course grade	First- generation	1.86	1.549	44
a. coaco B. aa.c	Continuing-	1.90	1.217	60
	generation	2.50	1.21,	
	Total	1.88	1.360	104
Social Presence Score	First-generation	10.61	1.932	44
Social Presence Score	Continuing-	10.75	2.333	60
	generation	10.75	2.555	00
	Total	10.69	2.164	104
Cognitive Presence	First- generation	16.32	3.109	44
Score	Continuing-	16.15	2.692	60
	generation			
	Total	16.22	2.862	104
Teaching Presence Score	First-generation	17.23	2.448	44
	Continuing-	16.40	3.136	60
	generation		3.23	
	Total	16.75	2.882	104
Total Student	First-generation	44.16	5.685	44
Engagement Score	Continuing -	43.30	6.046	60
0.01 1 00000	generation			
	Total	43.66	5.883	104

# **Qualitative Data Analysis**

The qualitative data were manually coded and analyzed separately by the researchers. The researchers compared their analyses and created broad themes and constructs from the qualitative findings as recommended by Creswell and Creswell (Creswell & Creswell, 2018). In analyzing the open-ended question data, the three significant constructs were course organization, the value of practical content, and sense of belonging, which were not applicable for the Jr. Level English course.

Three questions from the survey were designed as open-ended questions to collect data and gain insight into first-generation college students' experiences compared to their continuing-generation peers while enrolled in the 100% online Jr. level English course. Data were collected from 107 participants from a random sample of 330 students enrolled in the Jr. Level English course during the Spring 2021 semester. One hundred four students (*n*=104) completed the online survey in its entirety. A total of eight (8) students responded to the open-ended questions. Two (n=2) first-generation and, six (n=6) continuing-generation college students provided 10 responses to the open-ended questions.

#### **Open-ended questions**

- What other types of support would have been beneficial to you in the ENGL
   3100: Jr. Level English course?
- What other learning activities, in your opinion, motivated you to learn and apply the content from the ENGL 3100- Jr. Level English course to real-life experience?
- What other resources would have promoted a sense of belonging for you during your participation in online learning?

# **Constructs from Qualitative Data Analysis**

Construct 1: Course organization: There were three open-ended responses to the question inquiring if there were other types of support that students would have benefitted from in the ENGL 3100: Jr. Level English course. Student #14 reported that "feedback from the professor on work before next assignment" would you have benefited them in the ENGL 3100: Jr. Level English course during the Spring 2021 semester. Student #21 reported that "assignments clearly outlined in the syllabus, along with due

dates or tentative due dates" would have been of benefit. Furthermore, student #41indicated that "honestly, I did the work that I was supposed to do to pass the class" and "there nothing I too much got out of it" that they would have benefited from the course. Based on these responses, the researchers created and agreed upon themes of timely feedback, a well-developed syllabus, and the value of course content. Ultimately, the researchers concluded that an overall construct of course organization was interpreted from the themes.

Construct #2 The value of practical content: Students were asked about "other" learning activities they felt motivated to learn and apply the ENGL 3100- Jr. Level English course material to real-life experience. Student #26 reported that "literally none. This course was a joke. It was the biggest waste of my time and money". Student #61 and Student #72 responded that "internal drive" was their motivation to take courses. One student felt that 'writing and research" motivated them to learn. Based on these responses, the researchers developed a theme of students' perceptions of real-world application. The researchers then created a construct of the value of practical content based on the students' responses and the theme of real-world application.

Construct #3 Sense of belonging was not applicable in the Jr. Level English course. Respondents did not feel that sense of belonging was relevant at the research site. Student #41 stated that "I'm not invested in trying to feel like I belong." "There wasn't any racism shown or discrimination, so therefore, I do not have a problem." Other respondents felt that nothing could have been done to promote a sense of belonging in the Jr. Level English course that could have fostered a sense of belonging. Student #100 responded that "nothing" could have promoted a sense of belonging while in online

learning, while student #48 felt the need for a sense of belonging was "not applicable" to the respondent. The researchers interpreted a theme of inclusion from the responses.

Based on the student responses on their perceptions of belonging, the theme of inclusion, the researchers created a construct that sense of belonging was not applicable in the Jr.

Level English course.

# Qualitative Data Analysis Summary

The qualitative data analysis provided insight into the experiences of both first-generation and continuing-generation students through the open-ended questions. The researchers recognized that there were limited "other" responses (i.e., ten responses from eight students) from 104 students who completed the survey. As a result, the researchers acknowledge that the findings may not be generalizable for all students enrolled in the 100% online sections of the Jr. Level English course in Spring 2021.

# **Chapter 4 Summary**

Findings from the data analysis suggest that there aren't any statistically significant differences in course success (self-reported final grade of C- or higher) or levels of student engagement between first-generation and continuing-generation college students. The results could be due to the small sample size and since the first-generation college student group was significantly smaller than the continuing generation group (44 vs. 60 respectively). The researchers acknowledged that most survey respondents were high achieving students who were enrolled in the Jr. Level English course (i.e., students earning a self-reported letter grade ranging from "A" to "B-"). There is a continued need to provide holistic student engagement opportunities for all undergraduate students at the institution. The researchers will discuss the implementation of professional development

opportunities to address their results from Chapter 4 for the Executive Summary in Chapter 5.

#### **Chapter 5: Executive Summary**

Higher education institutions aspire to create a positive student experience.

Student engagement is critical to support student success. The online learning format may provide additional challenges to prioritize student engagement. However, the Community of Inquiry (CoI) model has been proven to support student engagement efforts in the online learning format. Moving forward, colleges and universities should consider providing professional development opportunities for all instructional staff to equip them with the tools to create optimum opportunities for student engagement.

# **Purpose and Research Questions**

The purpose of this study was to examine the difference between first-generation and continuing-generation undergraduate student engagement and success in a 100% online Jr. Level English course at a university located in the Midwest region. The research questions are as follows:

- Are first-generation college students less likely to complete a 100% online Jr.
   Level English course as compared to their continuing-generation peers?
- 2. Is there a significant difference in success (self-reported final course grade of Cornigher) for first-generation and continuing-generation college students in a 100% online Jr. Level English course?
- 3. Is there a significant difference in student engagement levels for first-generation and continuing-generation college students who enroll in a 100% online Jr. Level English course?

4. Is there a significant difference in the relationship between student engagement and success (self-reported final course grade of C- or higher) for first-generation and continuing-generation college students in a 100% online Jr. Level English course?

#### **Overview of Theoretical Frameworks**

The theoretical frameworks that guided the study include Garrison and colleagues (2003) Community of Inquiry (CoI) model and Bourdieu's (1986) Social Capital theory. The Community of Inquiry (CoI) model was used to conceptualize student engagement. The Community of Inquiry (CoI) Model is grounded in Kuh's (2003) theory of student engagement and its impact on student success. CoI comprises three components of student engagement: social presence, teaching presence, and cognitive presence. These three components are needed to effectively enhance participatory engagement between students and faculty in the online learning environment (Garrison et al., 2000 as cited in Dixson, 2015).

Bourdieu's (1986) Social capital theory was used to address the stark disadvantages of first-generation college students' lack of knowledge and resources to navigate higher education settings. In addition, lack of social capital places first-generation college students at a disadvantage related to their expectations of understanding the value of student engagement (Soria & Stebleton, 2012). Social capital is defined as "privileged knowledge, resources, and information received through social networks" (Bourdieu, 1986, p. 248).

# **Participants**

Participants were 104 participants from a random sample of 330 students enrolled in the Jr. Level English course during the Spring 2021 semester. The majority of respondents were white (63%) and identified as female (75%). First-generation college students accounted for 42% of all respondents (n = 44) and continuing-generation college students represented (58%) of the remaining respondents (n = 60).

#### **Summary of Findings**

The purpose of this study was to examine the difference between first-generation and continuing-generation undergraduate student engagement and success in a 100% online Jr. Level English course at a university located in the Midwest region. A convergent mixed methods research design was used to collect and analyze data for this study. A convergent mixed methods research design was used to collect and analyze data for this study. Participants completed an online survey which included 35 questions (see Appendix A), of which three questions provided an "other" option to solicit open-ended responses was used to collect data through Qualtrics. The data analysis for this study included three statistical methods, independent samples (two-tailed) t-test, and a one-way MANOVA analysis, to examine if the two groups of students (first-generation or continuing-generation) were different on a set of dependent variables. All statistical analysis tests were conducted in SPSS. For the qualitative portion of the convergent mixed methods design, open-ended questions were designed to collect data.

The quantitative statistical analysis findings suggested that there aren't any statistically significant differences in course success (self-reported final grade of C- or higher) or levels of student engagement between first-generation and continuing

generation college students. Furthermore, the qualitative findings provided insight into the experiences of both first-generation and continuing-generation students through the open-ended questions. Due to the small number of responses, the researchers recognized that there were limited "other" responses (i.e., ten responses from eight students) from 104 students who completed the survey. As a result, the researchers then acknowledge that there is a need for future studies to investigate student engagement between first-generation and continuing generation students in online learning. Additional research is essential to address the disparities amongst first-generation and continuing generation student achievement and perceptions of engagement value.

#### **Conclusions and Recommendations**

Although the findings were not statistically significant as hoped, there are still concepts which emerged which would be beneficial in the success of first-generation and continuing generation students in online courses. The following conclusions and recommendations are provided based on the results of this study and serve as indicators of what previous researchers have found support in what institutions should consider and or excel at, in order to positively impact the success of students in online courses.

#### **Engagement is critical for all students**

Online learning is growing and will continue to be part of enrollment strategic plan to sustain and continue progress toward their strategic planning goals to increase enrollment in public universities (Allen & Seaman, 2013). It is critical then to examine and learn "what engages students in order to offer effective online learning environments" to increase student success (Dixson, 2010, p.1). Several researchers have supported the need to examine the effectiveness of further online learning instructions to

improve the experiences of online students. Maki and Maki (2007), as cited by Dixson (2010), found that students were often required to do more in online courses than in a traditional on-campus learning environment. Therefore, the authors concluded that "to be effective online instruction required strong methodology and opportunities for students to interact with each other and the instructor (p.1). Dixson (2010) also supported other researchers that there is a need to examine online learning student engagement to measure the effective online learning since online teaching is student engagement" (Dixson, 2010, p. 1). Furthermore, research in online learning also supports that social presence, especially on the part of instructors, is a necessary component to effective online instruction (Dennen et al., 2007, as cited by Dixson 2010).

#### Benefits of the CoI model for GTA

Examining the factors contributing to student engagement and successful online course completion is essential to support institutional strategic goals of timely course completion and degree attainment. This information will equip and empower higher education institutions to address the engagement gap in on-campus and online courses. MPU will be able to apply the findings from this study to support faculty and Graduate Teaching Assistant development in the following ways:

#### CoI model can educate and inform the practice of GTA

The Community of Inquiry (CoI) model is grounded from Kuh's (2003) theory of student engagement and its impact on student success. Social presence, cognitive presence, and teaching presence are the three central components of the CoI model. Each component is necessary to effectively enhance participatory engagement between students and faculty in the online learning environment (Garrison et al., 2000 as cited in Dixson, 2015). Graduate Teaching Assistants (GTA) are often assigned to large-lecture-

based, online, and high-challenge courses (i.e., high D, F, W) at the research site. Informing the teaching practice for GTAs through the CoI model could significantly impact the overall course experience and sense of belonging for undergraduate students at MPU. The holistic engagement framework of the CoI model could lend itself to capitalize on both the instructor's and GTA's strengths for engagement. Introducing and continuing the curriculum for the CoI model with GTA could not only provide a professional development opportunity for GTA, but it can also enhance the overall student experience at MPU.

#### GTAs involvement on campus

Graduate Teaching Assistants are often assigned to support diverse instructional modes (i.e., Lecture-based, Recitation, Seminar and Discussion (RSD) Labs, Online, Hybrid). GTA are assigned to academic units across disciplines. In addition, the GTA assists with historically challenging courses (i.e., high D, F, W) for students to successfully complete (students earn a final grade of C- or higher) have implemented Graduate Teaching Assistants to support successful course completion.

#### Professional Development opportunity for GTA

MPU provides a Teaching Assistant Academy (TAA) facilitated through the Center for Teaching and Learning (CTL) as a development and training opportunity for graduate teaching assistants across all disciplines during August before the fall semester starts. The CTL is instrumental in supporting faculty professional development of all who teach and learn at MPU. Through a one-day-long professional development conference for all Graduate Teaching Assistants and Graduate Instructors, MPU provides resources through specialized sessions on succeeding in graduate school and teaching strategies on successful teaching and learning. The researchers plan to introduce the CoI model as a

framework in the Giving Effective Feedback to promote Learning session during the TAA to promote best practices for teaching. During the Giving Effective Feedback to promote Learning session, participants would receive an overview of the model and explain why it would be beneficial for MPU's student population. Next, participants would be placed in small groups/breakout rooms via Zoom to discuss faculty case studies and their classroom experiences. The participants will discuss strategies to incorporate the CoI model to support student engagement and learning in the course.

# CoI model can provide holistic engagement opportunities for professors and GTA to capitalize on each other's strengths

The holistic engagement framework of the CoI model could lend itself to capitalize on both the professor's and GTA's strengths for engagement. This approach would embrace a strengths-based model for engagement. For example, if the professor is competent with teaching and cognitive presences, the GTA could focus on social presence engagement interactions within the course. In addition, it provides measurable objectives and outcomes for the GTA's role as it contributes to course instruction. GTA can assess student engagement perceptions throughout the semester to provide real-time engagement strategies based on the students' needs.

#### Minimum/no cost

There would not be any additional cost for funding to support the curriculum development and instruction for the CoI model for GTA. GTA receive monthly pay stipends from their respective academic units, and either the Graduate School or the academic unit may provide a tuition stipend. No additional cost would be necessary to implement the curriculum for the CoI model.

#### Continuation of the CoI training

CoI training would be introduced at the Teaching Assistant Academy and continued through a six-week Canvas learning module to receive a CoI engagement badge. After which, an online course module would be available for the first six weeks of the fall semester in Canvas to continue the CoI training. The modules would include teaching reflections, discussion boards, and case studies.

#### Assessment

Before the TAA session on Giving Effective Feedback to Promote Learning, participants would complete a 5-7 item assessment on the CoI model. This information would be used to frame the content for the Canvas course. After the online course module, participants would complete a post-assessment reflective of the learning objectives and outcomes from the Canvas course before they receive the Community of Inquiry LinkedIn badge.

### Conclusion

It is critical that higher education institutions continue to research and implement best practices suited to meet the needs of the institution's student population particularly in online courses. Robust student engagement practices, h will in turn impact successful course completion (final grade of C- or higher). The proposed implementation of the CoI model for Graduate Teaching Assistants will provide a high impact low-cost professional development opportunity that can directly impact the student experience and contribute to an increase in successful course outcomes.

#### REFERENCES

Adelman, C. (2006). The toolbox revisited: Paths to degree completion from high school through college. Washington, DC: U.S. Department of Education.

Ali, W. (2020). Online and remote learning in higher education institutes: A necessity in light of COVID-19 pandemic. *Higher education studies*, *10*(3), 16-25.

Allen, I.E., & Seaman, J. (2013). Changing course: Ten years of tracking online education in the United States. Babson Park, MA: Babson Survey Research Group.

Allen, I. E., & Seaman, J. (2015). Grade level: Tracking online education in the United States. A research report for Pearson Education,

<a href="http://www.onlinelearningsurvey.com/reports/gradechange.pdf">http://www.onlinelearningsurvey.com/reports/gradechange.pdf</a>.

Anderson, D. M., & Haddad, C. J. (2005). Gender, voice, and learning in online course environments. Journal of Asynchronous Learning Network, 9(1), 3-14. doi:10.24059/olj.v9i1.1799.

Anderson, T. (Ed.). (2008). The theory and practice of online learning. Athabasca University Press.

Anonymous. (2019). MPU Enrollment Trends. MPU Factbook.

Ashong, C. Y., & Commander, N. E. (2012). Ethnicity, gender, and perceptions of online learning in higher education. MERLOT Journal of Online Learning and Teaching, 8(2), 98-110. https://jolt.merlot.org/vol8no2/ashong\_0612.htm.

Astin, A. (1970). The methodology of research on college impact (I). Sociology of Education, 43, 223-254.

- Baker, T. D. (2012). Confidentiality and electronic surveys: How IRBs address ethical and technical issues. *IRB*, *34*(5), 8.
- Bawa, P. (2016). Retention in online courses: Exploring issues and solutions—A literature review. SAGE Open, 6(1), 1–11.
- Berkner, L., Cuccaro-Alamin, S., and McCormick, A. (1996). Descriptive Summary of1989-90 Beginning Postsecondary Students: Five Years Later (NCES 96-155).U.S. Department of Education. Washington, DC: National Center for EducationStatistics

Billson, J. M., & Terry, M. B. (1982). In search of the silken purse: Factors in attrition among first-generation college students. College and University, 58(1), 57-75.

Boston, W. E., Ice, P., & Gibson, A. M. (2011). Comprehensive assessment of student retention in online learning environments. Online Journal of Distance Learning Administration, 14(1).

https://www.westga.edu/~distance/ojdla/spring141/boston\_ice\_gibson141.pdf.

Bourdieu, P. (1986). The forms of capital. In J.G. Richardson (Ed.), Handbook of theory and research for the sociology of education, 241-258. New York, NY: Greenwood Press.

Bransberger, P., & Michelau, D. K. (2016). Knocking at the college door: Projections of high school graduates. *Western Interstate Commission for Higher Education*.

Bryan, C. (2014). Approaches to delivering online programs in Kinesiology. Kinesiology Review, 3(4), 200–208. doi:10.1123/kr.2014-0056

Canning, E. A., LaCrosse, J., Kroeper, K. M., & Murphy, M. C. (2020). Feeling like an imposter: The effect of perceived classroom competition on the daily psychological experiences of first-generation college students. Social Psychological and Personality Science, 11(5), 647-657.

Carey, K. (2004). A Matter of Degrees: Improving Graduation Rates in Four-Year

Colleges and Universities. Washington, DC: Education Trust.

Carroll, D. (1989). College Persistence and Degree Attainment for the 1980 High School Graduates: Hazards for Transfers, Stopouts, and PartTimers (NCES 89-302). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Chen, X., (2005). First-generation students in postsecondary education: A look at their college transcripts (NCES 2005-171). Washington, DC: National Center for Education Statistics.

- Choy, S. P. (2001). Students whose parents did not go to college: Post-secondary access, persistence, and attainment (NCES 2001-126). Washington, DC: U.S. Department of Education, National Center for Education Statistics.

  <a href="http://nces.ed.gov/pubs2001/2001126.pdf">http://nces.ed.gov/pubs2001/2001126.pdf</a>.
- Choy, S.P., & National Center for Education Statistics (ED), Washington, DC. (2002).Nontraditional undergraduates: Findings from "the condition of education, 2002.".ED Pubs.
- Coates, H. & Ransom, L. (2011). Dropout DNA and the genetics of effective support.

  AUSSE Research Briefing. Melbourne: Australian Council for Educational

Researcha lever. AAHE Bulletin, 3–6.

e=eds- live.

 $\underline{http://www.tltgroup.org/programs/seven.html}$ 

Crawley, A. (2012). Supporting online students: A practical guide to planning, implementing, and evaluating services. San Francisco: John Wiley & Sons.

- Creswell, J.W, & Creswell, J.D., (2018). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, 5th Edition. SAGE Publications, Inc.
- Croxton, R. A. (2014). The role of interactivity in student satisfaction and persistence in online learning. Journal of Online Learning & Teaching, 10(2), 314-324. http://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=97080957&sit
- Dahl, J. (2004). Strategies for 100 percent retention: Feedback, interaction. Distance
  Education Report, 8(16), 6-7. Dumais, S. A., Rizzuto, T. E., Cleary, J., & Dowden,
  L. (2013). Stressors and supports for adult online learners: Comparing first-and
  continuing-generation college students. American Journal of Distance
  Education, 27(2), 100-110.
- Dennen, V. P., Darabi, A. A., & Smith, L. J. (2007). Instructor-learner interaction in online courses: The relative perceived importance of particular instructor actions on performance and satisfaction. *Distance Education*, 28(1), 65–79
- Dixson M.D., (2010) Creating effective student engagement in online courses: What do students find engaging? Journal of the Scholarship of Teaching and Learning, Vol. 10, No. 2, June 2010. www.iupui.edu/~josotl

Dixson M.D., (2015) Measuring Student Engagement in the online course: the online student engagement scale (OSE). Online Learn J 19.

Dong, S. (2019). The effects of first-generation status on student engagement and outcomes at liberal arts colleges. *Journal of College Student Development*, 60(1), 17-34.

Dumais, S. A., Rizzuto, T. E., Cleary, J., & Dowden, L. (2013). Stressors and supports for adult online learners: Comparing first-and continuing-generation college students. American Journal of Distance Education, 27(2), 100-110.

Engle, J., & Tinto, V. (2008). Moving beyond access: College success for low-income, first-

generation students. The Pell Institute for the Study of Opportunity in Higher Edu-

cation. http://www.pellinstitute.org/downloads/publications-Moving\_Beyond\_Ac-

cess\_2008.pdf.

Figlio, D., Rush, M., & Yin, L. (2013). Is it live or is it internet? Experimental estimates of the effects of online instruction on student learning. Journal of Labor Economics, 31(4), 763- 784.

Fowler, F.J. (2014). Survey research methods (5<sup>th</sup> ed.). Thousand Oaks, CA: Sage Frankola, K. (2001). Why Online Learners Drop Out. Workforce, 80, 53-58

- Garrison, D. R. (2007). Online community of inquiry review: Social, cognitive, and teaching presence issues. Journal of Asynchronous Networks, 11(1), 61–72.
- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. The Internet and Higher Education, 2(2-3), 87–105
- Garrison, R., & Arbaugh, J. B. (2007). Researching the Community of Inquiry framework: Review, issues, and future directions. Internet and Higher Education, 10, 157–172.
- Gaytan, J., & McEwen, B. C. (2007). Effective online instructional and assessment strategies. The American Journal of Distance Education, 21(3), 117–132.
- Giancola, J. K., Munz, D. C., & Trares, S. (2008). First-versus continuing-generation adult students on college perceptions: Are differences actually because of demographic variance? Adult Education Quarterly, 58(3), 214-228.
- Gibbons, M. M., Woodside, M. Hannon, C., Sweeney, J. R. and Davison, J. (2011). The lived experience of work and career: Women whose parents lack postsecondary education. Career Development Quarterly, 59, 315-29.
- Girard, S. A. (2015). Experience of registered nurses who voluntarily withdraw from their BSN program (Publication No. 10043007) [Doctoral dissertation]. ProQuest Dissertations and Theses Global.

Gliner, J. A., Morgan, G. A., & Leech, N. L. (2009). Sampling and introduction to external validity. *Research methods in applied setting: An integrated approach to design and analysis*, 115-133.

Gilster, P. (1997), Digital Literacy, Wiley, New York, NY.

Gofen, A. (2009). Family capital: How first-generation higher education students break the intergenerational cycle. *Family Relations*, 58(1), 104–120. https://doi.org/10.1111/j.1741-3729.2008.00538.x.

Goertzen, P. and Kristjansson, C. (2007). Interpersonal dimensions of community in graduate online learning: Exploring social presence through the lens of systemic functional linguistics. The Internet and Higher Education, 10(3), 212 – 230.

Gray, S. S. (2013). Framing "at risk" students: Struggles at the boundaries of access to higher education. Children and Youth Services Review, 35(8), 1245–1251

Harding, B. (2008). Students with specific advising needs. In Gordon, V. N. Habley, W.
R. & Grites T. J. (Eds.), Academic advising: A comprehensive handbook (2nd ed., pp. 203). San Francisco, CA: Jossey-Bass.

Holzweiss, P. C., Joyner, S. A., Fuller, M., Henderson, S., & Young, R. (2014). Online graduate students' perceptions of best learning experiences. Distance Education, 35(3), 311–323. doi:10.1080/01587919.2015.955262

Horn, L. J., and Premo, M. (1995). Profile of Undergraduates in U.S. Postsecondary Institutions: 1992-93 (NCES 96-237). U.S. Department of Education.

Washington, DC: National Center for Education Statistics.

Horton, J. (2015). Identifying at-risk factors that affect college student success. International Journal of Process Evaluation, 7(1), 83-102.

Howland, J. L., & Moore, J. L. (2002). Student perceptions as distance learners in Internet-based courses. Distance education, 23(2), 183-195.

Huang, H. (2002). Toward constructivism for adult learners in online learning environments. British Journal of Educational Technology, 33(1), 27–35. doi:10.1111/1467-8535.00236.

Huck, S. W., (2012). *Reading statistics and research* (6th ed.) Boston, MA: Pearson Education Inc.

Hughes, G. (2008). Diversity, identity and belonging in e-learning communities: Some theories and paradoxes. Teaching in Higher Education, 12(5-6), 709-720.

Ilgaz, H., & Gulbahar, Y. (2017). Why Do Learners Choose Online Learning: The

Learners' Voices. International Association for Development of the Information

Society.

Jaggars, S. S., & Xu, D. (2010). Online learning in the Virginia Community CollegeSystem. New York: Columbia University, Teachers College, Community CollegeResearch Center.

- Jaggars, S.S., (2011) Online Learning: Does it help Low Income Students and
  Underprepared Students (52) Community College Research Center, Columbia
  University.
- Jaggars, S, S., (2012). Online Learning in Community Colleges. In Handbook of Distance Education (3rd ed.), edited by Michael G. Moore, 594–608. New York:

  Routledge.

Jehangir, R. R. (2010). Higher education and first-generation students: Cultivating community, voice, and place for the new majority. New York, NY: Palgrave Macmillan.

Kehrwald, B. (2008). Understanding social presence in text-based online learning environments. Distance Education, 29(1), 89–106

Kim, Y. K., & Sax, L. J. (2009). Student–Faculty interaction in research universities:

Differences by student gender, race, social class, and first-generation status. Research in Higher Education, 50(5), 437-459. doi:10.1007/s11162-009-9127-x.

Kreideweis, J. (2005). Indicators of success in distance education. CIN: Computers, Informatics, Nursing, 23(2), 68-2

Kroenke, K., Spitzer, R. L., & Williams, J. B. (2003). The Patient Health Questionnairevalidity of a two-item depression screener. Medical care, 1284-1292.

Kuh, G. D. (2001). Assessing what really matters to student learning: Inside the National Survey of Student Engagement. Change, 33(3), 10-17, 66.

- Kuh, G. D. (2003). What we're learning about student engagement from NSSE. Change, 35(2), 24-32.
- Kuh, G. D. (2008). High impact education practices: What they are, who has access to them and why they matter. Washington DC: Association of American Colleges and Universities.
- Kuh, G. D. (2009). The National Survey of Student Engagement: Conceptual and empirical foundations. In R. Gonyea and G. Kuh (Eds.), Using student engagement data in institutional research. New Directions for Institutional Research, No. 141 (pp. 5-20). San Francisco: Jossey-Bass.
- Kuh, G. D., Kinzie, J., Buckley, J. A., Bridges, B. K., & Hayek, J. C. (2007). Piecing together the student success puzzle: Research propositions, and recommendations: ASHE Higher Education Report. 32(5).
- Lag. <a href="https://www.insidehighered.com/digital-learning/article/2018/06/20/online-education-gives-adults-access-student-outcomes-lag">https://www.insidehighered.com/digital-learning/article/2018/06/20/online-education-gives-adults-access-student-outcomes-lag</a>
- Lederman, D. (2019). Inside Higher Ed. Retrieved February 26, 2020, from <a href="https://www.insidehighered.com/digital-learning/article/2019/12/17/colleges-and-universities-most-online-students-2018">https://www.insidehighered.com/digital-learning/article/2019/12/17/colleges-and-universities-most-online-students-2018</a>.
- Lei, S.A. & Gupta, R.K. (2010). College Distance Education Courses: Evaluating

  Benefits and Costs from Institutional, Faculty and Students' Perspectives. Education,

  130(4), 616-631. Retrieved November 15, 2020 from

  <a href="https://www.learntechlib.org/p/109315/">https://www.learntechlib.org/p/109315/</a>.

- Lewis, A., Moore, C., & Nang, C. (2015). Using video of student-client interactions to engage students in reflection and peer review. Journal of University Teaching & Learning Practice, 12(4), 1–18.
- Lewis, C. C., & Abdul-Hamid, H. (2006). Implementing effective online teaching practices: Voices of exemplary faculty. Innovative Higher Education, 31(2), 83–98.
- Li, C., & Lalani, F. (2020, April 29). The COVID-19 pandemic has changed education forever:

  This is how. World Economic Forum. Retrieved from:

https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/

- Lippincott, J. A., & German, N. (2007). From blue collar to ivory tower: Counseling first-generation working-class students. In J. A. Lippincott & R. B. Lippincott (Eds.), Special populations in college counseling: A handbook for mental health professionals (pp. 89-98). Alexandria, VA: American Counseling Association.
- Majer, J. M. (2009). Self-efficacy and academic success among ethnically diverse first-generation community college students. *Journal of Diversity in Higher Education*, 2(4), 243.
- Maki, R. H., & Maki, W. S. (2007). Online courses. In F.T. Durso (Ed.), Handbook of applied cognition (2nd ed.) (pp. 527–552). West Sussex, England: John Wiley & Sons, Ltd.
- McCarron, G. P., & Inkelas, K. K. (2006). The gap between educational aspirations and attainment for first generation college students and the role of parental

- involvement. Journal of College Student Development, 47(5), 534–549. https://doi.org/10.1353/csd.2006.0059.
- McCormick, A. C., and Horn, L. J. (1996). A Descriptive Summary of 1992-93

  Bachelor's Degree Recipients: 1 Year Later (NCES 96-158). U.S. Department of Education.
- Mertler, C. A., & Reinhart, R. V. (2016). Advanced and multivariate statistical methods:

  Practical application and interpretation. Taylor & Francis.

Meltzer, L. (2014) Teaching Executive Functioning Processes in Promoting

Metacognitive Strategy Use and Effort. In S. Goldstein, S., 1952, & J.A. Naglieri,

J. A. (2014). (Eds.), Handbook of executive functioning (2014th ed, pp. 445-474.). Springer. <a href="https://doi.org/10.1007/978-1-4614-8106-5">https://doi.org/10.1007/978-1-4614-8106-5</a>.

Moore, J. (2014). Effects of online interaction and instructor presence on students' satisfaction and success with online undergraduate public relations courses. *Journalism & Mass Communication Educator*, 69(3), 271-288.

- Moore, M. (1997). Theory of transactional distance. In M. Moore (Ed.), Theoretical Principles of Distance Education (2nd ed., pp. 22-38) Routledge
- Morante, A., Djenidi, V., Clark, H., & West, S. (2017). Gender differences in online participation: Examining a history and a mathematics open foundation online course. *Australian Journal of Adult Learning*, *57*(2), 266-293.

Mortenson, T.G. (2012) Measurements of Persistence. In A. Seidman. (2012). (Eds),

College student retention: Formula for student success (2<sup>nd</sup> ed., pp. 23-56).

Rowman & Littlefield Publishers.

Mupinga, D. M. (2003). Communicating with online students. Sketches of innovators in education. 5th ed. Terre Haute.

Mupinga, D. M., Nora, R. T., & Yaw, D. C. (2006). The learning styles, expectations, and needs of online students. College teaching, 54(1), 185-189.

Muraskin, L., Lee, J., Wilner, A., & Swail, W. S. (2004). Raising the graduation rates of low-income college students. The Pell Institute for the Study of Opportunity in Higher Education. <a href="https://files.eric.ed.gov/fulltext/ED490856.pdf">https://files.eric.ed.gov/fulltext/ED490856.pdf</a>.

Nambiar, D. (2020). The impact of online learning during COVID-19: students' and teachers' perspective. *The International Journal of Indian Psychology*, 8(2), 783-793.

National Center for Educational Statistics. (2018a). Number and percentage of undergraduate students enrolled in distance education or online classes and degree programs, by selected characteristics: Selected years, 2003-04 through 2015-16.

 $\underline{https://nces.ed.gov/programs/digest/d18/tables/dt18\_311.22.asp}$ 

National Center for Educational Statistics. (2018b). Fast facts: Distance Education. https://nces.ed.gov/fastfacts/display.asp?id=80.

- Nkwake, A. M., & Morrow, N. (2016). Clarifying concepts and categories of assumptions for use in evaluation. Evaluation and program planning, 59, 97–101. <a href="https://doi.org/10.1016/j.evalprogplan.2016.05.014">https://doi.org/10.1016/j.evalprogplan.2016.05.014</a>.
- Nunnally, J. C. (1978). An overview of psychological measurement. *Clinical diagnosis of mental disorders*, 97-146.
- Oblender, T. (2002). A hybrid course model: One solution to the high online drop-out rate. Learning and Leading with Technology, 29 (6), 42–46.
- Ortagus, J. C. (2017). From the periphery to prominence: An examination of the changing profile of online students in American higher education. The Internet and Higher Education 32, 47-57
- Ortiz-Rodríguez, M., Telg, R. W., Irani, T., Roberts, T. G., & Rhoades, E. (2005).

  College students' perceptions of quality in distance education: The importance of communication. Quarterly Review of Distance Education, 6, 97–105.
- Pace, C. R. (1990). The Undergraduates: A Report of Their Activities and Progress in College in the 1980's.
- Park, J.-H., & Choi, H. J. (2009). Factors Influencing Adult Learners' Decision to Drop

  Out or Persist in Online Learning. Educational Technology & Society, 12 (4),

  207-217.
- Pascarella, E. (1985). College environmental influences on learning and cognitive development: A critical review and synthesis. In J. Smart (Ed.), Higher education: Handbook of theory and research (Vol. 1, pp. 1-61). New York: Agathon.

- Pascarella, E. T., Pierson, C. T., Wolniak, G. C., & Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experiences and outcomes. The Journal of Higher Education, 75(3), 249-284.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How College Affects Students: A Third*Decade of Research. Volume 2. Jossey-Bass, An Imprint of Wiley. 10475 Crosspoint

  Blvd, Indianapolis, IN 46256.
- Peterson, C. L., & Bond, N. (2004). Online compared to FTF teacher preparation for learning standards-based planning skills. Journal of Research on Technology in Education, 36(4), 345–361
- Pike, G. R., & Kuh, G. D. (2005). First-and second-generation college students: A comparison of their engagement and intellectual development. The Journal of Higher Education, 76(3276-300.
- Pontes, M., & Pontes, N. (2012). Distance education enrollment is associated with greater academic progress among first generation low-income undergraduate students in the US in 2008. Online Journal of Distance Learning Administration, 15(1).
- Polgar, S., & Thomas, S. (2000). Introduction to research in the health sciences (4th ed.). Churchill Livingstone: Edinburgh.
- Price, J. H., & Murnan, J. (2004). Research limitations and the necessity of reporting them [Editorial]. American Journal of Health Education, 35, 66–67.
- Richardson, R. C., & Skinner, E. F. (1992). Helping first-generation minority students achieve degrees. In L. S. Zwerling & H. B. London (Eds.), First-generation

- students: Confronting the cultural issues (New Directions for Community Colleges Series, No. 80, pp. 29-43). San Francisco: Jossey-Bass
- Robinson, C. C., & Hullinger, H. (2008). New benchmarks in higher education: Student engagement in online learning [Electronic version]. Journal of Education for Business, 84(2), 101–109.
- Robertson, J. S., Grant, M. M., & Jackson, L. (2005). Is online instruction perceived as effective as campus instruction by graduate students in education? Internet and Higher Education, 8, 73–86.
- Roblyer, M. D., & Wiencke, W. R. (2004). Exploring the interaction equation: Validating a rubric to assess and encourage interaction in distance courses. Journal of Asynchronous Learning Networks, 8(4), 25–37.
- Russo, T. C., & Campbell, S. W. (2004). Perceptions of mediated presence in an asynchronous online course: Interplay of communication behaviors and medium. Distance Education, 25, 215–232.
- Saenz, V. B., Hurtado, S., Barrera, D., Wolf, D., & Yeung, F. (2007). First in my family:

  A profile of first-generation college students at four-year institutions since

  1971. Los Angeles, CA: Higher Education Research Institute.
- Sanborn, F. W., & Harris, R. J. (2013). A cognitive psychology of mass communication.

  Routledge.

- Sato, T., & Haegele, J. A. (2019). Physical education preservice teachers' academic and social engagement in online kinesiology course. Journal of Digital Learning in Teacher Education, 35(3), 181-196.
- Seay, S. (2006). Strategies for success: Improving the academic performance of low-income adult and first-generation students in online general education courses.

  The Journal of Continuing Higher Education, 54(3), 22-35.

  <a href="https://doi:10.1080/7377366.2006.10401222">https://doi:10.1080/7377366.2006.10401222</a>.
- Shea, P., Li, C. S., & Pickett, A. (2006). A study of teaching presence and student sense of learning community in fully online and web-enhanced college courses. The Internet and Higher Education, 9, 175–190.
- Smith, A. (2010). Government Online: The Internet Gives Citizens New Paths to Government Services and Information. Washington D.C.: Pew Internet & American Life.
- Song, L., & Singleton, E. S. (2004). Improving online learning: Student perceptions of useful and challenging characteristics. Internet & Higher Education, 7, 59–70.
- Soria, K.M.; Horgos, B.; Chirikov, I.; Jones-White, D. (2020). First-Generation Students' Experiences During the COVID-19 Pandemic. Student Experience in the Research University (SERU) Consortium. Retrieved October 19, 2020 from the University of Minnesota Digital Conservancy, <a href="https://hdl.handle.net/11299/214934">https://hdl.handle.net/11299/214934</a>.
- Soria, K. M., & Stebleton, M. J. (2012). First-generation students' academic engagement and retention. Teaching in Higher Education, 17(6), 673-685.

- State Higher Education Executive Officers. (2005). Accountability for Better Results-A

  National Imperative for Higher Education. Network News, 24, 1-4.
- Stebleton, M. J., Soria, K. M., & Huesman Jr, R. L. (2014). First-generation students' sense of belonging, mental health, and use of counseling services at public research universities. Journal of College Counseling, 17(1), 6-20.
- Stone, C., O'Shea, S., May, J., Delahunty, J., & Partington, Z. (2016). Opportunity through online learning: Experiences of first-in-family students in online openentry higher education Cathy Stone, Sarah O'Shea, Josephine May, Janine Delahunty and Zoe Partington. *Australian Journal of Adult Learning*, 56(2), 146.
- Swail, S. S., Redd, K. E., & Perna, L. W. (2003). Retaining minority students in higher education: A framework for success (ASHE-ERIC Higher Education Research Report Series, Vol. 30, No. 2). San Francisco, CA: Jossey-Bass
- Swan, K., Shea, P., Fredericksen, E., Pickett, A., Pelz, W., & Maher, G. (2000). Building knowledge building communities: Consistency, contact and communication in the virtual classroom. Journal of Educational Computing Research, 23(4), 359–383
- Terenzini, P. T., Rendon, L. I., Upcraft, M. L., Millar, S. B., Allison, K. A., Gregg, P. L., & Jalomo, R. (1994). The transition to college: Diverse students, diverse stories.

  Research in Higher Education, 35, 57-73
- Terenzini, P.T., L. Springer, P.M. Yaeger, E.T. Pascarella, and A. Nora. (1996). First-generation

college students: Characteristics, experiences, and cognitive development.

Research in

Higher Education 37, 1-22.

Thayer, P. (2000). Retention of students from first-generation and low-income backgrounds. Opportunity Outlook Journal, 3(1), 2–8.

Vogt, W. P. (2005). Dictionary of statistics & methodology Thousand Oaks. CA: SAGE Publications Ltd doi: 10.9781412983907.

Wavle, S., & Ozogul, G. (2019). Investigating the Impact of Online Classes on Undergraduate Degree Completion. Online Learning, 23(4), 281-295.

Willging, P. A. & Johnson, S. D. (2004). Factors that influence students' decision to dropout of online courses. Journal of Asynchronous Learning Networks, 8(4), 105–118.

Wojciechowski, A., & Palmer, L. B. (2005). Individual student characteristics: Can any be predictors of success in online classes. Online Journal of Distance Learning Administration, 8(2), 13.

Xu, D., & Jaggars, S. S. (2011). The effectiveness of distance education across Virginia's community colleges: Evidence from introductory college-level math and English courses. Educational Evaluation and Policy Analysis, 33(3), 360–377. <a href="https://doi.org/10.3102/0162373711413814">https://doi.org/10.3102/0162373711413814</a>.

- Yee, A. (2016). The unwritten rules of engagement: Social class differences in undergraduates' academic strategies. The Journal of Higher Education, 87(6), 831-858.
- Yoo, S.J. & Huang, W.D. (2013) Engaging Online Adult Learners in Higher Education:

  Motivational Factors Impacted by Gender, Age, and Prior Experiences. *Journal of Continuing Higher Education*, 61(3) 151-164.
- York-Anderson, D. C., & Bowman, S. L. (1991). Assessing the college knowledge of first-generation and second-generation college students. Journal of College Student Development, 32, 116-122.
- Young, S. (2006). Student views of effective online teaching in higher education. The American Journal of Distance Education, 20(2), 65–77.
- Zhao, Y., Lei, J., Lai, B. Y. C., & Tan, H. S. (2005). What makes the difference? A practical analysis of research on the effectiveness of distance education. Teachers College Record, 107(8), 1836–1884.

## APPENDIX A: SURVEY INSTRUMENT

Thank you for participating in this survey. The purpose of this study is to examine the difference between first-generation and continuing-generation undergraduate students' engagement and success in a 100% online Jr. Level English course. By continuing you are consenting to participate in this survey.

- Your participation will involve completion of this online survey that will require that you reflect on your experiences in an online Jr. Level English course.
- o It will take approximately 30 minutes to complete the online survey.
- o There are no known risks associated with this research.
- Your participation is voluntary, and you may choose not to participate in this research study or withdraw your consent at any time by not moving forward with completing the online survey.
- You will NOT be penalized in any way should you choose not to participate or withdraw.
   We will do everything we can to protect your privacy. As part of this effort, your identity will not be revealed in any publication that may result from this study.
- 1. Did you take the online class ENGL-3100: Jr. Level English, in Spring 2021?
  - o Yes
  - o No
- 2. In Spring 2021what was your primary major?
  - o Social Sciences (i.e. Criminology, Psychology, Sociology, Social Work)
  - Arts & Humanities (i.e. Communication, Media Studies, Modern Languages, Music, Philosophy, Studio Arts)
  - Hard Sciences (i.e. Computer Science, Cybersecurity, Biology, Chemistry, Physics)
  - Liberal/Interdisciplinary Studies
  - Other
- 3. In Spring 2021 what was your student classification?
  - Sophomore
  - Junior
  - o Senior
- 4. Please identify your beginning Spring 2021enrollment status:
  - o Less than part-time (5 credit hours or less).
  - o Part-time (6-11 credit hours)
  - o Full-time (12 credit hours or more)
- 5. How many credits did you take 100% online in Spring 2021?
  - o 3-5 credit hours

- o 6-11 credit hours
- o 12 credit hours or more
- 6. Which of the following best represents your racial identity?
  - o White
  - o Black or African American
  - o Asian
  - o Hispanic/Latino
  - o Indigenous or Alaska Native
  - o Native Hawaiian or other Pacific Islander
  - Two or more races
- 7. What is your gender identity?
  - o Male
  - o Female
  - o Non-binary
- 8. Please identify the age group that most closely applies to you.
  - 0 18-24
  - 0 25-40
  - 0 41-60
  - o 60 and over
- 9. Please identify your generational status
  - First-generation (neither of your parents or guardians completed a bachelor's degree)
  - Continuing-generation (at least one of your parents or guardians completed a bachelor's degree)
- 10. Please identify your spring 2021employment status:
  - o Part-time (less than 30 hours a week)
  - o Full-time (30 hours or more a week)
  - Not working
- 11. Please identify your 2020 annual household income.
  - Low income or poor
  - Working class
  - o Middle class
  - Upper-middle class
  - Wealthy
- 12. Please identify your caregiver status in spring 2021:
  - Yes, I am responsible for providing direct care for a family member (children, parents, spouse, etc.)
  - o No, I'm not responsible for providing care for a family member

- 13. What was your UMSL cumulative GPA at the start of spring 2021?
  - 0.000-1.999
  - 0 2.000-2.499
  - 0 2.500-2.999
  - 0 3.000-3.499
  - 0 3.500-4.000
  - Spring 2021was my first semester as an UMSL student, and I hadn't established an UMSL GPA yet
- 14. What was your final grade in the Jr. Level English course?
  - o A or A-
  - $\circ$  B+, B, or B-
  - o C+, C, C-
  - o D, D+, D-
  - $\circ$  F
  - o Excused Grade or Excused Failing (EX or EX-F)
  - o Dropped Course and course is not reflected on transcript
  - O Withdrew from all courses for the semester
- 15. What influenced your decision to withdraw from the Jr. Level English course and/or the University? Select all that apply? (this is the next question for students who indicate that they withdrew from the course/semester or received an EX or or EX-F)? (Select all that apply)
  - o Didn't withdraw so does NOT apply
  - Work/studies conflict
  - Unsure of major/career path
  - Personal Issues
  - o New job
  - Moved out of the area
  - Medical/Physical/Mental Health issues
  - Financial Issues
  - Financial Aid problems
  - o Family responsibilities
  - o Difficulty navigating UMSL system/process
  - o Connection or Sense of belonging to the UMSL campus
  - o Campus life/Student Experience
  - Academic dissatisfaction or difficulty
- 16. What has been your experience enrolling in fully online courses?
  - o This was my first semester taking an online course
  - o I'd taken at least one online course before
  - o I'd taken 2-4 online courses
  - o I'd taken 5 or more online courses

17.	How comfortable we very Comfortable Comfortable Neutral Uncomfortable Very Uncomfort	le	iking online cours	ses?				
<ul> <li>Indicate which of the following you actively participated in for your online ENGL 3100- Jr. Level English Course. (Select all that apply)</li> <li>Online communication with the instructor</li> <li>Online discussions with other students</li> <li>Team or small group interactions</li> <li>Submitted assignments</li> <li>Took notes over readings, PowerPoints, or videos</li> <li>Discussion board postings and or replies</li> </ul>								
Please rate your level of agreement with the following statements concerning your experience in the online Junior Level English Course.								
19.	I feel a sense of belo Strongly Disagree	onging at UMS Disagree	L (Social present Agree	ce) Strongly Agree				
20. I enjoyed participating in my online ENGL 3100 Jr. Level English class (Social Presence)								
	Strongly Disagree	Disagree	Agree	Strongly Agree				
21.	I helped other studer Strongly Disagree	<u> </u>	_	sh course. (Social Presence) Strongly Agree				
22. Pres	I got to know other sence)	I got to know other students in my online Jr. Level English course. (Social e)						
	Strongly Disagree	Disagree	Agree	Strongly Agree				
23.	I submitted all assign Strongly Disagree	nments on time Disagree	e (Cognitive Pres Agree	ence) Strongly Agree				

24.	Strongly Disagram		`	,		
	Strongly Disagree	Disagree	Agree	Strongly Agree		
As a	result of my experienc	e in the ENGL	3100- Jr. Level	English course:		
25.	I am able to write cl	•	tively in English	n (Cognitive Presence)		
	Strongly Disagree	Disagree	Agree	Strongly Agree		
26.	I am able demonstrate critical thinking as a result of my online Jr. Level English course. (Cognitive Presence)					
	Strongly Disagree	Disagree	Agree	Strongly Agree		
27. Prese	· ·	te the course in	formation releva	ant to my life. (Cognitive	;	
	Strongly Disagree	Disagree	Agree	Strongly Agree		
		Disagree	rigice	Strongly rigide		
28.	The course information was well organized and I was able to access it easily in Canvas (Teaching Presence)					
	Strongly Disagree	Disagree	Agree	Strongly Agree		
29.	I believe my professor had good knowledge (Teaching Presence)					
	Strongly Disagree	Disagree	Agree	Strongly Agree		
30.	The course information was useful (Teaching Presence)					
	Strongly Disagree	Disagree	Agree	Strongly Agree		
31. (Tead	Requirements for co	ourse assignmer	nts were clear ar	nd easy to understand		
	Strongly Disagree	Disagree	Agree	Strongly Agree		

32.	32. My professor was available to answer questions and or had office hours							
(Teaching Presence)								
	Strongly Disagree	Disagree	Agree	Strongly Agree				
33.	33. My professor provided timely and helpful feedback for my assignments (Teachi Presence)							
	Strongly Disagree	Disagree	Agree	Strongly Agree				
34.	34. What other types of support would have been beneficial to you in the ENGL-3100: Jr. Level English course (select all that apply)							
	<ul> <li>Campus resources and referrals to support student success during the pandemic</li> <li>Time management skills</li> <li>Academic support within the course (i.e. course content mentor)</li> <li>English writing skills</li> <li>Skills to be innovative and creative</li> <li>Skills to become an independent learner</li> </ul>							
35. What other learning activities, in your opinion, motivated you to learn and apply the content from the ENGL 3100- Jr. Level English course to real-life experience? (select all that apply)								
0 0 0	Chapter readings PowerPoints Video lectures Group discussions Professor's feedback Other							
0	Ouici							

- 36. What other resources would have promoted a sense of belonging for you during your participation in online learning? (select all that apply)
  - o Classmates
  - o Course orientation
  - o Group discussions/ online chats
  - o Communication with professor
  - o Course mentor
  - o Other

## **APPENDIX B: SURVEY INVITATION EMAIL (student)**

Email Subject: Tell us about your Online experience and win a gift card!

Body:

Dear Student.

My name is Maya Scruggs Hicks, and I am a doctoral student at the University of Missouri St. Louis. I'm writing a co-authored dissertation with Tchule Moore.

Our dissertation advisor is Dr. Shawn Woodhouse, her e-mail address is <a href="woodhouses@umsl.edu">woodhouses@umsl.edu</a>. We'd like to learn more about your experience in the ENGL 3100 Jr. Level Writing course during Spring 2021 and would greatly appreciate your participation in our research study we are conducting for our dissertation. The purpose of this study is to examine the differences in student engagement strategies the course completion outcomes for undergraduate students in a 100% online Jr. level English course at a Midwest public university.

Participation will involve completing an online survey, which will take no more than 30 minutes. Your participation in this research is voluntary. Your decision whether or not to participate will not affect your academic standing with the university. If you decide to participate, you are free to withdraw at any time. You are also free not to answer any questions you see fit. Since the data collected from the survey may be perceived as sensitive, the following precautions will be taken in order to ensure confidentiality. Five randomly selected respondents will receive one of five \$20 Visa gift cards. A unique survey link will be provided to participants, which will only be available to students who were enrolled in the Jr. level English this semester. No names will be linked to the survey link nor will the researcher track who has or has not taken the survey. Individual responses will NOT be shared. Results will only be shared in aggregate form. Any identifiable information will be edited in order to ensure confidentiality. All data will be housed off-campus on a password protected drive and will only be accessible by the researchers and their advisor. The data will be destroyed after five years in accordance with APA guidelines.

Here is a link to the survey:

https://umsl.az1.qualtrics.com/jfe/form/SV\_b48wXX97UebArSS

By completing the survey you are granting informed and free consent to be a participant in this study. In order to obtain a high response rate, reminder e-mails will be sent to all participants regardless of survey completion or not. Thank you in advance for completing the survey. Your participation is greatly appreciated. If you have any questions or comments, you may direct them to Maya Scruggs Hicks at <a href="mailto:scruggsm@umsl.edu">scruggsm@umsl.edu</a> or Tchule Moore at

<u>mooretc@umsl.edu</u> or Dr. Shawn Woodhouse at <u>shawn\_woodhouse@umsl.edu</u> .You may also contact the Chair of the university's Institutional Review Board (IRB) at (314) 516-5899

Sincerely,

Tchule Moore & Maya Scruggs Hicks

## **APPENDIX C: SURVEY INVITATION EMAIL (Support from Faculty)**

Email Subject: Jr. Level English Student Feedback request

Dear Esteemed Faculty,

My name is Maya Scruggs Hicks, and I am a doctoral student at the University of Missouri St. Louis. I'm writing a co-authored dissertation with Tchule Moore.

Our dissertation advisor is Dr. Shawn Woodhouse, her e-mail address is <a href="mailto:shawn\_woodhouse@umsl.edu">shawn\_woodhouse@umsl.edu</a>. We'd like to learn more about your students experience in the ENGL 3100- Jr. Level Writing course and would greatly appreciate your support to students who were enrolled in the course during Spring 2021 to consider participating in a research study we are conducting for our dissertation. The purpose of this study is to examine the differences in student engagement and the course completion outcomes for undergraduate students in a 100% online Jr. level English course at a Midwest public university.

Participation will involve the students completing an online survey, which will take no more than 30 minutes. Their participation in this research is voluntary. Five randomly selected respondents will receive one of five \$20 Visa gift cards. A unique survey link will be provided to participants, which will only be available to students who were enrolled in the Jr. level English this semester. No names will be linked to the survey link nor will the researcher track who has or has not taken the survey. Individual responses will NOT be shared. Results will only be shared in aggregate form. Any identifiable information will be edited in order to ensure confidentiality. All data will be housed off-campus on a password protected drive and will only be accessible by the researchers and their advisor. The data will be destroyed after five years in accordance with APA guidelines.

Here is a link to the survey: http://umsl.qualtrics.com

By completing the survey, the student is granting informed and free consent to be a participant in this study. In order to obtain a high response rate, reminder e-mails will be sent to all participants regardless of survey completion or not. Thank you in advance for completing the survey. Your participation is greatly appreciated. If you have any questions or comments, you may direct them to Maya Scruggs Hicks at <a href="mailto:scruggsm@umsl.edu">scruggsm@umsl.edu</a> or Tchule Moore at <a href="mailto:mooretc@umsl.edu">mooretc@umsl.edu</a> or Dr. Shawn Woodhouse at <a href="mailto:shawn\_woodhouse@umsl.edu">shawn\_woodhouse@umsl.edu</a> .You may also contact the Chair of the university's Institutional Review Board (IRB) at (314) 516-5897 or <a href="mailto:orange.grang

Sincerely,

Tchule Moore & Maya Scruggs Hicks