Opening Doors Online

Access, Accountability and Excellence in Veteran Distance Learning

Sept. 11, 2021
# TABLE OF CONTENTS

**EXECUTIVE SUMMARY** ......................................................... .3

**COLLEGE ACCESS & THE MILITARY-AFFILIATED STUDENT** ........ 4
  - History of Access ........................................................... 4
  - Veterans On-Campus ...................................................... 6
  - Conclusion ..................................................................... 7

**THE LANDSCAPE OF ONLINE LEARNING IN THE UNITED STATES** . 8
  - History of Digital Education in the United States ................ 8
  - Current State of Digital Education in the United States .......... 10
  - Comparing Residential & Online Learning ......................... 13
  - Veteran Students & Online Education ............................... 16
  - Conclusion ..................................................................... 17

**BARRIERS AND SOLUTIONS REGARDING DEPARTMENT OF VETERANS AFFAIRS STATUTES & REGULATIONS CONCERNING DISTANCE EDUCATION** ......................................................... 18
  - Current Language Issues .................................................. 18
  - Proposed Expansion of Approval Modalities ....................... 19
  - Conclusion ..................................................................... 21

**References** ........................................................................ 22
  - Appendix A: Sample Online Synchronous Course Syllabus .... 28
  - Appendix B: Sample Hybrid Course Syllabus ..................... 38
  - Appendix C: Visual Examples of Online Course Meeting Technologies ......................................................... 47
  - Appendix D: NCSU Degree Program Materials .................... 49
EXECUTIVE SUMMARY

Through the Servicemen’s Readjustment Act of 1944, the U.S. federal government demonstrated a robust commitment to the betterment of those who sacrificed in service to their country by providing access to a quality post-secondary education. This commitment was reaffirmed in 2008 and 2017 with the passage of the Post-9/11 Veterans Educational Assistance Act and the The Harry W. Colmery Veterans Educational Assistance Act, respectively. While this legislation has assisted veterans and military families in pursuing higher educations, significant challenges still exist as post-secondary education evolves in the United States. One such area is the use of GI Bill benefits to enroll in online courses. Currently, the Department of Veterans Affairs’ definition and interpretation of online coursework causes confusion among education institutions and government agencies and limits veteran students from taking full advantage of their earned benefits.

Recent interest by the National Association of State Approving Agencies (NASAA) and the Department of Veteran Affairs (VA) in updating VA regulations regarding veteran and active-duty military education benefits has provided an opportunity to explore how current statutes and regulations may inhibit some of these individuals from fully accessing resources to expedite the completion of two- or four-year degrees, particularly through enrollment in online distance-learning programs.

This report aims to highlight the importance of online education as a pathway to degree completion and how changes to VA statutes and regulations can increase military-affiliated student access to high-quality online education and expedited pathways to degree completion. This report begins with an overview of access and retention issues that are specific to military-affiliated students and then explores how current iterations of online learning may positively benefit military-affiliated students. The report concludes with a discussion of specific statutes and regulations that create barriers to accessing online education, as well as recommendations for changes in statutes and regulations.
COLLEGE ACCESS & THE MILITARY-AFFILIATED STUDENT

Prior to World War II, post-secondary education had primarily been reserved for the upper class, but the GI Bill served as an avenue for many who had previously been denied access in the 20th century. New generations of servicemembers and their families have been afforded the opportunity for upward mobility through higher education since the GI Bill's passage in 1944, significantly impacting the landscape of American higher education and vastly improving the lives of those who used these education benefits. This section will examine the history of college access for the student veteran population and the state of military-affiliated students in higher education.

History of Access

Servicemen's Readjustment Act of 1944. Passage of the Servicemen's Readjustment Act of 1944, often referred to as the GI Bill, has been described as one of the most significant events in the history of American higher education, given its influence on academic policy, admission practices and government investment in education programs. It has often been credited with promoting postwar prosperity, expanding the middle class, and democratizing postsecondary education in the United States by making college a viable option for veteran students from a diversity of backgrounds (Eagan, 2017). The GI Bill was designed to provide education and vocational training to military personnel returning from World War II by subsidizing tuition, course materials, and living expenses. Authors of the legislation anticipated its housing and job provisions to have the greatest national impact, fearing mass unemployment following the war's end. At the time in which the GI Bill was enacted, only about one-third of all Americans even had a high school diploma; arguably, legislators' foremost priority was securing postwar economic stability (US Census Bureau, 2010). Before the war, the realities of Great Depression-era America were such that homeownership, college education and dependable employment were distant dreams for many Americans. The GI Bill effectively afforded those opportunities to millions of veterans, transforming the marketplace and, most drastically, the American higher education system. Out of the 16 million servicemembers who returned home from World War II, 7.8 million – nearly one in two – utilized GI Bill benefits for education or vocational training programs (“History and Timeline,” 2013). In 1973, historian Keith Olson remarked on the overwhelming response to the original GI Bill, “When the GI Bill was made into law, no one in their wildest imagination anticipated that veterans would attend college in such numbers.”

The GI Bill, as transformative as it was, was not without limitations. Chief among them was the contingency that many of its benefits were limited to specific periods of time following the servicemember’s release or discharge from the armed forces. By the mid-1950s, the number of veterans entering higher education subsided as many of the arrangements and benefits under the 1944 Servicemen’s Readjustment Act timed out. Without the continued financial support of the GI Bill, college campuses and their student bodies began to more closely mirror their pre-war states. Adjustments to, and expansions of, the GI Bill were made in 1952 and 1966 in response to the Korean and Vietnam Wars. Despite these pieces of legislation, historians have noted that government support of veteran access to higher education, after the end of the original GI Bill, experienced little improvement for the majority of the 20th century.

Veterans’ Educational Assistance Program of 1977 and the Montgomery G.I. Bill of 1984. Vietnam GI Bill benefits ended in 1976 and were replaced by the Veterans’ Educational Assistance Program (VEAP). Benefits under VEAP were more minimal than the three previous iterations of the GI Bill, making it increasingly difficult for veterans to depend on federal support to fully finance their educations. Again, many veterans faced limited access to post-secondary education, and student veteran populations continued to shrink on college campuses (Eagan, 2017). In 1984, seven years after VEAP
was first enacted, Congress updated the scope of veterans benefits with the passage of the Montgomery GI Bill. This new legislation expanded eligibility for educational benefits to veterans and servicemembers with at least two years of active-duty experience, and like the iterations that proceeded it, this benefit was paid directly to the veteran (“History and Timeline,” 2013).

Post-9/11 Veterans Educational Assistance Act of 2008. With the onset of the Global War on Terrorism, Congress authorized another update to the GI Bill. The Post-9/11 Veterans Educational Assistance Act, passed in 2008, expanded benefits for Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) veterans in addition to enhancing benefits for veterans with at least 90 days of active-duty service on or after Sept. 11, 2001 (Eagan, 2017; “History and Timeline,” 2013). Under this new legislation, qualifying veterans could receive higher tuition coverage, a monthly housing allowance, and an additional stipend to cover educational materials. Additionally, the Post-9/11 GI Bill allows for an eligibility period of 15 years (compared to the 10 years allotted under the Montgomery GI Bill), and Department of Defense (DoD) regulations would allow some recipients the option of transferring these benefits to children and spouses. At the time of its passage, these provisions made the Post-9/11 GI Bill hailed as the most generous iteration of the law since World War II.

The Post-9/11 GI Bill was not only one of the most expansive national social programs, but it also opened the door wider for student veterans in a significant way. Additionally, as noted by student veteran scholars Dr. Sue Loe and Dr. Lisa Langstraat, the 2012 repeal of the “Don’t Ask Don’t Tell” policy further expanded access to Post-9/11 GI Bill and benefited advanced college access for student veteran populations (Doe and Langstraat, 2014). Veterans returned to campuses in numbers not seen since the original 1944 legislation (Doe and Langstraat, 2014). In 2012, The Chronicle of Higher Education reported that the number of veterans receiving educational benefits increased from nearly 35,000 to more than 555,000 between 2009 and 2011 (“Who Benefits from the Post-9/11 GI Bill?” 2012).

The Harry W. Colmery Veterans Educational Assistance Act of 2017. As crucial as the Post-9/11 GI Bill was to increasing access and enrollment for veteran students, the 2008 legislation did not address certain limitations that inhibited veteran educational success. Under this law, veterans still faced the termination of their educational benefits after 15 years following discharge. Although the Post-9/11 GI Bill extended the benefits eligibility period by five years from the Montgomery GI Bill, many veteran service organizations (VSOs) felt a time limit on benefits was no longer needed. Additionally, the Post-9/11 GI Bill retained constraints on veterans of the National Guard and Reserves, narrowing their eligibility for benefits, as well (Wentling, 2017). In 2017, the Harry W. Colmery Veterans Educational Assistance Act, often referred to as the Forever GI Bill, was passed to resolve such issues. The Forever GI Bill eliminated the 15-year time limit on educational benefits for veterans discharged on or after January 1, 2013, and their families. The Forever GI Bill also enhanced eligibility for National Guard and Reserve servicemembers, protected against benefits loss in the event of school closure, increased funding for STEM education, and awarded Purple Heart recipients full benefits regardless of the amount of time served in active duty. This historic change has been received publicly as a renewed commitment to honoring veterans’ service and sacrifice and is poised to increase access to colleges and universities for veterans in an unprecedented manner (Sisk, 2018).

Veterans On Campus

Military-affiliated students represent an important, though sometimes misunderstood, population on college campuses. Only in the last few years have efforts increased to address significant gaps in accessible and accurate data on student veterans, shining a new light on the distinct profiles of this student group. As opposed to traditional students, student veterans arrive on campus with a diverse set of characteristics and traits that uniquely shape their post-secondary experience. Despite the obstacles they often face, student veterans typically perform exceptionally well and continue to contribute critically diverse perspectives to the American higher education landscape.
Student Veterans Academic Performance. Scholarship on the degree of success had by student veterans in higher education lacks consensus. Student success is generally equated with degree attainment, and although early estimates of student veteran dropout rates reaching as high as 88%, recent studies have invalidated those early estimates and shown that retention is actually far greater (Wood, 2012). The estimated completion rate of student veterans has been estimated between 52% (Dillard & Yu, 2016) and 64% (Cate, 2014). While these estimates are promising, alleviating regulatory barriers discussed at the end of this report may further increase completion numbers. The student veterans who are completing academic programs, however, exhibit strong performance. One study from Student Veterans of America showed that this population of students reported a higher average GPA than their traditional peers and a majority of student veterans pursue degrees in business, STEM, or health-care-related fields (“Research Brief,” 2017).

Student Veteran Profile and Barriers to Access. Similar to other nontraditional students, student veterans tend to be adult learners (over age 25), have spouses and children to support, and retain part-time or full-time employment throughout their school enrollment (O’Herrin, 2011). However, specific to the veteran student population is the likelihood that military obligations may delay enrollment or interrupt students’ academic progress. According to Student Veterans of America research published in the Million Records Project, the traditional military-affiliated student’s academic trajectory is changing; these students are more likely to interrupt enrollment due to the shifting scope of military obligations (Cate, 2014). Additionally, 51% of student veterans report suffering some level of a service-related disability, with 80% of those reported asserting that the disability caused them stress upon returning to school (“Research Brief,” 2017). Cate (2011) also reported that issues related to mental health created significant barriers for veteran students; however, this barrier was mitigated by access and usage of campus resources. Beyond the toll of stress on a student, service-related injuries can have tangible effects on academic performance. Studies have shown that student veterans with service-related injuries may not only have unpredictable class attendance due to lasting physical pain or other related symptoms, but may also feel impaired by the side effects of medicines used to tend to such injuries (Cate, 2014). Student veterans also may face obstacles such as post-traumatic stress disorder (PTSD) and traumatic brain injury (TBI), which may further create unanticipated challenges for the affected students as well as teachers and administrators (Eagan, 2017). All students returning from service, even those uninhibited by disabilities or the possibility of service-connected enrollment interruption, face the multifaceted challenges of transitioning to civilian and student life (Dillard & Yu, 2016). Many of these challenges and their implications can be mitigated, at least in part, by the flexible and innovative technologies available to provide quality education utilizing new modalities, particularly online learning or courses which have integrated some component thereof.

Conclusion

This section outlined the post-WWII history of the United States in support of veterans and their families who wish to pursue post-secondary education. While the GI Bill persisted in various forms since its first enactment post-World War II, the value of its educational benefits has not always remained as transformative as it was in the early years of the GI Bill. Steep increases in tuition, an ebb and flow of public support, and the evolving nature of American higher education drastically altered the landscape for student veterans receiving GI Bill benefits. By the turn of the century, GI Bill benefits alone could not cover the cost of education at many campuses and universities. The Post-9/11 and Forever GI Bills filled many gaps left by earlier versions of the law, but other barriers remain for student veterans. The realities of being a nontraditional student in conjunction with military service-specific challenges continue to affect the post-secondary experience for many students.
THE LANDSCAPE OF ONLINE LEARNING IN THE UNITED STATES

This report has highlighted the commitment of the United States to the education of military veterans, the positive impact veteran students have had on U.S. post-secondary education, and the barriers faced by many military-affiliated students when trying to complete post-secondary credentials. Online education was identified as a significant way to establish a more efficient and flexible path to degree completion for military-affiliated students. This section presents a brief summary of the landscape of online learning in U.S. post-secondary education and is broken into three subsections addressing the history of distance learning, current advancements in digital education, and emerging technologies and trends in digital education.

History of Distance Learning in the United States

Although many scholars trace the history of distance learning back hundreds of years, it has only been within the last century that technology has allowed distance learning to evolve to replicate the residential experience in a meaningful way. In the sections below, this report presents a historical timeline tracing the development of distance learning to provide context as to how distance learning is provided in contemporary U.S. higher education. Note that there is a significant overlap of the eras where distance learning was delivered through multiple media.

The Written Era (1700-1950). The Written Era of distance learning was characterized by the onset of correspondence courses. Learning in these courses centered on the independent and self-directed study of enrolled students, with student-instructor interactions being limited to correspondence via mail (Saba, 2011). Correspondence schools were focused on expanding access for those of lower socioeconomic status, with many courses focused on vocational training and farming (Saba, 2011). The first structured distance-learning program was a shorthand course advertised via the Boston Gazette in 1728 (Phillips, 1728). Although independent programs emerged throughout the era, the first department of correspondence teaching was founded at the University of Chicago at the turn of the 20th century (University of Chicago Library, 2006). However, correspondence education eventually developed separately within the private sector and within the domain of higher education (Saba, 2011). While correspondence education flourished, private-sector correspondence schools were continually found to misrepresent the education they offered. In one example from the mid 20th century, La Salle Extension University was found to have misrepresented students’ eligibility to take bar exams in a number of states upon completion of a degree (Federal Trade Commission, 1980). Such misrepresentations eventually led to the federal government withdrawing support of students in correspondence schools, as well as a long-lasting stigma associated with correspondence education. In the private sector, the U.S. military adopted correspondent courses and was still utilizing them for training programs in the latter half of the twentieth century (Duncan, 2005).

The Radio Era (~1920-1965). By the 1920s, radio broadcasting had become widely available for home use, opening another avenue for the evolution of distance learning. Radio had mixed use for higher education, serving students afar, as well as supplementing residential classroom experiences (Kentor, 2015). In 1921, Latter-Day Saints’ University was granted the first educational radio license by the federal government, and by 1925, more than 150 colleges and universities were granted federal educational radio licenses (Saba, 2011). While the radio era of distance learning continued to set the stage for later technological developments, many viewed radio-based education with some trepidation, as many professors simply broadcasted their usual lectures without thought to translation for a radio audience (Saba, 2011). Other critiques included opinions that listening to radio encouraged intellectual passivity, broadcast times were hard to adjust to class schedules, many programs were produced by radio artists and financiers (not educators), and many educators were too busy to produce radio content as
well as their normal duties (Saba, 2011). The latter criticism is still heard among faculty at traditional institutions of higher education today.

**The Television (TV) Era (~1945-1975).** By the last half of the 20th century, television revolutionized communication and information sharing around the world. In 1945, Iowa State University was granted a license by the Federal Communications Commission (FCC) and became the first educational television broadcaster in the world (Saba, 2011). By 1968, Stanford University founded the Stanford Instructional Television network, providing distance learning for part-time engineering students (Dumbauld, 2014). As television pushed the envelope on how education was delivered, scholars became increasingly interested in the efficacy of such modalities. In a series of studies conducted in the 1960s, researchers linked course outcomes to audience intelligence and audience motivation, also finding that the mode of presentation (TV versus face-to-face) mattered less than the way subject matter was prepared in either modality (Kumata, 1960). As the prevalence of this form of distance learning grew, so did its popularity among adult learners, who became a population of increasing focus for distance learning.

**The Online Era (~1975-1995).** The most transformative period of educational delivery began with the advent of the internet. Transitioning into the new knowledge economy, much of the digital education movement arose out of the private sector, as corporations redeveloped training initiatives using emerging technologies, coining the term eLearning (Saba, 2011). For-profit education accelerated as well, with the establishment of the University of Phoenix in 1976, which aimed to provide an education that took into consideration the needs and lifestyles of working adults (Dumbauld, 2014). However, a major critique of early eLearning was its lack of instructor-student interaction, relying mainly on text-based information consumption (Saba, 2011).

**The Modern Era (~1995-Present).** As internet use expanded and became more sophisticated, so did online course delivery. In 1997, a consortium of California institutes of higher education came together to offer more than 1,000 online courses, and by 2003, 81% of U.S. colleges and universities offered at least one online class (Dumbauld, 2014). Course delivery and management of online course learning became a new market, leading to the creation of learning management systems such as Blackboard and eCollege in 1999. Increasing confidence in the trustworthiness of online distance learning led to a 2005 congressional ruling abolishing restricted access to federal student aid for distance-learning programs but still excluding correspondence courses (Beaudoin & Shaw, 2006). Through the removal of such a significant barrier, the Higher Education Reconciliation Act of 2005 increased the potential for students to enroll in online courses. Today, innovative technology continues to expand the possibilities and improve the quality of distance learning for college students worldwide. In the section that follows, this report presents a brief overview of online education in contemporary U.S. higher education, as well as recent data exploring the efficacy of online education versus traditional residential education.

### Current State of Digital Education in the United States

By briefly highlighting key eras in the evolution of distance learning, this report contextualized today’s proliferation of online courses and degree programs offered by colleges and universities around the world. Although overall college enrollments have declined over the past decade, enrollment in distance-learning programs has increased, with nearly 15% (3,003,080) of students enrolled in completely online education programs during the 2015-2016 academic year (Allan & Seaman, 2016). During this same period, it was found that 1 in 4 students are enrolled in an online course (Seaman, Allan, & Seaman, 2018). In 2019, the National Center for Education Statistics (2021) put the number of online students at approximately 3,450,000. Leaders in online education predicted that students seeking online education would grow to 4 million by the year 2020 (Magda & Aslanian, 2018). In 2016, Learning House & Aslanian Market Research conducted a national survey exploring the profiles of students enrolled in online distance learning programs. It was found that most online students are white (64%); female (69%); single (56%); have no children (58%); earn an annual income of less than $55,000 (55%); are employed full time (45%); live within 100 miles of the college or university in which they are enrolled.
(75%); and/or enrolled in programs leading to a bachelor’s degree (30%) or master’s degree (26%). Within this sample of students, business is the most popular major for graduate and undergraduate students (25%), with enrollment in graduate education programs dropping by 8%, and enrollment in computer or IT-based graduate programs increasing by 11%.

Online students have also diversified the way in which they engage with online learning environments. It was found that nearly two-thirds of online students complete at least part of their coursework via smartphone or tablet, and a fourth of students complete most or all of their coursework on a smartphone or tablet. This trend will probably increase as nearly two-thirds of prospective online students indicated their desire to use a mobile device to complete coursework or attend class (Clinefelter & Aslanian, 2016).

This report has mostly avoided analyzing the evolution of online and distance learning as a result of the coronavirus pandemic in 2020. While it is certainly worth acknowledging the significance of this event for the American education system, the lasting impact of the pandemic on online learning is still being assessed. Additional research is needed to assess the extent and breadth of distance learning, post-pandemic. Therefore, the topic is outside the scope of this report.

Modalities. The rapid advance in communication and educational technologies has allowed students and educators to engage in learning beyond the four walls of a lecture hall or classroom. Today, teaching and learning take place in a variety of environments and modalities.

**Synchronous online courses.** This type of course environment allows a group of students to engage in learning at the same time. Synchronous learning can be thought of as the traditional class experience, where students are gathered in one environment, either in person or in a virtual meeting space such as WebEx, Google Hangout, or Adobe Connect. An example of a synchronous online course syllabus may be found in Appendix A.

**Asynchronous online courses (location-independent learning).** This type of course environment allows students to learn the same material at different times and locations. Instructors equip students with course materials and assessments that each student may complete independently within the timeframe of the course; hence, this type of online instruction is self-paced. Often, course materials and assessments are organized through a learning management system (LMS) such as BlackBoard or Canvas.

**Hybrid courses.** Hybrid courses, also known as blended or mixed-modal, involve a combination of in-person on-campus meetings and online coursework. Some have suggested that this type of course delivery utilizes the best of both worlds, and anecdotal evidence from one author’s experience with military base (OMB) institutions suggest many active-duty and traditional college students benefit from this type of instruction. An example of a hybrid course syllabus may be found in Appendix B.

**MOOCs.** Massively Open Online Courses (MOOCs) emerged as a potentially disruptive innovation in online education within the last two decades. In concept, MOOCs are designed as open online courses that anyone can take, often for free, with the same rigor and learning outcomes as traditional college courses. MOOCs are thought to democratize education further globally or provide the first step for those thinking of pursuing higher education (Friedman, 2016). Leaders in the MOOC movement include independent organizations such as Coursera and edX, as well as institutions of higher education, including Yale and Stanford (Friedman, 2016). Yet recently, the popularity of MOOCs has declined, as several studies have indicated that MOOCs do not deliver effective learning outcomes, with many courses failing to meet standards within commonly used frameworks such as Quality Matters (Lowenthal & Hodges, 2015).

**Technology.** In order for the course formats discussed above to be possible, educators have used a variety of technologies to meet student learning needs. Below, a select group of technologies are listed to exemplify how technology has enhanced online distance learning; Appendix C contains visual examples of selected technologies.
Emerging Technologies & Trends in Digital Education. Although technologies developed at the turn of the 21st century have radically transformed how students can access higher education, campuses and private-sector companies continue to produce new technologies to improve learning and the student experience in online education. For instance, in a 2018 report of nearly 200 chief online officers, technologies related to predictive analytics and learning analytics are poised to be the next wave of innovation in education (Legon & Garrett, 2018). These trends are summarized below.

Adaptive Learning. These technologies aim to create personalized learning experiences for individual students within a given course. Artificial intelligence senses patterns in student learning and delivers content and assessments at the learner’s pace. Adaptive learning may be differentiated from adaptive testing, as adaptive testing is concerned with efficiently assessing an individual’s current proficiency in a skill, while adaptive learning focuses on the most efficient ways to assist an individual in learning (Posner, 2017).

Predictive Analytics. Within the context of online learning, predictive analytics may be thought of as a tool using student data sets to identify patterns in learning, behavior, and other outcomes. These data-backed patterns may be used to identify students who may be at risk of failing courses, dropping out of college, etc. Being able to identify at-risk students preemptively allows institutions to create early intervention strategies to support students before they find themselves in difficult situations (Ekowo & Palmer, 2017).

Comparing Residential & Online Learning

Although online distance-learning programs and courses have become widely adopted in higher education, debates still linger regarding the efficacy of learning outcomes and viability of online education as an alternative to traditional face-to-face education. To that end, the sections below contain a summary of successes and challenges associated with contemporary online distance learning, as well as emerging trends in the field.

Successes. Technologies developed around the turn of the 21st century have allowed online learning environments to flourish. In 2009, more than 5 million students were enrolled in at least one online course (Dumbauld, 2014), and by 2014, 98% of colleges and universities offered some form of online education (Dumbauld, 2014). Public schools currently possess the largest portion of distance-learning students, with a majority of these students pursuing bachelor’s degrees (Allan & Seaman, 2016). Today, an overwhelming number of students who have taken online and traditional courses alike report that their online experience was better or the same as their traditional classroom experience. Additionally, nearly three-quarters of surveyed students reported that taking an online course was worth their time and monetary investment (Clinefelter, 2016).

Increased acceptance and popularity of online education were not isolated to students. A number of national surveys involving leaders in online education, higher education and the business sector suggested a majority of these stakeholders agree that online degrees are as credible as traditional degrees, and online learning outcomes are the same, or sometimes superior, to those in traditional programs (Allen & Seaman, 2013). While more skeptical, surveyed faculty who have taught online courses agree that online education has the potential to match the quality of traditional education (Jaschik & Lederman, 2016).

In a recent national survey, enrollment in online courses was associated with several positive outcomes for students, including higher retention and graduation rates, improved access for traditionally underrepresented students, and reduced time to degree (Bailey, 2018). Given the increase in traditionally underrepresented student populations including adult learners, first-generation students, and racial minorities, these numbers make sense. One of the most consistent barriers identified within adult-learner populations is balancing life responsibilities, including part-time or full-time work (Jenner, 2017, Lynch & Gross, 2017). Online courses allow for flexibility in scheduling and travel, giving
students more options. In addition, it has been found that in some cases, students taking online courses performed at a slightly higher level than their traditional counterparts (Means, 2010). Authors of the same report found that enrollment in hybrid courses was found to be even more beneficial.

**Challenges.** While research reflects a significant improvement in online distance learning over the last two decades, this mode of education is still associated with a number of challenges. One challenge includes faculty buy-in. In a national survey of faculty, Gallup found that a majority of faculty members remain unconvinced that student learning outcomes are still equal regardless of course modality. However, of the faculty polled, only 39% have taught online courses (Jaschik & Lederman, 2016). One reason faculty may remain skeptical is lack of experience delivering online courses or lack of skills and resources to develop an effective online course (Bichsel, 2013). Additionally, a debate continues over the quality of online education in for-profit institutions and non-profit or public universities. For instance, a report published by the Brookings Institute found that online students enrolled at DeVry University were below average in their academic performance and persistence compared to their face-to-face counterparts (Bettinger & Loeb, 2017).

Finally, while enrollment in online courses continues to increase from year to year, Bawa (2016) found that colleges and universities are failing to retain these students. Some studies have indicated higher fail rates or higher drop rates among online students compared to students in hybrid or traditional courses (Herbert, 2006; Smith, 2010). However, these studies are limited in scope, for instance, only studying students at one university. Therefore, results may not be generalizable to the online distance learning population. Further studies are needed in this area.

**Best and Promising Practices.** Although there are frequently new developments in technologies and practices involving online distance learning, many institutions currently use best and promising practices.

One early critique of the online education movement was the lack of agreement on standards to assess if online courses meet a minimum standard for rigor or quality. In 2003, the Quality Matters (QM) Framework emerged from this national conversation (MarylandOnline, 2018). As an independent subscription-based organization, QM provides rubrics and standards for several education sectors including higher education, K-12 education, and continuing and professional education. Their eight general standards include: Course Overview and Introduction, Learning Objectives, Assessment and Measurement, Instructional Materials, Course Activities and Learner Interaction, Course Technology, Learner Support, and Accessibility and Usability. To date, nearly 1,000 two-year and four-year colleges and universities across the United States are subscribing members of QM.

In addition to the QM framework, emerging reports have identified other best or promising practices (Bailey, 2018, Magda & Aslanlan, 2018). These include the use of strategic portfolios and mobile-friendly content; developing digital fluency in staff and faculty; increasing support for accessibility to online courses; engaging faculty in the implementation of digital learning objectives; strategic use of outside vendors to speed implementation of online learning technologies; and an increase in online student services such as career services.

**Emerging Trends & Issues.** As demand for online education increases, colleges and universities are being forced to adapt to a rapidly changing educational landscape quickly. In order to address these changes, there has been an increased focus on research and training regarding online distance learning. Entire degree programs have been crafted to produce instructional design staff, and scholars that help to maintain quality and uncover practices that create the best online learning environments. For instance, North Carolina State University (NCSU) has created both masters-level and bachelors-level degree programs focused on educational technology and learning design; more information may be found in Appendix D. Additionally, there has been a rapid increase in the number of academic journals addressing online education. Currently, more than 40 peer-reviewed publications are solely dedicated to expanding knowledge about effective online education or accept research related to the topic (Peer Reviewed Journals for Online Teaching & Learning, n.d.). Additionally, institutions are beginning to
recognize the need to create more intentional student support services that cater to online populations, including advising, career services and financial aid (UPCEA, NASPA, & InsideTrack, 2014).

While higher education institutions are quickly adapting to student demands, higher education leaders and scholars have identified several areas that may need to be addressed quickly as online education evolves. For instance, Bichsel (2013) found a disconnect between what students say they want out of online education and the technological support that colleges provide. These demands include more gaming or simulation-based classes and increased access to open educational resources. Additionally, Gallup polling found that faculty and higher education leaders have identified data security as a pressing issue facing online education (Jaschik & Lederman, 2016). This concern mirrors current national concerns about digital data management, sharing and privacy. Finally, UPCEA, NASPA, & InsideTrack (2014) discussed new organizational and administrative structures needed to manage the proliferation of online degree programs, including the development of Chief Online Officers and Vice Presidents for Digital [or Online] Education. Differences have also emerged about where online courses are housed, as academic departments weigh costs and benefits associated with managing courses within individual departments versus centralizing online programs.

Academic Integrity & Online Coursework. Although online learning has greatly expanded access to higher education, some question how academic integrity may be maintained within these courses (Bishop & Cini, 2017). For instance, in an asynchronous learning environment, what is to prevent a student from giving his or her course credentials to another individual who will complete the course for them; or, what prevents a student from using the internet to cheat during an exam in an online course? In one study published in the journal Online Learning, researchers reviewed current best practices for preventing academic dishonesty and enforcing policies related to academic integrity in online coursework (Lee-Post & Hapke, 2017). Their findings indicated that weak prevention policies included the creation of honor codes, authenticity statements and course redesigns. Robust prevention strategies included the use of user IDs and passwords, as well as challenge or security questions. Additionally, several strong enforcement approaches were identified, including biometrics (i.e. fingerprints), video monitoring, face-to-face proctoring, and virtual proctoring.

The University of North Carolina System’s UNC Online program has been identified as a leader in addressing academic integrity through its systemwide online proctoring system (UNC Online, n.d.). Students from any UNC system university may take advantage of online proctoring services provided through ProctorU (ProctorU, n.d.), the system’s current vendor. This service allows a proctor to view students in online environments through a webcam. Security and identification features include university username and password credentials, requirement that students hold their student ID up to the webcam for proctors to view, requirements for students to show the proctor the room in which they are located via webcam, IP address tracking, and a screen-share feature for proctors to observe student computer screens in live time.

Conversely, an area of online education that presents particular difficulty are non-college degree programs associated with completion (clock) hours versus credit hours. Completion (clock) hours may be defined as the direct number of hours needed to complete a course, training or program. In contrast, a credit hour may be defined as a unit of credit equal to a minimum of three hours of work per week for at least 16 weeks (Definition of “Credit Hour,” n.d.). Many online programs that employ completion hours as a basis for awarding academic credit often fail to provide security to ensure that students have actually completed requisite hours outside of honor systems.

Veteran Students & Online Education

Thus far, this report has laid a foundation for understanding the history of college access for veteran and military-affiliated students, as well as developed context for better understanding the current state of online distance learning in the United States. However, there exists a few key studies that intersect these topics to better understand the role and outcomes of online education and military-affiliated students.
Mirroring the sentiments of previous descriptions of military-affiliated students, particularly veteran students, scholars have found that military-affiliated students enrolling in online education come to college with the skills and dispositions to succeed (Garvey, 2017, Vacchi, 2012). Several factors have been identified that may explain this, including the development of independence and resilience from military training programs and culture, the ability to develop plans of action, experience with highly mobile and asynchronous environments, and development of personal discipline regarding assignment completion and deadlines (Downs & McAllen, 2016, Garvey, 2017).

However, while online learning environments are evidenced to support military-affiliated students in their pursuits of college degrees, some scholars have identified ways to improve the overall experience of this student population. For instance, one scholar who is also a military veteran, identified the need for veteran mentor programs (Case, 2015). Creating or enhancing such programs may boost motivation and sense of belonging for veteran students, in turn increasing their likelihood of completion and satisfaction with their degree program (Garvey, 2017). In addition, Artino (2007) found that veteran students in online environments are best served when they find value and purpose in class assignments, and course content is scaffolded so that students master skills and concepts before moving to other topics or concepts.

**Conclusion**

Distance learning in the United States is almost as old as U.S. higher education itself. While distance learning has evolved and faced many critiques over the years, the advent of the internet and modern communication technology has allowed online distance learning to provide a nearly identical experience to residential education. A number of scholars and higher education leaders recognize the value of online education in expanding access to higher education, and private-sector employers have recognized online education as a viable career path. Unfortunately, due to a number of statutory and regulatory barriers, military-affiliated students, often best suited for online coursework, may not be able to take full advantage of these opportunities using military-service financial assistance (i.e., GI Bill benefits).
BARRIERS AND SOLUTIONS REGARDING DEPARTMENT OF VETERANS AFFAIRS STATUTE & REGULATION CONCERNING DISTANCE EDUCATION

As education and technology have evolved, veteran students have more options than ever to take courses that fit their busy schedules. Scholars and leaders in post-secondary education have consistently demonstrated that, when implemented appropriately, distance learning can be just as effective as the traditional classroom experience. Unfortunately, due to current regulatory and statutory barriers and interpretations, many veteran and military-affiliated students are restricted in using education benefits to take courses delivered in online environments. The sections below review the issues with this regulation, as well as proposed revisions that could be considered to allow veteran and military-affiliated students to take advantage of credible distance-learning courses and academic programs.

Current Language Issues

Under the provisions of section 3680A(a)(4) of title 38, United States Code, the State Approving Agencies have authority to approve enrollment of eligible individuals in certain courses but are prohibited from approving enrollment in “any independent study program except an accredited independent study program leading to a standard college degree, or to a certificate that reflects educational attainment offered by an accredited institution of higher learning.” Therefore, for a course offered at an educational institution other than an institution of higher learning (IHL), whether or not the course is classified as “independent study” is critical because such a classification can single-handedly bar approval of the course. Because of the importance of this classification, it is essential that VA’s definition of “independent study” align with how the educational industry and beneficiaries understand and define the term, as well as establish new terms congruent with the education industry.

VA’s current regulatory definition for independent study, found in section 21.4267 of title 38, Code of Federal Regulations, provides that a course is offered by independent study if it is offered without any regularly scheduled, conventional classroom or laboratory sessions, and the interaction between the student and regularly employed faculty of the institution of higher learning is personal or through the use of communication technology, including mail, telephone, videoconferencing, computer technology (to include electronic mail), and other electronic means. However, current interpretations of independent study within this regulation provide a number of barriers for veteran students wishing to take courses via contemporary modalities such as distance learning.

To better understand how the current definition is failing veterans and educational partners, the issue was discussed with a multitude of stakeholders representing a broad spectrum of schools (e.g., institutions of higher learning and non-institutions of higher learning; public, private not-for-profit, and private for-profit; small scale and large scale; university, community college and vocational training center, etc.). The overwhelming consensus garnered from these discussions was that the regularity of the training sessions, or their physical settings, was not an accurate determinative factor in assessing whether or not a course should be classified as independent study. Rather, for them (and likely anyone else outside of VA), a course is considered to be independent study based on the freedom that a student is given to personalize the course’s design through a collaboration between instructor and student to define course objectives, content (such as specific reading assignments and deliverable products), and expected outcomes. This understanding of the term is in alignment with the Department of Education definition of “independent study” in 34 C.F.R. 668.10(a)(3)(iii). There, independent study is described in terms of a predefined objective, but with an interaction between the student and faculty member to craft the exact requirements of the program.
It is important that the language is updated to reflect common understandings and definitions related to independent study. As mentioned, due to the conflation of distance learning and independent study, there is serious confusion among VA personnel, state approving agencies, educational institutions and veterans. This confusion impacts approval of policy, meetings, regulatory requirements, and particularly the educational programs by state approving agencies. From the student perspective, many veterans are unable to use their benefits to take distance-learning courses. This creates a barrier for many veteran students who may be forced to temporarily or permanently suspend their studies due to deployment or other geographic impediments. This is unfortunate, as previous sections of this report have highlighted how accredited distance-learning courses and programs are effective in meeting the same goals as traditional face-to-face learning and may be more beneficial in assisting veteran students in expediting their time to degree attainment. Given that independent study has little to do with distance learning, using the current regulation verbiage to approve veteran enrollment in distance-learning programs is impractical; therefore, it is paramount that this regulation be rewritten entirely, and the term “independent study” be replaced throughout with the more accurate modern term of “distance learning.” The section below provides several recommendations as to what elements should be included in the revised regulation.

### Proposed Expansion of Approval Modalities

It is vital that the language of 38 C.F.R.21.4267(b) be completely revised, including the exclusion of the term “independent study,” while keeping the language of other section 38 requirements. However, the term “resident training” should not be completely eliminated because it remains extremely important with regard to monthly housing allowance payments under the Post-9/11 GI Bill. The terms “resident training” and “distance learning” (also called distance learning) are used in chapter 33 of title 38, United States Code, to differentiate two different levels of monthly housing allowance with the implication that these two terms are mutually exclusive. Compare 38 U.S.C. 3313(g)(3)(A)(ii)(aa) with (bb) (stating that someone pursuing training solely through distance learning will receive 50% of the amount payable to someone pursuing resident training); also compare 38 U.S.C. 3313(c)(1)(B)(i) with (iii). Congress intended the reduced “distance learning” housing allowance to be reserved only for those students who are not physically going to classrooms to train but rather are training somewhere more convenient—such as their own homes. See S. REP. 111-346, 11, 2010 U.S.C.C.A.N. 1503, 1505 (stating, “The Committee recognizes that the trend in higher education appears to be toward the so-called ‘blended’ or ‘hybrid’ learning experience where there are components of both classroom instruction and distance learning. However, since one of the basic purposes of the living allowance is to offset the cost of housing away from home and since most distance learning is pursued from home, the full allowance does not appear supported at this time.”). It appears clear that Congress only envisioned two possible methods by which a student might go to school—either through “classroom instruction” or through “distance learning.” Therefore, any definition that is used for “distance learning” must differentiate it from “classroom instruction.” This necessary distinction, therefore, requires the definition to have a spatial aspect that essentially asks “where is the student located when pursuing this training? Is the student in a face-to-face classroom or somewhere else, such as a virtual environment?” In addition, the term “distance learning” must be further defined to reflect current distance learning modalities. Figure 1, below, presents a relational chart of terms that fall under distance learning.
The term “distance learning” is defined in current regulations at 38 CFR 21.9505 as any program that satisfies the Department of Education’s definition of “distance learning” found at 20 U.S.C. 1003(7). However, the current regulatory definition is insufficient because it relies exclusively on 20 U.S.C. 1003(7), which does not entirely satisfy the requirement. The Department of Education definition contains the criterion “students who are separated from the instructor” which is essentially asking “where is the student located?” This is a question that the definition must ask. However, whereas the Department of Education’s definition can be satisfied by the answer “somewhere separate from the instructor,” there must be a definition that can only be satisfied by the answer “somewhere other than a classroom.” If the definition is not limited to this answer, then it would fail to fulfill Congress’ intent of distinguishing “distance learning” from “classroom instruction.” Therefore, § 21.4200(oo) intends to remedy this disconnect between the Department of Education’s criteria and VA’s criteria by incorporating most of the definition of distance learning from 20 U.S.C. § 1003(7) but adding to it an exception which states that certain training, although satisfying the definition of “distance learning” (because it utilizes communication technologies and the student is physically separated from the instructor), will not be considered “distance learning” for VA purposes if the student is required to attend training in a physical classroom (i.e., the student is required to go to the educational institution at a designated time in order to access the technology and instructional materials). This will ensure that Congress’ intent is fulfilled to limit the application of the reduced housing allowance to only those students who do not receive instruction in a physical classroom (i.e., no “classroom instruction”). Furthermore, paragraph (pp) would be added, codifying the “resident training”/“distance learning” dichotomy by simply stating that anything that is not distance learning would be considered resident training.

In sum, the language of 38 C.F.R.21.4267(b) must be revised entirely to terminate independent study, revise definitions of distance learning, and include expanded terminology for various distance-learning modalities. These changes will allow state approving agencies the ability to approve synchronous online courses and hybrid courses while maintaining restrictions on certain asynchronous online courses and other self-paced courses.

**Conclusion**

The U.S. government has a long history of supporting veteran and military-student access to post-secondary education, specifically through various mechanisms of financial aid. Since the
implementation of the GI Bill in the mid-20th century, this support has changed the face of U.S. higher education. However, as higher education has evolved, regulations guiding veteran and military-affiliated student benefits have not. This report sought to illuminate one such barrier: the outdated use and interpretation of courses labeled as independent study in regulation 38 C.F.R.21.4267(b). Proposed changes highlighted in this report would seek to change the language to reflect contemporary delivery of post-secondary education by creating definitions for distance learning encompassing both completely online courses and programs, as well as hybrid (blended) courses and programs. By implementing these changes, veteran and military students may benefit from broader course offerings and achieve their goal of a postsecondary credential in less time.
REFERENCES


Definition of “Credit Hour” - The Carnegie Unit: How to Calculate Student Contact Hours. (n.d.). Los Angeles Southwest College. Retrieved from http://www.lasc.edu/students/Credit%20Hour%20Definition%20for%20LASC.pdf


APPENDIX A:
Sample Synchronous Course Syllabus

Old Dominion University
Spring 2018
FOUN 812: RESEARCH DESIGN & ANALYSIS

Course Website: https://connect.odu.edu/foun812/

Instructor: Dr. Jason Lynch
Email: rlync009@odu.edu
Skype ID: rjlynch86

Tuesdays
4:20pm-7:00pm
WEB: Adobe Connect

COURSE DESCRIPTION

This course focuses on the application of advanced research design as it is applied in various educational disciplines. It provides an in-depth examination of quantitative research approaches, sampling techniques, threats to validity, ethical considerations and reviewing, writing quantitative methodology descriptions for research proposals and reports.

Prerequisites: FOUN 611, FOUN 612 or equivalent masters level introductory research course approved by instructor.

COURSE OBJECTIVES

Through lectures, interactive projects, writing assignments, and discussions students will achieve the following objectives:

1. Review research approaches and designs; distinguish between approaches, designs
2. Critique published research studies that use experimental and non-experimental methodologies
3. Develop research questions, hypotheses, and problem statements aligned with various methodologies
4. Review literature as it relates to methodologies employed
5. Operationally define variables and measure constructs
6. Evaluate methodology with respect to internal validity, external validity, psychometric properties.
7. Write methodology sections for various designs
8. Recognize ethical and political issues associated with research
9. Understand process for obtaining Human Subjects approval
10. Understand how to structure, write complete research proposals, reports
REQUIRED TEXTS

Required Text

Recommended Texts

COURSE REQUIREMENTS

Writing Assignments
Unless otherwise noted, all out-of-class assignments must adhere to APA 6th Edition standards, i.e. typed, double-spaced, with one-inch margins, and Times New Roman. If you do not own this book, it can be found in most libraries. Your references should be scholarly. While it is acceptable to use magazines, newspapers, the Internet, or any other source from the popular media, you should critically assess their worth. Research projects should be primarily based on books, peer-reviewed journal articles and other scholarly work. Furthermore, you should use original sources. Do not cite work that you have not read. In your writing assignments, please do not cite references in your bibliography or reference list that you have not used in the text of your paper.

Final Course Grades
Final grades will be assigned as follows, based on the total number of points. Final grades will not be rounded for any reason. Requests to round final grades will not be entertained.

95 to 100 = A
90 to 94.9 = A-
87 to 89.9 = B+
84 to 86.9 = B
80 to 83.9 = B-
77 to 77.9 = C+
74 to 76.9 = C
70 to 73.9 = C-
60 to 69.9 = D
Below 60 = F

Grading Criteria
Clarity of expression in class discussions and in written work is highly valued, as is good professional citizenship and active engagement. In addition, proficiency in applying theory to practice will be assessed.

Rubrics containing detailed criteria for grading each assignment may be found on Blackboard. It is highly suggested you review the rubric before embarking on each assignment.
Late Assignments

All assignments are due prior to the beginning of class unless otherwise noted. If you hand in an assignment after the due date you will lose 10 points for every day late for a maximum of 5 days on that assignment. After 5 days, late assignments will not be accepted and you will receive 0 points. Early submission of assignments is always welcomed.

Communication

Discussion Boards/Announcements. I will primarily use Blackboard Announcements and/or email to communicate with the class. If there is a question that you have that you believe will beneficial for the class, please feel free to post it to the discussion board. Otherwise, please feel free to email me directly.

Email. Please feel free to email me during the course. If I receive the same question numerous times, I will address it using Blackboard Announcements. I will try to respond to emails in a 48-hour time period. In the circumstance that I cannot satisfactorily answer your inquiry in that time period I will respond by letting you know that is the case. Please show the same courtesy in your email responses.

Note: I will only send emails to your ODU student email account. I will not send emails via personal accounts.

Honors Pledge. Students are responsible for the Code of Student Conduct posted on the Office of Student Conduct & Academic Integrity (OSCAI) website. Each student is expected to abide by the honor system of Old Dominion University: “I pledge to support the honor system of Old Dominion University. I will refrain from any form of academic dishonesty or deception, such as cheating or plagiarism. I am aware that as a member of the academic community, it is my responsibility to turn in all suspected violators of the honor system. I will report to the Honor Council hearings if summoned.”

All students are expected to abide by the code of academic integrity throughout the course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to the University administration.

Students with Special Needs. Old Dominion University is committed to ensuring equal access to all qualified students with disabilities in accordance with the Americans with Disabilities Act. The Office of Educational Accessibility (OEA) is the campus office that works with students who have disabilities to provide and/or arrange reasonable accommodations.

- If you experience a disability which will impact your ability to access any aspect of my class, please inform me as soon as possible so that I may connect you with OEA. We will work together to ensure that appropriate accommodations are available to you.
- If you feel that you will experience barriers to your ability to learn and/or testing in my class but do not have an accommodation letter, please consider scheduling an appointment with OEA to determine if academic accommodations are necessary.
- Students are encouraged to self-disclose disabilities that have been verified by the Office of Educational Accessibility by providing Accommodation Letters to their instructors early in the semester in order to start receiving accommodations. Accommodations may not be made until the Accommodation Letters are provided to instructors each semester.

The Office of Educational Accessibility is located at 1021 Student Success Center and their phone number is (757) 683-4655. Additional information is available at the OEA website: http://www.odu.edu/educationalaccessibility/

Syllabus. Given the nature of the course, this syllabus and calendar is subject to revision. The readings and assignments are due on the date listed.

Course Format. This course is designed to engage you using a variety of methods including voice thread videos, readings, and in-class activities. Based on the philosophy of a “flipped classroom,” it is to your benefit that you are participating in all voice thread conversations, and completing all reading before
class. Class time will be spend processing the material presented to you, as well as completing practical application exercises to cement your learning.

### COURSE ASSIGNMENTS

<table>
<thead>
<tr>
<th>#</th>
<th>Assignment</th>
<th>Total Points</th>
<th>% of Grade</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CITI Completion Report</td>
<td>5</td>
<td>2.5%</td>
<td>1/16</td>
</tr>
<tr>
<td>2</td>
<td>Research Questions, Hypotheses, Operational Definitions, &amp; Paradigm Rationale</td>
<td>20</td>
<td>10%</td>
<td>1/23</td>
</tr>
<tr>
<td>3</td>
<td>Summary &amp; Critique #1 (Experimental)</td>
<td>25</td>
<td>12.5%</td>
<td>2/13</td>
</tr>
<tr>
<td>4</td>
<td>Summary &amp; Critique #2 (Non-Experimental)</td>
<td>25</td>
<td>12.5%</td>
<td>2/27</td>
</tr>
<tr>
<td>5</td>
<td>Methods Review</td>
<td>45</td>
<td>22%</td>
<td>3/27</td>
</tr>
<tr>
<td>6</td>
<td>Peer Review</td>
<td>5</td>
<td>2.5%</td>
<td>4/17</td>
</tr>
<tr>
<td>7</td>
<td>Final Presentation</td>
<td>15</td>
<td>7.5%</td>
<td>4/17</td>
</tr>
<tr>
<td>8</td>
<td>Method Proposal Paper</td>
<td>45</td>
<td>22.5%</td>
<td>4/24</td>
</tr>
<tr>
<td>9</td>
<td>Participation &amp; Attendance</td>
<td>15</td>
<td>7.5%</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>200</td>
<td>100%</td>
<td>-</td>
</tr>
</tbody>
</table>

**Assignment Descriptions**

Detailed assignment descriptions may be found on the Blackboard course website.

**Assignment 1: CITI Completion Report**

This assignment is conducted as an on-line training program that is required of all graduate students. A few of you may need another certificate for your field of study. Just let me know. Here is the link: [www.citiprogram.org](http://www.citiprogram.org). Submit a copy of the completed certificate. The optional modules are not required. If you have completed the CITI training within the past year, you may submit that completion report.

**Assignment 2: Research Questions, Hypotheses, Operational Definitions, & Paradigm Rationale**

You will develop one or more research questions for an experimental study and one or more for a non-experimental study. Experimental and non-experimental questions must be related to the same topic selected for review (Assignment 5).

**Assignment 3: Summary & Critique 1 (Experimental)**

You will write a brief summary and critique of a published study employing experimental methods. The articles will be posted on Blackboard under assignments.
**Assignment 4: Summary & Critique 2 (Non-Experimental)**

You will write a brief summary and critique of a published study employing experimental methods. The articles will be posted on Blackboard under assignments.

**Assignment 5: Method Review Paper**

You will review and critique the methodology of studies related to your research questions. The methods reviewed can be of any type (quantitative, qualitative, experimental, non-experimental). You need to include at least 10 empirical studies published in peer refereed journal articles. The paper should be no more than 10 pages in length, including references.

**Assignment 6: Peer Review**

It is important for researchers to become comfortable with peers reading their work. Not only can it be helpful during the editing process it will also prepare you for the peer review process of publishing. Students will be asked to engage in peer review and receipt peer feedback.

In this exercise students will share their studies with a peer and provide written feedback via track changes. The focus of this feedback will be on the design of the study. Areas to be considered, are listed below, as well as required steps in the process. Peer feedback groups have been pre-assigned and may be found in Blackboard.

**Assignment 7: Final Presentation**

Students will present a summary of their methods proposal (Assignment 8). The presentation should include the following:

- Introduction
- Subjects or Participants
- Measures & Materials or Apparatus
- Proposed Data Collection & Analysis Procedures
- Limitations
- References

**Assignment 8: Method Proposal Paper**

You will propose an experimental design or non-experimental design aligned with the questions generated in Assignment 2. The proposal should make a contribution to the field by extending the research methodology beyond what was used in previous, related studies. In other words, the proposed method cannot be a replication of an existing study. The paper should be structured in APA style and contain the appropriate subsections.

Class Participation, Attendance, and Contribution. This course will be conducted in an interactive format; therefore, your participation and contribution will determine the success of this course and your experience in it. Your participation grade is dependent on the quality of your discussion and attendance, and so any absence or lateness may affect your grade. Please let me know by 4:00 p.m. on the day of class if circumstances will preclude your attendance, will cause you to be late, or require you to leave early. If you miss more than two class periods you will lose all participation points, and may be dropped from the course.

The classroom must be a place where we all speak freely and share our insights with the other members of the class. I will have opinions on many matters discussed in class, but this does not mean that you must agree with me. The course will not be truly enjoyable unless we disagree on the academic issues and are willing to discuss our opinions. However, at all times, we must be respectful towards each other.
Your class participation will be evaluated at the end of the course. If you have any concerns about your participation, you should contact me immediately. The criteria used to evaluate class participation will be:

a. Attendance as described above,
b. Quality of participation (e.g., integration and consideration of course readings)
c. Respect for others’ views and lived experiences
d. Balancing verbal contributions in class with active listening to classmates
e. Professionalism including giving sole focus to class during class time*
f. Participation in voice threads

*Note: Anyone who accepts phone calls or meetings during class time will be asked to leave class and will be counted as absent for the class session.

**COURSE CALENDAR**

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Assignment Due</th>
<th>Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1/9</td>
<td>Introductions &amp; Defining educational research; overview of research approaches and designs; research paradigms</td>
<td></td>
<td>Leedy (1974) Chapter 1 Smeyers (2001) Differences Between Quant &amp; Qual</td>
</tr>
<tr>
<td>2</td>
<td>1/16</td>
<td>Research problems: aligning questions hypotheses with research designs; types of variables; operationally defining constructs</td>
<td>1</td>
<td>Leedy &amp; Omrod (2015) Chapter 2</td>
</tr>
<tr>
<td>3</td>
<td>1/23</td>
<td>Reviewing literature; using literature to identify, critique various methodologies employed to address research questions</td>
<td>2</td>
<td>Leedy &amp; Omrod (2015) Chapter 3</td>
</tr>
<tr>
<td>4</td>
<td>1/30</td>
<td>Quantitative experimental designs: pre-experiments, true experiments</td>
<td></td>
<td>Leedy &amp; Omrod (2015) Chapter 7 Articles 1 &amp; 2</td>
</tr>
<tr>
<td>5</td>
<td>2/6</td>
<td>Quantitative experimental designs: Quasi-experiments, factorial designs; Solomon 4- group; single-subject; mixed designs</td>
<td></td>
<td>Leedy &amp; Omrod (2015) Chapter 7 Articles 3 &amp; 4</td>
</tr>
<tr>
<td>Week</td>
<td>Date</td>
<td>Topic</td>
<td>Assignment Due</td>
<td>Readings</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>----------------------------------------------------------------------</td>
<td>----------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>8</td>
<td>2/27</td>
<td>Selection and measurement in quantitative designs, criteria for sample sizes, psychometric properties of measures</td>
<td>4</td>
<td>Leedy &amp; Omrod (2015) Pgs. 158-172</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spring Break - No Class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>3/27</td>
<td>Aligning statistical analyses with research questions/ hypotheses</td>
<td>5</td>
<td>Leedy &amp; Omrod (2015) Chapter 8</td>
</tr>
<tr>
<td>11</td>
<td>4/3</td>
<td>Ethical and legal issues; obtaining human subjects approval &amp; Research proposals and reports: Dissertation topics, committees, process</td>
<td></td>
<td>Leedy &amp; Omrod (2015) Pg. 102-108</td>
</tr>
<tr>
<td>12</td>
<td>4/10</td>
<td>No Class: Peer Review Week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>4/17</td>
<td>Presentations</td>
<td>6 &amp; 7</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>4/24</td>
<td>No Class</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

### Journal Articles for Critique in Class

All articles may be found in the Blackboard course site via Weekly Documents


APPENDIX B:

Sample Hybrid Course Syllabus

(University of Texas at San Antonio)

Intro to Literature - ENG 2013-08 (Hybrid)
Tuesday Lectures in HSS 2.01.40, 12:30-1:45pm

Instructor: (Redacted)     Office: MB 2.476
E-mail: (Redacted)     Office Hours: TR 2-3pm

Course Description

This course introduces students to the traditional terminology and methods of Literary Study. In short, we will learn and practice the prevailing modes of scholarly work in the field of literature. This course focuses upon careful, critical reading combined with compulsory interaction with me during lectures, therefore keeping up with the assignments and class attendance is crucial. This course is designed to give students a foundation for further scholarly labor in the Liberal arts, although our primary focus will be the analysis of literature.

More specifically, you will:

1. Learn the terminology and conventions associated with the major literary genres.
2. Learn the terminology, theory, and rhetorical conventions of literary study in general.
3. Practice these conventions in class, your journals, and by writing your own critical essays
4. To learn efficient reading and analytical skills for this discipline
5. To improve your academic writing skills in general

Prerequisite

• Freshman Composition I and II

Textbook & Course Materials

Required Text (bring to every class meeting)

ISBN#: 978-0-393-93514-1 (pbk)

6 Parscore Quiz grading sheets (pink), and 2 Parscore form X-101-864
Your reading journal and materials to take notes.

• Other readings and assignments will be made available in Blackboard Learning Modules.
Computer Requirements

- Internet connection (DSL, LAN, or cable connection desirable)
- Access to Blackboard

Hybrid Course Structure

This course is designed to provide a “hybrid” experience, including both face-to-face (F2F) and online activities. Most of your direct contact with me will be during our class meetings although I will be holding “virtual” office hours in addition to my regular office hours. You may, of course, email me whenever you want at ken.burchenal@utsa.edu

Online sessions will be a blend of self-paced and group activities using Blackboard and other Web sites. Between classroom sessions you will be required to do the assigned readings, view the online lectures, create reading journals and comment upon the journals of other students, and complete other activities as detailed in the schedule of assignments. I will assume you have completed the online assignments before our Tuesday face-to-face sessions; it will be very difficult to follow my Tuesday lectures if you have not completed the online work, much less pass the quiz if there is one.

Face-to-face sessions will be held Tuesdays on the UTSA campus in HSS 2.01.40. These sessions will include additional lecturing, discussion groups, quizzes, and important instructions about online assignments. Different material will be presented during the face-to-face sessions than online, so it is a mistake to think you can pass the tests based solely on the material you consume online.

Blackboard Access

This course will be delivered partially online through a course management system named Blackboard. To access this course on Blackboard you will need access to the Internet and a supported Web browser (Internet Explorer, Firefox, Safari). To ensure that you are using a supported browser and have required plug-ins please run the Browser Check from your Blackboard course. Refer to the Blackboard Browser Tune-up page for instructions.

Graded Course Activities

Your final grade will be determined according to the following formula:

1) Journal–20%

You will write, then upload weekly journal entries onto our Blackboard site and bring hard copies of these entries with you to every F2F class meeting; how you accomplish these tasks will be up to you, though I make some suggestions below in the section which addresses Blackboard. You will also have to respond to two journal entries of your fellow students each week. Detailed directions about how to get full credit for these tasks are included in the learning module for each week.

2) Class Participation-10%

You will receive a grade for your class participation via in-class discussions and exercises as well as some group activities online. Being absent or unable (for whatever reason) to participate during in-class activities will lower this portion of your grade. Don’t worry; if you are not the kind of person who speaks up in class, ask about other ways to improve your participation grade. Your grade for the two group projects will also be included in this portion of your final grade.
3) **Quizzes-20%**

You will take brief quizzes on the reading assignments every week on Bb. These quizzes will give you credit for reading the homework on time. Quizzes will not test your ability to interpret literature, only your ability to retain basic terminology from the textbook and simple questions about plot, character names, setting, etc. from the literary works. In other words, they will be very easy if you read and take notes. I will also occasionally give brief quizzes during our F2F sessions, to encourage both attendance and note-taking. You will take these quizzes on a Parscore answer sheet, so you are required to bring at least one sheet to every class meeting; I will not provide answer sheets. If you have a legitimate reason for absence or being unable to take the quiz online, you may arrange to take up to two quizzes missed during F2F class time. Send me an email which includes your name, class, quiz missed, and the legitimate reason you were unable to complete the work.

4) **Mid-Term Test -20%**

This will be a multiple choice test that documents your understanding of the terminology, theories, and generic conventions associated with literary study.

5) **Final Exam-30%**

This will be an exam comprised of multiple choice and essay questions. We will take this exam in our regular classroom. There will be no make-ups for the final.

**Viewing Grades in Blackboard**

Points you receive for graded activities will be posted to the Blackboard Grade Book. Click on the My Grades link on the left navigation to view your points. Not all graded activities - notably “class participation” - will be published immediately.

**Attend Class Meetings**

Students are expected to attend all online and face-to-face class sessions as listed on the course calendar. Attendance at face-to-face class meetings and participation in online activities is essential for the success of the hybrid experience. Attendance is required. If you have more than five unexcused absences 20 pts can be subtracted from your participation grade; further unexcused absences will lower your grade further. If you must be absent, send me an email at ken.burchenal@utsa.edu (I never check my Blackboard email) stating your legitimate reason to be excused; doing so insures your right to make up or submit any work that would have been handed in. I will acknowledge receipt of these emails but not respond to your reasons for absence unless they are inadequate to justify missing the class period. Hand in any late work at the next class period and arrange a time to make up other work you may have missed, such as a quiz. You are responsible for work assigned or changes in assignments made in your absence, so you need to check with me or another student if you miss class. Being absent does not automatically release you from pending due assignments.

**Understand When You May Drop This Course**

It is the student’s responsibility to understand when they need to consider dropping a course. Refer to the UTSAS Course Schedule for dates and deadlines for registration. After this period, a serious and compelling reason is required to drop from the course. Serious and compelling reasons include: (1) documented and significant change in work hours, leaving student unable to attend class, or (2) documented and severe physical/mental illness/injury to the student or student’s family. I will not drop you from the course for any reason; if you are failing from lack of attendance or just poor performance, make sure you withdraw before the deadlines.
Incompletes are only given in advance and under extreme circumstances.

**Inform Your Instructor of Any Accommodations Needed**

If you have a documented disability and verification from the Office of Disability Services, and wish to discuss academic accommodations, please contact your instructor as soon as possible. It is the student's responsibility to provide documentation of disability to ODS and meet with a ODS counselor to request special accommodation before classes start.

**Use of Electronic Devices in Classroom**

Turn off cell phones, pagers, notepads, and other electronic gadgets before you enter class; take your earbuds out, don't text people, don't check your Facebook page. You may use computers to take class notes, but if you use them for ANY other reason, you will lose the privilege for the rest of the course. You also may not do online work or this class while in the F2F classroom.

**Commit to Integrity**

The University expects every student to maintain a high standard of individual integrity for work done. Scholastic dishonesty is a serious offense which includes, but is not limited to, cheating on a test or other class work, plagiarism (the appropriation of another's work and the unauthorized incorporation of that work in one's own work), and collusion (the unauthorized collaboration with another person in preparing college work offered for credit). In cases of scholastic dishonesty, the faculty member responsible for the class is directed by UTSA policy to initiate disciplinary proceedings against the student.

**Introduction to Literature - Schedule of Assignments**

Each of our face-to-face (F2F) sessions are listed below along with the homework that will be assigned this semester. You are required to finish all homework assignments BEFORE the Tuesday F2F session each week (except the first week, of course). Some Bb assignments will have additional deadlines, typically noon on class days. Activity and assignment details will be explained in detail within each week's corresponding learning module and in F2F sessions, but the general course assignments are as follows:

**T – 1/11:** In-class session/lecture: Intro to Intro to Literature

Assignments due next in-class session:

- Read: "Fiction: Reading, Responding, Writing" pp 12-37; Ch. 1 "Plot" pp 50-58; Baldwin, "Sonny's Blues" pp 63-85.
- Bb: View “Things we do with words” and “Interpretive Fallacies”
  - Create/upload a journal entry, responding to the reading assignment in some way.
  - Create/upload a response to a journal written by a cohort member.
  - Agree upon a method for identifying the other members of your cohort in-class.
  - Take the online quiz
T - 1/18: In-class session/lecture: Applying the Aesthetic Triangle

Assignments due next in-class session:

Read: Ch. 2 “Narration and Point of View” pp 96-117; Ch. 3 “Character” pp 119-126; Chekhov’s “The Lady with the Dog” pp 169-80.

Bb: View “Narrative Analysis”
   Create/upload a journal entry responding to the reading assignment in some way.
   Create/upload a response to a journal written by a cohort member.
   Take the online quiz

T - 1/25: In-class session/lecture: Narration

Assignments due next in-class session:

Read: Ch. 5 “Symbol” pp 208-24, Hawthorne’s “The Birth-mark”; Ch. 6 “Theme” pp 251-54; Garcia-Marquez “A Very Old Man…” pp 271-75; Flannery O’Connor “A Good Man is Hard to Find” pp 299-310.

Bb: View “Theme vs. Story”
   Create/upload a journal entry responding to the reading assignment in some way.
   Create/upload a response to a journal written by a cohort member.
   Take the online quiz

T - 2/1: In-class session/lecture: Literary Value

Assignments due next in-class session:

Read: Wm. Faulkner’s “A Rose for Emily” pp 389-398; Ch. 9 “Critical Contexts” pp 398-419; “critical response” journal

Bb: View “Meta-criticism”
   Create/upload a journal entry, responding in some way to Faulkner’s “A Rose for Emily”.
   Create/upload a response to a journal written by a cohort member.
   Create/upload a journal entry responding to the critical essays assigned from Ch. 9.
   Take the online quiz

T - 2/8: In-class session/lecture: Literary Criticism

Assignments due next in-class session:


Bb: View “Drama vs Prose” and “Traditional Tragedy”
   Read “Performance Project Guidelines”
   Create/upload a journal entry responding to the reading assignment in some way.
   Create/upload a response to a journal written by a cohort member.
   Take the online quiz

T - 2/15: In-class session/lecture: Reading Drama; Traditional Tragedy

Assignments due next in-class session:

Read: Ch. 22, 1245-1304 (Shakespeare’s “A Midsummer Night’s Dream”)

Bb: View “Comedy vs Satire”
Create/upload a journal entry responding to the reading assignment in some way.
Create/upload a response to a journal written by a cohort member.
Take the online quiz

T - 2/22: In-class session/lecture: Shakespeare and Traditional Comedy
Assignments due next in-class session:

Read: No reading assignment
Bb: Read "Midterm Study Sheet"
View "Staging Issues"
Complete the Performance project with your cohort members

T - 3/1: In-class Session/lecture: Performance Projects; Review for Midterm
T - 3/8: In-class session/lecture: Mid-Term Exam

Spring Break - 3/14 - 18
Assignments due next in-class session:

Read: No reading assignment
Bb: View "Short Term 12," "The Delicious," and "Are You the Favorite Person..." (The link to these short films is on our homepage.)
Read "Film Journal Guidelines"
Create/upload a journal entry responding in some way to the short films assigned.
Create/upload a response to a journal written by a cohort member.
Take the online quiz

T - 3/22: In-class session/lecture: Literature vs. Film
Assignments due next in-class session:

Read: “Poetry: Reading, Responding, and Writing” 619-26; and Ch. 10 “Theme and Tone” pp 651-62; Pound “The River-Merchant's Wife” 644; and James Dickey “Cherrylog Road” 708-711.
Bb: View “Reading Poetry”
Create/upload a journal entry responding in some way to the poems assigned.
Create/upload a response to a journal written by a cohort member.
Take the online quiz

T - 3/29: In-class session/lecture: The Elements of Poetry
Assignments due next in-class session:

Read: Ch. 13 “Language” pp 730-37, 751-55; and Ch. 14 pp 773-788.
Bb: View “Interpreting Poetry”
Create/upload a journal entry responding in some way to the poems assigned.
Create/upload a response to a journal written by a cohort member.
Take the online quiz

T - 4/5: In-class session/lecture: Poetic Music vs. Meaning
Assignments due next in-class session:

Read: Ch. 15 “Internal Structure” pp 801-812; and Ch. 16 “External Form” pp 824-834, 842-844.
Bb: View “Interpreting Poetry”
Create/upload a journal entry responding in some way to the poems assigned.
Create/upload a response to a journal written by a cohort member.
Take the online quiz

T - 4/12 In-class session/lecture: Poetic Form

Assignments due next in-class session:
Read: Wordsworth’s "Tintern Abbey" p 1048-51; Shelley’s "Ode to the West Wind" p 817; Dickinson’s "We do not play on graves" p 887; Plath’s "Morning Song" 720; Yvor Winters "At the San Francisco Airport" 738.
Bb: View “Classicism vs Romanticism”
Read "Romanticism"
Create/upload a journal entry responding in some way to the poems assigned.
Create/upload a response to a journal written by a cohort member.
Take the online quiz

T - 4/19 In-class session/lecture: Romanticism

Assignments due next in-class session:
Read: No Norton Anthology readings
Bb: View “Canonical vs Popular Culture”
Read Walt Whitman’s "Crossing Brooklyn Ferry" and Jay Z’s "What More Can I Say?"
Read “Popular Culture Project Guidelines”
Read “Final Exam Study Sheet”
Complete the Popular Culture Project with your cohort members
Take the online quiz

T - 4/26 In-class session: Canonical vs Popular Culture; Final Exam Review

W - 5/4: Final Exam, 10:30 AM - 1:00 PM
Bring a Blue Book, your text book, and a Parscore test sheet
APPENDIX C

Visual Examples of Commonly Used Web Conferencing Software in Online Courses

ADOBE CONNECT

CISCO WEBEX
# APPENDIX D:

## NCSU Degree Materials

**Instructions:** At NC State, the Plan of Work specifies the courses a student has taken or will take as part of their graduate program. Before submitting their official Plan of Work to the Graduate School, students should select File < Download to save a copy of this form on their computer, then fill out and share the form with their advisor to verify their planned courses meet program requirements. After verifying, students must submit their final Plan of Work to the Graduate School by logging into MyPack Portal and filling in their official Plan of Work. Once an official Plan of Work is built, the student submits/routes the plan to their advisor (and committee for M.S. and Ph.D.) who approves the plan. This curriculum planner is intended to serve as an interim working document that precedes the submission of the final Plan of Work online.

<table>
<thead>
<tr>
<th>Required Core Courses (preferably in the order listed)</th>
<th>Semester Taken or Planned:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECI 519 Special Topics: Digital Learning Workshop (Program Orientation Course, first fall in program)</td>
<td></td>
</tr>
<tr>
<td>ECI 517 Theoretical Foundations of Advanced Learning Environments</td>
<td></td>
</tr>
<tr>
<td>ECI 716 Design and Evaluation of Instructional Materials</td>
<td></td>
</tr>
<tr>
<td>ECI 719 Special Topics: Technology Program Evaluation</td>
<td></td>
</tr>
<tr>
<td>ECI 652 Field-Based Applications of Digital Learning and Teaching (Portfolio/Practicum)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Program Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECI 511 Technology Integration Theory and Practice</td>
</tr>
<tr>
<td>ECI 512 Emerging Technologies for Teaching and Learning</td>
</tr>
<tr>
<td>ECI 513 Teaching and Learning with Digital Video</td>
</tr>
<tr>
<td>ECI 514 Multimedia Design and Applications in Education</td>
</tr>
<tr>
<td>ECI 515 Online Collaborations in Education</td>
</tr>
<tr>
<td>ECI 518 Digital Learning Program and Staff Development</td>
</tr>
<tr>
<td>ECI 721 Technology &amp; Informal Learning Environments</td>
</tr>
<tr>
<td>ECI 722 Theory &amp; Research in Distance Education</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>New Program Courses (Currently Taught as “Special Topics” Until Course Action is Initiated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECI 519 Special Topics: Developing and Delivering Online Instruction</td>
</tr>
<tr>
<td>ECI 519 Special Topics: Media, Technology, and Open Learning</td>
</tr>
<tr>
<td>ECI 719 Special Topics: Modeling, Simulation, &amp; Games for Complex Problem Solving</td>
</tr>
<tr>
<td>ECI 719 Special Topics: Computer-Supported Collaborative Learning</td>
</tr>
<tr>
<td>ECI 719 Special Topics: Game-Based Learning</td>
</tr>
<tr>
<td>ECI 719: Special Topics: User Experience for Educational Software</td>
</tr>
</tbody>
</table>
Undergraduate Learning Design & Technology SUBPLAN

Students interested in education and learning who do not intend to enter the classroom as teachers typically have few degree options at the undergraduate level at any university. This option being proposed would allow students to pursue a path in the area of learning, design, and technology.

Learning, Design and Technology is a relatively broad description of a field that focuses on applying what is empirically understood about how humans learn and improve upon performance to the design, development, implementation, and evaluation of instructional and non-instructional processes and resources intended to improve learning and performance in a variety of settings, particularly educational institutions and the workplace. The LDT area typically draws upon the fields of education, psychology, communications, and design in order to improve human performance and knowledge in all learning environments. Graduates would be expected to understand and leverage technologies as both product (such as developing online courses for distance learners, designing simulations and gaming, and/or developing instructional materials in a variety of learning environments) and process (such as an iterative and formative approach to learner assessment). Someone seeking this degree may practice their unique, multidisciplinary profession in a variety of settings including industry, K-12 schools, higher education, and government:

- In K-12 settings, these skills are crucial for anyone involved in a wide range of situations from improving learning in individual classrooms to broad standards based initiatives. The field of LDT involves not only the integration of technology in the classroom, but the systematic development of instruction to enable educators to deal with the demands of standards based initiatives.
- In higher education, the principles of learning, design, and technology are used in the development of faculty and curriculum design in a variety of delivery modes. This degree would play a critical role in preparing students to excel in the development of online, hybrid (a mix of distance and face-to-face delivery modes), and face-to-face courses (developing instructional materials).
- In industry and government, agencies actively seek applicants that are skilled and able to develop training and educational programs within the organization or agency.

Graduates of the program might work directly with school systems in developing educational materials, curriculum, simulations and games, or professional development, or they might work for companies that target different markets (K-12, higher education, adult learners) in designing and developing commercial educational materials and digital content. Graduates might also work as instructional designers for businesses with training departments.

This degree program would address a growing field in learning, design, and technology, and provide an inter- and cross-disciplinary area of study that draws students with multiple interests and backgrounds. Technology has become an integral part of instruction and learning that is heavily emphasized by federal agencies including the DoE and NSF, as well as the State of North Carolina. Leveraging this growing trend with local partnerships with schools and business would allow us to provide a high quality program that extends beyond the classroom and helps prepare students for a field that shows a high probability of exponential growth in jobs and career opportunities.