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FACULTY PROFESSIONAL DEVELOPMENT FOR IMPROVING HYBRID COURSE SUCCESS

by

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Education in the School of Teaching, Learning, and Leadership in the College of Education and Human Performance at the University of Central Florida

Orlando, Florida

Summer Term 2017

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ABSTRACT

The purpose of this Dissertation in Practice was to investigate the inconsistent success rates in hybrid courses at a Florida college. Results from a pilot study and faculty survey revealed a need for a training program specific to hybrid instructors. The researchers created a training program composed of a framework and a professional development course, designed to promote consistency in how instructors create and implement their hybrid courses. The framework consists of six research-based standards which aided in the creation of six learning modules for the professional development course. These modules were: course alignment, face-to-face active learning, online resources, formative feedback, assessment guidelines, and course structure. A focus group of faculty members who have taught hybrid courses at the college was used to review the course and framework to assess whether any modifications are required. The focus group discussion revealed that all six elements of the framework are essential to the success of a hybrid course design. The focus group also suggested changes and revisions to the professional development course which should be addressed prior to rolling out the course college-wide.

Jennifer would like to dedicate this work to her mom,

Sharyn Lynn Zias.

She has been a great source for inspiration, strength, and perseverance.

Amanda would like to dedicate this work to her son,

Roland Alexander Weinsier.

His smile and laughter lifted my spirits every day and kept me sane.

ACKNOWLEDGMENTS

We are incredibly thankful to our dissertation chair, Dr. Carolyn Hopp. Dr. Hopp, your guidance and support made this work possible. You continually helped us stay on task, soothed our worries, and praised our abilities, giving us the courage and confidence to succeed. We have learned so much from you and feel truly blessed to have collaborated with you throughout this process. We simply do not know how to thank you enough.

We would also like to thank Dr. Julie Phelps. Julie, you convinced us to begin this journey in the first place and have cheered us on along the way. You are not only a valued member of our dissertation committee and a colleague, but also an amazing friend. Your knowledge and expertise were invaluable to this process.

Thank you to Dr. Thomas Vitale, our program advisor, dissertation committee member, and teacher. We learned so much from you and truly appreciate your support and willingness to allow us to co-author this work. Our collaboration made this work even richer thanks to you.

Thank you also to dissertation committee member Dr. Rebecca Hines. Your willingness to serve on our committee and lend us your expertise and guidance was instrumental in helping us complete this work.

We are thankful to Jeremy Weinsier, who edited this work and every paper we wrote together throughout this degree. Your perspective helped us create a cleaner, clearer, more professional final product.

Additionally, Jennifer would like to thank her husband, Brent Lawhon. You have been a wonderful support for me while working on my doctorate. You encouraged me to continue even when times were hard. I am truly grateful for your love and understanding.

I would also like to thank my parents, Mike and Sharry Zias. You both encouraged me to get my doctorate and continued to support me throughout the process. I am very grateful to have you both in my life.

I would like to thank my four wonderful children, Alyssa, Mikaela, Lukas, and Christopher. I love you all so much! You all make me want to be a better person and do my best at all times!

Amanda would like to thank her husband, Jeremy Weinsier. Besides editing all of my work, you have also been immeasurably understanding and supportive throughout these last three years. We have truly been through a lot–becoming parents while trying to complete this work. Your love, patience, and humor are everything.

I would like to thank my mother and father-in-law, Nancy and Richard Weinsier. Your monetary support made this degree possible and I would never have been able to complete this work if not for your countless hours of baby-sitting and incredible emotional support. I appreciate it more than you will ever know.

Thank you to my parents, Bill and Betsy Saxman, and my sister, Emily. You have always loved and supported me – pushed me to do my best without making me feel that I needed to live up to some unattainable expectation. I love you!

Lastly, I would like to again thank my son Roland. Becoming a parent during this process was wonderful and scary and worth it. You amaze me every day.

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LIST OF ABBREVIATIONS

CDL Center for Distributed Learning

LMS Learning Management System

MOOC Massive Open Online Course

PD Professional Development

CHAPTER ONE: THE PROBLEM OF PRACTICE

Introduction

The focus of this Dissertation in Practice is hybrid learning (also referred to as blended learning) at a college located in the state of Florida. Blended learning may help make college education more accessible for students, especially those who have careers, families, live in rural areas, or have special learning needs (Deschacht & Goeman, 2015). Blended learning also provides instructors with the ability to harness the strengths of both online and face-to-face instruction (Norberg, Dziuban, & Moskal, 2011). Norberg et al. asserted that blended learning has the potential to become a more popular modality in higher education than online because it "maximizes the educational potential of a mix of both traditional academy and internet-based tools and services" (p. 208).

Blended learning has the potential to produce higher success rates and lower withdrawal rates when compared to both online and face-to-face courses (Norberg et al., 2011). However, several studies have found inconsistencies in the success rates of hybrid courses. In a study of blended courses in a business program at the Campus Brussels of the KU Leuven in Belgium, Deschacht & Goeman (2015) found that blended courses had higher withdrawal rates compared to face-to-face and online courses. Ashby, Sadera, & McNary (2011) compared online, blended, and face-to-face intermediate algebra courses and found similar results. Ashby et al. found that both online and blended courses had lower success rates than face-to-face courses because of the lower retention rates associated with online and blended modalities. Their data showed that 93% of face-to-face students completed the course, while only 70% and 76% of students completed

the course in blended and online modalities, respectively (Ashby et al., 2011). However, a study conducted at the University of Memphis found that course success rates and retention rates improved for all three general education college math courses in which a blended learning framework was implemented (Bargagliotti, Botelho, Gleason, Haddock, & Windsor, 2012). Moreover, a meta-analysis report based on data and literature compiled between 1996 and 2008 from the Department of Education, found inconsistencies in success rates for both blended and online classes (Means, Toyama, Murphy, Bakia, & Jones, 2009). The meta-analysis report posited that these inconsistencies were most likely related to the variation in course delivery, course content, and the scope of instruction (Means, et al., 2009).

The college highlighted in this Dissertation in Practice has also experienced inconsistent hybrid success rates that are regularly lower than face-to-face course success rates since 2010 (College Strategic Indicator Report, 2015). At the same time, the college has seen a dramatic increase in students enrolled in hybrid courses. In fact, there was a 750% increase in full-time students taking hybrid courses in the ten-year span from 2004 to 2014 (College Strategic Indicator Report, 2015). During those same years, the college experienced a decrease of 6.7% in students enrolling in face-to-face courses (College Strategic Indicator Report, 2015). With the increased demand for hybrid courses at the college, it is imperative that the right strategies be implemented to promote more consistent success rates in hybrid courses.

Description and Significance

Problem Statement

Because of consistently lower average student success rates in hybrid courses at a Florida college, hereinafter referred to as "the college," the problem of practice that this Dissertation in Practice will address is the lack of consistency in organizational and pedagogical structure that impacts successful hybrid instruction. For the purposes of this document, the term "hybrid" will also refer to blended, mixed-mode, and reduced-seat-time modalities.

Over the past five years, the demand for hybrid courses at the college has increased by 49% college-wide while the demand for face-to-face courses has decreased by 16% (College Strategic Indicator Report, 2015). This growth in the blended modality, also known as hybrid, has been documented nationally over the last 10 years (Alammary, Sheard, and Carbone, 2014). Despite their growing popularity, the success rates of students taking hybrid courses have been consistently lower than the success rates of students in comparable face-to-face courses. In Fall 2014, 72.5% of the college's students were successful (earned a C or better) in all hybrid courses, while 76.1% of students college-wide earned a C or better in all face-to-face courses (College Strategic Indicator Report, 2015). Although 72.5% may not seem like an alarming success rate—and the gap between success in hybrid and face-to-face courses was only 3.6% that term—there are blatant inconsistencies in success when comparing departments and individual courses. For example, in Fall 2014, the gap between students successful in face-to-face courses versus hybrid courses in the communications department was 11% (College IR Hybrid Course Success Data, 2016). However, the proportion of successful students within the engineering department was higher for hybrid courses than face-to-face courses, producing a gap of -9.6%

(College IR Hybrid Course Success Data, 2016). In other words, hybrid courses in the communications department showed significantly lower success rates than face-to-face courses, while hybrid courses in the engineering department performed better than face-to-face engineering courses. Comparing specific courses, in Fall 2014, the percentage of successful students in face-to-face STA 2023 courses was 75.8% while the success rate for hybrid STA 2023 courses was 89%—a gap of -13.2%. Contrastingly, the success rate for face-to-face ECO 2013 in Fall 2014 was 75.8% while the hybrid ECO 2013 success rate was only 56.5%, producing a sizeable gap of 19.3%.

The gap between hybrid and face-to-face courses can vary widely even within a single department. Within the mathematics department in Fall 2014, which includes STA 2023 mentioned above, MAT 0018C and MAC 2233 had higher hybrid course success rates than the face-to-face sections. The gaps in success for these courses were -9.4% and -9.7%, respectively (College IR Hybrid Course Success Data, 2016). Meanwhile, many other mathematics face-to-face courses outperformed their hybrid counterparts. In fact, developmental course MAT 0028C, which follows MAT 0018C in sequence, had a success gap of 12.9% between hybrid and face-to-face courses (College IR Hybrid Course Success Data, 2016). Likewise, math courses MAC 2311 and MGF 1106 had success gaps of 28.6% and 18.8%, respectively, when comparing hybrid and face-to-face sections. Inconsistencies in course success rates are apparent even within departments that demonstrated higher hybrid success rates overall. In the engineering department, the gaps in hybrid versus face-to-face course success in Fall 2014 were 3.4% for EGN 2312 and 8.3% for EGN 2322, but -41.2% for EGN 2440 (College IR Hybrid Course Success Data, 2016).

Success in hybrid courses such as EGN 2440 may also be attributed to the course content and the level of student experience and motivation. EGN 2440 would typically be taken by students pursuing a degree in engineering after several semesters in college. For this reason, these students may be more motivated to learn the content and more dedicated to their coursework. These students may not require the additional instructor contact provided in a face-to-face course. In contrast, the communications department, which showed an overall lower hybrid success rate in Fall 2014, is comprised of required courses typically taken by first-year college students. Unlike engineering courses which are specific to a field of study, students may feel less motivated in required courses unrelated to their majors. First-year students may also benefit from the abundance of instructor guidance a face-to-face course can offer whereas they may struggle with the format of a hybrid course.

The inconsistencies in hybrid and face-to-face success rates raise questions about why some hybrid courses may outperform their face-to-face counterparts while others fall short, even within a single department. It also explains why the Fall 2014 hybrid success rate of 72.5% raises concerns regarding the success rates of hybrid courses in general. According to the college's Online Data Initial Report (2015), a course is defined as "high-risk" in terms of its success if its overall success rate is lower than 70%. Considering the widely variable success rates for hybrid courses, this means that a significant portion are "high-risk." Furthermore, many of the courses the college might deem as "high-risk" are the highest enrolled hybrid courses in the college. The courses listed in Table 1 are all included in the college's list of top 20 highest enrolled hybrid courses in 2013-14 and would be considered "high-risk" as they each had lower than 70% success rates in the Fall 2014 term (College Strategic Indicator Report, 2015, College Online

Data Initial Report, 2015). Additionally, when these courses were compared to their face-to-face counterparts during the same term, each produced a sizeable gap in success (College Strategic Indicator Report, 2015).

Table 1.

Select hybrid course success rates and the gap between those rates and face-to-face course success

Hybrid course	Success Rate	Gap
MAT 1033 C	46.7%	14.1%
MAT 0028 C	51%	12.9%
BSC 1010 C	51.4%	11.8%
ECO 2013	56.5%	19.3%
ENC 1101	69.2%	9.5%

The 49% increase in hybrid enrollment over the past five years, as referenced above, demonstrates student desire for the college to offer more of this particular modality. However, given the inconsistent success rates of hybrid courses and the low success rates of numerous "high-risk" hybrid courses, the future of such courses is uncertain. Courses that are deemed historically unsuccessful may potentially be discontinued as a course offering, affecting faculty workloads and student choice.

Low success rates can cause serious difficulties for students, colleges, and the state. A student who fails to succeed in a hybrid course may lose financial aid or even fail to graduate.

Colleges' marketing strategies depend on them being able to promote high success rates to potential new students. Low success rates force the state to spend precious financial aid funds for

students to retake courses. Thus, low success rates have direct educational and economic consequences both in and out of an academic setting.

The definition of what constitutes "hybrid" modality varies drastically from discipline to discipline and from campus to campus at the college. These inconsistencies in structure are also reflected in the literature on hybrid/blended learning (Alammary, Sheard, & Carbone, 2014; Brunner, 2006; Center for Digital Education, 2012). There is little consensus about what design determines if a course is "hybrid" and what elements need to be included in a successful hybrid course. The answers to these questions may even vary by discipline. Brunner (2006) found that blended learning may be defined in many ways: utilizing Internet-based technology in a course, combining educational technology with some face-to-face instruction time, or simply incorporating different pedagogical methods. He also stated that when pedagogically sound methods are utilized in hybrid courses, they can improve student learning. By clarifying the definition of a "hybrid" course and determining the best components and structure for success, the college may be able to improve their course success rates for this modality.

Significance of the Problem

Hybrid learning, also called blended or mixed-mode learning, is increasingly becoming a popular student choice for course modality at the college. Researchers Norberg, Dziuban, and Moskal as well as Ross and Gage suggested that blended learning will soon be the new traditional model for higher education (as cited in Alammary, Sheard, & Carbone, 2014, p. 440). A student survey conducted by Center for Digital Education (2012) found that college students prefer blended learning courses over both face-to-face courses and online courses. And with the

rise in popularity for flipped learning and MOOCs (massive open online courses), blended learning has also been gaining popularity (Wang, Han, & Yang, 2015). Flipped learning occurs when class lectures take place outside of the class meeting-time using video or other delivery methods in order to optimize class time to engage students through collaboration, discussions, and personal guidance by the instructor (Francl, 2014). Massive Open Online Courses (MOOCs) offer content learning through the internet which allows anyone to take part in a course from anywhere in the world (Demirci, 2014). Both flipped learning and MOOCs can be utilized in conjunction with hybrid learning (Holotescu, Creţu, Grosseck, & Naaji, 2014).

However, Aycock, Garnham, and Kaleta pointed out that hybrid course designs vary in how much of a course should be face-to-face versus online (as cited in Brunner, 2006, p. 230). The lack of a clear definition of hybrid design makes it difficult for instructors in higher education to select the most appropriate design (Alammary, Sheard, & Carbone, 2014). Instructors of hybrid courses at the college struggle with determining the best model for a successful hybrid course, including which components should be included. This confusion over the definition of design and components extends from campus to campus, discipline to discipline, and instructor to instructor at the college. Without a cohesive model or agreement about best practices, instructors are not able to provide the most effective learning experience for students. Similarly, student expectations about whether they will be successful in a hybrid course are difficult to assess.

Hybrid learning provides opportunities to mitigate the financial challenges faced by stakeholders in learning organizations while supporting students' ability to meet all necessary learning objectives (Boone, 2015). Boone emphasized the importance of a quality education to

improve opportunities for American workers, enabling them to compete in today's global economy and secure economic stability. Boone further believed that although we are in the information age and the working world has changed, education has not evolved and is still stuck in the industrial age. Hence, it is important that educational institutions prepare students to contribute to the world while providing for themselves and their families. As compared to face-to-face learning, blended learning allows for instructors to cultivate skills that learners will need to handle problems in the 21st century, thereby better preparing them for the modern working world (Tandoh, Flis, & Blankson, 2014). Hybrid courses are a valuable tool that can help education institutions offer a high-quality education to a large number of students through efficient utilization of institutional resources.

Exploratory Questions

The research questions that will guide this Dissertation in Practice are:

- 1. What do faculty feel is necessary for the framework of a hybrid model?
- 2. What components do faculty feel are required for a successful hybrid course?
- 3. How do faculty identify which components to include in a hybrid course?

Organizational Context

Background of Organization

The first two-year college in the United States, established in 1901, was Joliet Junior College in Illinois (Ayers, 2010). Once the students completed their first two years at this junior

college, they could then continue to get their bachelors at a university. The term "community college" became widely used after it was recognized in 1947 by the Truman Commission in a report titled, 'Higher Education for American Democracy' (Ayers, 2010). According to Ayers, the vision promoted by the Truman Commission was the establishment of a national system of two-year colleges available free of charge to qualified students. By the 1970s, the number of community colleges had grown; community colleges were striving to meet the local needs of the community by offering a variety of programs and services (Ayers, 2010). Although the college has recently begun to offer several four-year bachelor degrees and plans more offerings in the near future, the college is still considered by many a community college and maintains its mission, culture, and commitment to affordability (web news article, 2010).

The college has multiple campuses, altogether serving two counties and approximately 70,000 students (College Facts website, 2016). The average age of a student at the college in 2014 was 21, and the average class size at that time was 23.3 students (College Facts website, 2016). The college's faculty makeup in 2014 includes 518 full-time faculty members and 966 part-time faculty members (College Facts website, 2016). Table 2 provides a breakdown of the ethnicities by which students at the college identified themselves in 2014 (College Facts website, 2016).

Table 2.

Breakdown of ethnicities by which students at the college self-identified

TML at at	D
Ethnicity	Percent of students
Caucasian	32.5%
Hispanic	32%
African-American	17.9%
Asian	4.5%
Multi-Race	2.3%
Hawaiian	0.4%
Native American	0.3%
Unknown	9.2%

Data compiled in Fall 2014 showed that the college had a total of 43,214 students, 16,147 of which were full time and 27,067 were part time (College Facts website, 2016). The majority of those students attended the college's two main campuses, hereinafter referred to as "campus 1" (40% of students) and "campus 2" (36% of students) (College Facts website, 2016).

According to data compiled in the college's Strategic Indicator Report (2015), the proportion of full-time students enrolled in face-to-face course sections has steadily declined while the number of full-time students enrolled in hybrid course sections have both steadily increased. For example, in the 2003-2004 academic school year, 93.1% of course sections taken by full-time students at the college were face-to-face courses while only 0.7% of course sections taken by full-time students at the college were hybrid courses (College Strategic Indicator Report, 2015). More recently, in the 2014-2015 academic school year, 67.3% of course sections taken by full-time students at the college were face-to-face courses while 8.2% of course sections taken by full-time students at the college were hybrid courses (College Strategic Indicator Report, 2015).

Positionality

Both researchers are tenured professors of mathematics at the college. Both have taught at the college for over 10 years and have taught hybrid courses at the college for a combined total of 10 years. The researchers each bring different perspectives to this Dissertation in Practice due to their differing teaching experiences.

Amanda has been teaching Intermediate Algebra courses in the hybrid modality since 2012. Her initial experience teaching in this modality was not satisfying but—determined to improve upon the experience—she sought out best practices and ways to engage her students that would optimize the hybrid model. She collaborated with other instructors of this hybrid course to build resources and a cohesive course design. With their continued support, she has been able to continually make improvements as her passion for this modality grew. Although teaching only one course in this modality does not allow for a variety of experiences, it does facilitate her ability to perfect course elements and focus on design.

Jennifer has extensive experience teaching online courses at the college. It is interesting to note that her path to online instruction began with hybrid instruction. In 2004, she was tasked by her department to develop a Beginning Algebra hybrid course. Not knowing anything about this modality or how or if it was being used at the college, she collaborated with a colleague to design this hybrid developmental math course. The design was not effective. In 2005, when the course proved unsuccessful, the department decided to stop offering the Beginning Algebra hybrid course, instead offering it as an online course. Beginning Algebra was Jennifer's first online course but she spent the next twelve years teaching a variety of online courses, most of

which were college-level math courses. She earned her online teaching certificate through the college in 2011. In 2013, she returned to the hybrid modality teaching Liberal Arts Mathematics. Her decade of experience teaching online courses prepared her to reconsider the hybrid modality for which she recently discovered a renewed enthusiasm.

Both researchers initially found their experiences teaching hybrid courses to be unsuccessful and dissatisfying. However, each researcher's journey has led to a more informed understanding of hybrid design and enthusiasm about its possibilities. Combining these experiences and perspectives will inform the choices we make regarding hybrid course framework design and implementation.

Both researchers are insiders working with insiders as well as outsiders working with insiders (Herr & Anderson, 2015). Since we are both hybrid instructors who will be reflecting on our own practices as well as examining others' practices, we are insiders to the college and to hybrid courses. However, we are not familiar with every hybrid instructor and may be viewed as outsiders to those who are not familiar with our experiences and roles at the college. We are also both members of the hybrid design committee, which makes recommendations about policies for hybrid courses at the college. For this reason, we may be viewed as outsiders to hybrid instructors who are affected by these policy decisions.

History and Conceptualization

History of Hybrid Modality

Hybrid courses combine face-to-face and online instruction. The online element stems from distance education, which can be traced back to the late 1800's when the Tickman's Society formed one of America's first correspondence schools, allowing students to obtain their education by mail (Caruth & Caruth, 2013; Tandoh, Flis, & Blankson, 2013). Correspondence by mail declined with the creation of the World Wide Web, as distance education began to utilize new methods of online communication (Caruth & Caruth, 2013). The World Wide Web allowed for new methods of student learning and also opened up opportunities for those who would not have otherwise been able to attend college (Caruth & Caruth, 2013).

In spite of the fact that online education was growing in popularity, researchers believed that learning in a purely online environment could have a limited effectiveness, specifically when it comes to learner engagement (Tandoh, Flis, & Blankson, 2013). Tandoh et al. described how students who are in a purely online course may complain of feeling isolated and a lack of physical community. Blended learning, which combines online and face-to-face instruction, is therefore a feasible option for students who would still like some face-to-face instruction time. Accordingly, more institutions are now offering courses utilizing the blended modality. In 2014, 55% of colleges and universities offered at least one blended course (Tandoh et al., 2013). Tandoh et al. also found that many educators believe blended learning offers more promise than face-to-face or online instruction and that the benefits surpass any disadvantages it may have. In

fact, O'connor, Mortimer, and Bond (2011) stated that blended learning has the potential to be a more effective educational experience than exclusively face-to-face or online learning.

History of Hybrid Courses at the College

The college defines a hybrid course as one in which "a certain percentage of course instruction is delivered via electronic means and a certain percentage of instruction is conducted face-to-face," (College Catalog, 2016). While these percentages were never articulated by the college, a survey conducted by the college's alternative delivery workgroup revealed that approximately 58% of the college's hybrid instructors agreed that hybrid courses should be 50% online content and 50% face-to-face (internal college document, n.d.). Although the college has offered hybrid courses since 2003, it became apparent in 2011 that improving hybrid learning was a critical need at the college (internal college document, n.d.). Therefore, the college developed a formal plan to collect and document data that could be used to improve online and hybrid courses.

According to the Faculty Hybrid Survey Report compiled by two of the college's administrators, four major recommendations related to student support emerged (internal college document, n.d.):

- A clear definition of "hybrid" is needed and should be well-communicated to students.
- An orientation to technology tools and technical support is needed for students.
- Students need practice in the online environment.

 Students require time management and other skill development related to taking online and hybrid courses.

However, there was no overwhelming consensus about what elements of a hybrid course should be online versus face-to-face. Sixty-two percent of faculty utilized both online and face-to-face delivery of content in hybrid courses, but there was little agreement as to how other elements such as assessments, discussions, and group work should be delivered (internal college document, n.d).

Although the college's plans to improve learning in online courses have moved forward since the publication of this report, little has been accomplished toward the goals set for improvement of hybrid courses. In 2015, a hybrid design committee was established to investigate many longstanding concerns regarding hybrid courses at the college, including the unclear definition of hybrid courses and best practices for hybrid course design. This committee's work is still underway, but its eventual results may help to inform change in policy and procedure for hybrid courses in the future.

Challenges of Hybrid Courses

International Challenges

Today, universities from around the world are offering blended courses. O'connor, Mortimer, and Bond (2011) found that Universities in Australia had been experiencing more pressure over the previous few years to increase student participation and enrollment. This led

many universities in Australia to integrate blended learning into their curricula (O'connor et al., 2011). However, designing and implementing a blended course modality can present a number of challenges.

Gedik, Kiraz, and Ozden (2013) found that when designing a blended course, it is not as easy as simply incorporating an online environment into a face-to-face class. In their study, Gedik et al. discovered that instructors who created blended courses tended to grapple with problems such as increased workload, course management, misalignment between the online and face-to-face components, and creating harmony between the face-to-face and online environments. This study also found that choosing the proper pedagogical approach is crucial when designing a blended course. Gedik et al. further noted that although selecting the proper pedagogical approach is important in blended course design, there is also an institutional issue, specifically a lack of support for the technology and learning management systems utilized in course design. Their study established that the nature of a blended course is a significant factor in deciding what strategies and design are best utilized in that course.

Garrison and Kanuka (2004) highlighted that higher institutions are getting pressure to meet escalating student demand for "higher quality learning experiences and outcomes" (p. 95). Blended learning can help meet that demand. Garrison and Kanuka (2004) noted that faculty desire a more official approach to the creation of operations and policies for blended learning methodologies. Instructors also need the proper equipment, release time, and faculty support services to develop effective blended learning courses. Blended learning, when carefully designed, has the ability to strengthen campus experience by supplementing the physical campus with the Internet and information technologies (Garrison & Kanuka, 2004).

Digital literacy is another challenge instructors face when planning and designing a blended learning course. The term digital literacy refers to the ability of learners to seek, examine, and assimilate online information in a meaningful way (Greene, Yu, & Copeland, 2014). Tang and Chaw (2016) conducted a study to determine if digital literacy is required for effective learning in a blended course, finding that digital literacy is necessary for student success in a blended learning environment. Tang and Chaw also noted that it is important for instructors to consider their students' levels of digital literacy when designing blended learning courses. If students need to improve their digital literacy skills, the instructor should provide exercises and tutorials that will assist these students (Tang and Chaw, 2016).

National Challenges

Just as there is no international research on blended learning outside of a university setting, there is no domestic literature to support a national viewpoint on blended learning in the community college classroom. Available literature instead focuses solely on blended or hybrid learning in the university system, although much of this research is applicable in a community college setting.

Faced with student enrollment that is growing faster than their physical facilities, many universities are placing more importance on online education options such as hybrid, or blended, learning (Olapiriyakul & Scher, 2006). One of the challenges of utilizing blended learning is students' abilities to use technology (Tandoh, Flis, & Blankson, 2014). Compounding the problem, some students might not have access to personal computers with internet access and may need to rely on campus computer labs or their cell phones (Smith, 2014). Tandoh et al.

(2014) suggested that when instructors are designing a blended course, they need to consider students' technology skills and availability of necessary equipment because students may disconnect if they do not have the skills or equipment needed to meaningfully participate in a blended course. Thus, it is important that instructors and/or institutions offer extra assistance for students who lack the necessary skills or equipment to be successful in a blended learning environment.

Tandoh, Flis, and Blankson (2014) also discussed the challenge of course design in a blended learning environment. Many times, the course content design may not be responsive to the amount of material students are able to process in order to succeed in the course. Tandoh et al. mentioned that it is important for instructors to include clearly-stated directions to promote student success in blended learning courses.

Olapiriyakul and Scher (2006) found that a challenge with hybrid courses is the decrease in student attendance of the face-to-face course component caused by the common student belief that they can learn what they need from the online content only. Olapiriyakul and Scher suggested that student participation should be encouraged for both the online and face-to-face components of the course to promote successful learning experiences. In order to overcome many of the challenges inherent to hybrid courses, Olapiriyakul and Scher believed that the following factors must be considered: the types of technology to be utilized, efficient course design principles, course strategies to encourage student participation, activities and course material students will use to meet course objectives, and instructor's experience with online instruction and technology.

For a successful blended learning program, it is important to have capable faculty members with the necessary technology resources and training to implement a blended learning program (Hilliard, 2015). Hilliard stated that policies need to be implemented at universities for online programs such as blended learning and that these policies should be written in the handbook or catalog so that all students, faculty, and staff share common expectations for blended learning programs. Hilliard also suggested that committees for blended courses will help ensure that college policies and course descriptions are up to date and emulate blended learning course ideals.

Local Challenges

Several colleges and universities in Florida are now offering hybrid or blended courses. However, there are inconsistencies between these institutions' definitions of hybrid or blended design. For example, Florida State College at Jacksonville defines a hybrid course as, "one that blends online and face-to-face delivery of the course content and instruction," further stating that, "[a] substantial proportion (30-79%) of the content is delivered online, typically uses online discussions, and typically has a reduced number of face-to-face meetings" (Course Delivery Definitions, 2016). South Florida State College defines a hybrid course as one that, "may include required classroom attendance and alternate [e-learning] delivery methods," further stating that, "[h]ybrid courses have considerable content distributed over the Internet and/or via other [e-learning] delivery methods, which will replace some class sessions" (eLearning Options at SFSC, 2016).

This vagueness and inconsistency in definitions has also been a problem at the college. Although the college's course catalog provides the definition of a hybrid course, the meaning can vary between campuses and departments. For example, the catalog definition of a hybrid course is one in which, "[a] certain percentage of course instruction is delivered via electronic means and a certain percentage of instruction is conducted face-to-face" (College Catalog, 2016). However, the math department at one particular campus of the college defines a hybrid course as one in which, "a course is not over 75% online, over 75% videotape, or over 75% on-site (Delivery Methods-Math Department website, 2016). This campus math department website further states, "[a] hybrid/blended delivery may be On-site/Online, Hybrid On-site/DVD, etc." and, "[w]hat makes a course a hybrid is simply the degree of use of the alternative modality" (Delivery Methods- Math Department website, 2016). This lack of a clear definition of hybrid learning is also reflected in the literature (Alammary, Sheard, & Carbone, 2014; Brunner, 2006; Center for Digital Education, 2012).

The college has recently taken notice of the fact that it does not have a framework model for instructors to use as a resource when planning and designing hybrid courses. Therefore, a hybrid design committee made up of faculty, staff, and administrators has been tasked to establish a clear and cohesive definition of "hybrid" and suggest elements for a universal hybrid course framework. Both researchers serve on this committee and will have a voice in its decision-making process.

Overcoming the Challenges

By utilizing the proper strategies for development and implementation of a hybrid course, instructors and administrators can ensure successful hybrid learning experiences for their students. Niemiec and Otte (2010) listed the following priorities for successful blended learning: matching blended learning to institutional goals, matching goals to specific strategies, identifying strengths and weaknesses, providing critical support, ensuring effective communication, and using assessment effectively (both formative and summative). Porter, Graham, Spring, and Welch (2014) concluded from their study that the following elements facilitate a successful blended learning experience: adequate infrastructure that supports blended learning, technical and pedagogical training that enables instructors to make the most of the face-to-face and online components, and continuing technical and pedagogical support for instructors and students (especially for those who lack the skills to be successful in their blended course). Tandoh, Flis, and Blankson (2014) encourage instructors to utilize e-learning theories and strategies that promote individualized and student-centered learning, collaboration, and support. Instructors must be provided the necessary support for thorough research and planning while developing and implementing hybrid courses (Tandoh et al., 2014).

The challenges that educational institutions face with hybrid learning can be overcome by implementing strategies that promote a successful learning experience. For example, the University of Central Florida partnered with EDUCAUSE to create the Blended Learning Toolkit (EDUCAUSE, 2014). This toolkit—available online to the public—assists with course redesign. The toolkit contains the following: learning strategies, models and course design principles for blended learning, blended course templates, directions and suggestions on how to

use the toolkit to create a blended course, Morning Blend (a blog on blended learning research and practice), and Blendkit (courseware that contains modules, readings, recording, and other resources) (EDUCAUSE, 2014).

The University of Kentucky has also invested in blended learning (Center for Digital Education, 2012). This university uses lecture capture systems—available in most classrooms—to record lectures and student presentations. The University of Kentucky expects that use of the lecture capture software will increase as the university continues to develop its blended learning program (Center for Digital Education, 2012).

Despite the many challenges with blended learning, utilizing the correct strategies will help ensure success. The University of Central Florida and the University of Kentucky are just two examples of educational institutes that are proactively developing their blended learning programs while utilizing effective strategies for a more successful blended learning experience.

Factors that Impact the Problem

Pilot Study

Pilot Study Context

In May through August 2015, the researchers conducted a pilot study to determine the causes of low student success scores in hybrid and online Intermediate Algebra courses at the college and propose some initial solutions to this problem. Intermediate Algebra was selected as the initial course for investigation since it had the highest enrollment of any hybrid course in the 2013-14 academic school year at the college. This course had also been on the college's online

high risk report for the previous ten years, meaning that online sections had a less than 70% average success rate in each of these ten years (College Online Data Initial Report, 2015). From Fall 2011 through Fall 2014, hybrid Intermediate Algebra classes had student success rates ranging from 46.7% to 63.4% with a gap (when comparing these hybrid classes to their face-to-face counterparts) as wide as 16.4% in one term (College IR Online and Hybrid Mathematics Course Success Data, 2015).

Participants in the pilot study were identified by their involvement with hybrid and online Intermediate Algebra courses at the college. Fourteen mathematics faculty members across multiple campuses were identified as current or past instructors of these courses and included as eligible pilot study participants. Additionally, five administrators were included in the pilot study because of their direct influence over online and hybrid courses at the college and knowledge about factors that contribute to lower student success in hybrid and online Intermediate Algebra courses. The researchers also contacted 641 students at the college who took Intermediate Algebra in hybrid or online form during the Spring 2015 or Summer 2015 semesters.

Pilot Study Data Collection

The pilot study was designed to investigate the following exploratory questions:

- 1. Do faculty members feel they have the environment (training, support, autonomy, etc.) necessary to provide a quality online or hybrid course experience?
- 2. What factors prevent faculty and administrators from providing a quality online and hybrid course experience?

- 3. Do faculty members feel the college's online and hybrid courses align with its learning-centered culture?
- 4. What is students' perceived self-efficacy about taking an online or hybrid math course?
- 5. What are students' expectations about taking an online or hybrid math course?

To address the first three questions, a faculty survey was administered through Qualtrics to each of the 14 eligible faculty participants, to which 12 faculty participants responded. To address the final two questions, a student survey was administered through Qualtrics to each of the 641 eligible student participants, to which 12 student participants responded. In search of more in-depth responses to the first three questions, the researchers conducted interviews of nine faculty participants who teach or have taught Intermediate Algebra at the college in hybrid or online form as well as the five administrator participants.

Pilot Study Results

Faculty interview responses reflected recurring themes regarding factors that inhibit online and hybrid course success. Figure 1 shows a breakdown of these themes by percentage of faculty response and modality.

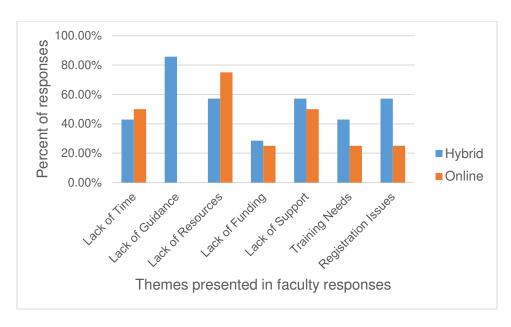


Figure 1. Pilot study frequency of faculty responses by theme for online vs. hybrid courses.

The most common concern from hybrid faculty members was a lack of guidance. Many of these participants did not fully understand what a hybrid course should consist of and whether their courses were aligned with the college's definition of hybrid instruction.

The administrator interview responses indicated similar themes when addressing factors that can inhibit successful hybrid or online course creation and facilitation. Figure 2 breaks down these themes by percentage of administrator responses.

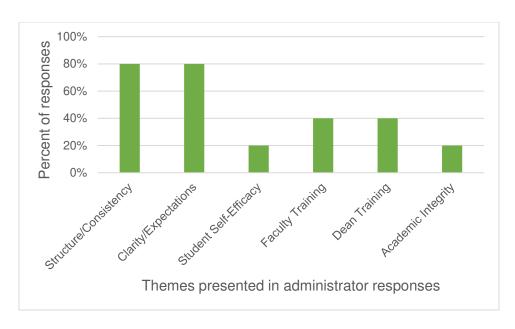


Figure 2. Pilot study percent frequency of administrator responses by theme.

Administrator responses mirrored those of faculty, reflecting a need for clearer guidelines to create from course to course and campus to campus as to course expectations and structure.

This was particularly mentioned in regard to hybrid courses.

While clearer themes emerged from both faculty and administrator interviews, faculty surveys produced varied results. As discovered during the interviews, faculty members on each campus had different understandings and procedures with regard to creation and facilitation of hybrid courses. Some notable participant comments included a need for specific training on content and resource creation for hybrid courses as well as a template containing guidelines for hybrid course creation. Another response mentioned a need for the college to demonstrate its commitment to hybrid courses by offering hybrid-specific training to promote consistency.

With responses from only 12 out of 641 potential student participants (ten online students and two hybrid students), it was difficult to extrapolate general student opinion without a

representative sample. The few responses obtained indicated that there may be a lack of clear guidelines communicated to students about the structure and expectations of online and hybrid courses. Students affirmed that they had incorrect expectations going into online or hybrid courses, such as expecting to complete the course without having to engage with other students (hybrid student response) and expecting assignments in the course would not have deadlines (online student response).

While the pilot study addressed both online and hybrid MAT 1033C courses, it became clear from the results that hybrid courses, in particular, required more investigation. There was a general consensus among administrator and faculty participants that hybrid courses are not well-defined, do not have clear guidelines, and do not offer hybrid-specific training or support.

Current literature supports the need for a clearer definition of hybrid/blended learning (Alammary, Sheard, & Carbone, 2014; Brunner, 2006; Center for Digital Education, 2012). There is no clear consensus of what hybrid instruction entails, inevitably leading to confusion about best hybrid design principles. Moreover, the lack of a clear definition and guidelines for faculty may contribute to a lack of clear expectations for students enrolling in a hybrid course. Kozlowski (2004) noted that students' anxiety may increase when there is a discrepancy between their expectations about a class and what the class actually requires. Kilic-Cakmak, Karatas, and Ocak (2009) noted that in the e-learning environment, student participation may decrease when there is a large discontinuity between student expectations and experiences.

Professional development and training opportunities are necessary in order to clearly communicate hybrid course best practices to faculty while promoting a clear and consistent definition of hybrid instruction at the college. Hilliard (2015) extolled the importance of

employing capable faculty members to successfully integrate blended learning as well as the necessity of technology resources and faculty training to a successful blended learning program. Adjunct faculty, in particular, may not have the knowledge or familiarity to effectively teach courses with online components and would benefit from training opportunities (Elliot, Rhoades, Jackson, & Mandernach, 2015). The college has a significant number of adjunct faculty members teaching hybrid courses. During the 2013-2014 academic year, 34.2% of hybrid courses at the college were taught by adjunct faculty (First Time Teaching Online Hybrid, 2015). The number of adjunct faculty teaching hybrid courses for the first time at the college increased between 2013 and 2015 by 78% (First Time Teaching Online Hybrid, 2015). Elliot et al. (2015) noted that as offerings of online and hybrid courses increase, institutions must provide additional support for online and hybrid instructors, including relevant training opportunities. Similarly, Tandoh, Flis, and Blankson (2013) emphasized the importance of offering support to blended course instructors to ensure their success.

While professional development opportunities are an effective means of promoting successful hybrid instruction, they can only be effective when built on a solid foundation of clear expectations and guidelines. A clear definition of hybrid instruction and a means of communicating that definition to faculty members who teach hybrid courses are both necessary components of successful hybrid course instruction.

Hybrid Design Committee Research

Hybrid Design Committee Context and Data Collection

Since the pilot study conducted by the researchers in Summer 2015, the college hybrid design committee has conducted additional investigations into hybrid course design along with factors that may hinder student success in hybrid courses. The hybrid design committee, consisting of 24 faculty, staff, and administrators chosen from across all campuses at the college, was charged with examining literature and current college practices to refine the definition of hybrid learning as well as designing models to integrate online and face-to-face instruction in a meaningful way. As part of this charge, a subgroup of the hybrid design committee conducted a survey of all faculty members at the college who had taught at least one hybrid course during the 2014-2016 academic years. One hundred eleven faculty members participated in the survey during the Spring 2016 semester. They were asked to focus on a single hybrid course that they considered successful while answering the survey questions. The following sections highlight some of the results from that survey.

Hybrid Design Committee Results on Course Content

Faculty participants were asked to identify which activities they used in the face-to-face portion of their hybrid course as well as which activities they used outside of the face-to-face portion. Although there was little consistency among the participants, the most commonly mentioned activities employed in the face-to-face portion were discussions, cooperative learning, lecture/demonstration, and formative assessment (College Hybrid Design Committee, 2016). Roughly half of those surveyed indicated that they incorporated structured group assignments.

Additionally, active learning, group discussions, group work, and discussing new or difficult material were the top activities faculty mentioned as important to include during the face-to-face portion of a hybrid class (College Hybrid Design Committee, 2016). Faculty participants responded that the activities they most commonly employed during the out-of-class portion were discussions, formative assessments, summative assessments, writing assignments, watching videos, and completing online homework (College Hybrid Design Committee, 2016). In order to manage the activities that took place outside of face-to-face meetings and keep students on track, 66% of surveyed faculty members stated they used a calendar or schedule with deadlines (College Hybrid Design Committee, 2016).

Hybrid Design Committee Results on Course Structure

Participants were asked to list essential elements they believed necessary for a successful hybrid course. Some of the essential elements noted by faculty were class structure and organization, student expectations for the course, flipped classroom procedures, and student engagement (College Hybrid Design Committee, 2016). Participants were also asked to indicate the percent of time during the entire semester that their students spent in the face-to-face portion of their hybrid course. Figure 3 shows the results from the survey regarding the proportion of total class-time spent in face-to-face meetings (College Hybrid Design Committee, 2016).

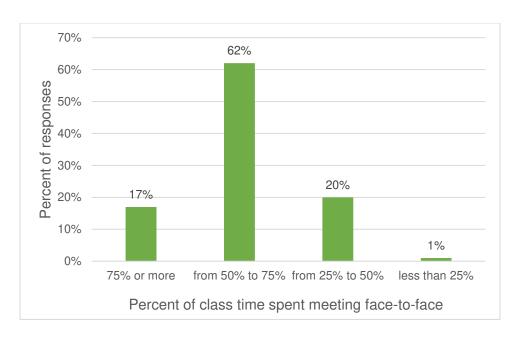


Figure 3. Pilot study faculty responses from survey.

It is clear from these results that there are inconsistencies in how much time faculty members currently spend in the face-to-face portion of a hybrid course although a significant majority appear to spend between 50% and 75% of their class time meeting face-to-face. Some variation in the amount of face-to-face time is expected because the college affords a large amount of freedom to faculty members regarding the length of time spent face-to-face in a hybrid class.

Hybrid Design Committee Results on Course Training

The college offers an abundance of professional development courses and training for faculty members, many of which are tailored toward online teaching. However, although the college recently began offering a professional development course on hybrid instruction, the course is not required and most faculty members teaching hybrid courses are unaware that it

even exists. Yet 61% of faculty who took the survey indicated that they participated in professional development programs to help prepare for their hybrid courses (College Hybrid Design Committee, 2016). This indicates that faculty sought out professional development opportunities because they felt a need for additional guidance when designing their hybrid course. This may indicate a need for additional professional development opportunities that specifically relate to hybrid learning along with better communication to hybrid instructors that these professional opportunities exist.

As described in our pilot study results, Tandoh, Flis, Blankson (2013) and Hilliard (2015) all support the use of faculty training and believe that adequate support is required to ensure successful blended-learning courses. The results of both the pilot study and the hybrid design committee survey indicate that the college's hybrid learning program may benefit from specific training for hybrid instructors.

Dissertation Plan

Framework Context

A consistent definition and design of hybrid courses will help address the inconsistent success rates of hybrid courses at the college. To clearly communicate this information to faculty members who teach hybrid courses, a framework of essential elements of hybrid design will be established and provided to faculty members through professional development opportunities.

Working with the college's director for online learning, the researchers will establish consistent

criteria for all hybrid courses. They will develop an online professional development course to house these criteria and communicate them to faculty who teach hybrid courses at the college. The college may choose to adopt this as either a recommended or required component for hybrid instruction. Regardless, it will be necessary for academic deans to support this framework and communicate its importance to faculty members within each department. By providing a framework for hybrid course design rooted in educational theory as well as by researching and communicating best practices to faculty members who teach hybrid courses, the college can help create a more consistent and predictable hybrid experience for students.

Framework Design

The framework design will consist of necessary standards that should be included in every hybrid course design. Faculty members will be provided with a clear definition of hybrid instruction including

- a description of components and key terms that should be used in a successful hybrid course;
- research-based standards and guidelines for planning, creating, and revising hybrid courses;
- strategies and suggestions for planning, creating, and revising hybrid courses.

Framework design elements will support these standards and provide details for faculty members to create activities and/or establish class policies that align with and uphold these standards.

Since there has always been varied understanding of what constitutes hybrid instruction at the

college, the college may face initial opposition if it chooses to adopt these strategies as requirements for all hybrid courses.

A list of required standards for the hybrid framework, the design elements that would support these standards, and the reality that faculty and facilitators of the professional development course would face when helping faculty members navigate this framework are shown below in figure 4.

STANDARD	REALITY	FRAMEWORK DESIGN
Provide a cohesive learning	Faculty will need to be familiar	A cohesive hybrid course
experience between face-to- face and online portions of class (Bocconi & Trentin, 2014; Stein & Graham, 2014)	with hybrid course requirements in order to develop course materials that support those requirements Faculty will need to be familiar	design that promotes alignment within and between all class materials for face-to-face and online portions
	with all course objectives and required content	
	Faculty may have difficulty writing clear and level-appropriate lesson outcomes based on the course outcomes	
	Faculty will need to be familiar with the levels of Bloom's Taxonomy and apply these levels appropriately to their lesson outcomes	
Incorporate active learning strategies during the face-to- face portion of class (Bonwell & Eison, 1991; Garrison & Vaughn, 2008; Tandoh, Flis, & Blankson, 2013)	Faculty may not be confident in the levels of Bloom's Taxonomy enough to know which skills are considered higher-level Faculty will need to determine the best activities to use with each weekly lesson and prepare them ahead of time	Weekly activities that support the content, allow for cooperative/collaborative learning, and promote higher level Bloom's Taxonomy skills
	Faculty will need to be aware of course outcomes and design lesson outcomes so that these activities are in alignment with both	
Provide digital resources that allow students to engage with content during the out-of- class portion of class (Olapiriyakul & Scher, 2006; Stein & Graham, 2014)	Faculty may not be confident in content video creation or curation Faculty will need to determine which course elements should be provided online Faculty may not be confident utilizing the current learning	Curate/create content videos and other web resources that support the content and allow students to engage with the course material
	management system to create online course components	

STANDARD	REALITY	FRAMEWORK DESIGN
Provide frequent formative feedback during both out-of- class and face-to-face portions of class (Chung, Shel, & Kaiser, 2006; Stein & Graham, 2014)	Faculty may not understand the definition and purpose of formative feedback Faculty will need to determine multiple activities/assignments through which they can provide feedback Faculty will need to establish a time management plan as to when and how they plan to provide feedback	Multiple opportunities and a clear mechanism for providing formative feedback
Provide clear instructions for completion of assessments (Stein & Graham, 2014)	Faculty will need to be familiar with hybrid course requirements in order to determine assessment methods and protocols Faculty will need to be familiar with department, campus, and college testing procedures in order to determine assessment methods and protocols Faculty will need to determine best assessment approaches for their content and learning environment Faculty must become familiar with any technology used for assessment (if applicable)	Well-defined assessment methodology, guidelines, and protocols

STANDARD	REALITY	FRAMEWORK DESIGN
Provide a structured course design (Olapiriyakul & Scher, 2006; Stein & Graham, 2014)	Faculty may not be confident utilizing the current learning management system to embed course materials Faculty will need to be familiar with hybrid course requirements in order to develop course materials that support those requirements Faculty will need to be familiar with all course objectives and required content Faculty will need to establish due	Use the current learning management system to clearly display course syllabus, policies/procedures, and a schedule with all assignment due dates at the start of the term
	dates/times for all assignments, activities, and assessments Faculty will need to establish protocols for assessments and all online assignments	

Figure 4. Standards, framework design elements, and the reality of implementing the framework.

The faculty professional development course will be made up of multiple modules, each based on a standard of hybrid design, and will require participating faculty members to develop course materials that align with these standards. In each module, examples will be provided to aid faculty of varying disciplines with hybrid course design.

Through implementation of the hybrid course framework and professional development course, faculty will:

- Feel more confident in their understanding of the definition of "hybrid instruction."
- 2. Be able to describe elements that should be utilized in a successful hybrid course.
- 3. Create activities to support successful hybrid instruction.

By improving the quality and consistency of hybrid course design college-wide, students will benefit from a more cohesive and educational research-grounded approach to hybrid course instruction. Clearer course expectations can be communicated by the college and students will be better able to understand the course design, procedures, and course content.

Framework Implementation

Prior to implementing this framework, the researchers will schedule an initial meeting with a member of the Center for Distributive Learning at the University of Central Florida. The University of Central Florida has won several awards for their online learning program such as the Excellence in Distance Learning Program Award in 2000 and the 21st Century Best Practices Award for Distance Learning (Our Awards-Center for Distributed Learning, 2016). The University of Central Florida has also gained recognition for their Blended Learning Toolkit (EDUCAUSE, 2014). The researchers will learn more about the blended toolkit from a member of the Center for Distributive Learning and will utilize this information to create the college's hybrid framework.

The researchers will also schedule a meeting with the college's director for online learning to discuss the creation of the proposed professional development course. The researchers worked with the director for online learning at the college during the pilot study in Summer 2015. During this time, the director expressed interest in a universal hybrid design framework and continuing to work with the researchers on this project. The director's position at the college gives her sway over the college's policies for online and hybrid learning. She is familiar with the college's culture and would be a valuable resource when creating and

establishing a professional development course. The researchers will also work with instructional designers at the college to create this professional development course and make it available to the appropriate faculty members for review.

Using information gleaned from the above-described meetings, the researchers will develop a rough draft of the proposed framework and professional development course. They will then recruit a variety of faculty from varying disciplines who have first-hand experience teaching hybrid courses at the college to review the course content. Upon completion of the professional development course review, these faculty members will be asked to participate in a focus group. The researchers will utilize information gathered from the focus group to inform revisions to the framework and professional development course as well as to assess the areas in which faculty will need additional training. The focus group will be asked to assess the framework and professional development course to ensure that both meet the needs of the college's hybrid faculty members. The following are some of the questions that will be asked of focus group participants:

- What did you like most about the hybrid design course?
- What did you least like about the hybrid design course?
- Do the course objectives cover all the topics essential for faculty developing a hybrid course?
- Are there additional objectives that should be included?
- Are there any objectives that should be removed?
- Considering each module separately, are the assignments sufficient to help faculty meet the lesson objectives for that module?

After collecting and analyzing feedback from the focus group, revisions to the framework and professional development course will be made as needed. The researchers will schedule a meeting with the college's faculty development office and director for online learning to finalize the proposed plan and discuss future implementation of the professional development course college-wide. The framework and professional development course will be completed by Summer 2017 with intended implementation scheduled for the upcoming year.

Framework Documentation

In order to document the creation of the framework and ensure the efficacy of the framework design, the researchers will acquire feedback and make revisions as needed. The framework and professional development course will be developed through collaboration with the college's instructional designers and the director for online learning. They will be based on feedback previously obtained through meetings with a member of the Center for Distributive Learning at the University of Central Florida. Once the framework is established and agreed upon, and the professional development course is complete, faculty opinions will be solicited through focus groups of faculty members from varying disciplines. This will help the researchers establish whether the framework is aligned with the faculty's understanding of hybrid instruction as well as which elements of the framework will require more faculty training. Feedback compiled from these focus groups will help determine whether the faculty will be able to understand and implement the framework standards along with which areas of the framework may need revisions.

Once the professional development course is fully implemented, faculty members who complete the course will be surveyed both before and after course completion to determine whether their confidence about the definition of hybrid instruction and their understanding of hybrid course design and best practices have improved. After making any necessary revisions, the professional development course will be made available to all faculty at the college.

Additional pre- and post-course completion surveys will be conducted to establish if there is any continued increase in confidence about the definition of hybrid instruction and understanding of hybrid course design and best practices. After several successful semesters of hybrid framework and professional development course implementation, hybrid student success data will be reevaluated to determine if success rates have improved and/or stabilized.

Key Terms and Concepts

"Hybrid learning," on which the topic of this paper focuses, refers to student learning that occurs in a hybrid course.

"Hybrid" refers to a mode of teaching in which part of the class time is spent face-to-face and part is spent online. There is no clear definition of the term "hybrid" in terms of what specific criteria is required to use this name. However, this is the term currently used at the college. Other terms used by other institutions in place of "hybrid" with the same or similar meaning are "blended learning" and "mixed-mode."

"Reduced seat time" refers to any course where there is less face-to-face time than a traditional course. While this is true of hybrid courses, it is not enough of a descriptor to replace

the term "hybrid" in meaning as it may refer to other modalities with less face-to-face interaction such as a video streaming course.

"Distance learning" refers to course instruction carried out remotely. This may include online courses or courses taught by correspondence and is not restricted to hybrid instruction.

"Learning Management System" or "LMS" is an online platform that allows faculty to build and deliver content virtually. Hybrid courses will contain some type of online portion in which content will be delivered and students will be asked to learn online. This online content will often be delivered through the institution's LMS. Many institutions have an LMS that all faculty use. The college's LMS will be used to deliver the proposed professional development or "PD" course.

"Professional development" or "PD" is defined as, "learning opportunities that engage educators' creative and reflective capacities in ways that strengthen their practice" (Bredeson, 2003, p. 34). Professional development is considered an effective way to, "prepare practitioners and improving their instructional and intervention practices after they enter the workforce" (Buysse, Winton, & Rous, 2009, p. 235).

"Active learning" requires students to, "read, write, discuss, or be engaged in solving problems" (Bonwell & Eison, 1991, p. 5). Students must be engaged in, "higher-order thinking tasks [such] as analysis, synthesis, and evaluation" (Bonwell & Eison, 1991, p. 5).

"Curation" refers to the process of selecting content that is already created. Content curation allows faculty to sift through already created content to choose what works best for their topic and course. Faculty may choose to curate video content or other online resources to use in their hybrid course.

"Formative assessment" activities are ongoing and part of the learning process, rather than after a period of instruction" (Glazer, 2014, p. 277). Formative feedback should inform both instructor and students about student learning so that changes can be made to correct misunderstandings in course content.

"Summative assessment" provides "little or no feedback . . . and is usually a numeric or letter grade score" (Glazer, 2014, p. 277). Summative assessments are typically end-of-unit or term assessments to check for final understanding of a course topic.

CHAPTER TWO: THE FRAMEWORK

Framework Design Rationale

Problem and Context of Design

The problem of practice addressed in this Dissertation in Practice is the lack of consistency in the organizational and pedagogical structures that impacts successful hybrid instruction at a Florida college referenced herein as "the college." This problem became evident due to consistently lower average student success rates in the college's hybrid courses when compared to face-to-face courses. The framework is designed to provide cohesion between all hybrid courses offered at the college by communicating a consistent message regarding the meaning of hybrid learning.

The college has demonstrated excellence in, as well as a commitment to, helping its students earn degrees. While academic success is a priority for the college, there is always room for improvement. Noting the growth in online courses at the college in 2007, the college's faculty and administration established a professional development training program for instructors of online courses in 2008. In 2013, new investigations into the success of online courses and available faculty training options at the college led to the formation of workgroups that would make recommendations regarding issues with online learning at the college. On the heels of this trend in online growth followed by strategic institutional improvement in training methods, the college is now primed to tackle hybrid courses in a similar fashion. With the recent rapid growth of its hybrid course offerings, the college is examining the success of these courses as a basis for discussions of improvement strategies. The college's hybrid design committee was

therefore established in 2015 to begin addressing concerns about hybrid course success rates at the college. The researchers, who are members of this committee, have worked in conjunction with the committee on recommendations for improving and standardizing hybrid course design.

Significance of the Framework Design

Hybrid course enrollment at the college has increased over the last five years (College Strategic Indicator Report, 2015). According to Stein and Graham (2014), blended (also known as hybrid) courses can be cost-effective for the college, faculty, and students. They also allow institutions to maximize limited classroom space (Stein & Graham, 2014). "When used in pedagogically effective ways, hybrid courses can produce an overall improvement in student learning" (Brunner, 2006, p. 230). However, successful implementation of a hybrid learning experience requires consistency in course design along with available training and support opportunities for faculty and students (Brunner, 2006). Previous surveys conducted with faculty at the college (discussed in Chapter 1, above) indicated that there are inconsistencies with how hybrid courses are designed and delivered at the college and that there is a lack of training and support opportunities available to faculty and students.

Implementing a framework at the college through professional development will provide hybrid instructors with a better understanding of the college's vision of hybrid learning increasing their confidence with hybrid instruction and ideally leading to a more consistent hybrid course experience for students. Professional development enables faculty to stay updated in the latest technologies and trends in blended learning (Hilliard, 2015). Hilliard also noted that a quality blended learning program requires a capable faculty and sufficient resources, including

professional development training on the use of blended learning tools. Professional development allows for clear communication of blended learning policies, including objectives, goals, materials, resources, and student/faculty responsibilities (Hilliard, 2015). However, Mirriahi, Alonzo, McIntyre, Kligyte, and Fox (2015) expressed concern that faculty members who are not familiar with the wide-range of online tools available and how to use them will be less likely to see the benefits of utilizing these tools. Thus, the proposed framework and professional development course will help participating faculty members discover how to best utilize the online environment in their hybrid classes. Training faculty members on the new hybrid framework will educate faculty on using online learning technology and making sound pedagogical decisions for their hybrid classes (Baran & Correia, 2014).

According to Baran and Correia (2014), some organizations may require a culture shift in order to offer institutional support for transitioning faculty members to an online environment. The creation of an online strategic planning team (created by the college to address issues related to online learning) and the hybrid design committee (described in Chapter 1 of this dissertation), contributed to a recent culture shift at the college towards better addressing the needs of its faculty members and students utilizing new learning modalities. It is important for both online and hybrid instructors to be able to offer a quality online component to their course, which requires professional development and organizational support (Baran & Correia, 2014).

Professional Development Offerings at Other Institutions

The University of New South Wales (UNSW) in Australia created professional development programs in order to increase their confidence with and capability for designing

blended and online courses (Mirriahi, Alonzo, McIntyre, Kligyte, & Fox, 2015). From this experience, Mirriahi et al. found the following principles were necessary in order to create an effective online or blended professional development experience:

- Professional development should convey intended blended and online learning principles.
- Professional development course activities should provide blended and online learning opportunities that are authentic to allow for faculty to see the benefits of integrating technology for learning.
- A professional development course should align with standards for effective blended or online course design and delivery which models best practices.

The proposed professional development course for hybrid instructors at the college will convey learning principles that promote a successful hybrid learning experience. Faculty members who participate will be given the opportunity to customize the learning strategies and create activities that are applicable to their hybrid course. This will allow faculty participants to better understand how they can implement online technology in their hybrid classrooms.

Research-based standards for hybrid instruction will be addressed in the professional development course to assist faculty in creating well-designed hybrid courses.

UNSW planned to evaluate the professional development programs they offered for online and blended learning with surveys and focus groups in order to guide future improvements (Mirriahi, Alonzo, McIntyre, Kligyte, & Fox, 2015). A focus group will also be used to assess the proposed professional development course for hybrid instructors at the college. The results from this focus group will be used to inform the necessary changes. Pre- and post-

surveys will be used to assess the course's effectiveness once the professional development training course has been fully-implemented at the college.

Deakin University in Australia offers a blended approach to faculty professional development, including online modules, face-to-face workshops, self-help guides, and online teaching strategies that incorporate the university's learning management system (LMS) (Atkinson, Fluker, Ngo, Dracup, & McCormick, 2009). Atkinson et al. (2009) discussed how feedback from these professional development courses indicated that they were well received and enhanced the skills of those attending. The university made modifications to the professional development program based on comments from participants and facilitators. Deakin's method of delivery for professional development is similar to that proposed by the researchers for the professional development course for the college's hybrid instructors. This professional development course will incorporate face-to-face meetings along with online modules to model the hybrid learning experience. Feedback will be collected before and after implementation of the professional development course to ensure its success with participating faculty.

The University of Central Florida (UCF) designed a five-week online professional development course titled, 'Blendkit', open to anyone in the world who is preparing to teach a blended course (Moskal, Thompson, & Futch, 2015). UCF's model incorporates proven blended learning practices such as assessment and data collection, along with procedures and examples of blended courses. UCF currently offers two model blended courses: algebra and composition.

Other institutions have also been given permission to adapt the content from the Blended Learning Toolkit (Moskal et al., 2015). Moskal et al. also note that in 2014, 2,840 participants (national and international) registered for the Blendkit 2014 training course. Moskal et al.

believed that having international participants shows the need for blended learning professional development programs around the world. This need is also reflected in the interview and survey data collected from hybrid faculty at the college.

In 2013, the college commissioned a consultant to assess its online learning program (Strategic planning at the college – Online learning, 2016). The report noted several areas in need of improvement. To address these areas, the college created short-term work teams that would develop strategies, processes, and tools to improve student success rates while decreasing the success rate gaps between hybrid and face-to-face modalities (Strategic planning at the college – Online learning, 2016). The created work teams were overseen by the college's online strategic planning team. The three goals of the teams were as follows (Strategic planning at the college – Online learning, 2016):

- Establish a clearly articulated model for quality online/hybrid teaching and learning at the college.
- Expand and enhance student service and learning support strategies for the fully online learner at the college, so that they are comparable to face-to-face strategies.
- Enhance quality in the online/hybrid environment.

One of the college's work teams was the faculty preparedness team for online/hybrid teaching and learning. The faculty preparedness team for online/hybrid teaching and learning determined that there was no consistent process for certifying faculty to teach online or hybrid courses (College Online Work Team, 2016). The team also noted that some deans require faculty members to take professional development training before teaching an online course while other deans do not require training. In the solution proposed by the work team, the college would

implement an online professional development program consisting of three levels of faculty preparation (College Online Work Team, 2016):

- Level 1: Faculty will utilize a course template through the college's learning management system and be introduced to available technology tools.
- Level 2: Faculty will work with instructional designers to develop course content that meets the college's standards for online course creation.
- Level 3: Faculty will have the opportunity to conduct research in best practices for online learning/teaching and/or participate in mentoring other online faculty members.

This proposed online professional development training program has the full support of the college. The team's plan is to introduce the first two levels to a small pilot group before revising the program and offering it to a larger population at the college.

Much like this online professional development training program, the proposed hybrid professional development course is also expected to have full support from the college. The professional development course will address the college's need for training and professional development specific to the hybrid modality. It will also provide for a more consistent learning experience for hybrid students, a stated goal of the college.

Framework and Professional Development Course Design

Goals and Expected Outcomes

The researchers, in collaboration with the college's hybrid design committee and supported by the college's director for online learning, established specific goals for hybrid learning. These goals will be communicated to faculty participants along with the framework design through the professional development course.

Goals

To communicate a clear and cohesive definition of "hybrid learning" including:

- A description of components and key terms that should be used in a successful hybrid course.
- 2. Research-based standards and guidelines for planning, creating, and revising hybrid courses.
- 3. Strategies and suggestions for planning, creating, and revising hybrid courses.

Each of these goals serves the faculty by providing a foundation of expectations for the college's hybrid courses. These goals provide the basis for a culture-shift in which the college's hybrid faculty will now be able to meet certain expected outcomes.

Expected Outcomes

Faculty will be able to:

- 1. Communicate a clear definition of hybrid learning to students.
- 2. Utilize the current learning management system (LMS) to provide a consistent hybrid course experience.
- 3. Utilize the current learning management system (LMS) to provide basic hybrid course materials (syllabus, course topics, course timeline, etc.).
- 4. Develop quality course materials (activities, online resources, assessments, etc.) for use in hybrid course instruction.

Design Theory and Basis

The researchers became interested in hybrid courses over the past several years. During the pilot study conducted in 2015, we focused on both online and hybrid instruction. However, the results of the pilot study drew our attention solely to hybrid course success. We enjoy teaching hybrid courses and have watched our colleagues struggle with understanding the nuances of this modality and helping their students succeed. The proposed framework design is based initially on the pilot study results and our experience teaching hybrid courses.

The design was first established by considering our own hybrid students' needs. As we informally surveyed our students each term and used their feedback to make changes in our own courses, we developed a better understanding of which aspects needed clarifying as well as the common points of confusion. In Summer 2015, the pilot study confirmed many of our initial suppositions about the issues affecting learning in hybrid courses at the college. The results from

the faculty survey and interviews made it apparent that there were vast inconsistencies in how individual faculty members presented their hybrid courses on each campus. What's more, faculty responses indicated a need for faculty support and training to provide some guidance on best practices for hybrid design. This confirmed an institutional need for a universal hybrid course design for faculty to follow. According to the hybrid design committee and the faculty survey conducted in 2016, faculty members from all campuses and disciplines have varied understandings of the term "hybrid learning." The hybrid design committee proposed creation of a framework to be communicated to the faculty through professional development opportunities. It is the intention of the researchers to create this framework and assist the college with communicating cohesive hybrid course design principles.

In order to create the proposed framework for hybrid design, the researchers each drew on their own experiences to develop a list of elements necessary for successful hybrid design. We independently considered what makes our own hybrid courses successful and what essential elements all hybrid courses should contain. After generating lists of ideas independently, we compared these lists and found that we agreed on most elements. Minor differences were resolved by combining topics to create more general categories.

A review of literature provided suggestions for appropriate category names and academic support for the topics we chose. Research into articles on "blended learning," including "strategies," "principles," "components," and "essentials," produced practical, universal strategies that formed the backbone of the framework elements. These articles also confirmed the lack of a consistent definition for the hybrid/blended modality (Alammary, Sheard, & Carbone, 2014; Brunner, 2006; Center for Digital Education, 2012). Additionally, the framework design

was heavily influenced by Stein and Graham's *Essentials for Blended Learning: A Standards-Based Guide*, which provides an easy-to-use guideline for building a hybrid course by integrating online technology with pedagogically sound standards and practices. By analyzing our own ideas and those found in the literature, we identified five main topics to include in the framework: course alignment, course structure, active learning, online resources, and formative feedback.

The five major elements of the framework were initially proposed by the researchers, but the instructional designers at the University of Central Florida's Center for Distributed Learning (CDL) proposed a stronger emphasis on assessment. From our conversations with the CDL and further investigations into the literature, we created a sixth framework element: assessment guidelines. Explorations into UCF's Blended Learning Toolkit also influenced the framework elements and the design of the professional development course structure. Thus, by drawing on our individual hybrid teaching experiences, participating in conversations with UCF's CDL, and reviewing literature on hybrid learning, the six key framework elements were established. These elements became the course objectives for the professional development course and the major topics of each module in the PD course.

Key Elements of the Design

The framework design will be comprised of specific strategies and suggestions for hybrid course planning, implementation, and revision. These strategies will be universal enough to be utilized throughout various academic disciplines and for various courses within each of those disciplines. The key elements of the framework design are based on the following standards:

- 1. Provide a cohesive learning experience between face-to-face and online portions of class (Bocconi & Trentin, 2014; Stein & Graham, 2014).
- 2. Incorporate active learning strategies during the face-to-face portion of class (Garrison and Vaughn, 2008; Tandoh, Flis, and Blankson, 2013).
- 3. Provide digital resources that allow students to engage with content during the out-of-class portion of class (Olapiriyakul & Scher, 2006; Stein & Graham, 2014).
- 4. Provide frequent formative feedback during both out-of-class and face-to-face portions of class (Chung, Shel, & Kaiser, 2006; Stein & Graham, 2014).
- 5. Provide clear instructions for completion of assessments (Stein & Graham, 2014).
- Provide a structured course design (Olapiriyakul & Scher, 2006; Stein & Graham, 2014).

These research-based standards form the structure for the key framework elements. These elements will be communicated to faculty members teaching hybrid courses through modules within the professional development course. The key elements are:

- Development of active learning opportunities.
- Curation and/or creation of content videos or other web resources.
- Formative feedback.
- Clear and varied assessment strategies.
- Clear course structure.
- Cohesiveness between face-to-face and online course components.

These elements will each be explored in detail through individual modules of the professional development course. In an effort to model the model, the professional development

course will be offered in a hybrid modality, comprised of face-to-face meetings and online modules (see Appendix D). The course will consist of six modules: Course Alignment, Face-to-Face Active Learning, Online Resources, Formative Feedback, Assessment Guidelines, and Course Structure.

Key Elements Supporting Goals

The six key elements of the framework provide the major topics that will be covered in the modules of the professional development course. These modules are created to communicate a clear and cohesive definition of "hybrid learning." In particular, the three goals communicate to faculty (1) key terms and components used in hybrid learning; (2) research-based standards and guidelines for planning, creating, and revising hybrid courses; (3) strategies and suggestions for planning, creating, and revising hybrid courses.

These goals are addressed by each of the six elements of the framework design. The modules will provide research-based standards and guidelines as well as strategies, practical examples, and resources for building a new hybrid course or revising an existing one. The modules will address best design principles for a hybrid course: what to do with the face-to-face portion, what to do with the online portion, how and where to assess, and a better understanding of the components that make up a hybrid course. Faculty participating in the professional development course will also be introduced to key terms relevant to hybrid instruction. The first module will address criteria for "hybrid learning" at the college, while the sixth and final module will ask faculty to put all the pieces together to begin building the course including core elements such as the syllabus and course schedule.

Course Alignment Module

A blended course requires a balanced mix of online and face-to-face activities (Bocconi & Trentin, 2014). The online learning portion should support the face-to-face sessions (Bocconi & Trentin, 2014; Stein & Graham, 2014). All course activities should align with course outcomes to produce successful results on assessments (Stein & Graham, 2014). Faculty must forge deliberate connections between the face-to-face and online course activities in order to establish the necessary alignment between these elements (Stein & Graham, 2014).

Alignment of the face-to-face and online course components will be initially addressed in the first module, and will continue to be addressed in the remaining five modules since alignment is an overarching concept for the professional development course. Activities for the face-to-face portion, content videos and other web resources for the online portion, as well as course assessments, must all connect in a seamless and cohesive design. Moreover, the syllabus and course schedule must communicate this content alignment to students from the start of term. The formative feedback provided throughout will reinforce students' understanding of the content and build their self-efficacy. In this way, faculty will connect each element of the hybrid learning experience so that students feel the work is clear and significant to their success.

As faculty participants decide which content to address each week, they must be strategic about how to partition the content into what will be delivered online and what will be handled face-to-face. They must consider what students will need to do prior to a face-to-face meeting to prepare for the in-class activity, what they will be required to do once they meet with their instructor in the classroom each week, what they will need to complete after the face-to-face

meeting to further their understanding of the content, and how they will be assessed on this content. The transition between these four segments should feel seamlessly and purposely connected.

In this module, faculty will begin developing a plan for how each of their hybrid course components will fit together, including when and where each assignment and assessment will occur. Faculty participants will be asked to investigate course outcomes and use Bloom's Taxonomy to design lesson outcomes that support the course outcomes. Any assignments or assessments developed in the remaining modules should address the lesson outcomes in order to align the course components.

Active Learning Module

Although the act of learning may be considered an 'action,' Bonwell and Eison (1991) contend that active learning requires students to read, write, discuss, and engage in higher order thinking tasks that require analysis, synthesis, or evaluation. Active learning can include a variety of activities or techniques including debates, role-playing activities, simulations, games, and cooperative learning activities such as small group work collaboration (Bonwell & Eison, 1991). Garrison and Vaughn (2008) state that student collaboration leads to deeper learning and that blended learning is an ideal higher education environment for students to engage in such collaboration. Tandoh, Flis, and Blankson (2013) also support collaboration in blended learning environments in order to improve student mastery of learning outcomes.

In this module, faculty participants will develop weekly activities that support the course content, allow for cooperative/collaborative learning, and promote high-level Bloom's

Taxonomy skills during the face-to-face portion of class. While active learning certainly has its place in both the online and face-to-face portions of class, the focus of this module will be to develop active learning opportunities for the face-to-face portion. These activities should require students to utilize higher cognitive levels of Bloom's Taxonomy and should provide opportunities for students to communicate content with their peers and instructor.

It is important to consider which content to feature during the face-to-face active learning portion in order to best utilize the time that students will be in direct contact with their peers and instructor. Faculty will need to not only determine the best activities for each weekly lesson, but must manage their time so as to prepare these activities before each face-to-face meeting. Choosing the best activities requires faculty to be aware of all course outcomes and to design lesson outcomes so that these activities will be in alignment with both. All active learning opportunities should further student understanding of the required course content. Additionally, faculty must be familiar with the levels of Bloom's Taxonomy so as to know which skills are appropriate for the face-to-face active learning portion of class.

In this professional development module, faculty will be asked to develop at least one learning activity for a hybrid course. They will be required to provide the supporting lesson and course objectives and to describe which level(s) of Bloom's Taxonomy are addressed in this activity. While the focus of this module will be active learning that occurs during the face-to-face portion, faculty will also be asked to develop a plan for any other events that may need to occur during the face-to-face portion of class. This may include troubleshooting technology problems, reminding students about class policies, or discussing particularly troublesome course content.

Online Resources Module

Digital video instruction, computer-based tutorials, and course websites are frequently used in hybrid learning (Olapiriyakul & Scher, 2006). Stein and Graham (2014) assert that utilization of digital text, images, and video may be a more efficient means of conveying course content than traditional onsite lectures. A solid understanding of technology is necessary to create the web resources required for a hybrid course (Olapiriyakul & Scher, 2006). Therefore, training should be provided to assist faculty in the creation of online materials (Olapiriyakul & Scher, 2006).

In this module, faculty participants are asked to consider which online resources they will provide to students during the out-of-class portion of their hybrid class. Faculty will curate and/or create content videos and other web resources to support the course content. Active learning will also be addressed in this module because faculty must determine how students will engage with the course material outside of class.

This topic can be very scary for technology novices. Many hybrid faculty members may want to provide content videos but may lack the skill to create videos or find content videos for curation. A concern has been raised by many universities as to whether faculty members have the ability to use technology in conjunction with pedagogically sound practices (Olapiriyakul & Scher, 2006). This module will provide resources and technology tips on content video creation and curation. Faculty participants will also want to consider what technology they currently utilize in their courses. Many courses utilize a publisher-provided online learning platform that provides online content such as videos, slide presentations, and practice problems. Faculty members should consider how extensively and in what ways publisher content may be utilized in

their hybrid course. However, to maintain consistency between hybrid courses, it is recommended that faculty utilize the college's general learning management system (LMS) as a portal for most course assignments. Therefore, faculty may be faced with the challenges of utilizing the LMS effectively or learning how to best integrate the web resources they wish to use into the LMS.

As with the face-to-face portion of class, faculty will need to determine which course elements should be provided online in order to maximize student learning and provide the richest learning experience. This determination should be made based on best utilization of time and ability to learn the content presented. The out-of-class online portion will likely provide a range of Bloom's Taxonomy levels. While the more basic "remembering" or "understanding" skills will often be the focus prior to the face-to-face portion of class, the higher-level cognitive processes such as "analyze," "evaluate," or "create" may be employed after the face-to-face meeting to allow students to develop a deeper understanding of the course content. Activities that utilize the upper Bloom's Taxonomy cognitive levels are sensible options for online activities because they may take students a significant amount of time to complete.

This module will require faculty to create and/or curate video content for one week of their hybrid course. Content should be aligned to the active learning that occurred in the face-to-face portion that week. Faculty will articulate which online resources will be utilized both prior to and after the face-to-face meeting. Additionally, faculty will be asked to describe any other events that may need to occur before or after the face-to-face class portion.

Formative Feedback Module

Formative feedback provides timely information to the instructor and the student about student learning. It can be used to swiftly determine what, how much, and how well students are learning the content (Chung, Shel, & Kaiser, 2006). In turn, instructors can use this valuable information to improve the quality of student learning (Chung et al., 2006). Students also benefit directly from formative feedback as it provides critical and timely information regarding their progress, allowing them to make immediate adjustments to improve their own learning (Stein & Graham, 2014).

In this module, faculty participants will devise a plan to offer multiple opportunities for formative feedback each week during face-to-face and online meetings. Participants must consider how they can most effectively provide this feedback both in and out of the classroom. This module will require faculty to establish a time management plan as to how and when feedback will be provided during a typical week.

While formative feedback happens naturally in a face-to-face classroom setting, providing it purposefully and frequently requires a complete understanding of the definition and purpose of formative feedback. The module content includes strategies for utilizing formative feedback and will help faculty participants better understand how to formatively assess students. The active learning opportunities discussed in a previous module will provide some opportunities for formative feedback during the face-to-face portion of class. Outside of that time, faculty will need to design additional activities that provide formative feedback virtually. Development of web resources and utilizing publisher-based content as mentioned in the previous module can

also provide formative feedback opportunities. Either way, faculty members will need to be purposeful and strategic about offering this feedback.

Assessment Guidelines Module

To help students navigate the course structure and requirements and more likely succeed in meeting course outcomes, faculty must provide clear and concise instructions for assessment (Stein & Graham, 2014). In fact, Stein & Graham suggest that clearly articulating the link between assessments and outcomes may further encourage students to track their own progress in mastering those outcomes. For a blended course in particular, students must be made aware of whether each assessment will be administered online or face-to-face in order to avoid confusion (Stein & Graham, 2014). Faculty must decide what types of assessment to use as well as how, when, and where these assessments will take place.

In this module, faculty participants will decide how they plan to assess their students' learning. Both formative and summative assessment will be addressed in this module, but the focus will be on developing clear assessment guidelines regardless of the assessment type. Participants will be asked to consider how to assess whether students have met lesson and course objectives. Faculty participants will need to decide what assessment methods to use (quizzes, tests, etc.), how they plan to assess (whether through technology or traditional paper-and-pencil test, for example), where they plan to assess (during face-to-face portion or online) and when they plan to assess (once a week, at the end of every unit, etc.). Faculty will be asked to provide an assessment plan that addresses each of these elements (how, what, when, and where) and draft

the language they will include in their syllabus to communicate assessment guidelines and protocols for each assessment type.

Creating well-defined assessment guidelines requires familiarity with all hybrid course requirements that relate to assessment. Specific department, campus, or college testing policies will also factor into how students are assessed. For example, whether hybrid students can take all assessments in a proctored testing facility and the hours of the testing facility are both important considerations when writing course assessment policies. Additionally, participants will need to determine which assessment methods are the most effective given the content and learning environment. Assigning a computer quiz that must be completed during the face-to-face portion of class may not be an effective use of time and may not be feasible if the classroom does not contain computers. However, if technology will be required for an assessment, faculty members must be well-versed in the workings of that technology in order to write clear and accurate guidelines for students.

Course Structure Module

Developing a blended course requires first establishing a course outline, then determining course materials including web content (Olapiriyakul & Scher, 2006). Stein and Graham (2014) assert that it is critical for faculty to specify course goals and learning outcomes in order to ensure that the online and face-to-face activities are learning-focused. Faculty will need to determine the appropriate combination of delivery formats for each lesson (Olapiriyakul & Scher, 2006).

In this module, faculty participants will create essential course materials and begin to design their course structure in the college's learning management system (LMS). This module's emphasis will be on providing a cohesive learning experience between all hybrid courses at the college. Participants will be expected to use the college's LMS to provide a course syllabus, a list of class and institutional policies/procedures, and a schedule with all assignment due dates. All of these materials should be prepared in advance so that they are available at the start of the term.

In order to provide these essential course materials, faculty will need to be familiar with all hybrid course requirements at the college. They must also be familiar with all course objectives and any required content or procedures to develop course materials that support those requirements. Clearly delineating course objectives is necessary to make sure all required course content is included in the course schedule. Knowledge of the content and pace of the course will help faculty establish due dates for all assignments, activities, and assessments. Additionally, faculty participants will need to become comfortable with utilizing the college's LMS in order to successfully embed the required course materials.

Framework Design Support and Timeline

Required Expertise

The researchers have both taught hybrid courses for many years and have recently completed doctoral coursework focused on e-learning. This coursework provided the expertise to begin designing and building the hybrid course framework and accompanying professional

development course. This framework and the modules that will form the professional development course were refined and improved upon after consultations with the instructional designers from UCF's Center for Distributed Learning (CDL). The expertise of these instructional designers was instrumental in developing the final modules to complete the design for the researchers' professional development course. Once this course has been created and reviewed, experienced hybrid faculty members will provide detailed feedback in a focus group interview. As hybrid instructors, these faculty members may directly benefit from the new framework and professional development course.

Framework Design Timeline

Designing the proposed framework will require time for development as well as collaboration with various sources of expertise including University of Central Florida's Center for Distributed Learning, the college's instructional designers, and the college's director for online learning. Collaboration and development of the framework will take place from September 2016 through March 2017. Subsequently, the framework will be reviewed by focus group participants and the feedback will inform any necessary revisions, at which point time for additional collaboration and development will be required. Framework review and revisions will take place from April 2017 through August 2017. A detailed timeline of events can be found in Appendix A.

Documentation Process

The process of creating the professional development framework and course will be documented in several ways. E-mail correspondence will be saved and labeled. Any notes taken during collaboration meetings will be saved and uploaded into a folder shared by both researchers. The researchers will take notes and audio record the focus group session. Handwritten notes will also be collected from the participants and saved.

Informing the Framework

A focus group will be used to inform the researchers of modifications needed to the framework and professional development course. Focus group participants will consist of faculty members who have experience teaching hybrid courses at the college. The purpose of the focus group will be to gather participants' feedback after they have reviewed the proposed faculty development course for hybrid instructors. Participants will be asked to assess the course objectives, module content, and module assignments. Focus groups can be an informative means of collecting information about the views of group members as well as understand the meaning behind those views (Gill, Stewart, Treasure, & Chadwick, 2008). Gill et al. also mentioned that focus groups can produce an expansive understanding of each person's experience, which can result in a more in-depth analysis for the researchers. Analysis of the focus group interview will inform the researchers if the goals of the course have been met. Revisions will be made, if needed, according to the focus group final report.

The focus group will consist of no more than 20 faculty members and will include faculty members from various disciplines and campuses at the college. The researchers will moderate

the focus group interview and questions will be provided to the participants at the start of the meeting. The researchers will facilitate the group discussion and ensure that all members of the focus group have an opportunity to contribute to the discussion (Gill et al., 2008). As noted above, the focus group discussion will be audio recorded (participants will be notified) and written notes will be collected at the conclusion of the meeting.

<u>Visual Representation of Framework and Professional Development Course</u>

As described above, many of the modules overlap in terms of content. Participants in the professional development course will need to build upon content from completed modules and will sometimes need to look ahead when completing content for a current module. Figure 5 below provides a visual of the order of the modules and illustrates the interconnectedness of the modules' content.

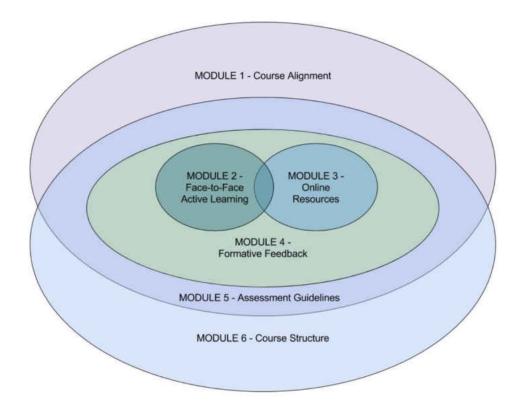


Figure 5. Visualization of the modules' interconnectivity and flow.

Module 1 will cover course alignment in order to provide faculty participants with a foundation on hybrid course design. Alignment will be considered throughout every module and is an overarching theme to the entire hybrid course design. By introducing the idea of alignment at the beginning of the professional development course, faculty participants may begin to understand its importance and will continue to consider alignment as they progress through the remaining modules.

As with Module 1, Module 6 will cover course structure and overlaps the rest of the modules. Although alignment must be considered when creating course structure, there are other factors that contribute to the structure of a course. Therefore, alignment and structure (Modules 1

and 6) overlap, but also remain separate considerations. However, active learning (Module 2), online resources (Module 3), formative feedback (Module 4), and assessment (Module 5) must all be incorporated into the course structure (Module 1). Faculty members will have to consider all of these elements when designing course syllabi, schedules, and any instructions or guidelines provided to students in the course.

Module 2 will cover active learning strategies and will focus on active learning during the face-to-face portion of the class. Faculty participants will need to consider if or when to use active learning during online class portions and how to utilize online resources to promote active learning. For this reason, there is an overlap with Module 3 (online resources). Active learning is a natural opportunity to provide formative feedback. Faculty participants should consider how active learning fits into their overall course design. These engagement opportunities must support course outcomes and align with assessments and online course activities. For this reason, and those stated above, this module is connected to Modules 1, 4, 5, and 6.

Module 3 will cover creating and curating video content as well as utilizing other online resources during the online portion of a class. As stated above, there is opportunity for active learning within online content, overlapping with Module 2. Online content must support and align with active learning, as well as with course components such as formative feedback and assessments. Videos and other online content utilized in the class must be considered when designing the course structure. Therefore, as with Module 2, Module 3 is connected to Modules 1, 4, 5 and 6.

Modules 4 and 5 are both related to the topic of assessment. While Module 4 addresses formative feedback, Module 5 will cover assessment in a broader sense and may include both

formative and summative assessment opportunities. Thus, Module 5 expands upon Module 4. Module 4 will focus on creating formative assessment opportunities where Module 5 will focus on articulating the guidelines provided to students regarding course assessments. Assessment, whether formative or summative, must align with other course elements and will be instrumental when wording guidelines for the course structure. In this way, Module 5 overlaps with both course structure and alignment (Modules 1 and 6).

The modules in the professional development course are interconnected because the framework elements rely on each other to build a cohesive hybrid course. Faculty will be asked to complete the modules in numerical order and will be encouraged to reflect on the previous modules when they move to the next one. Completing each module, in turn, will provide scaffolding process for faculty to build their own well-designed hybrid courses.

CHAPTER THREE: FRAMEWORK DESIGN ANALYSIS

Supporting the Framework

Professional Development Course Rationale

The problem of practice addressed in this Dissertation in Practice is the lack of consistency in organizational and pedagogical structure that impacts successful hybrid instruction at a Florida college hereinafter referred to as "the college." Inconsistent success rates in hybrid courses, when compared to their face-to-face counterparts, are evident at the college. Compounding this problem is a lack of participation in training for hybrid instructors at the college as well as a lack of a clear, college-wide definition of "hybrid learning." To address these issues, the researchers created a framework and professional development course for use by hybrid instructors at the college. The professional development course, through its module objectives, content, and assignments, communicates a clear description of hybrid learning, encouraging consistency between all hybrid courses at the college. The PD course is intended for instructors creating new hybrid courses and those revising existing hybrid courses. We chose to develop a PD program because "a well-designed, formal Hybrid Course Faculty Development Program is the most effective and time-efficient solution for introducing faculty to Hybrid teaching" (Kaleta, Garnham, & Aycock, 2005, p. 2).

According to Kaleta, Skibba, and Joosten (2007), many education institutions are developing faculty development programs to assist in creating and designing hybrid courses. The University of Wisconsin-Milwaukee (UWM) provides a professional development course for hybrid instructors that is offered as a hybrid course to allow instructors to experience a hybrid course from the learner's perspective (Kaleta et al., 2007). Similarly, the professional

development course created for this Dissertation in Practice is offered as a hybrid course, intended to itself be a model for hybrid instructors. It offers examples of good hybrid course design and effective teaching strategies for a hybrid course, as in the UWM model for hybrid instructors (Kaleta et al., 2007). Kaleta et al. noted that a well-rounded faculty development program for hybrid instructors will provide structure and help faculty members develop the necessary skills to design and teach a hybrid course.

Principles of Hybrid Course Design

The professional development course created by the researchers for hybrid instructors at the college is titled 'Principles of Hybrid Course Design' and consists of six modules:

- Course Alignment designed to help faculty align each element of their hybrid course with each other and with all learning outcomes.
- 2. Face-to-Face Active Learning designed to help faculty develop active learning strategies and consider all other events that will occur during the face-to-face portion of class.
- 3. Online Resources designed to help faculty utilize technology to deliver online lesson content as well as to ask faculty to consider all other events that will occur both before and after the face-to-face portion of class.
- 4. Formative Feedback designed to help faculty develop mechanisms for providing feedback during all portions of class.
- 5. Assessment Guidelines designed to assist faculty with choosing appropriate assessments and developing clearly worded instructions for students taking those assessments.

6. Course Structure – designed to help faculty communicate a clear course structure to students through creation of a syllabus and course schedule as well as by designing easily navigable course elements in the LMS.

Each module (as described in Chapter 2) has its own objectives, content, and assignments to help faculty meet those objectives. The researchers created these modules after a thorough review of literature on hybrid teaching and learning. The framework and course objectives are grounded in educational theory and sound research in order to give faculty the tools needed to provide a more consistent learning experience across hybrid courses.

'Principles of Hybrid Course Design' was created as a hybrid course, allowing faculty to experience a hybrid course from the learner's perspective. Aside from modelling the hybrid course experience, the course will also educate faculty on the definition of hybrid learning and what a hybrid course entails. Suffolk University in Boston, Massachusetts developed a similar professional development experience. Suffolk University's Center for Teaching and Scholarly Excellence (CTSE) was charged with creating a training program for hybrid faculty (Linder, 2017). CTSE created a professional development course for hybrid instructors called, 'Hybrid Course Design Institute' (HCDI). This professional development course was intended to be completed over a six-week period (as is 'Principles of Hybrid Course Design'). Linder (2017) noted that CTSE modeled their hybrid training as a hybrid course to ensure participants understood the meaning of hybrid instruction and how it differs from other modalities.

Linder (2017) explained that a pre- and post-survey was created for the HDCI course to assess participating faculty's level of knowledge in (1) teaching hybrid courses; (2) technology; (3) teaching online; (4) using tools to teach content in their discipline. CTSE determined that participants demonstrated an increase in knowledge in all these categories (Linder, 2017).

'Principles of Hybrid Course Design' will also offer a pre- and post-survey to assess faculty confidence in understanding and implementing hybrid course design elements from the framework as presented in the professional development course. These surveys will be administered online through Qualtrics before and after participants complete the PD course.

Impact of the Professional Development Course

Offering a flexible education is imperative for today's community college students, many of whom have a multitude of responsibilities outside of class (Lloyd-Smith, 2010). Lloyd-Smith also noted that blended instruction provides the opportunity for multiple forms of learning, which may increase the effectiveness of the course. With the recent increase in hybrid course enrollment, it is important that the college meets the needs of its hybrid students by providing a more consistent learning experience across all its hybrid courses. It is the researchers' intent that after completing 'Principles of Hybrid Course Design,' participating faculty members will be able to communicate clear course expectations to their hybrid students, leading to better student understanding of what hybrid means and, thereby, more success in their hybrid coursework.

By providing a more consistent learning experience for hybrid students, the researchers hope to see increased student success rates and hybrid course enrollment at the college. Increased use of hybrid courses allows higher learning institutions to maximize use of their classroom space and reduce overcrowding (Lloyd-Smith, 2010). Thus, 'Principles of Hybrid Course Design' will likely have a positive impact on the college, faculty, and students.

Goals, Course Objectives, and Expected Outcomes

Prior to the researchers' development of the framework and PD course, they established goals, objectives to meet those goals, and expected outcomes. The goals clearly articulate what

must be addressed to help the college develop a consistent and successful hybrid learning program. To achieve these goals, the researchers established a framework of best practices for hybrid learning supported by research-based standards. Each framework element became an objective for the PD course to ensure the entire framework would be communicated to participating faculty members. Each course objective forms the basis of one of the six modules. By completing the course, participating faculty members will learn the necessary tools to achieve the expected outcomes and provide students with more consistent hybrid learning experiences. Figure 6, below, demonstrates how the goals (left) support the objectives (middle) and provide the opportunity for achieving the expected outcomes (right).

Goals Objectives Expected Outcomes		
To communicate a clear and cohesive definition of "hybrid learning" including:	Faculty will be able to:	By utilizing the framework and completing the professional development course, faculty will:
A description of components and key terms that should be used in a successful hybrid course. Research-based standards and guidelines for planning, creating, and revising hybrid courses. Strategies and suggestions for planning, creating, and revising hybrid courses.	Provide a cohesive learning experience between face-to-face and online portions of class (Bocconi & Trentin, 2014; Stein & Graham, 2014). Incorporate active learning strategies during the face-to-face portion of class (Garrison and Vaughn, 2008; Tandoh, Flis, and Blankson, 2013). Provide digital resources that allow students to engage with content during the online portion of class (Olapiriyakul & Scher, 2006; Stein & Graham, 2014). Provide frequent formative feedback during both online and face-to-face portions of class (Chung, Shel, & Kaiser, 2006; Stein & Graham, 2014). Provide clear instructions for completion of assessments (Stein & Graham, 2014). Provide a structured course design (Olapiriyakul & Scher, 2006; Stein & Graham, 2014).	Communicate a clear definition of hybrid learning to students. Utilize the college's current learning management system (LMS) to provide a consistent hybrid course experience. Utilize the college's current learning management system (LMS) to provide basic hybrid course materials (syllabus, course topics, course timeline, etc.). Develop quality course materials (activities, online resources, assessments, etc.) for use in hybrid course instruction.

Figure 6. The goals, course objectives, and expected outcomes of the hybrid design framework and PD course.

Achieving the Goals

To ensure that each of the six research-based objectives is achieved by participants in the 'Principles of Hybrid Course Design' course, the researchers created six modules, each with its own objectives and assignments. The PD course was built within the college's current LMS.

Course content (files, videos, and text) for each module had to be uploaded into the college's LMS. In order to create the module content, the researchers first considered their own hybrid courses and the processes by which these courses were created. We relied on our own expertise and judgment to design content that would convey the framework and provide extensive resources for faculty learning about hybrid course design.

The course design was based on design principles learned during e-learning coursework in this doctoral program. We considered design elements such as font choice, spacing, accessibility, and visual interest in creating the course. The course was organized into content folders at the suggestion of an instructional designer at the college, whose advice helped put the finishing touches on the flow and usability of the course elements.

The resources provided in the modules came from a variety of sources. Whenever possible, resources from the college's current faculty development website were integrated into the learning modules. Templates from University of Central Florida's online Blendkit course (located at https://blended.online.ucf.edu) were provided where appropriate. Some examples and videos were created by one of the researchers during her recent work at the college and during her coursework in the doctoral program. Searches of educational websites and streaming video repositories, such as YouTube, provided additional content for the modules. This section will explore each module, its objective(s), and the corresponding assignments to meet those objectives.

Module 1: Course Alignment

Module 1 focuses on connecting course components to enhance cohesion in a hybrid course (see Appendix E). In this module, faculty participants will (1) choose an appropriate course objective; (2) write appropriate lesson objectives utilizing Bloom's Taxonomy; (3) draft a plan to align all course elements and ensure they support the learning objectives. Course participants are required to review all module content, including links to Bloom's Taxonomy resources and examples of aligning face-to-face and online course components. A blended course integration chart and schedule template from University of Central Florida's online Blendkit course (https://blended.online.ucf.edu) is also included in the module content.

After course participants have read the course content, researched their course objectives, and familiarized themselves with Bloom's Taxonomy, they will complete the module assignments. Assignments must be completed by each participant by a set due date. The assignments for this module require participants to submit (1) a list of all course objectives their lessons will address; (2) a list of all lesson objectives for the chosen lesson; (3) a description of the events that will occur during each portion of class in order to meet both lesson and course objectives. Assignments will be submitted using the Google Docs application for this and all future course assignments, with exception of discussion board assignments. Google Docs was selected as the submission format because it allows faculty the ability to work in a "live" document which they can continue to access after course completion.

Module 2: Active Learning

Module 2 focuses on collaborative strategies that can be utilized during the face-to-face portion of a hybrid course (see Appendix F). The objectives for this module are that faculty participants will (1) incorporate active learning strategies into the face-to-face component of their hybrid courses; (2) determine which other course elements will be addressed during the face-to-face component. In this module, an embedded video provides an explanation of active learning, including the reasons why active learning strategies should be incorporated in the classroom. Another video introduces the terms 'digital native' and digital immigrant' while discussing the various active learning techniques that can be employed in the classroom. 'Digital natives' are students (K-12 through college) who grew up using technology such as computers, phones, videogames, and digital toys (Prensky, 2001). Prensky (2001) describes 'digital immigrants' as those who were born before digital technology was widely used and who had to adapt to new technologies currently in use. The active learning module also contains links to articles and websites addressing various active learning techniques that can be incorporated in a hybrid classroom. In this module, participants are asked to plan at least one activity that will take place in the face-to-face portion of their hybrid classes.

The assignments are (1) make an original post to the discussion board (asking which active learning strategies participants are most excited about and which strategies they have previously used in the classroom) as well as at least two replies to their peers' posts; (2) submit a description or copy of one learning activity to be used during the face-to-face portion of their class; (3) submit a description of the other events that will occur during the face-to-face portion of class; (4) provide the supporting lesson objectives and course objectives for their activity.

Module 3: Online Resources

The online resource module is intended to assist faculty in understanding how to curate or create online content, as well as how to use web resources for online meetings (see Appendix G). In this module, faculty participants will (1) investigate content curation and creation technology tools; (2) create or curate course content; (3) determine which other course elements will be addressed online. The content for this module includes a video that describes education from the digital native perspective, as well as one that explains content curation and creation using several different sources. This module also provides several resources for curation and creation of videos for hybrid courses, including Screencast-o-matic, Audacity, Powtoon, and EdPuzzle. Participants in the PD course are also provided with a link to contact the college's instructional designers for assistance with course creation.

Once participants have explored all of the resources in this module, they are asked to create or curate content for their own lessons. These lessons must align with participants' course objectives. Module 3 assignments require faculty participants to (1) provide a link to the created or curated course content; (2) provide a description of other events that will occur outside of class (both before and after the face-to-face portion).

Module 4: Formative Feedback

The formative feedback module provides strategies to assess student understanding during face-to-face and online meetings (see Appendix H). In this module, faculty participants will develop mechanisms that permit formative feedback during face-to-face and online class

portions. To help participants meet this objective, the module content begins by describing formative assessment, including links to articles that discuss formative assessment in further detail. The module also includes a video illustrating technology tools that can be used for formative assessment. Additionally, links to resources such as Kahoot, Socrative, and Plickers, are included to help participants create formative assessments. Module 4 also includes descriptions of various types of formative assessment techniques that can be utilized online or face-to-face.

In this module, participants are asked to strategize how and when they will offer formative feedback in the face-to-face and online portions of their hybrid courses. Each participant will be required to submit (1) an original post in the discussion board (regarding strategies that will be most useful in their discipline and how these will differ between online and face-to-face learning) as well as at least two replies to their peers' posts; (2) a weekly time-management plan that articulates how, when, and where formative feedback will be provided in the course.

Module 5: Assessment Guidelines

In Module 5, faculty participants will learn about designing assessment policies and protocols (see Appendix I). They will (1) determine how students will be assessed on each objective; (2) draft assessment protocols to be included in the course syllabus. The module content begins by discussing formative versus summative assessment. It also describes how to plan for assessment, including when, where, and how to assess hybrid students. This module includes a Venn diagram that provides examples of assessment that can be utilized in either the

online, face-to-face, or both portions of a hybrid course. It also includes resources on creating and utilizing rubrics to assess student learning.

In Module 5, participants are asked to consider how they plan to assess their hybrid students throughout the term. They are also reminded to review course and lesson objectives when planning assessments. Faculty participants must submit (1) a list of each type of assessment utilized in their lesson, including when each assessment will occur; (2) the course and lesson objectives that will be assessed for each assessment listed; (3) a draft of the language that will be included in the course syllabus to explain the assessment protocols utilized.

Module 6: Course Structure

In the course structure module, faculty participants will learn about designing course elements to create a clear hybrid course design (see Appendix J). Participants will (1) design a hybrid course syllabus; (2) design a hybrid course schedule; (3) determine whether all course elements are aligned and support the learning objectives. This module asks faculty to consider how they will communicate their expectations regarding each of the elements discussed in the previous five modules. Module 6 provides resources for creating a course syllabus, including links to the college's list of syllabus requirements and to UCF's syllabus template from the Blendkit course (https://blended.online.ucf.edu). To assist faculty participants planning the design of their course elements, a link to a hybrid course template from UCF's Blendkit course is included in this module for reference.

After reviewing this module's content, faculty participants are asked to review the policies in their syllabi and construct a course schedule that includes all content to be covered as

well as all major assignments, assessments, and due dates. Participants will be asked to submit (1) a course syllabus; 2) a course schedule; (3) a revised copy of the alignment plan developed in Module 1.

Target Audience

The intended audience for 'Principles of Hybrid Course Design' are faculty members who are new to hybrid teaching at the college. However, it also offers useful content for faculty who are experienced at teaching hybrid courses, helping them to redesign a current course or to develop new ideas. Before fully implementing this course at the college, the researchers assembled a focus group to analyze the course and assess what modifications would improve the course content or design. The following sections summarize the focus group procedures and feedback acquired from the focus group participants.

Methodology

Focus Group Rationale

A focus group is an appropriate process to evaluate and suggest potential improvements to a program or project (Krueger & Casey, 2002). Therefore, the researchers chose to use a focus group as the method of collecting information to inform the framework. Krueger and Casey (2002) suggested that when choosing participants for a focus group, the selected individuals should embody the "characteristics, experience, or knowledge needed to provide rich information on the topic" (p. 4). By using a focus group composed of experienced hybrid

instructor participants, the information collected will inform the researchers as to how useful their professional development course will be for hybrid instructors and how this course might be improved. The focus group setting will "provide direct evidence about similarities and differences in participants' opinions and experience" (Morgan, 1997, p. 10). Morgan further stated that focus group participation elicits feedback about participants' previously-held viewpoints along with those they develop through interaction with other participants.

Consequently, the researchers believed that the use of a focus group would encourage valuable interactions between participants, illuminating their individual and shared experiences with hybrid course instruction, and providing valuable feedback for revisions to the researchers' professional development course.

Participant Recruitment

The initial list of potential focus group participants was generated through an Institutional Research (IR) request for the names of faculty members who have taught hybrid courses at the college within the prior two years. The researchers contacted 255 potential focus group participants by email, requesting their participation in reviewing the researchers' professional development course. After two weeks, a reminder email was sent to all potential participants who had not yet responded to the researchers' initial email request. Each of these emails included an explanation of the focus group rationale and consent process. By agreeing to review the researchers' hybrid design course, participating faculty would also be consenting to participate in the focus group interview to be conducted at the end of the review period.

Initially, 15 faculty members agreed to participate. A Doodle Poll was sent to those faculty members in order to determine a suitable day and time for the focus group interview.

Twelve faculty members were able to agree on a common time for the focus group meeting. The other three did not participate and were sent emails thanking them for their willingness to participate in the process. Two additional faculty members subsequently withdrew their participation for personal reasons and one did not show the day of the focus group interview.

Consequently, nine faculty members participated in the focus group.

Participant Description

The nine focus group participants are all faculty members at the college who have taught a hybrid course within the last two years. They represent a majority of the college's campuses as well as six different disciplines. Each participant chose a pseudonym for reference during the focus group interview, displayed in figure 7 below. Figure 8 reflects a breakdown of participant demographics by campus and figure 9 describes the participants by discipline.

Pseudonym	Campus	Discipline
Katchie	Campus 1	Mathematics
Dr. Gonzo	Campus 4	English
Lizzy	Campus 1	Economics
Yokai	Campus 1	Psychology
Hero	Campus 1	Mathematics
Seven	Campus 1	Mathematics
Valentina	Campus 1	English
Charles	Campus 3	Accounting
Daara	Campus 2	Spanish & Humanities

Figure 7. Participant pseudonyms and demographic information.

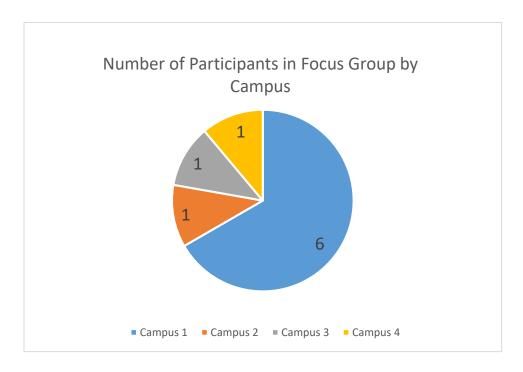


Figure 8. Pie chart of focus group participant campuses.

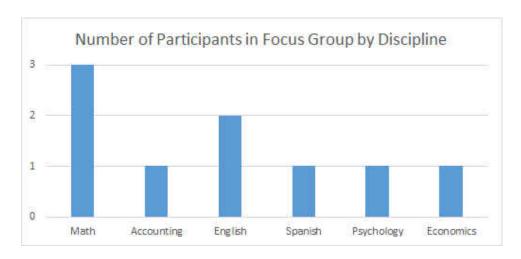


Figure 9. Bar chart of focus group participant disciplines.

The majority of the participants were mathematics instructors on campus 1. Because both researchers are also campus 1 mathematics instructors, it is likely that these participants were more willing to participate in this focus group because of their personal connection to the researchers.

Participant Review Process

Prior to focus group selection, the researchers built the hybrid design professional development course. As described above, the course materials and design were based on principles learned in this doctoral program. The course was comprised of existing faculty development resources provided by the college and additional course elements created based on the researchers' expertise and research on the subject.

Participants were enrolled by the researchers in the hybrid design PD course. They were instructed to spend two weeks reviewing the course and making notes in preparation for the focus group interview. Once logged in to the course, participants were presented with a screen

explaining what was expected of them as course reviewers and providing them with a link to the schedule of tasks they needed to complete. This opening screen described the purpose of the course and asked the participants to consider course content as well as course design during their reviews (see Appendix C). The focus group meeting was held immediately following the two-week review period. In preparation for the focus group, and to continually model the model of a hybrid course experience where "entrance tickets" are commonly used as a method of ensuring students prepare for face-to-face class sessions, participants were asked to submit responses to an online discussion board prompt just prior to arriving as their "entrance tickets" to the focus group meeting.

Data Collection

Focus Group Interview Process

The focus group was held in a predetermined classroom at campus 1 of the college. The researchers moderated the focus group discussion and were aided by a colleague who observed the focus group interview and listened for repeated or emphasized topics and themes. The purpose of using an observer was to obtain an unbiased viewpoint of the focus group discussion. The observer has extensive experience with conducting focus groups and first-hand knowledge of the researchers' framework and professional development project. Participant responses during the focus group meeting were captured by audio-recording, the researchers' typed notes, the memory of the researchers, and field notes from the observer—all methods of capturing focus

group data recommended by Krueger and Casey (2002). Additionally, participants recorded their own responses in packets containing the focus group questions (see Appendix B), which were provided at the start of the focus group session and collected at the close.

Upon arriving, participants were greeted by the researchers, asked to sign in, and pick up their participant packet. The participant packets contained all questions that would be discussed in the focus group interview. The packets were labeled Group A or Group B, reflecting the groups established prior to the focus group interview. The first three and last two questions of the packet were identical for all members of the focus group; the remaining questions were specific to each group. The Group A packet primarily addressed Modules 1, 2, and 5 while the Group B packet primarily addressed Modules 3, 4, and 6. Each packet was 15 pages in length, including blank space provided between questions where participants could record their written responses. The participant packets containing all focus group questions can be found in Appendix B.

Before beginning with the questions, participants were instructed to select a pseudonym and write it on their individual packets. After an initial welcome, the researchers explained the focus group process and reviewed the rules for the session. The nine participants stayed together while answering questions 1 and 2 before splitting into Group A and Group B in separate rooms to complete questions 3 through 9. Each researcher led one of the two smaller groups. The focus group observer travelled between rooms observing and taking notes. The purpose of the smaller groups was to get more in-depth feedback on all six modules in a shorter amount of time. Toward the end of the session, all participants reconvened in the original room to share feedback about the modules they reviewed and offer additional feedback for the modules they did not review during their small group time (questions 10 through 12). All participants were asked to

complete questions 13 and 14 before submitting their packets at the conclusion of the focus group meeting.

Data Analysis

Researchers' Roles in Data Analysis

As described in Chapter 1, the researchers are considered insiders working with insiders because of their experience teaching hybrid courses at the college (Herr & Anderson, 2015). As hybrid instructors, we have each developed our own opinions about what should be included in a successful hybrid course. As described in Chapter 2, our combined knowledge of necessary course components for hybrid courses led to creation of the hybrid design framework. We also relied on our expertise to plan and build the accompanying professional development course. For this reason, it was important that we consider our individual experiences and perspectives regarding hybrid instruction so as to not let these perspectives interfere with an unbiased analysis of the data. Setting aside our own prior experiences and preconceptions, referred to as "bracketing" by Creswell (1998), helped us to be more open toward the feedback we received from focus group participants. Bracketing allowed us to use our hybrid course experience to identify themes and probe further when needed during the focus group interview, while still maintaining a focus on the exploratory questions we were attempting to investigate (Tufford & Newman, 2012).

Because we were developing a course to serve all hybrid faculty at the college, it was important for us to recognize that the course components we include in our own hybrid courses are not necessarily important to nor included in other instructors' hybrid courses. We are also sensitive to the fact that we are both mathematics professors on the college's campus 1 and we are therefore not familiar with the nuances of every discipline and campus at the college. For this reason, feedback from a diversified focus group comprised of faculty members from various campuses and disciplines, was extremely valuable in evaluating the course and framework.

While our work with hybrid courses at the college makes us insiders working with insiders, our involvement with the hybrid design committee also makes us outsiders working with insiders because of our ability to affect policy change (Herr & Anderson, 2015). College administrators formed the hybrid design committee in 2015 by selecting members of the college's administration and faculty to serve. The committee's focus is on investigating faculty concerns about hybrid courses and providing feedback to the administration regarding future policies for hybrid courses. Our involvement on this committee means that we have firsthand knowledge of the college's plans for future hybrid courses. Some focus group participants had requested to be on this hybrid design committee but were not selected. Therefore, we felt it important to reassure the participants that we were both open to their feedback and respected their expertise in hybrid instruction. As researchers, we put aside our preconceived ideas and policies discussed by the hybrid design committee and remained open to all suggestions made by the focus group participants.

Analysis Procedures

Directly following the focus group meeting, the researchers and the observer met to discuss the focus group interview results. This debriefing session allowed the researchers and observer to compare notes and reflect on the focus group session while it was fresh. During this discussion, the observer shared her notes with the researchers and identified underlying themes presented during the focus group meeting. The researchers and the observer reflected upon interactions between members of the focus group, which can be a useful source of data according to Morgan (2012). The researchers later compiled the observer's notes with the audio notes, participant packets, and the typed notes to obtain a complete view of the feedback provided. As suggested by Krueger and Casey (2002), all captured data were analyzed for major themes from the group discussion as well as key insights provided by individual participants. After the moderator debriefing, the researchers prepared a written report based on the audio notes, the typed notes, and written responses as suggested by Krueger & Casey (2002). The researchers utilized the following steps to analyze the captured data:

- The notes typed during the focus group interview were reviewed for emerging themes.
- 2. The audio recording that accompanied the typed notes was replayed to clarify meaning where needed.
- 3. Participants' handwritten responses in the participant packets were divided by question and typed verbatim to allow for easier analysis of common themes.
- 4. The handwritten responses were compared to the typed notes and audio recording to clarify meaning where needed.

- 5. The written and verbal responses to the focus group questions were compared to the observer's notes to determine consistency and thoroughness of findings.
- 6. The written and spoken responses to the focus group questions were compared to the exploratory questions to interpret results.
- 7. A written report of the findings was compiled.

Analysis Results

Analysis of the focus group interview revealed that participants held many different ideas regarding which elements are important in creating a hybrid course. Questions 1 and 2 of the focus group packet asked participants to state what they most and least liked about the professional development course. These questions allowed participants to express which elements of the course they thought were well-executed and which required further revision. These responses were reiterated by many participants throughout the focus group discussion, forming its major themes. Other key insights only became apparent during later conversations with the participants regarding the course objectives and individual modules.

Here are the key insights and major themes presented during the focus group interview:

- Course objectives are on target.
- Course is well-organized.
- Create a hybrid course template for faculty to copy.
- Align all modules so that creation of materials is for a week, not the entire course.
- Be careful of terms that may send the wrong message (such as 'digital native').

- Course may contain too many words or too much content depending on time and number of PD hours provided for completion.
- Integrate other faculty development workshops as possible co-requisites to alleviate burden of covering everything in this course.
- Reduce number of steps required to navigate the course website and access course content.
- Provide content related to student cheating.
- Provide suggestions for dealing with the issue of students arriving at face-to-face sessions unprepared.
- Provide more examples of activities and documents for faculty to build from.
- Highlight the necessity of clear communication channels between faculty and students.

The next ten questions of the focus group packet requested information specific to the exploratory questions developed for this Dissertation in Practice. As previously described, the above themes were all discussed during the focus group meeting. Consequently, these themes will be explored in greater detail throughout the remainder of the focus group conversation analysis.

Exploratory Question 1: What do faculty feel is necessary for the framework of a hybrid model?

The course objectives form the literature-based support for the professional development course and are the elements of the hybrid design framework. Therefore, the researchers chose to focus on the course objectives in response to this exploratory question.

Framework/Course Objectives

The framework on which the researchers' professional development course was established is a series of six literature-based course objectives, presented to participants upon entering the professional development course:

- 1. Provide a cohesive learning experience between face-to-face and online portions of class (Bocconi & Trentin, 2014; Stein & Graham, 2014).
- 2. Incorporate active learning strategies during the face-to-face portion of class (Garrison and Vaughn, 2008; Tandoh, Flis, and Blankson, 2013).
- 3. Provide digital resources that allow students to engage with content during the online portion of class (Olapiriyakul & Scher, 2006; Stein & Graham, 2014).
- 4. Provide frequent formative feedback during both online and face-to-face portions of class (Chung, Shel, & Kaiser, 2006; Stein & Graham, 2014).
- 5. Provide clear instructions for completion of assessments (Stein & Graham, 2014).
- 6. Provide a structured course design (Olapiriyakul & Scher, 2006; Stein & Graham, 2014).

In question 3 of the focus group questionnaire, participants were asked to consider their disciplines, campuses, and courses in determining whether these objectives cover all the topics essential for developing a hybrid course. The participants were also asked if any additional objectives should be included or removed.

Most revisions to the objectives were requested by Valentina. Here is a summary of her notes regarding the course objectives:

• Objective 2: make the language clear that active learning applies to both face-to-face and online portions of class.

• Objective 3: use the same terminology in this objective as others (online versus out-of-class).

• Objective 4: consider deletion.

• Objective 5: writing clear instructions should apply to all online content, not just assessments.

• Objective 6: make this the first objective.

Daara also observed that Objective 1 may need to include a definition for "cohesive learning experience."

During the focus group conversation, Valentina originally suggested that an additional objective be added regarding clear communication channels with students. Daara agreed with the importance of this topic and clarified the need for instructor presence in the online environment. However, Charles suggested that this topic may fit well within one of the current objectives and others came to agree with him. Here is an excerpt of this conversation:

Charles: Because I'm thinking, we could probably have a list of like 20 objectives but how do we roll up into major [objectives]...? Because that's [referring to clear faculty-student communication] important but that might not be the overarching objective...

Researcher: In other words, maybe those would be more of a module objective?

Charles: Right!... Because you're creating this course so that it can be used to instruct instructors. And if I were taking this course, that wouldn't be the major objective...because contact may be in all six of them [the modules] or however many.

Valentina: Right, right.

Daara: I think somewhere in there, either in instructor course design [Module 6], or cohesive learning experiences [Module 1], somewhere in there has to be a way of communication.

Several participants believed that the provided objectives were sufficient for faculty teaching a hybrid course for the first time or wanting to redesign their hybrid course.

Yokai wrote in her packet, "The objectives cover the topics necessary for faculty developing a hybrid course. These are all things I considered when developing my courses." In support of this viewpoint, she stated:

"I took a course in hybrid design before I ever taught a hybrid course so that might be the difference - that I've taken classes myself online so that might be a difference too where I feel these things all look really really good, because I had experience before ..."

Additionally, Dr. Gonzo wrote, "All stated objectives seem important for anyone expecting to learn how to develop a mixed-mode course."

Five of the nine participants initially believed that the objectives were adequate and no revision was needed. After some conversation, it became clear that most of the suggested changes were subsumed under the current objectives and that no additional objectives were required.

Exploratory Question 2: What components do faculty feel are required for a successful hybrid course?

The remainder of the focus group session primarily addressed exploratory question 2. Focus group questions 4 through 12 from the participant packet (see Appendix B) request detailed feedback on each of the modules that support the framework/course objectives.

Appendices E through J contain screenshots of module pages contained in 'Principles of Hybrid Design' for reference during the following sections.

Module 1 Feedback

While Lizzy verbally expressed concern about the amount of information presented in Module 1, she also wrote that, "the assignments and all of the links and lists are all helpful as you plan your work. There is a lot of support." Katchie and Yokai agreed that the information presented was relevant, logically displayed, and comprehensive. The inclusion of Bloom's Taxonomy, however, provided a minor disagreement. Dr. Gonzo questioned the necessity of utilizing Bloom's Taxonomy to write objectives but Katchie and Yokai defended this practice and felt that including Bloom's Taxonomy was both valuable and necessary. Katchie further suggested the inclusion of a practice assignment or formative assessment on how to use Bloom's Taxonomy when writing objectives. In response to the clear support for Bloom's Taxonomy, Dr. Gonzo suggested adding the following phrase to help clarify how Bloom's Taxonomy can be used when reading course objectives:

"This blended course integration chart will show you how to apply Bloom's Taxonomy verbs to your CIM [Course Information Management System] objectives."

Valentina and Daara expressed concern about the alignment between Modules 1 and 6 in terms of how much course content participants are required to develop. Course participants are asked to develop content for a particular week or lesson of their hybrid course content throughout most of the modules but are then asked to develop their entire course schedule and syllabus in Module 6. This concern will be addressed further in Module 6 analysis.

Module 2 Feedback

The conversation regarding Module 2 primarily focused on a provided video resource

discussing the terms 'digital natives' and 'digital immigrants.' The video implied that most

college students today are 'digital natives' whereas many college professors may be 'digital

immigrants.' Participants warned that this could be misleading terminology.

Dr. Gonzo: I wasn't sure I completely bought the 'digital native,' some of the material on that... Their [referring to students] digital native-ness is, I think, much more likely to

show up in places like Snapchat and texting and Kick and all those kinds of things but

I don't know that they are nearly as online savvy as we sometimes think they are.

Yokai: They're not able to apply that to any learning management system...they seem not to be able to transfer that [referring to technology skills] or be able to understand

'fake news.'

Dr. Gonzo: Yep. They're certain that the first hit on Google is the answer.

Yokai: Yep.

Researcher: Is there something you would replace that concept with or would you just

remove that to not oversell the idea of...

Dr. Gonzo: That's a good question. I mean, I heard some people say that this was a new term [referring to other participants not being familiar with the term 'digital natives'] so I think you probably want to include it because, you know, if you were, I think,

dealing with students that work this way there might be still something to it...I just

want to make sure faculty know...

Researcher: Not to oversell it?

Dr. Gonzo: ...they're [referring to students] not nearly as capable in the digital

environment as we think they are because of the type of digital work they do.

Yokai: It's digital play.

Katchie: I like the way you said that.

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While there was agreement that this particular video resource did not need to be removed from the course, participants all appeared to agree that some kind of clarification or warning should be issued to faculty regarding the technical ability levels of students.

In addition, Katchie requested that Module 2 contain more examples of active learning strategies for faculty to reference. She would like to see examples that fit with specific disciplines, such as mathematics.

Module 3 Feedback

Focus group participants felt that Module 3's online resources were extensive and useful. Hero praised the, "awesome table of resources." However, while Daara acknowledged that all of the resources should be included, she felt that it was important to be clear about which resources are free so that faculty can initially try the free resources when building content. She reminded the group that faculty, in particular part-time faculty, may not have, "the latest computer or programs on their computer." Seven added:

"You left off a resource that most of us are using...the smartphone. Do lessons on the phone and upload it to YouTube."

Highlighting the smartphone as a creation tool is certainly a valuable suggestion. Most instructors and students have a smartphone or tablet, and there are more and more services being developed to allow users to both create and view content directly on these devices.

Another concern raised during an exchange between Valentina and Charles was the length of the video resources provided in the module. Module 3 contains a 22-minute video

comparing the merits of content curation versus creation, and describing the pros and cons of various resources for both (see Appendix G). In reference to this lengthy video, Valentina stated:

"Good online course design is chunked in small bits. Whether it is video...even the part that says module three assignments. That should be a separate link that the faculty clicks on..."

Participants agreed that this video should be broken up into several smaller videos. In general, there was agreement that chunking video content as well as content you see on the screen is a good practice when developing content for hybrid courses as well. Therefore, the suggestion about breaking up the content curation and creation video in Module 3 led to an additional best practice that could be added to Module 3—the use of smaller, chunked, well-organized video and text content.

Module 4 Feedback

The majority of the conversation regarding Module 4 focused on the discussion assignment. The focus group offered several best practices for utilizing a discussion board assignment, including that discussion board assignments should

- have value and add to the conversation or content module;
- be created so that participants must post an original response before reading and replying to peers;
- have two submission dates: one for the original response and one for replies to peers.

Additionally, Seven sought to include information for instructors on how to handle students who come to class unprepared. In a hybrid course, especially one which utilizes the

flipped learning model, students may have a reading or video assignment prior to the face-to-face portion of class. This assignment will often require students to apply what they learned online in a group activity during the face-to-face portion. It is not uncommon for students to arrive at the face-to-face portion of class without reviewing the necessary content, leaving them unable to meaningfully participate in the group activity. Members of the focus group believed that it would be helpful to address this circumstance in the professional development course and provide strategies for hybrid faculty on how to handle unprepared students.

Module 5 Feedback

The majority of participants felt that the Module 5 content was useful and complete.

Lizzy wrote in her packet, "I like the assessment diagrams that let faculty know what assessment tools work best in what format." Yokai's written response also validated the content provided in Module 5:

"The assessments seem to be more than ample. There is much information to support the work. The information flows logically."

One suggestion made by Lizzy was to provide information on how to deal with student cheating when administering online exams. Although hybrid courses provide the opportunity for exams during the face-to-face portion, it is a common practice to deliver many assessments online. Providing strategies to help faculty minimize cheating and resources to help detect cheating, such as Turnitin or iThenticate, are helpful suggestions.

Module 6 Feedback

It was the intent of this module assignment for faculty to develop a draft of their course schedule and syllabus for the entire semester (see Appendix J for screenshots of Module 6 content). However, there was confusion among focus group participants regarding whether they were being asked to develop the entire course schedule or a schedule for just one week or lesson (as instructed in previous module assignments). Here is an excerpt of the conversation:

Valentina: It looks like you want me to do my entire semester in a professional development course.

Daara: Yes, because here it is under, 'What do you need to accomplish this week? Start making a plan for what will occur during each portion of the class, before, during, and after. Design lesson outcomes to support your lesson.' I mean this is...

Valentina: For a semester.

Seven: Yeah! Well and that was one of my questions.

Focus Group Observer: So you're suggesting that as you are looking through these modules, in any of them, make sure it's clear what is the focus.

Daara: Yes, it has to be really clear.

Charles pointed out that the face-to-face meeting of this hybrid professional development course would provide the opportunity to discuss what is expected of faculty participants and clarify any confusion about the course requirements. He said, "the face-to-face meeting is going to establish some vocabulary and direction, so that when you go to the online portion, you'll have some fluency."

Seven replied, "Even if I heard all that in the first day, when I go to this module and I read your course syllabus... it needs to say it in here. It's too much." Seven also suggested, and

the other participants agreed, that Module 6 should contain examples of syllabi from hybrid classes in various disciplines.

Many of the focus group participants were concerned that writing an entire course syllabus and schedule may be too much to ask of new hybrid faculty in this professional development course. The participants believed that by providing multiple syllabi exemplars, hybrid faculty could begin to develop their own materials more easily. Module 6 contained templates from UCF's Blendkit (https://blended.online.ucf.edu) for creating a course schedule and a syllabus. However, the focus group participants believed that providing examples in addition to the Blendkit templates might assist faculty with developing these required course documents on their own.

Templates were a theme that was echoed in other portions of the focus group interview. Lizzy suggested that this professional development course provide a general course template in the college's LMS for hybrid faculty to copy. This would ensure consistency and alleviate some of the pressure of new hybrid faculty developing their courses from scratch. Katchie requested that design tips be included to help faculty better design their courses within the college's LMS. These tips could include suggested font types and sizes, use of images, hyperlinks, and designing for accessibility.

Module Content Summary

These module conversations helped to address the second exploratory question: 'What components do faculty feel are required for a successful hybrid course?' While the conversation about these modules centered primarily on what changes or additions should be made to the

professional development course, the conversation often revealed information about what components need to be in any hybrid course and best practices for including those components.

As a whole, focus group participants did not determine that any of the module content should be removed. They believed that course alignment, active learning, online resources, formative feedback, assessment guidelines, and course structure were valid concepts on which to build a successful hybrid course. Suggestions for improvements primarily regarded which resources to include, how to present those resources, and assignments to utilize these resources in meeting the course objectives.

Some content, such as the 'digital natives' video in Module 2 and the use of Bloom's Taxonomy in Module 1, may require additional explanation to clarify the meaning or usage of these resources. Other modules would benefit from clearer wording to convey the intent of the assignments, such as the discussion assignment in Module 4. Better alignment of Module 6 assignments with those from the prior modules would also improve the course. Best practices for discussion board assignments and video creation were addressed in Modules 4 and 3, respectively.

Apart from some minor adjustments to the current course content, most feedback from the focus group conveyed a need for additional course content or components. Participants requested that the following items be added to the course:

- Examples of active learning strategies specific to disciplines (Module 2).
- Syllabi exemplars for various disciplines (Module 6).
- Information on how to address the unprepared student (Module 4).
- Information/resources on how handle cheating in online assessments (Module 5).

• A hybrid course template available for copy in the college's LMS (Module 6).

Exploratory Question 3: How do faculty identify which components to include in a hybrid course?

To answer exploratory question 3, focus group participants were asked to reply to a discussion post in the college's LMS while reviewing the professional development course and prior to arriving at the focus group session. Completion of this posting served as their "entrance ticket" to the focus group meeting. The use of this discussion post as an "entrance ticket" was an intentional effort on the part of the researchers to continually model the hybrid course experience within the PD course and for the reviewers of this course. This discussion post posed the following question:

'Consider a hybrid course you have taught that you felt was "successful." How did you decide what (materials, assignments, assessments, etc.) to include in your hybrid course?'

Although eight of the nine participants replied to the discussion post, only six discussed how they decided what materials to include. Surprisingly, each participant response was unique, with the exception of similar responses from two participants who worked together in the same campus and department. The following is a list of participant responses explaining how they each designed their hybrid courses:

- Used own existing online course and built hybrid version from it.
- Hybrid course was provided containing all necessary materials, assignment, and required content.

- Collaborated with other instructors of same course in same department to create materials and develop a consistent course design. They meet regularly to discuss the course and make necessary changes.
- Worked with textbook publisher to develop content based on course outcomes.
- Attended conferences and professional development courses specifically related to hybrid and flipped learning to help develop the best materials and design.

From these responses, there appears to be no common process for hybrid course creation at the college. While there may be several valid pathways to designing a hybrid course, these responses indicate a lack of consistency in how hybrid courses are designed at the college. It is also interesting to note that only one participant mentioned utilizing professional development opportunities when constructing a hybrid course. This aligns with data collected from hybrid faculty in the pilot study as well as the hybrid design committee showing that faculty either do not know about or do not utilize professional development opportunities to assist with hybrid course design.

Several of the participants who posted responses in the discussion board mentioned specific types of assignments and strategies they utilize in their hybrid courses. Figure 10 displays how many participants utilized each type of assignment or strategy in their hybrid courses.

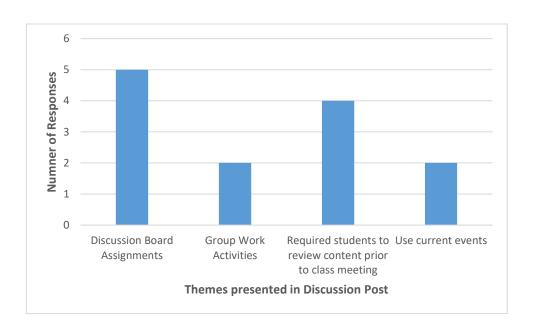


Figure 10. Frequency of responses by focus group participants about assignments used in hybrid courses.

Additional Thoughts Shared by Participants

The final question (question 13) of the focus group participant packet stated the following:

'Based on the feedback shared during the focus group today and regarding any additional thoughts or questions you may have, complete the following statement: I wonder...'

This question was included to allow participants a forum for providing additional thoughts or questions that did not come up earlier in the focus group interview. Seven of the nine participants responded to this question. Some used this space to provide positive feedback such as, "Good Job!" or encouragement such as, "Look[ing] forward to seeing the new format." Dr. Gonzo requested that he be allowed continued access to the course to, "mosey through some of those links some more." And Hero, while not responding to this question specifically, made that

same verbal request before leaving the focus group session. The positive feedback and continued interest further validated the work that went into designing the course and the information that was provided within it.

Other responses to this question posed important considerations for the future. Charles and Seven both wondered if faculty would be provided enough time or compensation to complete this course. Charles also pondered, "Will there be followup on the effectiveness of the fac[ulty] dev[elopment] hybrid course?" and Lizzy wondered, "how veteran and new faculty would respond to the course format." These are all valid and helpful considerations regarding the future of the course.

The course contains a large amount of information and content, as noted by participants during the Module 1 discussion. If the college will not provide appropriate time or compensation for a course of this magnitude, the course may need to be modified to limit its content or requirements. To address Charles' concern about following up on the course's effectiveness, it is the intent of the researchers to survey future participants in this course both before and after course completion to continually evaluate the course and make improvements.

Conclusion

To address inconsistencies in hybrid course success rates at the college, the researchers developed a hybrid design framework and built a professional development course to convey that framework to faculty at the college. Three exploratory questions were proposed to aid the researchers' investigations into hybrid course design. A focus group was assembled to review the researchers' framework and professional development course and to provide feedback that would

inform the model. The focus group feedback was instrumental in confirming the framework elements, determining the necessary components for a successful hybrid course, and illuminating the varied processes by which faculty develop their hybrid courses at the college.

As a whole, focus group participants felt that all six of the framework elements were essential to a successful hybrid course design. One participant suggested modifications to the descriptions of several framework elements to provide clarity. The six framework elements formed the basis of each of the six modules in the professional development course. Some participants raised concerns regarding the amount of content in the course compared to available faculty compensation. Some suggested combining certain modules or utilizing existing professional development courses to alleviate the burden of covering all of the essential material in one course.

The focus group participants praised the professional development course's organization and abundance of useful resources. In particular, Modules 1, 3, and 5 were commended for their quality and the large variety of resources provided. One participant suggested that the flow of the course be modified so that there are less button clicks needed to access each module. The participants also expressed a desire for a course template in the college's LMS that could be copied by any faculty member, providing consistency and alleviating the burden of designing a new hybrid course from the ground up.

Most of the feedback from participants addressed additions or alterations to resources and content in the course modules. None of the suggestions were major changes and some applied to only one particular resource in a module. Figure 11 displays a list of proposed content and

resource additions and figure 12 displays a list of proposed content and resource alterations suggested by the focus group participants.

Module	Content/Resource to be ADDED
Module 1	Examples of how to use Bloom's Taxonomy to construct learning objectives
Module 2	Examples of active learning activities specific to certain disciplines
Module 3	Information about how to utilize a smartphone as a course resource
Module 4	Suggestions for what to do if students come unprepared to engage in the face-to-face portion Information highlighting the importance of clear communication
Module 5	channels between faculty and students Suggestions and resources for how to handle students cheating
Module 6	Examples of well-constructed hybrid course syllabi
	Tips on content creation in the current LMS including best practices for designing online content

Figure 11. PD course module additions.

Module	Content/Resource to be ALTERED
Module 1	Adjust wording to make it clear how and why to use Bloom's Taxonomy in conjunction with Course Integration Management System (CIM)
Module 2	Choose a different video or provide more information about students' abilities with technology to not mislead faculty about the concept of "digital natives"
Module 3	Break up 22-minute video on content curation/creation resources into several smaller videos
Module 4	Require two due dates for Discussion (one for original response and one for replies)
	Require faculty to post original response before viewing other responses Make sure the wording reflects the intention that only one week or lesson's formative feedback needs to be submitted
Module 5	NONE
Module 6	Require the creation of the course schedule for only a week or lesson to better align with other modules' timeframes

Figure 12. PD course module alterations.

These conversations about changes to module content and resources brought to light best practices for hybrid course content creation and presentation. Addressing participants' concerns regarding the hybrid design professional development course resulted in the following list of best practices for content and resource creation and presentation:

- Limit amount of content on any page by breaking up content into multiple pages or content folders.
- Reduce the number of button clicks or screens to access in order to find course content.
- Separate out the objectives, content, and assignments.
- Chunk video content into several smaller videos so that it is organized by topic and quicker to view.
- Make a communication plan that clearly explains to students how often, when,
 and where they may receive feedback.
- Make sure discussion prompts add depth to understanding of the course content.
- Include two due dates for discussion boards—one for initial post and one for replies.
- Require students to post an original discussion board response before having access to view others' responses.

Focus group participant responses to the "entrance ticket" discussion board prompt confirmed that faculty who teach hybrid courses at the college do not have a consistent process by which to design and develop their hybrid courses. Only one participant mentioned utilizing

the college's current professional development offerings and most were unaware of any professional development opportunities specific to hybrid course design. These findings are consistent with the results of previous interviews and surveys conducted at the college and reflect a lack of well-communicated and consistent hybrid course design principles for faculty.

CHAPTER FOUR: IMPLICATIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH

Summary

The problem of practice addressed in this Dissertation in Practice is the lack of consistency in organizational and pedagogical structure that impacts successful hybrid instruction at a Florida college hereinafter referred to as "the college." This inconsistency is apparent when comparing success rates between hybrid and face-to-face courses at the college. For some courses, success rates in hybrid courses outperform their face-to-face counterparts, whereas with other courses, the face-to-face modality has higher success rates. There is no required training for hybrid instructors at the college and no clear definition of "hybrid learning" has been adopted across campuses. To address these issues, a framework design and professional development course titled 'Principles of Hybrid Course Design' were created by the researchers for the college. Principles of Hybrid Course Design was created using the college's current learning management system (LMS). The course objectives and module content will provide participating faculty with resources and information that will generate a more consistent learning experience for students taking hybrid courses at the college.

Before Principles of Hybrid Course Design is fully implemented at the college, the researchers assembled a focus group to assess modifications needed for the professional development course. Krueger, Casey, Donner, Kirsch, and Maack (2001) noted that focus groups are used by educational institutions to understand the needs of current faculty members.

Therefore, the researchers selected current hybrid instructors at the college as members of the

focus group. The focus group met with the researchers for two hours to discuss course objectives, module content, and module assignments. The focus group feedback will be used to inform the framework and professional course to determine how it can be improved, a process recommended by Krueger et al. (2001). The following section is a summary of the suggestions presented during the focus group discussion.

Findings and the Future

Summary of Findings

The six elements of the hybrid framework design—also the topics of each of the professional development course modules—are: course alignment, face-to-face active learning, online resources, formative feedback, assessment guidelines, and course structure. Focus group participants agreed that these elements are all essential to hybrid course design and only minor alterations to the framework element descriptions are needed. However, concerns about the amount of content in this course versus the level of compensation that would be awarded to faculty who complete it led to the suggestion of removing portions of the content covered by existing professional development courses at the college.

Focus group participants praised Principles of Hybrid Course Design for its plentiful resources and well-organized content. They appreciated the consistency of the course design. Several focus group participants were excited to learn about a new term or resource related to hybrid instruction. The participants also suggested some minor changes to the flow and

presentation of the module content and assignments to allow for quicker access through less button clicks and screens.

The researchers received several suggestions regarding content and resources that should be added to or changed in the modules. Participants asked for examples of how to use Bloom's Taxonomy to write objectives as well as examples of discipline-specific activities and syllabus content. They further suggested adding the smartphone as an option for content creation along with providing suggestions for dealing with academic dishonesty and unprepared students. Participants requested a new section highlighting the importance of clear communication channels between faculty and students. The focus group also suggested changes to the current module content. They felt that the video on "digital natives" could send the wrong message about students' understanding of technology and noted that faculty members may need additional explanation of how Bloom's Taxonomy supports current course objectives. The group also requested that a lengthy video in Module 3 be chunked into several smaller videos and that the discussion board assignment in Module 4 contain stricter rules and deadlines.

Ultimately, focus group participants were very supportive of this professional development opportunity while offering feedback to improve its consistency and clarity. Several participants expressed their desire for a course template that hybrid faculty could copy within the college's LMS as well as tips on improving the visual design of their courses.

Modifications to the Framework and PD Course

The feedback obtained from the focus group participants will inform changes to the researchers' hybrid design framework and professional development course. Prior to making any

modifications, the proposed changes will be reviewed with the director for online learning at the college. The director has supported the creation of this program and will be able to provide useful advice about how to proceed with modifications based on the focus group feedback.

The first and largest proposed modification is a restructuring of the hybrid design course experience. Many faculty members who teach online courses at the college are required to complete a certification program consisting of multiple professional development courses. There is no single course meant to convey everything an instructor needs to know to teach online. Similarly, it may be appropriate to redesign the researchers' PD course as a number of smaller courses, utilizing existing professional development opportunities covering elements of hybrid course design. This would alleviate issues associated with implementing a single course that addresses every aspect of hybrid course creation and instruction.

The college presently offers professional development courses on active learning, flipped learning, incorporating multimedia tools, and assessment. These courses, along with a streamlined version of the Principles of Hybrid Course Design course, could be incorporated into a program for faculty learning how to provide a richer and more supportive experience in their hybrid courses. In this scenario, some of the modules in Principles of Hybrid Course Design, would need to be revised or combined while the framework, consisting of all of the necessary elements for a hybrid course design, will remain the same. Figure 13, below, provides the titles and descriptions of the proposed modules for a revised Principles of Hybrid Course Design professional development course.

Module	Description of Module Content
Module 1: Course Alignment	This module will remain primarily the same as the previous Module 1.
Module 2: Course Engagement	This module will combine content from Modules 2, 3 and 4 and rely on information participants would have obtained during other PD opportunities to support this content. This module's content will focus on how to engage learners during the face-to-face and online portions and will address aspects and examples of active learning, online resources, and assessment specific to hybrid learning and not addressed in other PD courses.
Module 3: Course Structure and Design	This module will include all of the elements of the former module 6 but will incorporate sample syllabi, information for building a course in the current LMS, and Module 5 assessment guidelines.

Figure 13. Proposed new PD course design.

The remaining modifications address the content of the new PD course. As figure 13 demonstrates, we propose that the information from the previous six modules be condensed into three modules by supplementing the course with existing PD opportunities on active learning, building online resources, and utilizing formative assessment.

Module 1: Course Alignment

As recommended in the focus group feedback, Module 1 will contain all content from the earlier version, supplemented by more examples and explanation on using Bloom's Taxonomy to write lesson objectives.

Module 2: Course Engagement

The new Module 2 will present strategies for engaging learners in and out of the classroom (such as active learning and creating or curating online content) along with strategies for informing and assessing learning (such as formative feedback). Tools and strategies that are not discussed in other PD courses or which are specific to hybrid instruction will be provided.

The focus group feedback on Modules 2, 3, and 4 will be incorporated into the new Module 2 where applicable. For example, discipline-specific active learning examples need only be provided if they are not already provided in the college's active learning PD course.

Additionally, the Learning Assessment Techniques (LATs) developed in 2016 by Barkley and Major will be used to update the Classroom Assessment Techniques (CATs) provided in Module 2 to better reflect the current landscape of higher education, which includes an ever-growing number of online and blended learning courses (Barkley & Major, 2016). The new Module 2 on engagement will include suggestions for what to do if students come unprepared to meaningfully participate in the face-to-face portion of class. All video resources will be chunked and organized into smaller videos where necessary and ambiguous terms used in those videos, such as "digital natives," will be clarified regarding meaning and context. This new Module 2 will contain a large amount of information and resources. Consequently, it is imperative that the content be well-organized and that faculty participants are directed to sources most relevant to their instructional needs.

Module 3: Course Structure and Design

The new Module 3 will require faculty participants to develop the necessary elements for communicating a clear course structure in the current learning management system (LMS). Based on the suggestions of the focus group, participants will not be required to create an entire course schedule but will instead be asked to develop only a small portion of this schedule for later extension. However, we did not agree with the focus group's suggestion to eliminate the requirement of constructing a complete course syllabus. Therefore, we will require participants to draft their entire course syllabus, including course outcomes and policies, to ensure that participants are fully-prepared to finish developing their course after completion of the PD program. Sample syllabi will be provided in the PD course materials. Module 3 will also highlight the importance of creating clear communication channels between faculty and students. To this end, faculty participants will be asked to draft faculty-student communication procedures to be included in the course syllabus. The syllabus will also cover course assessment procedures and protocols.

This module will also feature tips on designing content in the current LMS. Faculty participants can request feedback from course facilitators and instructional designers regarding their courses' aesthetics and layout. Unsurprisingly, the focus group participants requested the inclusion of design principles specific to the college's learning management system. While it was our original intention to include design principles specific to the LMS, we discovered while building this course that the college was switching to a new learning management system within the year. For this reason, we chose not to emphasize the LMS in the original course content. Future versions of this course will include information on this topic in the new Module 3.

Course Schedule

In order to offer Principles of Hybrid Course Design as a hybrid course, the course schedule will need to be revised to accommodate the three new modules. We recommend a face-to-face meeting both at the beginning and end of the course experience. The new Module 2 will require participants to create course components such as content videos or learning activities. Therefore, we will recommend that participants meet with an instructional designer at the college as needed to assist with development of these components. Additionally, a discussion board assignment regarding student engagement during the face-to-face and online portions of a hybrid course will be incorporated into the second module. This assignment will be updated to incorporate best practices for discussions postings, as recommended by the focus group participants.

Recommendations for Future Research

Future Improvements

Following modifications to Principles of Hybrid Course Design and its implementation at the college, we recommend the following strategies for additional research to continually evaluate and improve the framework and professional development course:

- 1. Administer pre- and post-surveys to faculty participants in the PD course.
- Administer a course evaluation survey to solicit feedback for future modifications.

- 3. Compare and analyze hybrid course success rates one year after PD course implementation.
- 4. Interview former faculty participants one year after completion of the PD course.

Following full implementation of Principles of Hybrid Course Design, we recommend that the course be evaluated to determine whether it meets faculty needs and whether further modifications are required. This information can be gathered by administering a pre-survey at the start of the course and a post-survey along with a course evaluation survey at course completion.

The pre- and post-surveys will be used to determine participants' confidence regarding understanding and implementing elements from the framework as presented in the PD course. These surveys will be implemented online through Qualtrics. Results from the pre- and post-surveys will be compared to determine whether there has been an increase in participants' confidence with these course elements. Additionally, a course evaluation survey with openended survey questions regarding content and design will be administered immediately following the post-survey. Results from these surveys will be instrumental in determining whether the Principles of Hybrid Course Design course should be modified further to ensure it meets the needs of the faculty.

After several semesters of successful implementation of Principles of Hybrid Course

Design, we recommend that hybrid course success rates be re-analyzed. One year after initial

implementation of Principles of Hybrid Course Design, after the course has been offered at least

twice, a request should be sent to Institutional Research (IR) requesting an analysis of hybrid

course success data at the college. Current hybrid course success rates should be compared to

those from the year prior to determine if hybrid success rates are increasing. Moreover, current hybrid course success rates should be compared to current face-to-face success rates to determine if the college is closing the gap.

Finally, it is our recommendation that one year after its implementation, interviews be conducted with faculty members who completed Principles of Hybrid Course Design. These interviews will allow further investigations into whether participants are able to implement the design principles they learned in the PD course. This feedback will provide additional insight into whether modifications should be made to the course to better meet faculty needs.

Future Research

Additional investigations into possible causes for lower success in hybrid courses may shed more light on how to promote success in hybrid courses. As described in Chapter 1, there are inconsistencies in success rates of hybrid courses at the college compared to their face-to-face counterparts. While most hybrid courses have lower success rates than face-to-face courses, some hybrid courses are performing significantly better than their face-to-face counterparts. For example, the engineering department had a higher overall success rate for hybrid courses in Fall 2014, mostly due to the 41.2% higher success rate in hybrid sections of EGN 2440 versus face-to-face (College IR Hybrid Course Success Data, 2016). Several other courses at the college had higher hybrid course success rates in Fall 2014: Java Programming (COP 2800C) had a 26.5% higher success rate for hybrid than face-to-face, Principles of Accounting (ACG 2021C) hybrid performed 14.9% better than face-to-face, and Human Anatomy and Physiology I (BSC 2093C) hybrid outperformed face-to-face by 13.4% (College IR Hybrid Course Success Data, 2016).

Therefore, it may be beneficial to conduct additional focus group interviews with instructors of these well-performing hybrid courses to better determine which factors contribute to hybrid course success. Feedback from these additional focus group interviews can then be incorporated into professional development opportunities for other hybrid faculty at the college, such as 'Principles of Hybrid Course Design.'

Future focus groups may also provide insight into whether particular content areas are better suited for the hybrid modality. While the researchers of this Dissertation in Practice conducted inquiries into the pedagogical and organizational structures that impact hybrid course success, further investigations into how the course content impacts success may be warranted. Are there certain content areas that are better suited to the hybrid modality? It has already been established that certain hybrid courses, such as EGN 2440, significantly outperform face-to-face sections, possibly due to higher levels of student motivation and self-reliance. Deeper inquiries into how hybrid course content impacts successful hybrid instruction could help determine which courses should be taught using this modality.

Additional focus group interviews with faculty of successful hybrid courses at the college may help illuminate which traits are common in successful hybrid instructors. Are certain instructors more effective than others in utilizing the hybrid modality? If so, what characteristics do effective hybrid instructors share? First time hybrid instructors should expect to devote considerable time to building their hybrid courses and may find teaching in this modality to be a "shift in teaching style" (Napier, Dekhane, and Smith, 2011, p. 30). Therefore, administrators may want to consider instructors' adaptability and time-management capabilities when assigning hybrid courses. While there is research on strategies a hybrid instructor can implement to build a

successful hybrid course (Napier et al., 2011; Stein & Graham, 2014), this research does not consider personal profiles of a successful hybrid instructor such as background, experience, and teaching style. It may be important to consider teachers' particular strengths when assigning hybrid courses. For example, active learning is a crucial component of hybrid instruction.

Instructors' ability to effectively utilize active learning both in and out of the classroom could be another indicator of whether they are well-suited to hybrid instruction and may be worthy of future study.

Finally, student perspectives on hybrid courses in general could provide additional insight into these courses' low success rates. During their 2015 pilot study, the researchers investigated student expectations regarding hybrid Intermediate Algebra courses at the college. However, due to the low proportion of respondents, these results were inconclusive and unreliable. It may be useful to expand this research in the future to collect more reliable data in various content areas. As mentioned above, it has not yet been determined the extent to which content area affects the success of a hybrid course, though Owston, York, and Murtha (2013) found a "surprisingly strong relationship between [student] perceptions and course grades" (p. 42). Therefore, additional research into how student expectations about hybrid courses affect their success could provide valuable insight for designing future hybrid courses.

Impact of Ed.D. Program

This Ed.D. program provided the researchers with necessary tools for completing this Dissertation in Practice. Several courses challenged and expanded our thinking to incorporate new perspectives. We learned to view problems through multiple "lenses" and propose solutions grounded in theory and research.

One of the most influential courses was our first course, Facilitating Learning,

Development, and Motivation. This course introduced us to the process of gap analysis and gave

us our first opportunity to collaborate while analyzing a problem using the gap analysis

approach. We investigated the knowledge, motivational, and cultural issues that can affect

students' ability to succeed. Additionally, this course provided a rigorous introduction to the

importance of conducting a thorough literature review—a skill we utilized throughout our

dissertation process.

In our second term, Organizational Theory in Education taught us how to look for the organizational causes of a problem. We learned to view organizational theory through four frames—structural, human resources, political, and symbolic—allowing us to gain a more complete picture of the problem and propose meaningful solutions (Bolman & Deal, 2013). Facilitating Learning, Development, and Motivation and Organizational Theory in Education opened our eyes to new perspectives we then utilized in the pilot study that launched this Dissertation in Practice.

Identifying Complex Problems of Practice afforded our first glimpse at the Institutional Review Board (IRB) process. In this course, we completed our Collaborative Institutional Training Initiative (CITI) training. We also learned the necessary procedures for submitting an IRB request, an integral part of conducting any study and a necessity for this Dissertation in Practice. Identifying Complex Problems of Practice also provided us with strategies for creating an effective survey instrument in Qualtrics, a skill we relied upon heavily during our lab of practice.

During our first summer in the program, we were required to complete a lab of practice in which we investigated the psychological and organizational factors contributing to a problem affecting the college. This gap analysis, conducted during Summer 2015, laid the groundwork for our Dissertation in Practice. The lab of practice provided an opportunity to work with administrators and faculty members at the college to examine causes of the problem and propose possible solutions. The relationships we established during this process were instrumental in supporting our work in this Dissertation in Practice. This lab of practice provided us with experience completing an IRB application and designing effective survey questions in Qualtrics. We gained experience in conducting interviews and analyzing qualitative data for common themes. Our results from this lab of practice were so meaningful that it became the pilot study for our Dissertation in Practice.

Both researchers chose e-learning for their doctoral program concentration. The elearning courses required for our concentration provided course design principles that can be applied in online and hybrid class environments. We learned to build modules, design organized and visually appealing content pages, promote accessibility, and include lesson and course outcomes. We were introduced to a myriad of multimedia tools that can spark creativity and engage learners. These lessons and resources were utilized in the design and creation of the professional development course for our Dissertation in Practice.

Overall, the courses we studied in this Ed.D. program have thoroughly prepared us for our Dissertation in Practice. Additionally, much of what we learned is applicable in our own practice at the college. The program's e-learning coursework has helped us learn to create better course designs for our own courses, facilitating increased student engagement and clearer course expectations. As described above, many courses in our Ed.D. program and e-learning concentration were directly applicable to our work developing the hybrid design framework and our professional development course, Principles of Hybrid Course Design. We will continue to utilize the knowledge we acquired in this program as we work to redesign our professional development course in the college's new LMS. Because both researchers were selected to be part of the initial group of faculty members to access the college's new LMS, we will be better able to answer questions and provide support to faculty members building hybrid courses in the new system. We look forward to implementing Principles of Hybrid Course Design, which we hope will benefit the college, its faculty, and its students for the foreseeable future.

APPENDIX A: TIMELINE FOR FRAMEWORK AND PD COURSE COLLABORATION AND DEVELOPMENT

Task/Event	Expected Completion Date	Focus	Task/Event Details
Meet with dissertation panel	September 2016	Collaboration	Meeting with members of the dissertation panel to discuss dissertation proposal. Feedback and suggestions obtained from panel.
Meet with instructional designers from UCF	October 2016	Collaboration	Meet with instructional designers from the Center for Distributed Learners at UCF to discuss proposed professional development plan and obtain feedback and suggestions.
Framework revisions	November 2016	Development	Based on feedback recorded from meetings with dissertation panel meeting and UCF instructional designers, revisions will be made to the framework.
Module content discussion	November 2016	Collaboration & Development	Decide what deliverables are needed for each module of the professional development course as well as the order each module will be presented.
Submit course plan to the college's director for online learning for feedback	November 2016	Collaboration	Discuss the professional development plan and the content of each module with the college's director for online learning to ensure the needs of hybrid faculty are being met.
Framework revisions	December 2016 - January 2017	Development	Based on feedback received from the college's director for online learning, revisions will be made to the modules if needed.
Design of professional development modules	January - February 2017	Development	Content for each module of the professional development course will be designed and created.
Revision approval from the college's director for online learning	February 2017	Collaboration	If changes were made to the professional development course, revisions will be sent to the college's director for online learning for approval.
Build professional development course	February 2017 – March 2017	Development	Build the professional development course within the college's LMS.
Meet with an instructional designer from the college	March 2017	Collaboration & Development	Fine-tune the professional development course within the college's LMS.

Task/Event	Expected Completion Date	Focus	Task/Event Details
Submit professional development course to the college's director for online learning and a college administrator for online learning and professional development	March 2017	Collaboration	The college's director of online learning and a college administrator for online learning and professional development will be enrolled in the professional development course to solicit final feedback and approval before implementation.
Selection of faculty to take the professional development course	March 2017	Communication	Select faculty who teach hybrid courses (pilot group) at the college to review the professional development training course.
Review professional development course	April 2017	Review	Selected faculty will review the professional development training course over a 2-week period.
Meet with focus group	April 2017	Collaboration	Focus group will consist of the faculty members who reviewed the professional development course. Feedback on the course will be documented by the interviewers.
Review focus group feedback and survey results	April – May 2017	Collaboration	Feedback from the focus group interview will be assessed and analyzed.
Meet with the college's director for online learning	July 2017	Collaboration	Meet with the college's director for online learning to discuss focus group feedback
Framework revisions	July - August 2017	Development	Based on feedback received from the focus group, revisions will be made to the professional development course if needed.

APPENDIX B: FOCUS GROUP PARTICIPANT PACKET

Hybrid Design Course Focus Group Questionnaire – Group A	
Participant # Pseudonym:	
Please follow along as each question is read aloud and provide your respon accordingly. Do not work ahead.	ses
1. What did you <u>like most</u> about the hybrid design course?	
2. What did you least like about the hybrid design course?	

3. Take a moment and read the **course objectives**. Do these objectives cover all the topics essential for faculty developing a hybrid course? Consider your discipline, your campus, your course, etc.

Are there additional objectives that should be included? Are there any objectives that should be removed?

4.	Consider Module 1: Course Alignment. Are the assignments sufficient to help faculty meet the lesson objectives for that module? Consider resources provided (links, articles, technology, discussion posts, etc.) and presentation (design, flow, etc.).
5.	Do you have additional comments regarding course alignment?

6.	Consider	Module	2: Fac	e-to-Face	Active	Learning.
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Are the assignments sufficient to help faculty meet the lesson objectives for that module? Consider resources provided (links, articles, technology, discussion posts, etc.) and presentation (design, flow, etc.).

7. Do you have additional comments regarding *active learning* or the *face-to-face portion* of a hybrid course?

8.	Consider Module 5: Assessment Guidelines . Are the assignments sufficient to help faculty meet the lesson objectives for that module? Consider resources provided (links, articles, technology, discussion posts, etc.) and presentation (design, flow, etc.).
9.	Do you have additional comments regarding the assessment guidelines?

10.Please write down any thoughts or considerations you would like to share regarding the resources or presentation of Module 3: Online Resources .
11.Please write down any thoughts or considerations you would like to share regarding the resources or presentation of Module 4: Formative Feedback
12.Please write down any thoughts or considerations you would like to share regarding the resources or presentation of Module 6: Course Structure .

13.Based on the feedback shared during the focus group today and regarding any additional thoughts or questions you may have, complete the following statement:
I wonder
14. May we contact you for clarification or with additional questions as needed during our analysis of this feedback?
Thank you for your participation!

Hybrid De	sign Course Fo	cus Group Que	Stionnaire – Group B
Participan	nt #	Pseudonym: _	
Please follow along a accordingly. Do not v	•	n is read aloud	and provide your response
1. What did you <u>l</u>	<u>ike most</u> about	t the hybrid des	ign course?
2. What did you l	east like about	the hybrid des	ign course?

3. Take a moment and read the **course objectives**. Do these objectives cover all the topics essential for faculty developing a hybrid course? Consider your discipline, your campus, your course, etc.

Are there additional objectives that should be included? Are there any objectives that should be removed?

4.	Consider	Module	3: Online	Resources
4.	Consider	would	5. Ullille	resource

Are the assignments sufficient to help faculty meet the lesson objectives for that module? Consider resources provided (links, articles, technology, discussion posts, etc.) and presentation (design, flow, etc.).

5. Do you have additional comments regarding *online resources* or the *online portion* of a hybrid course?

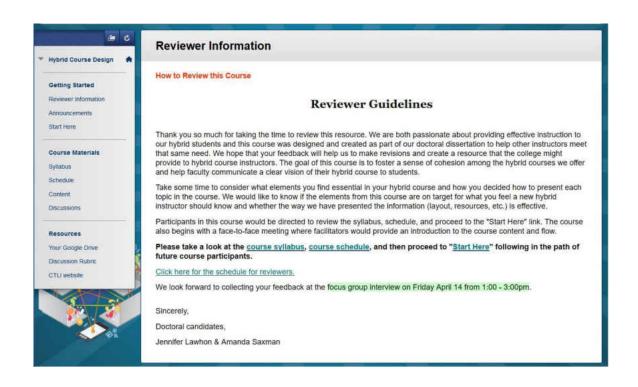
6.	Consider Module 4: Formative Feedback. Are the assignments sufficient to help faculty meet the lesson objectives for that module? Consider resources provided (links, articles, technology, discussion posts, etc.) and presentation (design, flow, etc.).
7.	Do you have additional comments regarding formative feedback?

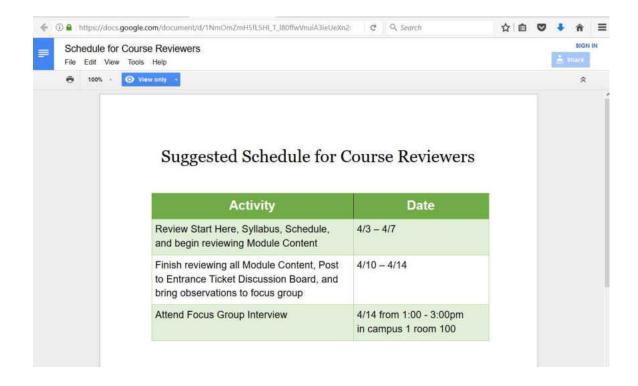
8.	Consider Module 6: Course Structure . Are the assignments sufficient to help faculty meet the lesson objectives for that module? Consider resources provided (links, articles, technology, discussion posts, etc.) and presentation (design, flow, etc.).
9.	Do you have additional comments regarding course structure?

10.Please write down any thoughts or considerations you would like to shar regarding the resources or presentation of Module 1: Course Alignment .
11.Please write down any thoughts or considerations you would like to shar regarding the resources or presentation of Module 2: Face-to-Face Activ Learning .
12.Please write down any thoughts or considerations you would like to shar regarding the resources or presentation of Module 5: Assessment Guidelines .

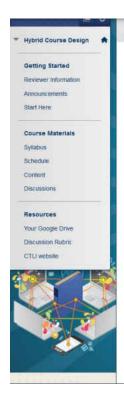
13.Based on the feedback shared during the focus group today and regarding any additional thoughts or questions you may have, complete the following statement:
I wonder
14. May we contact you for clarification or with additional questions as needed during our analysis of this feedback?
Thank you for your participation!

APPENDIX C: PD COURSE REVIEWER CONTENT





APPENDIX D: PD COURSE SCHEDULE



Schedule



Schedule of Course Meetings and Required Content

This is a 6-week professional development course offered as a hybrid modality. You will meet with your facilitators face-to-face 3 times: at the start of the course, during module 3, and at the course conclusion. The rest of the material will be provided online and you will interact with your facilitators and colleagues virtually. The following course schedule will provide you with specific dates, times, and locations for all meetings.

Course Schedule

Initial Course Meeting	TBD date & location	Face-to-face
Module 1	TBD date range	Online
Module 2	TBD date range	Online
Module 3	TBD date range	Online
Mid-Course Meeting	TBD date & location	Face-to-Face
Module 4	TBD date range	Online
Module 5	TBD date range	Online
Module 6	TBD date range	Online
End of Course Meeting	TBD date & location	Face-to-Face

Each module contains a content section followed by an assignment section in which you will directed to what you need to accomplish and what you need to submit. Assignment submissions will be made within your own provided Google doc. See "Your Google Drive" for more information. Below you will find the assignment schedule for this course. Please see the assignment section in each module for more detailed information.



Assignment Schedule

Activity	Date & Time	Submission Location
Pre-Course Survey	TBD date	Qualtrics through Blackboard
Module 1	TBD date range	Blackboard
List of Course & Lesson Objectives	TBD date & time	Google Doc
Alignment Plan Draft	TBD date & time	Google Doc
Module 2	TBD date range	Blackboard
Active Learning Discussion	TBD date & time	Blackboard Discussion Board
Active Learning Activity	TBD date & time	Google Doc
Description of other F2F Events	TBD date & time	Google Doc
Module 3	TBD date range	Blackboard
Curated/Created Content	TBD date & time	Google Doc
Description of other Online Events	TBD date & time	Google Doc
Module 4	TBD date range	Blackboard
Formative Feedback Discussion	TBD date & time	Blackboard Discussion Board
Formative Feedback Plan	TBD date & time	Google Doc



Module 5	TBD date range	Blackboard
Assessment Plan	TBD date & time	Google Doc
Assessment Protocols	TBD date & time	Google Doc
Module 6	TBD date range	Blackboard
Course Syllabus	TBD date & time	Google Doc
Course Schedule	TBD date & time	Google Doc
Revised Alignment Plan	TBD date & time	Google Doc
Post-Course Survey	TBD date	Qualtrics through Blackboard

APPENDIX E: MODULE 1 SCREENSHOTS FROM PD COURSE



Module 1: Course Alignment

Module 1 Content

Course Alignment

Connecting Course Components to Provide Cohesion

Objectives

In this module, faculty will:

- · Choose appropriate course objectives.
- · Write appropriate lesson objectives utilizing Bloom's Taxonomy.
- . Draft a plan for all course elements so that they are aligned with each other and support learning objectives.



What Does the Literature Say?

A blended course requires a balanced mix of online and face-to-face activities (Bocconi & Trentin, 2014). The online learning portion should support the face-to-face sessions (Bocconi & Trentin, 2014; Stein & Graham, 2014). All course activities should align with course outcomes allowing students to produce for successful results on assessments (Stein & Graham, 2014). Faculty must forge deliberate connections between the face-to-face and online activities in order to establish the necessary alignment between these course elements (Stein & Graham, 2014).

Considering Placement of Course Elements

A hybrid course combines elements from face-to-face and online courses. Some content will need to be delivered online but you also have the opportunity to meet with your students and address some course material face-to-face. The important thing is to be strategic about what you will have your students do online versus what they will do when you meet in nerson



Alignment is Key

Once you consider what can be handled online and how you can engage your students in the content in the physical classroom, next make sure these two parts connect to one another. We suggest you pick out one weekly lesson and think of it in three parts: before class, during class, after class.



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During class



Before class

What do you want your students to know before they come to class? Is there content they should review in order to engage in a more meaningful discussion or activity? Provide introductions to lesson content and assess low-level skills.

How can you engage them in the content? Employ active learning strategies to promote engagement and assess understanding. Use this time to address misconceptions or misunderstandings about content instead of introducing new content. Answer questions and probe for deeper understanding. Utilize formative assessment and provide large amounts of feedback.

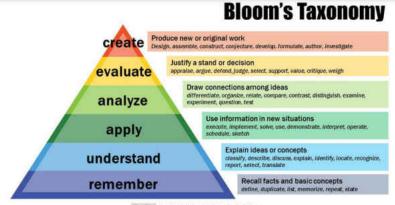
After class

What should your students complete when they leave your classroom in order to demonstrate mastery or gain an even deeper understanding of the content? Have students continue to practice or engage in content now that they have a better understanding from your face-to-face time. Utilize summative assessments when applicable.

Make sure that these three parts all work cohesively together. If you ask your students to accomplish something before class, make sure it is utilized during or assessed in the face-to-face portion of class. Perhaps they are required to bring something to class as proof of their before-class content completion. Or perhaps they are required to submit something before class. Make sure the activity and any other tasks they accomplish in the face-to-face portion relate to and build upon the content they saw before class and further prepare them for what they are to accomplish after class.

One example of this progression is the following:





Now You Try!

Start trying to divide up your lesson into these pieces. Remember to consider what will be best promote understanding and choose your activities and assignments carefully. This week you are just beginning this process. You are asked to start brainstorming how you might divide up the parts of your lesson and make a plan for how all of the pieces can work together. Make sure all of the elements of your lesson address any lesson objectives and course objectives.

Step 1: Find the course objectives for your course in ATLAS CIM. Pick out the course objective(s) that are addressed by your lesson. If you are unsure of where to find the course objectives in ATLAS, click here for a PDF that will explain where to find

Step 2: Determine the Bloom's Taxonomy level for your lesson's course objective(s).

Step 3: Create more specific lesson objectives that will be used as stepping stones to reach the course objective(s). Make sure to use appropriate Bloom's Taxonomy levels (lesson skill levels should lower or equal to course objective skill levels).

Module 1 Assignments

What do you need to accomplish this week?

- . Investigate the course outcomes for your course and choose which outcome(s) on which your lesson will focus.
- Familiarize yourself with the cognitive and knowledge levels of the Revised Bloom's Taxonomy.
- Design lesson outcomes to support your lesson utilizing the Bloom's Taxonomy action verbs.
- . Start making a plan for what will occur during each portion of class (before, during, after). Make sure each element you
- Include is represented in your lesson objectives and will be used to meet the chosen course objective(s).

 You will likely have to edit this plan many times as we proceed in the course and before you settle on it. But for this week, take a first stab so you have something to work with.

What do you need to submit?

- . A list of any course objectives your lesson will address (as found in ATLAS CIM).
- · A list of all lesson objectives you plan to address through your lesson (written with appropriate Bloom's Taxonomy action verbs).
- · A description or plan for what events will occur during each portion of class in order to meet both lesson and course objectives. Remember, this is just a rough draft!

Access your personal Google doc (emailed to you by your facilitators) to submit these assignments and read feedback posted by your facilitators. More information can be found in the Your Google Drive resource.

APPENDIX F: MODULE 2 SCREENSHOTS FROM PD COURSE



Module 2: Face-to-Face Active Learning

Module 2 Content

Active Learning

Collaborative Strategies for Face-to-Face Meetings

Objectives

In this module, faculty will:

- . Incorporate active learning strategies into the face-to-face component of their hybrid course.
- . Determine other course elements that will be addressed face-to-face.



What Does the Literature Say?

Although learning itself may be considered by some to be an 'action,' Bonwell active learning requires students to read, write discuss, and engage in higher of analysis, synthesis, or evaluation. Active learning can include a variety of activ analysis, synthesis, or evaluation. Active learning can include a variety of active debates, role-playing, simulations, games, and cooperative learning such as simulations, and value of the system of material such as the system of material such as simulations, and value of the system of material such as simulations, and cooperative learning can include a variety of active debates, role-playing, simulations, games, and cooperative learning can include a variety of active debates, role-playing, simulations, games, and cooperative learning can include a variety of active debates, role-playing, simulations, games, and cooperative learning can include a variety of active debates, role-playing, simulations, games, and cooperative learning such as simulations, games, games, and cooperative learning such as simulations, games, games, and cooperative learning such as simulations, games, games improve student mastery of learning outcomes.

Making the Most of your Class Time

Instructors can often feel constrained by the limited time allotted for face-to-face interactions with students. I often hear colleagues say, "There's so much content and so little time!" While a hybrid class provides benefits in other ways, the face-to-face time with students is all the more limited. This requires faculty to make strategic choices about what will occur

Active Learning Resources

There are a variety of active learning strategies you can employ to keep your students engaged. Make sure whatever you choose will work well with your content and your learning environment. Consider the lesson objectives you are trying to address and the amount of time you have to facilitate the activity. Be careful not choose an activity simply for its entertainment value. Remember that the activity should build upon whatever you are asking your students to accomplish prior to class and should lay a foundation for whatever they will need to accomplish after class.

As you peruse the many active learning strategies, ask yourself these questions:

What resources will I need to facilitate the activity and can I reasonably acquire them?

How much time will the activity take and is that feasible in terms of our face-to-face class time?

Will the activity help my students better understand the material to which they were introduced prior to class?

Will the activity help my students further their understanding of the lesson objectives?

Watch the following video about Digital Natives and Active Learning and then look through the resources provided below to identify a possible active learning strategy that could work for your hybrid course.





These resources may provide some ideas and/or further explanation about active learning strategies. Some of the same strategies may be represented in various locations but each resource lends an additional perspective or strategy in the mix. Take a look and start brainstorming about what active learning strategy may work for the lesson you identified in the previous module.

Active Learning Strategies	A list of strategies provided by Valencia College Faculty Development with descriptions and links to other resources where you can learn more about each strategy
Activities to Boost Student Engagement	A list of strategies and descriptions suggested by Stanford University Teaching Commons
Active and Cooperative Learning Strategies	An explanation of the term "active learning" as well as a list of techniques with descriptions grouped by category to help you decide when and where to use them provided by California State University L.A.
Collaboration vs. Cooperative Learning	A video describing the difference between cooperative and collaborative learning and the merits associated with utilizing collaborative learning in the classroom by the Teaching Channel
Examples of Active Learning	A video shot in classrooms at Harvard University, Boston University, and Colorado Boulder depicting real-life footage of peer instruction in action presented by Boston University and the CIRTL

Other Uses for Face-to-Face Time

While we focused primarily on active learning during the face-to-face portion of your hybrid class in this module, we realize that you may need to reserve some of the face-to-face time with your students for other tasks.

Here is a list of other tasks you may consider leaving time for depending on the particular lesson or time-frame:

Reminders about due dates and other class business

Clarification of course or college policies

Discussion about any technology concerns students may have encountered since your last meeting

Discussion about any technology or content common pitfalls students may encounter in this lesson



Module 2 Assignments

What do you need to accomplish this week?

- Plan out at least one activity for the face-to-face portion of your class.
- . Make a plan for what other elements or tasks, if anything, will need to occur during the face-to-face portion of class.
- Choose different course objectives (from CIM) or revise your lesson objectives as needed to align with your activity.

What do you need to submit?

- . An original post and two replies to Module 2 Discussion.
- A description or copy of one learning activity you will use during the face-to-face portion of your class.
- · A description or plan for what other events will occur during the face-to-face portion of class.
- Provide the supporting lesson and course objectives for your activity. If necessary, you may need to revise your lesson
 objectives from last week now that you have worked out the details of your face-to-face class portion. You may even need
 to choose different course objectives. Remember, that you can continue to make these changes as you feel your way
 through the layout of this course and determine what is best for your own.

Remember to access your personal Google doc (emailed to you by your facilitators) to submit these assignments and read feedback posted by your facilitators. More information can be found in the <u>Your Google Drive</u> resource.

APPENDIX G: MODULE 3 SCREENSHOTS FROM PD COURSE



Module 3: Online Resources

Module 3 Content

Online Resources

Curation and Creation of Videos and Other Web Resources for Online Meetings

Objectives

In this module, faculty will:

- · Investigate content curation and creation technology tools.
- . Create and/or curate course content.
- · Determine other course elements that will be addressed online.



What Does the Literature Say?

Digital video instruction, computer-based tutorials, and course websites are frequently used in hybrid learning (Olapiriyakul & Scher, 2006). Stein and Graham (2014) assert that utilization of digital text, images, and video may be a more efficient means of conveying course content than traditional onsite lectures. A solid understanding of technology is necessary to create the web resources required for a hybrid course (Olapiriyakul & Scher, 2006). Therefore, training should be provided to assist faculty in the creation of online materials (Olapiriyakul & Scher, 2006).

Meeting the Needs of the Digital Native



Curating and Creating Content: Finding and Building the Best Stuff!

By this point you may have realized that since you have less face-to-face time with your hybrid students, much of the content will need to be delivered virtually. As we discussed last week, it is not a good use of your face-to-face time to try and lecture on all of the lesson content. Therefore, you must find some way to deliver your lecture virtually. In this case, you may find it necessary to either create or curate lecture videos. While creating content allows you the flexibility to make exactly what you want, it can be time-consuming and you will need some technical expertise. And there is already a wide array of created content available for use. For this reason, curating, or finding and selecting pre-made content, is also a great option. Curating, however, can be time-consuming as you may have to sift through a lot of resources to find what you want.

Here is a video that discusses creating and curating content and provides several resources for you to investigate. This video was originally made by Amanda Saxman and instructional designer Aaron Bergeson for Destination 2016: Filipped Learning track and references flipped learning a couple times in the video. Although flipped learning is not the same thing as hybrid mode, the two concepts have a lot in common and "flipping" the learning experience is partly what you must do for hybrid instruction.





Other Creation Resources	Description	
Screencast-o-matic	A screencasting tool that allows users to create and share screen recordings	
Quizlet	Find or create flashcards, games, or learning tools to study a topic. Website and phone app.	
Animoto	Create video slideshows out of photos and video clips	
Powtoon	Create animated videos to share your content.	
Audacity	An open source digital audio editor to edit sounds, music, or make podcasts	
Thinglink	Create an image with embedded videos, text, web links, or other images	
Movenote	A video presentation tool to create and upload videos on your phone. Integrates with Google Drive	
Microsoft Mix	A Microsoft PowerPoint add-on that allows you both to screencast, embed quiz questions, a make videos out of presentations. Add video of yourself and/or write directly on the slides.	
Zaption (try <u>EdPuzzle</u> instead)	Take an existing video and edit, add pauses, quiz questions, feedback, etc.	

Here is a Google Sildes presentation about a few favorite resources. Featured resources include Microsoft Mix (Including a commercial about Mix made with Mix!, Microsoft Sway, and Thinglink. You might also consider how you can use Google (Docs, Sildes, Sheets, Forms, etc.) to engage your students and/or provide lesson content. Here is a Thinglink poster with links to videos on how to use some of these great Google features. (This poster is also included as one of the examples in the silde presentation above).

Active Learning for Online Content



Module 3 Assignments

What do you need to accomplish this week?

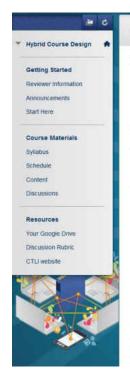
- Explore creation and/or curation resources.
- Determine how students will engage with course material outside of class.
- Create and/or curate lesson content.
- Make sure your created/curated content still aligns with your objectives. Make any necessary revisions to continue to
 ensure this alignment.

What do you need to submit?

- A link to your created or curated course content.
- A description of other events that will occur outside of class (both before and after the face-to-face class portion).

Remember to access your personal Google doc (emailed to you by your facilitators) to submit these assignments and read feedback posted by your facilitators. More information can be found in the <u>Your Google Drive</u> resource.

APPENDIX H: MODULE 4 SCREENSHOTS FROM PD COURSE



Module 4: Formative Feedback

Module 4 Content

Formative Feedback

Strategies to Assess Understanding During Both Face-to-Face and Online Meetings

Objectives

In this module, faculty will:

. Develop mechanisms to allow for formative feedback during face-to-face and online class portions.



What Does the Literature Say?

Formative feedback provides timely information, both to the instructor and the student, about student learning. It can be used to swiftly determine what, how much, and how well students are learning the content (Chung, Shei, & Kaiser, 2006). In turn, instructors can use this valuable information make decisions that will impact and improve the quality of student learning (Chung, Shel, & Kaiser, 2006). Students also benefit directly from formative feedback as it provides critical and timely information regarding their progress, which allows them to make quicker adjustments to improve their own learning (Stein & Graham, 2014).

Understanding the Purpose of Formative Assessment

Formative assessment provides an opportunity for instructors to assess student understanding in order to make changes and provide feedback before a high-stakes summative assessment. Formative assessment is important in every course, but in a hybrid course instructors face the additional challenge of determining when and where to offer this important feedback.



Is this Similar to Active Learning?

Yes! Handelsman, Miller and Pfund point out that, "the line between active learning and formative assessment is blurry and hard to define; after all, teaching that promotes students' active learning asks students to do so or produce something, which then can serve to help assess understanding" (as cited in Brame, 2016, What is it section, para, 2).

For this reason, you may want to review the active learning resources you saw in Module 2.

Do the active learning strategies you chose in module 2 allow you to assess your students' understanding of one or more objectives?

Can you use that information to make changes or customize feedback to individual students?

If yes, then you are already formatively assessingt

If you do not feel that the activity you plan to implement during the face-to-face portion of class will provide you insight into your students' understanding of the content, then you most likely need to rethink the activity!

Now consider if there are other ways you can formatively assess or provide formative feedback during both face-to-face and online class portions.

Technology for Formative Feedback

There are some great technology tools out there for formative feedback and most are very easy to use! This video presents a few options to get you thinking about if and how you might use technology for formative feedback.



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Kahoott	create interactive quizzes, polis, or surveys students can play from a computer or smartphone in the classroom and get immediate feedback					
EDpuzzle	mentioned last week as well, this tool lets you embed questions or other media into videos to formatively assess for understanding					
Socrative	create simple quizzes that students can take on a computer or smartphone and view the data immediately					
Plickers	collect real-lime student data without the need for student devices - instead print cards that are matched to each student and can be read from your smartphone					
Formative	create assignments students can answer on any device by typing, showing work with drawings, or submitting images					
Google Forms	create forms such as polls or surveys that your students can complete to make data collection easy					

You can use these brief Google Slides presentations on EdPuzzle and Kahoot for an overview of each tool.

Consider these two web articles by Edutopia on formative assessment technology tools: 5 Fantastic, Fast, Formative
Assessment Tools by Vicki Davis and Empowering Teachers with Tech-Friendly Formative Assessment Tools by Monica Burns.

While formative assessment apps and tech-tools can be really fun to use, it is also important to make sure you are using them correctly. Ideally, both the instructor and students should get something out of formative assessment. Through formative assessment, you will determine where your students are struggling in order to adjust instruction techniques and provide individualized feedback to students. Students will then use the feedback to correct any misconceptions or lapses in understanding they may be experiencing.

This video will challenge you to consider how you use your technology tool and whether you are making the most of it!





Module 4 Assignments

What do you need to accomplish this week?

- Strategize how and when you will offer formative feedback during the face-to-face portion of your class.
- . Strategize how and when you will offer formative feedback during the online portion of your class.
- Develop any mechanisms needed to provide formative feedback.

What do you need to submit?

- An original post and two replies to Module 4 Discussion.
- A weekly time-management plan that articulates how, when, and where you will provide formative feedback.

Remember to access your personal Google doc (emailed to you by your facilitators) to submit these assignments and read feedback posted by your facilitators. More information can be found in the <u>Your Google Drive</u> resource.

APPENDIX I: MODULE 5 SCREENSHOTS FROM PD COURSE



Module 5: Assessment Guidelines

Module 5 Content

Assessment Guidelines

Designing Assessment Policies and Protocols

Objectives

In this module, faculty will:

- · Determine how students will be assessed on all objectives.
- . Draft wording for assessment protocols to be included in the course syllabus.



What Does the Literature Say?

To better help students navigate the course structure and requirements, and course outcomes, faculty must provide clear and concise instructions for ass In fact, Stein & Graham (2014) suggest that clearly articulating the link between may further encourage students to track their own progress in mastering the course in particular, students must be made aware of where, whether online will be administered in order to avoid confusion (Stein & Graham, 2014). Fac of what types of assessment will be used as well as how, when, and where a

Formative versus Summative

It is important to check for student understanding in a variety of ways. In addition to the formative assessments you planned out





WHEN will you Assess?

Decide at what point in the lesson you will administer each assessment. Will you formatively assess at the beginning? Check again for understanding in the middle? Summatively assess at the end? For example, perhaps you will formatively assess student understanding at a low-stakes quiz prior to the face-to-face portion, then again during the activity in your face-to-face portion, and again in a wrap-up poil at the end of the face-to-face session. Then you will summatively assess by submission of an end-of-week assignment submitted online. Think through all of the opportunities you will have for assessment and strategically plan out when each assessment will occur.

WHERE will you Assess?

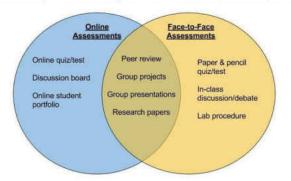
Some assessments will work better face-to-face and some are perfect for online assessment. Decide during which class portion each type of assessment will occur. If you have high-stakes assessments (summative) that will occur online, sketch out the details of how you will require students to complete the assessment and draft the language you will use to communicate these assessment protocols to your students. We will discuss assessment protocols further below.

HOW will you Assess?

Even within the categories "formative" and "summative," there are many options for types of assessments. Start thinking about which types of assessments will be a good fit for your hybrid course and lesson. There may be specific assessment types you will use regularly, such as a weekly quiz. Others you may decide to use only sporadically, such a discussion board posting or project presentation. There may be some assessments that are great for face-to-face assessment and others can be administered individually to students through an online platform. Both the when and where contribute directly to how you will assess. Now that you know when you would like each assessment to occur, and whether you intend for the assessment to be face-to-face or online. decide specifically what type of assessment you will choose.



This diagram provides some examples of assessment types that can be utilized online, face-to-face, or both.



Additionally, **rubrics** are a great way to provide a consistent grading scheme as well as allow students to understand how their assignment will be graded and what is expected of them. To see how to create a rubric in Blackboard or through an alternative site, go to <u>Creating a Rubric</u>.

Whatever you choose, remember that assessments should measure the desired learning outcome, not the students' skill at using technology (Stein & Graham, 2014). It is important that you design your assessment to measure the intended outcome. Often, an assessment question may be unintentionally tricky or require too many steps to assess the question for which it was originally intended. It is also important that your assessment match the desired skill level of the outcome. Consider this resource on multiple choice items for various levels of Bloom's Taxonomy and this resource on 10 examples of assessment question improvements to get you thinking about writing well-designed assessment questions.

Assessment Protocols

For summative assessments delivered online, you must provide details to your students about the assessment protocols and procedures. Consider the following:

In what online platform will the assessment take place (Blackhoard, publisher-site, Google doc submission, etc.)?



Module 5 Assignments

What do you need to accomplish this week?

- . Decide how you plan to assess your students throughout the term.
- Review course and lesson objectives (and revise if needed) to make sure you will be assessing the correct objective(s).
- Develop any mechanisms needed to support these assessments (for example, familiarize yourself with how to use the discussion board feature and make a rubric if you plan to assign discussion posts).
- Determine what information your students will need to complete assessments and begin drafting the language you will
 put in your syllabus to ensure their understanding of these protocols.

What do you need to submit?

- A list of each assessment type that will occur during the span of your lesson. Include when each assessment will occur.
- The course and lesson objectives that will be assessed for each of the assessments above.
- A draft of the language you will include in your syllabus to explain any assessment protocols. Be clear about how, when, and where students will be assessed.

Remember to access your personal Google doc (emailed to you by your facilitators) to submit these assignments and read feedback posted by your facilitators. More information can be found in the <u>Your Google Drive</u> resource.

APPENDIX J: MODULE 6 SCREENSHOTS FROM PD COURSE



Module 6: Course Structure

Module 6 Content

Course Structure

Designing Course Elements to Communicate a Clear Hybrid Course Design

Objectives

In this module, faculty will:

- · Design a hybrid course syllabus.
- · Design a hybrid course schedule.
- . Determine if all course elements are aligned and support learning objectives.



What Does the Literature Say?

Developing a blended course requires first establishing a course outline, and determining course materials including web content (Olapiriyakul & Scher, 2006). Stein and Graham (2014) assert that it is critical for faculty to specify course goals and learning outcomes in order to ensure that the online and face-to-face activities are learning-focused. Faculty will need to determine the appropriate combination of delivery formats for each lesson (Olapiriyakul & Scher, 2006).



Putting it All Together

In the last five modules you have developed essential elements to include in your hybrid course. You have selected active learning strategies, explored technology to allow you to deliver content online, determined ways you can formatively assess your students, and constructed written language to communicate assessment protocols, while constantly checking each element for alignment with the other elements and the lesson/course objectives. This week you will choose language to communicate your expectations about each of these elements to your students. In other words, write your syllabus!



Course Syllabus

At this point you may already have a working draft of your syllabus or at least ideas of what assignments you would like to include and what policies you will need to state. You may want to check with your department to verify if there are any additional departmental requirements that need to be included in your syllabus.

Think back through the last five modules and what components will be included in your hybrid course. Your syllabus is your opportunity to communicate what it means to take a "hybrid" course as well as your specific course, assignment, and assessment expectations. Your syllabus will be one of the first things yours students encounter in your hybrid course so it should help set the tone for what you want your hybrid course to be.

Use this list of syllabus requirements to help you get started. The PDF file also includes wording you can copy and paste for some of the required sections in your syllabus.

You can also use this template (a Word doc) from UCF's BlendKit Course to help build your syllabus from scratch.



Course Schedule

A course schedule is a necessary component for a hybrid course. For a student new to this modality of learning, it can be confusing when, where, and how often to show up to class and when, where, and how often to submit course assignments. Instructors must make this information extremely clear to students. While some elements may change from lesson to lesson, there should be some consistency in course assignments and assessments and the schedule should help reflect that structure.

Your course schedule should include:

- · A list of which content will be covered each week
- · All assignment due dates/times/locations (Blackboard, Publisher site, in person, etc.)
- · All assessment due dates/times/locations (Blackboard, Publisher site, in person, etc.)

In Module 1 you were provided a schedule template from <u>UCF's BlendKit Course</u> to start considering as you progressed through the modules. Create your course schedule using <u>this template</u> (a Word doc) or one of your own making.

Continue below for a list of what assignments are due this week!



Looking Ahead

At this point you have made some very important decisions about the structure of your hybrid course. You have explored technology tools for delivering content and providing formative feedback both in and out of the classroom. You have considered how to engage your students during the face-to-face portion of class and the details of your class assessments. Now you must continue to build! Decide which elements you want to consistently use and keep others in your back pocket for use with specific lessons when most applicable.

References

Olapiriyakul, K., & Scher, J. M. (2006). A guide to establishing hybrid learning courses: Employing Information technology to create a new learning experience, and a case study. *The Internet and Higher Education*, 9(4),287-301. doi:10.1016/j.lheduc.2006.08.001

Stein, J., & Graham, C. R. (2014). Essentials for blended learning: A standards-based guide. Routledge.



Module 6 Assignments

What do you need to accomplish this week?

- · Review required policies and information for syllabi.
- Construct a course schedule that includes all content you plan to cover (covering all course objectives), and lists major assignments and all assessments with due dates/times.
- Revise any previous module content particularly your alignment plan from Module 1.

What do you need to submit?

- Your course syllabus including the assessment language you drafted last week. Since this is a lengthy submission, you
 will want to provide a link to a shared file or consider creating a separate Google doc to which you can provide the link.
- Your course schedule including all content, major assignments, assessments, and due dates/times for each. You can
 post this in your Google doc or supply a link to a separate doc or file as needed.
- · A revised copy of your Alignment Plan from Module 1.

Remember to access your personal Google doc (emailed to you by your facilitators) to submit these assignments and read feedback posted by your facilitators. More information can be found in the <u>Your Google Drive</u> resource.

APPENDIX K: UNIVERSITY OF CENTRAL FLORIDA IRB APPROVAL LETTER



University of Central Florida Institutional Review Board Office of Research & Commercialization 12201 Research Parkway, Suite 501 Orlando, Florida 32826-3246 Telephone: 407-823-2901 or 407-882-2276 www.research.ucf.edu/compliance/irb.html

Approval of Human Research

From: UCF Institutional Review Board #1

FWA00000351, IRB00001138

To: Jennifer Lawhon and Co-PI: Amanda B. Saxman

Date: January 17, 2017

Dear Researcher:

On 01/17/2017 the IRB approved the following human participant research until 01/16/2018 inclusive:

Type of Review: Submission Response for UCF Initial Review Submission Form

Expedited Review

Project Title: Faculty Professional Development for Improving Hybrid Course

Success

Investigator: Jennifer Lawhon IRB Number: SBE-16-12784

Funding Agency:

Grant Title: Research ID: N/A

The scientific merit of the research was considered during the IRB review. The Continuing Review Application must be submitted 30days prior to the expiration date for studies that were previously expedited, and 60 days prior to the expiration date for research that was previously reviewed at a convened meeting. Do not make changes to the study (i.e., protocol, methodology, consent form, personnel, site, etc.) before obtaining IRB approval. A Modification Form eannot be used to extend the approval period of a study. All forms may be completed and submitted online at https://iris.research.ucf.edu.

If continuing review approval is not granted before the expiration date of 01/16/2018, approval of this research expires on that date. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

<u>Use of the approved, stamped consent document(s) is required.</u> The new form supersedes all previous versions, which are now invalid for further use. Only approved investigators (or other approved key study personnel) may solicit consent for research participation. Participants or their representatives must receive a copy of the consent form(s).

All data, including signed consent forms if applicable, must be retained and secured per protocol for a minimum of five years (six if HIPAA applies) past the completion of this research. Any links to the identification of participants should be maintained and secured per protocol. Additional requirements may be imposed by your funding agency, your department, or other entities. Access to data is limited to authorized individuals listed as key study personnel.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Page 1 of 2



Signature applied by Patria Davis on 01/17/2017 04:56:10 PM EST

IRB Manager

APPENDIX L: 'THE COLLEGE' IRB APPROVAL LETTER

Human Research Protection (HRP) Institutional Review Board (IRB)

	1	RB Determination	Form	
Title of Research Protocol:			ment for Improving Hybrid Co	ourse Success
Principal Investigator (PI):	Jennifer Lawh	on		
Date Received by IRB Chair:	02/21/2017			
RB Number:	17-0010			
Based on the IRB Protocol Initia or the IRB Addendum/Modificat the following determination has	on Form) subm	itted by the Princi		
The research is exer	mpt from IRB re	view.		
☐The research is eligi	ble for expedite	d review and has	been approved. Expedited revi	ew category: <u></u>
The research is eligican be given.	ble for expedite	d review but requi	res modifications and re-submi	ission before approva
The research is subj		v and will be discu	ssed at the next IRB meeting,	currently scheduled
	(date)			
The research has be	en subjected to	full review and h	as been approved.	
The research has be	en subjected to	full review and h	as been disapproved.	
Period of Approval: 02/23/3	2017 to	02/23/2018		
Additional details specific to this to read, understand, and complete to read.			s letter. It is the Principal Inves	stigator's responsibility
If you have any remaining ques	tions about	s IRB proces	s, contact the IRB Chair at	
4	1	, .	5,	
Raus	()	en	02/23/2017	
Signature of IRB Chair or Desig	nated Represer	itative	Date	

1

IRB File, IRB Members, PI Supervisor/Administrator

C:

Human Research Protection (HRP) Institutional Review Board (IRB)

Investigator Agreement Form (for Expedited Approved and Full Approved Protocols)

Ti	tle of Research Protocol:	Faculty Professional Development for Improving Hybrid Course Success
IR	B Number:	17-0010
In	vestigator Name:	Jennifer Lawhon
1.	(http://ohrp.osophs.dhhs.go Services (DHHS) regulation	ator has completed HRP/IRB training and has read the Belmont Report ov/humansubjects/guidance/ belmont.htm); the U.S. Department of Health and Human ns for the protection of iduman subjects at 45 CFR 46 ov/humansubjects/guidance/45cfr46.htm); and relevant ond procedures explicable to the protection of the protect
×	(including but not limited to 6Hx28:08-22, and 6Hx28:19	and procedures applicable to the protection of human subjects and research policies 6Hx28:04-08, 6Hx28:04-20, 6Hx28:04-35, 6Hx28:06-28, 6Hx28:07-26, 0.09)
2.	The Investigator understand	ds and hereby accepts the responsibility to comply with the standards and he above documents and to protect the rights and welfare of human subjects involved
3.	The Investigator acknowled	Iges that he/she is primarily responsible for safeguarding the rights and welfare of that the subject's rights and welfare must take precedence over the goals and
4.	The Investigator will comply	with all applicable Federal, State, and local laws, regulations, and policies that may
5.	The Investigator will abide b	n for human subjects participating in research conducted under this Agreement. by all determinations of the line institutional Review Board (line institutional Revi
6.	The Investigator will report p this Agreement. The Invest	promptly to the RB any proposed changes in the research conducted under igator will not initiate changes in the research without prior RB review and research to subjects.
7.	The Investigator will report i subjects or others in researce	immediately to the IRB any unanticipated problems involving risks to ch covered under this Agreement using the Adverse Event Form
8.	The Investigator will obtain,	document, and maintain records of informed consent for each subject or each representative as required under HHS regulations at 45 CFR part 46 and stipulated
9.	continuing review, recordked	ges and agrees to cooperate in the Record IRB's responsibility for initial and eping, reporting, and certification for the research referenced above. The Investigator equested by the IRB in a timely fashion.
10.	The Investigator will not enre	oil subjects in research under this Agreement prior to its review and approval by the
11.	Emergency medical care ma under applicable Federal rec	ay be delivered without IRB review and approval to the extent permitted gulations and State law, but the Investigator shall notify the IRB within five inistration of such care using the Adverse Event Form.
12.	This Agreement does not pro	eclude the Investigator from taking part in research not covered by this Agreement.
lnv	estigator Signature:	Date: 3-9-17

REFERENCES

- About us: College facts. (n.d.). Retrieved on July 5, 2016 from the college website.
- Alammary, A., Sheard, J., & Carbone, A. (2014). Blended learning in higher education: Three different design approaches. *Australasian Journal Of Educational Technology*, *30*(4), 440-454. Retrieved from http://ajet.org.au/index.php/AJET/article/view/693
- Ashby, J., Sadera, W. A., & McNary, S. W. (2011). Comparing student success between developmental math courses offered online, blended, and face-to-face. *Journal of Interactive Online Learning*, 10(3), 128-140. Retrieved from http://www.ncolr.org/jiol/issues/pdf/10.3.2.pdf
- Atkinson, K., Fluker, G., Ngo, L., Dracup, M., & McCormick, P. (2009). Introducing a learning repository using a blended professional development approach. In *ASCILITE 2009: Same places, different spaces: Proceedings of the 26th ASCILITE conference* (pp. 35-39).

 Australian Society for Computers in Learning in Tertiary Education. Retrieved from http://dro.deakin.edu.au/view/DU:30021252
- Ayers, D. F. (2010). Putting the community back into the college. *Academe*, (3). 9. Retrieved from https://www.aaup.org/article/putting-community-back-college#.V6TUNKLMk5w
- Baran, E., & Correia, A. (2014). A professional development framework for online teaching.

 *Techtrends: Linking Research & Practice To Improve Learning, 58(5), 95-101.

 doi:10.1007/s11528-014-0791-0
- Bargagliotti, A., Botelho, F., Gleason, J., Haddock, J., & Windsor, A. (2012). The Effectiveness of blended instruction in core postsecondary mathematics courses. *International Journal*

- for Technology In Mathematics Education, 19(3), 83-94. Retrieved from http://digitalcommons.lmu.edu/math_fac/75/
- Barkley, E. F., & Major, C. H. (2016). *Learning assessment techniques: A handbook for college faculty*. San Francisco, CA: Jossey-Bass & Pfeiffer Imprints, Wiley.
- Bocconi, S., & Trentin, G. (2014). Modelling blended solutions for higher education: teaching, learning, and assessment in the network and mobile technology era. *Educational Research and Evaluation*, 20(7-8), 516-535. doi:10.1080/13803611.2014.996367
- Bolman, L. G., & Deal, T. E. (2013). *Reframing organizations: artistry, choice, and leadership*. San Francisco: Jossey-Bass.
- Bonwell, C. C., & Eison, J. A. (1991). *Active learning: creating excitement in the classroom*.

 Washington, DC: School of Education and Human Development, George Washington University.
- Boone, J. (2015). Leading learning organizations through transformational change: Making the case for blended learning. *International Journal of Educational Management*, 29(3), 275-283. doi:10.1108/IJEM-06-2013-0096
- Bredeson, P. V. (2003). *Designs for learning: A new architecture for professional development in schools*. Thousand Oaks, Calif.: Corwin Press.
- Brunner, D. L. (2006). The potential of the hybrid course vis-a-vis online and traditional courses.

 Teaching Theology And Religion, (4), 229. Retrieved from

 http://digitalcommons.georgefox.edu/cgi/viewcontent.cgi?article=1022&context=gfes
- Buysse, V., Winton, P. J., & Rous, B. (2009). Reaching consensus on a definition of professional development for the early childhood field. *Topics in early childhood special education*,

- 28(4), 235-243. Retrieved from http://journals.sagepub.com.ezproxy.net.ucf.edu/doi/pdf/10.1177/0271121408328173
- Caruth, G. D., & Caruth, D. L. (2013). Distance education in the United States: From correspondence courses to the internet. *Turkish Online Journal of Distance Education*, 14(2), 141-149. Retrieved from http://eric.ed.gov/?id=EJ1013772
- Caruth, G. D., & Caruth, D. L. (2013). The impact of distance education on higher education: A case study of the United States. *Turkish Online Journal of Distance Education*, *14*(4), 121-131. Retrieved from http://eric.ed.gov/?id=EJ1042587
- Center for Digital Education. (2012). *Realizing the full potential of blended learning* [pdf file].

 Retrieved from

 http://echo360.com/sites/default/files/CDE12%20STRATEGY%20Echo360-V.pdf
- Chung, G. K., Shel, T., & Kaiser, W. J. (2006). An exploratory study of a novel online formative assessment and instructional tool to promote students' circuit problem solving. *The Journal of Technology, Learning and Assessment*, 5(6). Retrieved from https://ejournals.bc.edu/ojs/index.php/jtla/article/view/1645
- The College. (2015). *First time teaching online hybrid 2013-2015*. [pdf file]. Retrieved from College IR.
- The College. (2015). *Online and hybrid mathematics course success data 2011-2014*. [Data file]. Retrieved from College IR.
- The College. (2015). *Online data initial report* [pdf file].
- The College. (2015). Strategic indicator report 2014-2015 online student overview [pdf file].

- The College. (2016). *Hybrid course success data 2012-2015* [Data file]. Retrieved from College IR.
- The College. (2016). Recommendation from work team: Faculty preparedness for online/hybrid teaching/learning. [pdf file].
- The College Hybrid Design Committee. (2016). *Hybrid Best Practices Survey* [pdf file]. Retrieved from internal hybrid design committee report.
- Course Delivery Definitions. (n.d.) Retrieved July 10, 2016, from http://www.fscj.edu/academics/online-learning/course-delivery-definitions/
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, California: Sage Publications.
- Delivery Methods- Math Department website. (n.d.) Retrieved on July 9, 2016 from the college website.
- Demirci, N. (2014). What is Massive Open Online Courses (MOOCs) and what is promising us for learning? A review-evaluative article about MOOCs. *Necatibey Faculty of Education Electronic Journal of Science & Mathematics Education*, 8(1), 231-256. Retrieved from http://eds.a.ebscohost.com.ezproxy.net.ucf.edu/eds/pdfviewer/pdfviewer/sid=d5ccc229-11b0-44c7-9c2e-ee097706d269%40sessionmgr4009&vid=7&hid=4208
- Deschacht, N., & Goeman, K. (2015). The effect of blended learning on course persistence and performance of adult learners: A difference-in-differences analysis. *Computers & Education*, 87, 83-89. Retrieved from http://www.sciencedirect.com.ezproxy.net.ucf.edu/science/article/pii/S036013151500098

6

- EDUCAUSE. (2014). University of Central Florida and the American Association of State

 Colleges and Universities: Blended learning toolkit. [pdf file]. Retrieved from

 https://library.educause.edu/~/media/files/library/2014/8/ngp1404-pdf.pdf
- eLearning Options at SFSC. (n.d.) Retrieved July 10, 2016, from http://www.fscj.edu/academics/online-learning/course-delivery-definitions/
- Elliott, M., Rhoades, N., Jackson, C. M., & Mandernach, B. J. (2015). Professional development:

 Designing initiatives to meet the needs of online faculty. *Journal Of Educators Online*,

 12(1). Retrieved from http://files.eric.ed.gov/fulltext/EJ1051031.pdf
- Francl, T. T. (2014). Is flipped learning appropriate? *Journal of Research In Innovative Teaching*, 7(1), 119-128. Retrieved from

 http://www.nu.edu/assets/resources/pageresources/journal-of-research-in-innovative-teaching-volume-7.pdf#page=128
- Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet And Higher Education*, 795-105. doi:10.1016/j.iheduc.2004.02.001
- Garrison, D. R., & Vaughan, N. D. (2008). Blended learning in higher education: Framework, principles, and guidelines. San Francisco: Jossey-Bass.
- Gedik, N. n., Kiraz, E., & Ozden, M. Y. (2013). Design of a blended learning environment:

 Considerations and implementation issues. *Australasian Journal Of Educational*Technology, 29(1), 1-19. Retrieved from http://eric.ed.gov/?id=EJ1007061

- Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in qualitative research: interviews and focus groups. *British Dental Journal*, 204(6), 291-295. Retrieved from http://www.nature.com/bdj/journal/v204/n6/abs/bdj.2008.192.html
- Glazer, N. (2014). Formative plus summative assessment in large undergraduate courses: Why both? *International Journal Of Teaching And Learning In Higher Education*, 26(2), 276-286. Retrieved from http://eric.ed.gov/?id=EJ1060846
- Greene, J. A., Yu, S. B., & Copeland, D. Z. (2014). Measuring critical components of digital literacy and their relationships with learning. *Computers & Education*, 55. doi:10.1016/j.compedu.2014.03.008
- Herr, K., & Anderson, G. L. (2015). *The action research dissertation: a guide for students and faculty*. Thousand Oaks, California: SAGE Publications, Inc.
- Hilliard, A. T. (2015). Global blended learning practices for teaching and learning, leadership and professional development. *Journal of International Education Research*, 11(3), 179-188. Retrieved from http://search.proquest.com/openview/34d8b4f26fe3d3389fd2af719b87e0c7/1?pq-origsite=gscholar
- History of the college. (n.d.). Retrieved on July 5, 2016 from the college website.
- Holotescu, C., Creţu, V., Grosseck, G., & Naaji, A. (2014). Integrating MOOCs in blended courses. *Elearning & Software For Education*, (1), 243-250. doi:10.12753/2066-026X-14-034
- Kaleta, R., Garnham, C., & Aycock, A. (2005). Hybrid courses: Obstacles and solutions for faculty and students. [pdf file]. In *Presentation at the 19th Annual Conference on*

- Distance Teaching and Learning. Madison, WI. Retrieved from http://www.uwex.edu/disted/conference/Resource_library/proceedings/03_72.pdf
- Kaleta, R., Skibba, K., & Joosten, T. (2007). Chapter 6: Discovering, designing, and delivering hybrid courses. *Blended Learning: Research Perspectives*, 111-144. Retrieved from http://eds.a.ebscohost.com.ezproxy.net.ucf.edu/eds/pdfviewer/pdfviewer?sid=058918d6-6e89-4c15-88d7-3776f6b69cb8%40sessionmgr4006&vid=4&hid=4111
- Kilic-Cakmak, E., Karatas, S., & Ocak, M. A. (2009). An analysis of factors affecting community college students' expectations on e-learning. *Quarterly Review Of Distance Education*, 10(4), 351-361. Retrieved from http://www.infoagepub.com/index.php?id=89&i=45
- Kozlowski, D. (2004). Factors for consideration in the development and implementation of an online RN-BSN course: Faculty and student perceptions. *CIN: Computers, Informatics, Nursing*, 22(1), 34-43. Retrieved from http://www.emeraldinsight.com/doi/citedby/10.1108/09684889610146163
- Krueger, R. A., & Casey, M. A. (2002). Designing and conducting focus group interviews. *Social analysis, selected tools and techniques*, *4*(23), 4-24. Retrieved from https://pdfs.semanticscholar.org/4b1b/534107a6f950ef66ac01951cc325e17f4c02.pdf#pag e=10
- Krueger, R. A., Casey, M. A., Donner, J., Kirsch, S., & Maack, J. N. (2001). Social analysis: selected tools and techniques. *Social Development Paper*, *36*. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.607.4701&rep=rep1&type=pdf

- Linder, K. E. (2017). Training faculty to teach in hybrid settings. *New Directions for Teaching And Learning*, 2017(149), 47. doi:10.1002/tl.20226
- Lloyd-Smith, L. (2010). Exploring the advantages of blended instruction at community colleges and technical schools. *Journal of Online Learning and Teaching*, 6(2), 508. Retrieved from http://search.proquest.com/openview/675a3a86125314b58aff1a13c9dcb8f0/1?pq-origsite=gscholar&cbl=2030650
- Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2009). Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies.

 US Department of Education. Retrieved from https://eric.ed.gov/?id=ED505824
- Mirriahi, N., Alonzo, D., McIntyre, S., Kligyte, G., & Fox, B. (2015). Blended learning innovations: Leadership and change in one Australian institution. *International Journal Of Education And Development Using Information And Communication Technology*, 11(1), 4-16. Retrieved from http://eric.ed.gov/?id=EJ1061471
- Morgan, D. L. (2012). Focus groups and social interaction. *The Sage handbook of interview research: The complexity of the craft*, 161-175. doi:10.4135/9781452218403
- Morgan, D. L. (1997). Focus groups as qualitative research. Thousand Oaks, CA: Sage.
- Moskal, P., Thompson, K., & Futch, L. (2015). Enrollment, Engagement and Satisfaction in the BlendKit Faculty Development Open, Online Course. *Online Learning*, 19(4). Retrieved from https://olj.onlinelearningconsortium.org/index.php/olj/article/view/555
- Napier, N. P., Dekhane, S., & Smith, S. (2011). Transitioning to blended learning:

 Understanding student and faculty perceptions. *Journal of Asynchronous Learning*Networks, 15(1), 20-32. Retrieved from http://files.eric.ed.gov/fulltext/EJ918216.pdf

- Niemiec, M., & Otte, G. (2010). An administrator's guide to the whys and hows of blended learning. *Journal of Asynchronous Learning Networks*, *14*(1), 91-102. Retrieved from http://eric.ed.gov/?id=EJ909846
- Norberg, A., Dziuban, C. D., & Moskal, P. D. (2011). A time-based blended learning model. *On the Horizon*, 19(3), 207-216. doi:10.1108/10748121111163913
- O'Connor, C., Mortimer, D., & Bond, S. (2011). Blended learning: issues, benefits and challenges. *International Journal of Employment Studies*, (2), 63. Retrieved from https://search.informit.com.au/documentSummary;dn=273763855930484;res=IELBUS
- Olapiriyakul, K., & Scher, J. M. (2006). A guide to establishing hybrid learning courses:

 Employing information technology to create a new learning experience, and a case study.

 The Internet and Higher Education, 9(4), 287-301. doi:10.1016/j.iheduc.2006.08.001
- Our Award-Center for Distributed Learning. (2016). Retrieved September 9, 2016, from https://online.ucf.edu/about/our-awards/
- Owston, R., York, D., & Murtha, S. (2013). Student perceptions and achievement in a university blended learning strategic initiative. *The Internet and Higher Education*, *18*, 38-46.

 Retrieved from http://www.sciencedirect.com/science/article/pii/S1096751612000863
- Porter, W. W., Graham, C. R., Spring, K. A., & Welch, K. R. (2014). Blended learning in higher education: Institutional adoption and implementation. *Computers & Education*, 75, 185-195. doi:10.1016/j.compedu.2014.02.011
- Prensky, M. (2001). Digital Natives, Digital Immigrants Part 1. *On The Horizon*, (5), 1. doi:10.1108/10748120110424816

- Smith, S. (2014). Supporting digital literacy across the curriculum through blended support: A pilot project report. *Journal of Educational Technology Systems*, *43*(2), 189-198. doi:10.2190/ET.43.2.f
- Stein, J., & Graham, C. R. (2014). Essentials for blended learning: A standards-based guide.

 New York: Routledge.
- Strategic planning at the college: Online Learning (n.d.). Retrieved on October 24, 2016 from the college website.
- Tandoh, K., Flis, N., & Blankson, J. (2013). Blended learning: history, implementation, benefits.

 *Practical Applications and Experiences in K-20 Blended Learning Environments, 18.

 *Retrieved from http://www.igi-global.com/chapter/blended-learning/92962
- Tang, C. M., & Chaw, L. Y. (2016). Digital literacy: A prerequisite for effective learning in a blended learning environment? *Electronic Journal of E-Learning*, *14*(1), 54-65. Retrieved from https://eric.ed.gov/?id=EJ1099109
- Tufford, L. & Newman, P. (2012). Bracketing in qualitative research. *Qualitative social work*, *11*(1), 80-96. doi:10.1177/1473325010368316
- Wang, Y., Han, X., & Yang, J. (2015). Revisiting the blended learning literature: Using a complex adaptive systems framework. *Educational Technology & Society*, 18(2), 380–393. Retrieved from http://www.ifets.info/journals/18_2/28.pdf
- Web news article. (2010). College poised for name change. Retrieved on July 5, 2016.