THE HYBRID MODEL AND STUDENT LEARNING EXPERIENCES

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by

Sarah Nava

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Abstract

of

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by

Sarah Nava

Brief Literature Review

Higher education has integrated many new technologies into its courses. The hybrid model takes full advantage of technological advances with the incorporation of learning technologies used during online interactions combined with in-person instruction (Brunner, 2006). As more institutions of higher education continue to adopt the hybrid model, learning technologies will play a larger role in the learning process of students (Snart, 2010). Thus, understanding how these technologies impact student learning experiences becomes vital to ensuring quality education within the hybrid setting.

Statement of the Problem

The hybrid model allows information to be transmitted through the use of both face-to-face and online platforms or interactions, which alter how students receive and learn this information. Hybrid courses also transfer student-instructor interactions online and reduce those held in-person. Therefore, it is the purpose of this study to explore the effects of the hybrid model on the learning experiences of students enrolled in a hybrid master’s program. This study seeks to further reveal if and how the hybrid model, and
the learning technologies utilized for instruction, change or impact student learning experiences.

Methodology

The study used a quantitative method to conduct research on graduate students enrolled in a hybrid master’s program at a Northern California public university. The online survey used only closed-ended questions. Nineteen graduate students participated in the research.

Conclusions and Recommendations

This study’s research revealed two crucial findings on the relationship between the hybrid model and student learning experiences: the significance of learning technologies and the importance of instructor-student interactions. These two findings produced a deeper understanding of the importance of the instructor’s role inside the hybrid model. The instructor’s interactions with students during reduced face-to-face time and their ability to use learning technologies make a significant impact to either benefit or challenge learning experiences. Future research is needed to reveal the necessary training for hybrid course instructors on the efficient use of learning technologies, and continuous technological support for these instructors is imperative to maintain positive student learning experiences within the hybrid model.

Jose L. Chavez, Ed.D.

Date 4/30/15
DEDICATION

This thesis is dedicated to my God, my king, my love. You provide constant strength, hope, peace, and sweet joy. You revealed Your perfect love to me during this process and renewed my heart. In the light of Your presence I am free. Thank you, Jesus.
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I would like to thank my family. To my parents, Jose and Vilma Morales. Thank you for your commitment to love and family. I couldn’t have completed this product without you both. Your support has planted many seeds and will produce great fruits.

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Chapter 1
INTRODUCTION

Background

New and improved technologies are continuously emerging and permeate both the private and public domains of everyday life. In response to this steady emergence, higher education may utilize such technologies to provide greater access, drive costs down, and engage the current generation of undergraduate students in a new learning experience. The majority of today’s college students belong to a uniquely technological generation, which has been educated surrounded by unlimited access to information. This coexistence has been facilitated through the use of constant technological advances, such as laptops, tablets, and smart phones. Their experience in higher education has included the use of technology inside and outside the physical campus classroom. Such technological integrations began with the blended learning setting—which incorporates online teaching tools—but now the hybrid course model has a greater presence in higher education. The increasing number of institutions now offering hybrid courses is evidence of its expanding popularity. The effects of this expansion are important to investigate when considering the potential impact on student learning experiences in higher education.
Statement of the Problem

The hybrid model not only increases the use of technology within a course but also allows for the transfer of information and knowledge through the use of both face-to-face and online platforms or interactions. The courses operate under new forms of instruction, which change how students receive information and how they ultimately learn that information. The increasing implementation of technology in the classroom has the potential to transform the way higher education operates as well as a student’s overall educational experience. Additionally, hybrid courses transfer student-instructor interactions from previously strictly in-person to the online situated interaction during an online class. Thus, it is the purpose of this study to explore the effects of the hybrid course model on the learning experiences of graduate students enrolled in a hybrid master’s program. This study sought to further reveal if and how the hybrid model changes the way graduate students receive and learn information and the impact of this shift away from the traditional model on their learning experience.

Definition of Terms

A few terms need clarification within this study’s discussion of the hybrid course model and its potential effects on the learning experience of graduate students enrolled full-time in a hybrid MA program. It is important to know the definitions through which this study operates in order to understand the connections between the terms and the theories related to the topic under investigation.
Digital Divide

Digital divide describes the gap between those who have and those who do not have access to technology or a fast broadband Internet connection (Block, 2010). The want of such resources can become a barrier for students lacking these technologies in terms of their pursuit of higher education and can thus hinder their learning. In addition, this divide has acted as a source of inequality in education, as it hinders equal opportunity for all college students (Fox & Livingston, 2007).

Face-to-Face (In-person) Interactions

Face-to-face interactions define the interactions between students and their instructors or peers, which are conducted in an in-person setting such as the campus classroom, instructor’s office hours, or other in-person meeting. These interactions do not include any use of electronic sources to see the other person, such as Skype.

Hybrid Course Model

The hybrid course model encompasses a course in higher education that utilizes both online and face-to-face platforms for instruction. These courses incorporate the use of technology within the classroom setting and beyond, as in online lectures (Olapiriyakul & Scher, 2006). The hybrid course model is also not contained in the space and time constraints of the traditional course setting, which is the physical campus classroom (Dziuban, Moskal, & Hartman, 2005).
Learning Technologies

Learning technologies refer to any form of technology used for the purpose of distributing or transmitting materials or information to students within a hybrid course in higher education. Theses technologies act as the mediums through which students receive information during online instruction. A few examples include a computer, tablet, or Blackboard (Derntl & Motschnig-Pitrik, 2005; Garrison & Akyol, 2009). Students also use these technologies to learn any necessary information and interact with either peers or instructors. This term is also used interchangeably with technological learning modalities in this research.

Online Interactions

Online interactions define the interaction between students and instructors or students and their peers that are maintained online. These interactions can include those done on an online lecture platform, such as those performed on Blackboard (Beckwith & Cunniff, 2009), or in any other online setting. These interactions include the online transfer of knowledge and information.

Student Learning Experiences

This term defines the experience of how students receive and learn information. It also incorporates the type of experience the student had with regard to having a negative or positive process of learning the required information during the extent of the course. The student learning experiences term also encompasses the learning outcomes yielded from the learning process.
Traditional Course Model

A traditional course is one in which students receive only face-to-face instruction in the physical campus setting and in the designated time frame. Students may have information and materials delivered to them through both online and in-person interactions, but all discussions are only held in face-to-face.

Limitations

This study on hybrid education and student learning experiences encountered a few limitations to the research. First, the author of this study is currently enrolled within a hybrid MA program, which potentially contributed to author bias on the subject. However, all literature was drawn from academic sources and from studies previously conducted to gain a deeper and expanded understanding on the impact of the hybrid model on student learning. This literature is presented in Chapter 2. Furthermore, ethical research practices and protocols were taken to ensure that this study, and the collection of data, was conducted in alignment with research protocols set by the institutional site.

However, the researcher changed the initial date to begin data collection while waiting to receive approval for meeting ethical research standards. Thus, the researcher was unable to send out the online survey invitation to potential participants until almost two months had passed after the original intended start date.

Additionally, the online survey used to collect survey responses for this study’s data remained open for an additional week. Survey responses collected in the span of
two weeks yielded a response rate of less than 20%. Survey invitations were sent out to a total of 47 potential participants. It was also discovered that the initial link sent out in the first invitation email to potential participants was not directing them to the correct site. For this reason, a second invitation email was sent out to all potential research participants for this study. Therefore, to attain a larger sample population, the researcher expanded the data collection period another week.

**Significance and Importance of Study**

The hybrid course model has the potential to transform student learning experiences in various ways because it utilizes both face-to-face and online forms of instruction. Moving away from the traditional classroom model, the hybrid course allows students to receive and learn materials through online technologies as well as through in-person instruction (López-Pérez, López-Pérez, & Rodriquez-Ariza, 2010; Olapiriyakul & Sher, 2006). Students also must work independently more often with online material, but at the same time, they must keep up with the required in-person coursework and lectures (Dziuban et al., 2005). Additionally, online technologies provide new mediums of delivering information to students through new forms of technology constantly emerging and changing teaching and learning (Iiyoshi & Vijay Kumar, 2008). It may be observed how the hybrid course model transforms the student learning experience and specifically for graduate students enrolled in a hybrid M.A. program.
Therefore, investigating and better understanding the current shift occurring in higher education—due to the growing adoption of the hybrid course model—will further reveal the potential risks and benefits to student learning experiences. Research already conducted on this topic reveals that the implementation of the hybrid course model can foster unsatisfactory sentiments with regard to the student learning experience in such a course (Dziuban et al., 2005; Ocak, 2011). Studies have revealed that a few contributing factors to this dissatisfaction are a lack of communication on the part of the instructor and a lack of innovation in the way learning technologies are used to foster a creative and engaging learning experience for students who have already had a vast exposure to technology before entering higher education (Economist Intelligence Unit, 2008; Ocak, 2011).

However, there are also potential benefits to using the hybrid course model. Using both online and face-to-face instruction, materials, and interactions creates a flexible educational setting “reducing time and space commitment” (Dziuban et al., 2005). The hybrid model can also foster a sense of community (Rovai & Jordan, 2004). This is a reoccurring theme in the literature on the potential benefits of the hybrid model, which could help make students feel engaged in not only the course material but also in the educational experience and institution (Garrison & Akyol, 2009; Garrison & Kanuka, 2004; Hartnett, St. George, & Dron, 2011).

Taking into account the shift from in-person to hybrid instruction occurring within higher education, as well as the risks and benefits associated with this change, it is
evident that this type of study may yield insight for those within the field of higher education. It is equally important to consider how the use of learning technologies, in combination with in-person instruction, can impact how students receive and learn information. Consequently, the issue of educational access is also relevant to this discussion because of how technology may be used to expand the reach of higher education in a society operating more and more online with each passing year. However, those in higher education must also consider the obstacles that may arise for students who lack access to technology and, thus, access to education occurring online. Therefore, as with any change in higher education, the potential risks and benefits connected with the shift toward the implementation of the hybrid course model must be taken into account when considering the effects it may have on student learning experiences.
Chapter 2

REVIEW OF THE RELATED LITERATURE

Introduction

New technologies emerge at a rapid pace in the public domain every year. Updates or newer versions of these technologies are never far behind and have massive followings. Education has not remained unaffected. Higher education has integrated new technological learning modalities into the course setting. The hybrid course takes full advantage of such ongoing changes with its incorporation of online interactions alongside face-to-face interactions. New forms of online interactions are now facilitated through the use of features such as online class sessions and interfaces such as Blackboard. Understanding how such technological learning modalities impact the student learning experience thus becomes crucial to continuing to provide quality education for students within the hybrid setting.

Research suggests that the hybrid model is gaining popularity within institutions of higher education around the United States, with more and more campuses adopting this model for their programs (Allen, Seaman, & Garrett, 2007; Brunner, 2006, Olapiriyakul & Scher, 2006; Sullivan & Freishtat, 2013). As higher education shifts toward a teaching method of utilizing both online and face-to-face interactions, learning technologies will play a larger role in the learning experience of students during their time at and away from the physical campus (Snart, 2010). This shift has been
documented in many studies investigating how instructors structure their hybrid courses (Biddex, Chung, & Park; 2014; Bunner, 2006; Ocak, 2011; Olapiriyakul & Scher, 2006). Sullivan and Freishtat (2013) found that as hybrid education increases, so does the need to “[consider] strategies to optimize teaching and learning effectiveness in these technology-enhanced settings” (p. 13). Therefore, this study explored the changes occurring to student learning experiences within the hybrid setting due to the implementation of technological learning modalities.

Understanding the changes occurring to student learning experiences within hybrid education begins with an introduction to the unique qualities of blending both online and face-to-face course features. An in-depth analysis of the following subtopics as they relate to the larger context of hybrid education is presented. The literature review first explores the integration of technology into courses of higher education. The traditional, online, and hybrid course structures are reviewed to track the integration of learning technologies into each setting. Next, the benefits and challenges of those learning technologies are separately examined within the context of student learning experiences inside hybrid education. The benefits of course flexibility and building a sense of community demonstrate the advantageous of a hybrid model. In contrast, challenges including the development of hybrid programs and lack of faculty support reveal the potential obstacles these issues can produce for student learning outcomes. It is, therefore, important to address such issues.
Technological Integration

Traditional Course Setting

The traditional higher education course setting keeps students within the physical classroom on campus. In this structure, students receive lectures on a weekly basis from instructors and directly and primarily interact with other peers at the institutional site (Biddex et al., 2014). However, the emergence of learning technologies such as the personal computer has literally transformed the space of the traditional course setting by allowing it to move online (Garrison & Akyol, 2009; Garrison & Kanuka, 2004). Yet, it is important—within a discussion of technological advances and hybrid education—to understand how higher education has functioned up until the entry of technology into courses.

Traditionally, the learning experience for students within higher education has primarily been shaped by time spent inside the classroom on the physical campus. In this “traditional space,” students learn information from the instructor during lectures whereby course content is relayed, contained, and primarily accessed through any material distributed in class, such as notes taken or “paper handouts” (Ching, Levin, & Parisi, 2004, pp. 225-226). Additionally, students are expected to study, memorize, and learn material for any exams from the notes they took on the information given during the lectures and from the supplemental texts or readings (Jaffe, 2003). Learning, therefore, was based on the weekly in-person interactions held between student and instructor inside a physical classroom.
Likewise, instructors rely only on the weekly in-person lectures, or the face-to-face experiences, to interact with their students and transmit any necessary information to them (McAndrew, Scanlon, & Clow, 2010). In this way, the traditional instructor role keeps any teaching contained in the physical classroom. Such methods also demanded that instructors only create and deliver a curriculum for their in-person lectures, and curriculum is disseminated through no other medium than the lecture and any discussion that followed in the classroom (Brunner, 2006). Clearly, the face-to-face interaction dominated the traditional course setting; hence, the learning experience was contingent on the materials, discussions, and information transmitted between persons during these in-person dealings. Thus, in higher education, such in-person interactions have predominately formed student-learning experiences (Ekwunife-Orakwue & Teng, 2014).

However, the rise of technology and its presence within higher education has begun to not only reshape course settings but to create different forms of learning as well. It has been this shift from the traditional course setting to the technologically saturated setting that has allowed institutions of higher education to implement online programs (Garrison & Akyol, 2009). The classroom is no longer only contained at the physical campus, nor are teaching and learning.

**Online Course Setting**

With the emergence of the Internet and the personal computer, higher education has begun to move courses or whole programs online where everything is done entirely online. Instructors deliver lectures and materials and interact with students in a fully
online environment with no in-person exchange (Biddix et al., 2012; Brunner, 2006). Teaching still consists of lectures but now information can be transmitted through a computer screen. Therefore, information continues to be relayed to students predominantly through the form of lectures but new technological learning modalities are also incorporated. Students' learning experiences are no longer contained just within a physical classroom and the online course setting has presented a few advantages with respect to this relocation.

Moving courses and the lecture online has given students the ability to access information in more than one way without time and place constraints (De la Vega, 2008). The course has transcended physical space constraints where “online learners [are] both together and apart...connected to a community of learners anytime and anywhere, without being time, place, or situation bound” (Garrison & Kanuka, 2004, p. 96). In contrast to the traditional course setting where students only rely on the lecture and information given to them in-person, the online course setting maintains course content on the Internet where students can repeatedly review it (Garrison & Kanuka, 2004). This form of expanded access to content has given students new ways to learn information because they no longer have to solely depend on the in-person lectures to receive information given at once (Brunner, 2006). In addition to this expanded access, the online course setting allows for the traditional time constraints to shift. Placing lectures and course content online gives students the opportunity to access the materials at the most convenient time to them (Campaign for the Future of Higher Education [CFHE],
2013). The technology in an online setting allows students to attend lectures away from the physical campus and gives them the potential to structure their learning differently as well as gain new forms of learning support (Thille, 2014). In this way, the online course setting gives students more control over their learning experiences. Some students have benefited from the control they are given over their course content (Brunner, 2006).

Nonetheless, even with the added benefits of online courses, there are concerns that such a fully online learning environment does not meet the learning needs of all students within higher education. The independent learning style required for the online course setting isolates students from faculty and forces them to work through the material with very little guidance (Ocak, 2010). In consequence, fully online course settings do force students—similarly to the traditional course setting—to receive and learn information through only one medium and one course structure. As described by De la Vega (2008), students in this setting have to learn by performing instead of listening because “in on-line learning, [they] complete their assignments on the internet, post their questions [and] comments on a discussion forum...and meet with their instructors and peers in an internet chat room” (p. 741). In contrast to the traditional setting that forces students to rely heavily on the in-person interactions, the online setting makes students reliant on technological interactions.
Hybrid Course Setting

Combining the in-person interactions of the traditional course setting with the online interactions of the online course setting has resulted in the hybrid model and unique attributes.

Computers assist adult learners in two ways. First, they provide a useful tool for carrying out assignments in the traditional classroom. Second, they have extended walls of the classroom into the home and the community throughout web-based distance learning and educational software. (Mossberger, Tolbert, & Stansbury, 2003, p. 76)

In a unique way, the hybrid course setting blends the traditional lectures held at the physical campus with the expanded access to course content located online (Ekwunife-Orakwue & Teng, 2014). It is this combination of information transmission that has changed the student learning experience for those in hybrid education. “Hybrids permit both the ‘reflectiveness’ of asynchronous, online communications and the ‘immediacy’ of verbal interactions” (Brunner, 2006, p. 231). Students no longer need only rely on the lectures delivered by instructors in class because, within the hybrid course, they can also access course information and hold discussions with peers online (Garrison & Kanuka, 2004). The hybrid model allows technology to be incorporated into the course without completely removing personalized interactions.

Thus, the hybrid course model’s combination of online and in-person settings has evolved from two once-divided educational settings that were more structurally rigid
when separated. It has been fashioned from the on-campus lectures of the traditional setting in higher education and from the newer online access, enabled by the technological advances constantly emerging at a rapid pace in the public domain (Bunner, 2006; CFHE, 2013; Delaney, 2004). Incorporating technological advances into course curricula has given those within higher education the opportunity to teach through the technological learning modalities that expand the learning possibilities for students (Derntl & Motschnig-Pitrik, 2005; Olapiriyakul & Scher, 2006). Furthermore, these new and evolving learning technologies have the potential to change the learning experiences of students within hybrid courses or programs in higher education. The benefits of such a shift have been discussed in-depth in the literature on hybrid education and are presented in the following sections. Likewise, the challenges are also taken into account when exploring the impact that such changes may have on how students receive and learn via hybrid settings today.

**The Active Learning Theory**

The active learning theory emphasizes the need for students to actively participate in their learning process in order to receive the most out of the experience (Chickering & Gamson, 1999; McGee & Reis, 2012; Rotgans & Schmidt, 2011). Chickering and Gamson (1987) presented active learning as one their seven principles listed in *Seven Principles for Good Practice in Undergraduate Education*. In this body of work, they expressed the notion that “learning is not a spectator’s sport” (Chickering & Gamson,
Thus, within this theoretical framework, learning is not an activity to be endured but rather a process to be experienced in fullness within a very student-centered environment (Tileston, 2007). The hybrid model fits into this theoretical notion on learning because it incorporates various forms of engaging the student throughout their learning process, especially when compared to the traditional course model (Bonwell & Eison, 1991; Prince, 2004). As previously addressed, students in hybrid education receive and learn information through a combination of in-person and online interactions, allowing them to engage in their courses differently (Beckwith & Cunniff, 2009). These interactions alter and expand, compared to the traditional setting, how students actively participate in their learning. In addition, the hybrid course model’s online interactions promote assistive technology use to further enhance the learning process (Heide & Henderson, 2001).

Prince’s (2004) analysis on active learning further highlights comparability between the active learning theory and the hybrid model. “Adopting instructional practices that engage students in the learning process is the defining feature of active learning” (Prince, 2004, p. 4). Therefore, the hybrid model approach can be described as active learning when utilizing online lectures and Blackboard group postings that expand the learning experience of students. In addition, in favor of implementing engaging instructional models, Prince (2004) cited evidence for the argument that active learning promotes increased retention and motivation compared to the traditional setting. Bonwell and Eison (1991) also emphasized the potential of active learning strategies to increase
student interest throughout the learning process. In their book, *Active Learning: Creating Excitement in the Classroom* (1991), the authors explained, “several additional strategies promoting active learning have been similarly shown to influence favorably students’ attitudes and achievement” (p. 7). In her research on educational technology, Candice Thille (2010) relayed a similar case in favor of such instructional practices. “Our understanding of human learning from the last 20 years of research tells us that learning is an active, not a passive process and simply providing lectures is not sufficient” (Thille, 2010, p. 74).

Interestingly, Huffaker and Calvert (2003) conducted a study on how e-learning could specifically address the implementation of active learning in education. They sought to understand how technology could add to and enhance the learning experience of students in K-12. However, the findings are relevant to the learning process within higher education. “Part of the solution for getting children to spend more time actively engaged in learning outside formal classrooms may be to combine appealing content with entertaining production features” (Huffaker & Calvert, 2003, p. 328). Hybrid, with its online features that expand the learning space, appeals to the notions surrounding the active learning theory. Thus, institutions of higher education may enact active learning strategies, as facilitated through hybrid education, to enhance student learning experiences and outcomes. In fact, the authors stress that e-learning fosters active learning by “encouraging online collaborations that facilitate both cognitive and social aspects of learning” (Huffaker & Calvert, 2003, p. 326). Again, a direct link is made to
hybrid education, whereby students learn through a combination of online interactions and face-to-face meetings, which foster collaborative participation (Martyn, 2003).

**Benefits of Technological Learning Modalities**

At the core of hybrid education is the use of technology for the purpose of teaching and learning. Technological advances have allowed those in higher education to form hybrid programs that utilize learning technologies such as Blackboard and WebCT to hold online lectures (Derntl & Motschnig-Pitrik, 2005; Olapiriyakul & Scher, 2006). Initially, the personal computer gave education free reign to move class time away from the physical space and time of the campus classroom and into the less constraining online Internet environment (Crabtree & Rodden, 2008). Higher education was essentially liberated and free to conquer new territory. Thus, technological learning modalities, or learning technologies, provided the means and the medium through which hybrid education could transform the learning experience for many students in higher education. These modalities offer instructors new ways of teaching with the combined in-person and online interactions. Additionally, it is these same technological learning tools that shape how students receive and thus learn information within hybrid education. Research presented in this section illustrates the benefits of such blended instruction—unique to the hybrid experience—as having the potential to address various student-learning needs because of its structure and features.
Flexibility

Hybrid education’s combination of in-person and online interactions inherits the best qualities from both modes to provide students with a technologically enhanced learning experience (Safar & AlKhezzi, 2013). The benefit of the hybrid model is the two settings, which afford students flexibility during their educational lives. “The potential of a blended approach is endless . . . it can produce robust teaching and learning environments and experiences” (Safar & AlKhezzi, 2013, p. 624). As previously mentioned, students in hybrid classes are no longer constrained by the time and space limitations of traditional course settings, but they are also not left isolated on the web to work independent of personal interactions, as is the case in the fully online setting (Beckwith & Cunniff, 2009; Olapiriyakul & Scher, 2006). Furthermore, the hybrid model integrates learning technologies into the educational experience and relies heavily on them to create a new learning space for different learning needs and styles, wherein students can take control of the learning process (Biddix et al., 2014; Brunner, 2006). In this way, technological learning modalities advance the learning experience for students because the structure’s flexibility molds to them and there is less rigidity.

Therefore, it is this blending of teaching strategies and styles that has become beneficial to students in hybrid education. “Blended methods of teaching and learning have the potential to create a solid foundation for promoting learner/student-centered environments” (Safar & AlKhezzi, 2013, p. 619). Also, the hybrid model allows for more “self-paced learning” (Ocak, 2010) with “learner autonomy” (Biddix et al., 2014),
in an environment that provides students more control over how they receive and learn course content. Meeting the needs of students in this way could produce improved student learning outcomes for institutions of higher education.

Additionally, research has demonstrated that the hybrid model meets student needs in terms of how they receive and interpret information (Olapiriyakul & Scher, 2006). Sullivan and Freishtat (2013) found that “the flexibility afforded to students about when to engage in an online discussion, coupled with multiple opportunities for engagement it provides, makes for improved learning and reflection” (p. 18). The hybrid model, therefore, maintains a crucial element for meeting different types of student learning needs. Judy Block (2010) discovered that the value of distance education—or hybrid—lies in its ability to provide students with expansion of both the physical and online space/time, largely afforded by the use of technology. “Self-paced learning has become possible with computers. Distance learning is not dependent upon time or place and in many ways it can be more flexible than the traditional model” (Block, 2010, p. 3). Thus, the hybrid model allows students to understand course material through more than one medium, locate it in more than one place, and access it more than once.

**The Multiple Intelligence Theory**

The hybrid model’s incorporation of both online and in-person learning formats serves to address an ongoing theoretical learning approach that seeks to accommodate different forms of learning. This notion is known as Multiple Intelligence Theory and was introduced by psychologist Howard Gardner in 1983. Gardner presented his theory
on multiple intelligences in his book *Frames of Mind* (1983) wherein he introduced the idea of seven human intelligences. “He defined intelligence as the capacity to solve problems or to fashion products that are valued in one or more cultural settings and detailed a set criteria for what counts as human intelligence” (Gardner & Hatch, 1989, p. 5). Some intelligence examples included linguistic, spatial, musical, logical-mathematical, and kinesthetic (Gardner, 1983). As of 1999, however, the naturalist intelligence was added to the list (Gardner, 1999; Kincheloe, 2004; Shearer, 2004).

Incorporating Gardner’s (1983) multiple intelligence theory into the hybrid model allows for further understanding of how its multiple learning formats, both online and face-to-face, could potentially benefit student learning and, thus, further an understanding on how hybrid education addresses different forms of student learning. Multiple formats, settings, and interactions could cater to multiple intelligences. In essence, multiple features address multiple learning needs. In fact, in his research on multiple intelligence theory and improving student learning, Stephen Denig (2004) found that students learn and retain information best when the learning process is conducted in such a way that targets varied learning preferences. “Intelligence is more than a score on a typical standardized pencil-and-paper test used to predict success in school” (Denig, 2004, p. 98).

Beckwith and Cunniff (2009) also strongly asserted the association between the multiple learning formats of hybrid education and Gardner’s (1983) multiple intelligence theory. The authors believed the learning theory could be implemented through
multimedia education to enhance the teaching/learning process and student outcomes. They made a clear link between hybrid education, with its use of technologies like Blackboard, and Gardner’s theory regarding various forms of intelligences. “A hypermedia instructional approach, such as that . . . incorporated in a part-onsite program called a hybrid, is arguably a feasible and economical approach to addressing the multiple intelligences in instruction” (Beckwith & Cunniff, 2009, p. 21). In their research, Beckwith and Cunniff (2009) explored the impact hybrid education can have on not only expanding the manner by which students receive and access information (flexibility) but also in the manner by which they internalize the content. This increased exposure to information is essential to students memorizing and understanding the knowledge they will need to recall; therefore, hybrid courses could enhance student outcomes compared to the traditional course setting. The authors explained:

Hybrid courses, in which at least some of the sessions are conducted online and therefore must use hypermedia instructional techniques that thereby potentially address all of the learner’s multiple intelligences, can likewise, as noted above, be expected to be somewhat more effective than an onsite course. (Beckwith & Cunniff, 2009, p. 25)

**Community**

Allowing students to learn at their own pace is accompanied by a sense of community, as fostered through the hybrid setting (CFHE, 2013). Research on hybrid education has investigated how the model creates community among all participants
involved. The unique blend of in-person and online interactions expands on the relationships traditionally contained within the physical campus classroom (Brunner, 2006). Garrison and Akyol (2009) understood technology to be a crucial feature of hybrid education and relayed that “in this modern educational context, the only practical means of creating communities where students can meaningfully engage in collaborative knowledge construction is through the use of instructional technologies” (p. 25). It is the instructional technologies such as “Blackboard or WebCT” that allow students to connect with their peers and the instructors in ways that reach beyond the institutional campus (Picciano, 2009, p. 14). These learning technologies then begin to foster a sense of community that many have observed within hybrid courses and programs.

In 2003, Margie Martyn revealed how students in hybrid education use the sense of community, in the hybrid model, to stay connected to other peers and instructors. “The hybrid online model encompasses both face-to-face contact ... and extensive computer-mediated communication through the use of extensive e-mail, weekly synchronous chat, and asynchronous online threaded discussion” (Martyn, 2003, p. 22). Through meaningful connections, unique to the hybrid setting, students are able to enact new learning experiences that were not possible in the traditional course, a more limited setting (McAndrew et al., 2010). Some research even suggests the technology and interactions in online settings could potentially shape student identity as they learn through the use of technological mediums (Ching & Foley, 2012). Thus, hybrid education, with its use of technological learning modalities, or learning technologies,
presents new opportunities for students and faculty to exchange information and ideas in a collaborative learning environment that expands the setting beyond the physical classroom.

Olapiriyakul and Scher (2006), focusing on reduced seat-time and media enhanced teaching, revealed the impact of incorporating technology in hybrid education and its benefits for building community between participants. The authors explained, "the hybrid learning model is dependent upon the use of computers and network technology to support out-of-class instruction" and "also encourages students to participate in class for rich content and discussion" (Olapiriyakul & Scher, 2006, p. 289). Thus, by merging two forms of teaching styles—in-person and online—the hybrid course method enables more opportunities for students to engage in multiple interactions that connect them back to the information and expose them to it more often. Consequently, a more centralized and "strong learning community" (Sullivan & Freishtat, 2013, p. 19) is created in the hybrid setting, and students have a unifying feature embedded in their learning experience that is unique to this emerging model in higher education.

**Online Access**

The hybrid course model’s online platforms and technologies expand the reach of higher education by allowing students to access their course materials outside the traditional campus classroom. Proponents of moving higher education courses online have rallied around this expansive quality to increase the popularity and adoption of the hybrid model setting (Delany, 2004; Lovett, Meyer, & Thille, 2010; Picciano, 2009).
article released in the *New York Times* in 2010 mentioned the additional potential of online education to increase access to higher education for the underprivileged, especially those in community colleges. The author explained, “The online tool . . . can help open up educational pathways to skills, especially for low-income young adults” (Lohr, 2010, p. 2). Similarly, in his research on blended learning, Picciano (2006, 2009) explored the impact of technology use in higher education and how it can aid student access. He explained, “online learning is seen as an important means of access for students who otherwise have difficulty attending traditional face-to-face programs” (Picciano, 2009, p. 9), and “online learning improved access as measured by more new students enrolling in a specific college” (Picciano, 2006, p. 100).

Adding to this perspective on online education and access, Thille (2010), a major proponent of using technology to advance learning, wrote a piece for the White House in which she presented the advantages of incorporating the use of technology in education. While working on the Open Learning Initiative, which implements the use of learning technologies with traditional teaching methods, and conducting studies on the effects, Thille discovered that students in a hybrid setting will actually learn the same amount of material in less than half the time when compared to students in the traditional setting (Thille, 2010).

Thille’s (2010) research also revealed the cost of moving higher education online and thus increasing access. “The advent of the personal computer, the Internet, and the World Wide Web has led to a focus on delivery of traditional materials through these
new channels as a way to address the problem of access and cost” (Thille, 2010, p. 73). The hybrid model uses learning technologies for the purpose of teaching and learning. This could expand access for students with regard to furthering their education and alleviating costs, which could greatly benefit higher education as well. Lovett et al. (2010) hinted at such a potential for the hybrid model. In their article, they revealed how “one of the challenges that academic institutions . . . face . . . and are hoping to solve by using online education is how to provide effective instruction under limited resources” and thus “the more a course is web-based and relies less on an instructor, the more resources are saved” (Lovett et al., 2010, p. 6). Hybrid education—taking the above-mentioned benefits into consideration—could provide students access that is affordable, which would positively impact their student learning experience in higher education.

Challenges of Technological Learning Modalities

While the hybrid course model does have many advantageous qualities for students and their learning experience, there are also some challenges with the technological learning modalities it employs. The challenges are important to analyze when considering the potential impact on student learning outcomes. Most challenges documented include the complications that arise with the use of technologies and any dependencies formed (Jaffé, 2003; Ocak, 2010). The hybrid course model can foster a reliance on technology for students and instructors via the transfer of knowledge and materials, which presents some obstacles when technology does not operate correctly
In fact, such technological difficulties have led to another very critical challenge for instructors of hybrid courses regarding their utilization of technological learning modalities.

The shift from the traditional course setting of only in-person interactions to the integrative hybrid course setting has resulted in the evolution of the instructor role (Ocak, 2010). Traditionally, instructors only needed to consider the implementation of curriculum and the delivery of information or discussions within the physical classroom, but the hybrid model’s unique blended learning environment challenges this operation (Garrison & Kanuka, 2004). Each challenge is further explored in the following sections in order to grasp the potential effects hybrid education has on student learning experiences.

**Technological and Developmental Support**

The unique combination of in-person interactions with online interactions is essentially what leads to a challenge for both students and instructors in the hybrid setting. The learning technologies used to teach and learn can interrupt the processes when they fail to work properly and can even become “disruptive innovation[s] in ways not intended” for instructors (The Economist Intelligence Unit, 2008, p. 4). Many studies pointed to the reality that incorporating such technologies into the learning environment can become counterproductive if instructors lack the ability and knowledge to best utilize features and address technical difficulties in their courses (Brunner, 2006; Garrison & Kanuka, 2004; Olapiriyakul & Scher, 2006; Sullivan & Freishtat, 2013). In his study,
which focused on the instructor perspective of hybrid education, Ocak (2010) discovered that “faculty members must have access to technical and pedagogical support that can motivate them to implement new classroom technologies” (p. 690) or they may not attempt to teach blended courses. Comparably, Garrison and Akyol (2009) asserted that “the lack of support for faculty [is an] important obstacle . . . suppressing the effective application of instructional technology” (p. 22). Consequently, institutions seeking to implement hybrid education at their campus must attend to the technical issues of technological learning modalities because of the effects on all participants and processes.

Addressing the problem of technical issues, however, requires adequate funding, which can then create a cost issue for the development of hybrid education. Repairing learning technologies used in the hybrid setting or training faculty on the appropriate use requires money and this aggravates the issue of developmental support challenges (Olapiyakul & Scher, 2006). Consequently, 70% of universities polled in one study cited cost as the greatest concern with regard to the ability of technology to have a “largely positive impact on their campuses” (The Economist Intelligence Unit, 2008, p. 14). This problem complicates the potential implementation of the hybrid course setting because it can demand funding that many institutions may not have.

Furthermore, within the context of supporting student learning, adequate funding impacts the overall development of hybrid programs. Garrison and Kanuka (2004) insisted “technical resources that are dependable and transparent are required to ensure that the technology can enhance the learning process—rather than obstruct it” and it
requires “management tools in place that have the capability of meeting the learning needs, is up-to-date, and the technological tools are reliable and easy to use” (p. 101). However, since “technology to support learning also requires some amount of money or investment” (Olapiriyakul & Scher, 2006, p. 297), institutions of higher education must properly fund hybrid education. Such challenges stemming from the technological aspect of hybrid education can affect the learning experience of students taking such courses and, therefore, must be taken into account.

**Changing Instructor Roles**

The technological learning modalities incorporated into the hybrid model alter how students learn information—through both online and in-person interactions—and, consequently, the methods instructors employ to deliver course material (Martyn, 2003). Garrison and Akyol (2009) referred to the more traditional instructor role, where lectures and discussions occur only through in-person interactions, as “teacher-centered learning” (p. 22). They relayed that a change was occurring in the learning paradigm of higher education because of the use of learning technologies found within blended learning environments and hybrid education. They expressed that “emerging communication technology capabilities are not congruent with teacher-centered learning environments where the teacher is the main source of knowledge and the learner passively receives information” (p. 22). Such a change occurring in higher education could impact the learning experiences for students in hybrid programs because instructors release materials
and information with greater access online. The learning process is thus also altered along with instructor roles.

Literature on the subject already revealed the potential challenge that such changes to their roles can pose for instructors in hybrid education. “For the instructor who tends to employ the traditional lecture-based pedagogy, the virtual classroom poses an immediate challenge” (Jaffee, 2003, p. 231). Existing studies on hybrid education revealed the challenges for instructors that arise from the innovative learning environment of the hybrid model (Garrison & Akyol, 2009; Ocak, 2010). One study compiled by The Economist Intelligence Unit (2008), found that the faculty role was understood to be evolving to one of a sort of mentor-type learning facilitator. One participant was quoted as saying that the “instructional paradigms will have to shift” because, as it was asserted, “instead of focusing on memorization of material by their students, instructors will focus on the application of knowledge to particular problems” (The Economist Unit, 2008, p. 6). Moving course material online, with increased access for students, necessitates that the instructor facilitate learning in different forms.

Challenges further increase for hybrid course instructors when their roles evolve with their use of technological learning modalities but the institution does not support the needs that arise from such shifts. Ocak (2010) found that technical issues with the learning modalities in hybrid courses not only change faculty roles but also create barriers for the delivery of the course. “The integration of technology into blended teaching requires educators to have some technological expertise” (Ocak, p. 691).
Likewise, Olapiriyakul and Scher (2006) verified the impact of such an expertise, or lack of, on the quality of the course and student learning in their study. They emphasized the importance of the instructor in the effective use of learning technologies within hybrid education.

Since a portion of time is online, instructors should be able to use tools and available resources to develop active and collaborative learning during the online component, which could be done by reformation of some of the content with appropriate use of technology. (Olapiriyakul & Scher, 2006, p. 290)

Instructor roles in hybrid education evolve to incorporate the integration of both in-person and online course interactions but they must also simultaneously develop the appropriate skills to facilitate a beneficial learning experience for students.

**Access to Technology**

An additional challenge that arises with implementing hybrid courses in higher education is the access to technology required from students. A lack of access to technology can severely hinder the student learning experience because hybrid education relies so heavily on interactions and activities performed online (Goode, 2010; Tien & Fu, 2006). In a 2013 article released by the CFHE, some somber realities emerged about online learning and whether it can increase access for students in higher education or not. If the increase of technology use in higher education does not take into consideration students’ access to said technology, then challenges emerge. Posed as the “promise” of higher education, increased access to higher education is—unfortunately, for those with
limited means—mainly linked to access to technology, the Internet, and fast broadband, which forms an online achievement gap between the haves and have-nots (CFHE, 2013). “In fact, for most American students, who are increasingly . . . low-income, and academically less prepared . . . an uncritical rush to ‘online everything’ may, despite the promise, ultimately provide only access to failure” (CFHE, 2013, p. 6).

An unfortunate consequence of the increased use of technology and the implementation of the hybrid model in higher education is the separating effect this can have between students with access to technology and students without. This separation has become known as the digital divide (Block, 2010; Choemprayong, 2006; Gilliën & Suárez, 2005; Tien & Fu, 2006; Peña-López, 2010). This could pose a major issue for higher education as the use of technology increases in and outside the college campus. In her study, Goode (2010) merged the notion of a digital divide with the concept of an access divide, because it limits the attainment of higher education for students who lack the required resources. Furthermore, there is a racial component to this divide, in which more and more students of color are on the disadvantaged side of it (Fox & Livingston, 2007). “Not only does technology integration across academic disciplines vary according to socioeconomic status, but research examining which students encounter rich computing learning experiences also exposes discrepancies in access along lines of race” (Goode, 2010, p. 499).

Similarly, authors Karen Mossberger, Caroline J. Tolbert, and Mary Stansbury (2003) unveiled a significant disparity between racial categories and access to technology
and its benefits. They explained, "The striking result is that all three studies based on different survey data and statistical methods report persistent gaps in access to the Internet based on race, ethnicity, education, and income" (Mossberger et al., 2003, p. 35). Additionally, in their book, Virtual Inequality: Beyond the Digital Divide (2003), these authors presented data that exposed the impact of the digital divide on society and the manner in which this phenomenon further creates a divide in skill sets among the population. “For the most part, the skills divide replicates the access divide – those who lack skills are older, less-educated, poor, African-American, and Latino” (p. 55). These skills, the authors highlighted, are essential for the efficient use of technology, especially when it is being used to educate. The authors used the term “information literacy” (p. 54) to identify the skills necessary to garner a beneficial use from technologies.

Mark Warshauer (2003), in his book Technology and Social Inclusion, cited a similar analysis on information literacy. He emphasized the idea that this notion has arisen because of the importance of technology in society today and the dependencies many now have in various facets of day-to-day use. Unfortunately, with a skill set being connected to technology use, and the digital divide, an unequal distribution and social stratification in society has begun to form in relation to access (Warshauer, 2003). The author demonstrated how access to technology and information literacy are closely linked. “Information literacies involve both computer-specific knowledge (e.g., mastery of browsing software and search tools) and broader critical literacy skills (e.g., analysis and evaluation of information sources” (p. 113). Therefore, if access to technology has
created a digital divide, wherein those with no access are hindered, then a similar divide emerges from the skill sets acquired from the use of the technologies. A divide is formed between those that do and do not have information literacy.

In another study conducted by Ching, Basham, and Jang (2005), the repercussions of the digital divide are also investigated, but from a different perspective. The authors examined issues that might precede college entrance and how these issues may exasperate the digital divide for young adults after they enter higher education. In fact, Ching et al. (2005) found that with regard to equity and access, exposure to technology in K-12 and at home was essential to preparing students for technology use in higher education. If a student lacks technological skills to operate modalities in the hybrid setting, then some students’ access to a positive learning experience is only further limited. “Concerns about the legacy of the digital divide seem to hold true in our initial findings: . . . family income, and early home computer access were significant demographic predictors” (Ching et al., 2005, p. 404). However, if, as Ching et al. (2005) pointed out, “African-Americans and Latinos in particular often show lower rates of technology-related activities” (p. 405), then the divide continues to be racially marked. Such stunning revelations are relevant to the higher education community if quality education and quality learning experiences are to be secured for all students, especially as a shift toward hybrid education and increased technology use continues.
Summary

Hybrid education varies from the traditional course setting because it incorporates online interactions with those performed in person. Students learn not only through the discussions inside the physical classroom but also through online lectures and activities. The emerging technological learning modalities further facilitate such interactions and allow the learning process to relocate interchangeably between online and face-to-face settings. Such educational technologies thus begin to shape, in evolving forms, the learning experience of students in hybrid education. The growing popularity of hybrid education has resulted in a growing interest on the impact of this learning model on new learning processes occurring in higher education. The body of literature presented in this chapter communicated an ongoing shift in the how students receive information and in how instructors deliver course content. Within the research on the hybrid model’s emergence into higher education is the evidence of both benefits and challenges now impacting and shaping student learning experiences. However, further research is needed to specifically assess the effects of learning through technological learning modalities, and implications on student learning experiences within the hybrid model setting.
Chapter 3

METHODOLOGY

Introduction

The purpose of this study was to investigate the learning experiences of graduate students enrolled in a hybrid program wherein instruction was delivered through the medium of technological learning modalities, also called learning technologies, in combination with face-to-face instruction. A quantitative design was used to conduct an online survey to answer the following research questions:

1. Which learning technologies are most helpful and of efficient use in delivering instruction to students in a hybrid program?
2. What features of the learning technologies have been most obstructive to student learning?
3. What features of the hybrid program have been beneficial to student learning experiences?
4. How does the instructor facilitate the learning process within the hybrid course model?

This chapter gives an in-depth outline of the methodology and design in the construction, distribution, and collection methods of the research for this study.
Research Design and Rationale

A quantitative method of conducting an online survey on graduate students enrolled in an Educational Leadership and Policy Studies (EDLP) MA program was used. Through the use of the online survey generator SurveyMonkey.com, student data were collected and organized. This method was best suited to collect the necessary data on graduate students within a hybrid program. Consequently, the online survey was the single method used for the research conducted in this study. The method and design of the online survey allowed for the appropriate compilation and analysis of student responses, which were formulated to answer the research questions investigating student learning experiences in the EDLP hybrid master's program. The survey contained only closed-ended questions for the purpose of the investigation. In total, the online survey consisted of 35 questions.

Furthermore, graduate students in the EDLP MA program at a Northern California public state university completed all surveys. The EDLP program was selected because of its hybrid component. All graduate students enrolled in this hybrid program received instruction through the combination of in-person and online methods. This population has had an abundant amount of interactions with technological learning modalities, such as Blackboard and online lectures.

Survey: Description of Instrument

For the purpose of collecting data on the effects of instruction with learning technologies on student learning, the online survey method was best suited to gather the
desired information in the largest quantity. A survey allowed for the exploration and investigation of the learning experiences of all the graduate students in the program. A different method would not allow for such a mass collection. The survey contained 35 closed-ended questions meant to answer the four research questions and investigate the relationship between hybrid education and student learning experiences (see Appendix A). Survey questions gathered student demographic information based only on gender and age. Additional data were collected to explore the perceived effects of technologies on learning experiences as they were combined with face-to-face instruction. However, questions primarily dealt with the benefits and challenges of learning through the use of technological learning modalities in a graduate hybrid program. To accomplish the data collection goals, the survey questions were created to specifically yield the most insight into how students must receive and learn information through the medium of learning technologies. Ultimately, the survey was developed and distributed to all potential participants through SurveyMonkey.com.

Participants

All participants were gathered from a pre-selected group of full-time graduate students enrolled in a hybrid MA program at a Northern California public state university. Participants were collected through the cooperation of the department of EDLP that provided email information for its graduate students. After receiving email information for the selected population, each graduate student was solicited with an invitation email asking for their consent and participation in the study (see Appendix B).
The invitation relayed the study, its intent, and its importance in the advancement of research on hybrid education. The email directed each participant to the online survey via a link to SurveyMonkey.com.

**Collection of Data**

Once the participants accepted the invitation, sent on March 18, 2015, they were directed to Survey Monkey to complete and submit the online survey. Taking into consideration the population’s potential time constraints due to work and school commitments, the survey was designed to take no longer than 20 minutes to complete. However, it was discovered that the link to the online survey on the first email was not directing potential participants correctly. A second email, addressing this issue, was sent out on April 1, 2015. All graduate students who received this email were asked to copy the link directly into their browser if the problem persisted. The online survey was closed on April 4, 2015 and all data were compiled and returned via Survey Monkey for further analysis. All quantitative categories were aligned and organized to answer the research questions and further investigate the learning experiences of graduate students in a hybrid setting. The 35 questions were organized into the following categories: demographics, hybrid education, learning technologies, learning needs, learning experiences, hybrid course lecturers, the hybrid course model, and overall satisfaction ratings. All findings are discussed in Chapter 4.
Ethical Considerations

To conduct research on the learning experiences of graduate students enrolled in a MA hybrid program, certain considerations were necessary prior to initiating the survey. All measures were critical to ensure that adequate privacy and secure accommodations were provided for the study’s participants. To begin, supervisor permission from the EDLP department was attained before any further steps were taken in conducting the survey. In addition, institutional permission was required and also secured through the process of the IRB approval, which necessitated NIH training and certification on protecting human research subjects.

As previously mentioned, all participants were solicited with a consent and invitation letter sent via email before participating in the survey. Afterward, consenting participants were instructed to go to SurveyMonkey.com, through a link in the email, and complete the survey anonymously. No identifiers were added to the survey and all responses remained anonymous throughout the study. Additionally, all participation was voluntary and was communicated as so in the invitation email. There was no incentive offered to the graduate student who knew that he or she could abstain from completing the survey at any time. Each survey was completed by a participant willing to assist in furthering the investigation of both the impact of the hybrid model on student learning experiences and the effects of online instruction with the use of learning technologies in combination with in-person (face-to-face) interactions.
Chapter 4

DATA AND ANALYSIS

Introduction

The purpose of this study was to investigate the participation of students in a graduate hybrid program and the effects of the hybrid model on their learning experience. The researcher sought to better understand the impact on student learning due to the incorporation of both online and in-person interactions. Students in hybrid education are taught through a combination of both platforms and settings, which differs from the traditional method located solely on a campus. Therefore, to investigate such an enhanced learning experience, a quantitative approach was taken to collect student responses, via an online survey, which were meant to answer the following research questions:

1. Which learning technologies are most helpful and of efficient use in delivering instruction to students in a hybrid program?

2. What features of the learning technologies have been most obstructive to student learning?

3. What features of the hybrid program have been beneficial to student learning experiences?

4. How does the instructor facilitate the learning process within the hybrid course model?
This chapter presents the analyzed graduate student responses, grouped into patterns that emerged from the data. These patterns then serve to answer the research questions and help investigate, specific to the EDLP hybrid master's program, the following subtopics: demographics, hybrid education, learning technologies, learning needs, learning experiences, hybrid course instructors, and the hybrid course model.

**Demographics**

**Sample Population**

The online survey was sent to graduate students enrolled full-time in an EDLP master's program at a Northern California public university. Students from the 2012, 2013, and 2014 cohorts received the invitation email to participate in this study on hybrid education and student learning experiences. Out of 47 potential participants, 19 completed the online survey. This indicates a response rate of 40%. The survey contained only four questions pertaining to student demographics, and most of these were meant to gage the amount of time the graduate student had spent in the hybrid program. Table 1, however, displays the range of ages for the survey participants, as organized into decades to demonstrate the various generations represented in the findings.
Table 1

Ages of Sample Population

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Number of Participants</th>
<th>% Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-29</td>
<td>10</td>
<td>52.63</td>
</tr>
<tr>
<td>30-39</td>
<td>7</td>
<td>36.84</td>
</tr>
<tr>
<td>40-49</td>
<td>2</td>
<td>10.53</td>
</tr>
<tr>
<td>50-beyond</td>
<td>0</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Table 1 shows that most participants were between the ages of 21 and 29. The next largest number of participants, with 36.84%, were in the age range of 30-39. Therefore, based on these demographics it can be asserted that most of the graduate students within this particular hybrid program are part of the millennial generation. The smallest percentage yielded from graduate students was within the age range of 40-49 years of age. There were no survey participants in the study from the age range of 50 and beyond.

In terms of gender, out of the 19 participants, eight were male and 11 were female. These numbers do not indicate a significant unequal gender distribution within the sample. However, a little more than half of participants, 57.89% out of the total survey sample population, were female graduate students from the EDLP hybrid program.
Furthermore, survey Question 3 pertained to the number of semesters that the student had been enrolled full-time in the hybrid program. This particular graduate hybrid program operated on a semester schedule. Of the 19 survey participants, none had been enrolled only one semester. Five participants (26.32%) had been enrolled two semesters and four participants (21.05%) had been enrolled three semesters. The majority of participants, eight out of the 19, 42.11%, had been enrolled in the program four semesters. Only two participants, or 10.53%, had been enrolled in the EDLP master’s program five or more semesters. The results indicate that most of the participants, having been enrolled in the program for four semesters, are from the Fall 2013 cohort.

The students were asked how many years were in between the last degree they had attained and their enrollment in the current program. This question indicates how much time was between their last degree, or time in school, and their involvement in the hybrid program. Table 2 shows the results for Question 4. As indicated, the majority of student participants had three years or more in between the last degree they attained and their enrollment in the hybrid master’s program. Out of the 19 participants in the study, nine (47.37%) had three or more years between their last degree and enrollment in the EDLP program. Less than half the graduate students in the hybrid program who participated in the survey had none or just one year in between.
Table 2

Years Between Last Degree Attained and Enrollment in Current Hybrid Program

<table>
<thead>
<tr>
<th>Number of Years</th>
<th>Number of Participants</th>
<th>% Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No years</td>
<td>3</td>
<td>15.79</td>
</tr>
<tr>
<td>1 year</td>
<td>3</td>
<td>15.79</td>
</tr>
<tr>
<td>2 years</td>
<td>4</td>
<td>21.05</td>
</tr>
<tr>
<td>3 or more years</td>
<td>9</td>
<td>47.37</td>
</tr>
</tbody>
</table>

**Hybrid Education**

In the online survey, Questions 5-9 asked students about the hybrid element of the EDLP master’s program. Question 5 asked the student participants whether they knew or not that the program was hybrid before they enrolled. Out of the 19 survey takers, a majority of students (13, 68.42%) knew when they applied that it would be a hybrid graduate program. The remaining six (31.58%) answered “no.” Furthermore, with regard to Question 6, 68.42% of the graduate students in the survey did not choose the EDLP master’s program because it was hybrid. Only 31.58% of the participants, 6 of the 19, indicated yes, they chose the program because it was hybrid. In addition to these findings, Question 8 showed that a little more than half of the survey participants had not taken a hybrid course prior to enrolling in their current hybrid program. At 52.63%, 10 out of 19 participants had not taken hybrid courses before but 47.37% had. However, results for Question 9 suggest otherwise.
Table 3 displays the number of hybrid courses the graduate students in the study had taken prior to enrolling in the EDLP hybrid program. One participant skipped this question in the online survey and results demonstrate responses from 18 of the 19 study participants. As demonstrated in Table 3, the majority of students had taken a hybrid course prior to enrolling in their current hybrid program. A total of five survey respondents revealed that they took three or more hybrid courses prior to enrollment in the EDLP hybrid program. The results also show that a total of 11 of the 18 survey participants, 61.12%, indicated they had taken at least one prior hybrid course. Additionally, only seven of the 18 graduate students, 38.89%, answered that they had taken zero hybrid courses prior to their enrollment in the hybrid program. Therefore, the results for Question 9 reveal that the majority of students had taken a hybrid course prior to enrolling in the current hybrid master’s program. Yet, in Question 8, 10 of the 19 participants (52.63%) had responded that they had not taken a hybrid course before their current program.

<table>
<thead>
<tr>
<th>Number of Courses</th>
<th>Number of Participants</th>
<th>% Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>7</td>
<td>38.89</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>16.67</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>16.67</td>
</tr>
<tr>
<td>3 or more</td>
<td>5</td>
<td>27.78</td>
</tr>
</tbody>
</table>
Learning Technologies

The researcher also wanted to better understand the effect on student learning from the learning technologies incorporated into the hybrid model and Questions 10-14 were posed in such a way as to investigate the participants’ sentiments. The questions regarding the use of learning technologies in the EDLP hybrid master’s program were general but also asked specifically whether such modalities could be a benefit or an obstruction to the learning process. The following survey data demonstrate the potential of the learning technologies, as used within the EDLP hybrid master’s program at a Northern California public university.

Question 10 asked survey participants to describe their level of experience using learning technologies such as Blackboard prior to enrolling in their current program. The results varied across the board. However, a little more than half, 52.63% or 10, of the total 19 survey takers, chose “moderate level” to describe their experience using learning technologies prior to their enrollment in the EDLP hybrid master’s program. The second largest percentage of 26.32%, 5 of 19 participants, indicated “high level of experience” prior to enrollment in the hybrid program. Next, 15.79%, 3 of the 19 participants, selected “no experience” with prior learning technologies. Lastly, with the smallest percentage of 5.26%, only one of the 19 participants described having “little experience” using learning technologies prior to enrollment in the master’s hybrid program.

Interestingly, most survey participants, the majority of which enrolled in a program that is hybrid, did not consider their level of experience using learning technologies, such as
Blackboard, as being high before their time in the EDLP hybrid master’s program, but instead described their experience as moderate.

As a follow-up, Question 11 had the survey participants describe their current level of experience using computers. These act as crucial learning technologies within the hybrid model. Curiously, out of four potential answer choices, the survey responses only selected two. From the total 19 graduate students in the study, 15 described their current level of experience as being “high.” Thus, a staggering 78.95% selected the option of currently having a “high level of experience” using a computer. In turn, only 4 of the 19 survey participants (21.05%) indicated having a “moderate level” of current experience using computers. No survey takers selected the last two options, which were “little experience” and “no experience.”

Efficient Technologies

In an attempt to reveal the most helpful features of the learning technologies utilized within the EDLP hybrid master’s program, survey Question 13 asked participants how comfortable they felt using learning technologies to successfully pass their hybrid courses. The researcher specified the result of passing hybrid courses in the question to draw conclusions on what produces positive learning outcomes. None of the 19 participants indicated that they were “not comfortable.” A small 10.53%, 2 of 19 survey takers, elected the “very comfortable” option to describe how they felt using learning technologies in the hybrid program to successfully pass courses. A total of six survey participants described being “somewhat comfortable” using the learning technologies.
Ultimately, 57.89%, more than half of the graduate students, considered themselves as comfortable using the learning technologies to successfully pass courses in the EDLP hybrid master's program. Combining the two selections that indicated a comfort level using learning technologies—"comfortable" and "very comfortable"—a total of 68.42% of the graduate students in the study responded as having a positive learning experience.

Furthermore, the study investigated how the graduate students in the EDLP hybrid master's program felt about the learning technologies. Question 14 thus asked the survey participants how they would overall describe the learning technologies as they are used in combination with face-to-face interactions in their hybrid courses. None of the survey participants chose to describe the learning technologies as "obstructive." The vast majority of participants, a total of 57.89%, or 11 of 19, overall described the learning technologies used in combination with face-to-face interactions as "convenient." This choice selection alone implies that more than half the survey participants found the learning technologies to be beneficial when used in combination with in-person interactions in the EDLP master's hybrid program located at the Northern California public university. In support of this positive sentiment, 3 of 19 participants (15.79%) found the learning technologies to be "helpful" and two of the survey takers (10.53%) chose the description of "additional support." The remaining three survey participants, however, did select "confusing" to describe the learning technologies when used in combination with face-to-face interactions in the EDLP hybrid master's program. This is a small percentage (15.79%) showing a negative response to this question.
Obstructive Use

In spite of the results for Question 14, when Question 12 asked students to describe their ability to learn through the use of learning technologies in their hybrid courses, the responses indicated less positive sentiments. It was crucial to the researcher, to investigate the entire scope of the learning experience, to understand the graduate students' ability to learn when having to use learning technologies. Table 4 displays the results for Question 12.

Table 4

Learning Through Learning Technologies Using Face-to-Face and Online Interactions

<table>
<thead>
<tr>
<th>Description Responses</th>
<th>Number of Participants</th>
<th>% Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not well at all</td>
<td>1</td>
<td>5.26</td>
</tr>
<tr>
<td>Moderately well</td>
<td>11</td>
<td>57.89</td>
</tr>
<tr>
<td>Well</td>
<td>6</td>
<td>31.58</td>
</tr>
<tr>
<td>Very well</td>
<td>1</td>
<td>5.26</td>
</tr>
</tbody>
</table>

As indicated in Table 4, with a majority of 57.89%, more than half the 19 survey participants described their ability to learn using learning technologies, within the hybrid model setting, as “moderately well.” With regard to learning outcomes, the responses of more than half the survey participants for this question do not relay a strong sense of positive learning experience having occurred. Only one survey participant of 19 (5.26%) indicated that their ability to learn through the use of learning technologies in their hybrid
courses was “very well.” These findings are startling considering that students in the hybrid program must rely heavily on learning technologies in combination with face-to-face interactions to learn course information.

Question 21 sheds some light on what is potentially obstructive about the learning technologies used in the EDLP hybrid master’s program at a Northern California public university. Question 21 asked survey participants to indicate what was the most challenging component about the hybrid course for their overall learning experience. Participants were asked to rate five potentially challenging features of the learning technologies within the EDLP hybrid master’s program. Each potential obstacle was given a rating of 1-5, with a 1 rating signifying the most challenging and a 5 rating signifying the least challenging. Table 5 illustrates the ratings that each of the five potential challenge responses received from the 19 survey participants. Each potential challenge was rated from 1-5 to demonstrate how each posed a potential obstacle for student learning experiences located within the EDLP hybrid master’s program.
Table 5

Most Challenging Hybrid Course Components

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Number (%) of Participants that gave a 1-2-3-4-5 Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1= most challenging &amp; 5= least challenging)</td>
</tr>
<tr>
<td>Figuring out how to use the learning technology</td>
<td>1 (5.26%) - 3 (15.79%) - 2 (10.53%) - 6 (31.58%) - 7</td>
</tr>
<tr>
<td>Reduced in-person lecture time with instructor</td>
<td>7 (36.84%) - 4 (21.05%) - 4 (21.05%) - 3 (15.79%) - 1</td>
</tr>
<tr>
<td>Working with groups</td>
<td>3 (15.79%) - 2 (10.53%) - 7 (36.84%) - 3 (15.79%) - 4</td>
</tr>
<tr>
<td></td>
<td>(21.05%)</td>
</tr>
<tr>
<td>Less in-class face-to-face time</td>
<td>2 (10.53%) - 8 (42.11%) - 3 (15.79%) - 4 (21.05%) - 2</td>
</tr>
<tr>
<td></td>
<td>(10.53%)</td>
</tr>
<tr>
<td>Technological problems with learning technologies</td>
<td>6 (31.58%) - 2 (10.53%) - 3 (15.79%) - 3 (15.79%) - 5</td>
</tr>
<tr>
<td></td>
<td>(26.32%)</td>
</tr>
</tbody>
</table>

As displayed in Table 5, the 19 survey participants gave the highest challenge rating to “reduced in-person lecture time with instructor.” This challenge received the highest amount for most challenging ratings with 7 of 19 (36.84%) survey participants giving it a 1. The next challenge to receive the highest amount of most challenging ratings was “technological problems with learning technologies.” This challenge received 6 of 19 (31.58%) responses of most challenging. The “working with groups”
challenge garnered the third highest amount of most challenging ratings at 15.79% of survey participants giving it a 1. The challenge of “less in class face-to-face time” and “figuring out how to use the learning technology” received the least amount of 1 ratings with smaller amounts of 10.53% and 5.26%.

Curiously, the challenge of “technological problems with learning modalities” received an almost equal amount of ratings for both most challenging and least challenging. This challenge, as previously stated, received six (31.58%) most challenging ratings, but also received five (26.32%) participant ratings for least challenging. Thus, according to the data, almost the same number of survey participants in the EDLP master’s program considered “technological problems with learning modalities” either most challenging or least challenging. The remaining eight survey participants gave “technological problems with learning modalities” a rating between 2 and 4. Also, while the challenge of “reduced in-person lecture time with instructor” did receive the highest amount of 1 ratings, it also received the least amount of 5 ratings. Only 1 of the 19 survey participants (5.26%) gave it a rating of 5. Ultimately, the challenge that appears to be creating the least amount of difficulties for the EDLP hybrid master program is “figuring out how to use the learning technology.” This challenge was given a 1 rating by only one of the 19 survey respondents (5.25%) and it received a 5 rating by seven (36.87%) survey participants.
Learning Needs

Questions 15-18 and 28 were meant to obtain information regarding the learning needs of the graduate students in the EDLP hybrid master’s program. Specifically, the researcher wanted to investigate the learning styles of the survey participants and explore which hybrid components best suited those learning preferences, especially to yield positive learning outcomes in the EDLP hybrid master’s program. Question 15 had survey participants identify their learning styles. This question asked the 19 graduate students to rate three learning styles according to how they best learned information. The three learning styles included visually, auditory, and kinesthetically. The researcher allowed students to rate all learning styles to imply that students learn in more than one way. The 19 survey participants had to rate each learning style with a rating of 1 (best), 2 (so-so), or 3 (least). The survey participants could only rate each learning style once. Results indicated that most of the 19 survey participants felt their best learning style was “visually.” Eight of the 19 (44.44%) survey respondents rated “visually” with a 1 rating and 10 respondents (55.55%) gave it a 2 rating. The “auditory” learning style received the most 3 (least) ratings. Out of the 19 participants, 10 (55.56%) gave the “auditory” learning style a 3 rating. This indicates that within the group of 19 survey participants, most do not learn information best by hearing it. Additionally, three survey participants gave the “auditory” learning style a 2 rating and the remaining five gave it a 1 rating.

Question 28 asked the 19 survey participants to state whether they preferred the traditional or hybrid course model to satisfy their learning needs and pass a class. The
researcher specified, in this question, the ability to pass the class. This was done to, again, indicate positive learning outcomes within the learning experience of the EDLP hybrid master program at the Northern California public university. Surprisingly, a staggering 73.68% of survey participants, 14 out of 19, selected the traditional model as better satisfying their learning needs to pass a class. These results are interesting considering the fact that the survey participants are enrolled in the EDLP master's program, which operates using the hybrid model.

In relation to these sentiments, Question 16 gave further insight as to why the survey participants preferred the traditional course model to the hybrid course model to satisfy their learning needs. This question asked the 19 survey participants to describe how well a traditional course met their learning needs. They had the option of rating the traditional course as meeting their learning needs “very well,” “well,” “moderately well,” or “not well at all.” Again, the majority of the survey responders indicated a positive sentiment toward the traditional course. Six of the 19 survey respondents (31.58%) replied that a traditional course meets their learning needs “very well” and nine survey participants (47.37%) selected the “well” rating. Only 3 of the 19 survey participants selected the “moderately well” rating and one (5.26%) chose the “not well at all” rating.

In contrast to the previous question, when graduate students from the EDLP hybrid master’s program were asked to rate how a hybrid course met their learning needs, the responses indicated slightly less positive sentiments. Surprisingly, more than half the survey participants (57.89%, 11), selected the “moderately well” rating to describe how a
hybrid course met their learning needs. The remaining seven survey participants (36.38%) selected the “well” rating and only one participant (5.25%) chose the “very well” rating. Therefore, unlike the responses for the traditional course in Question 16, fewer of the 19 survey participants elected the “well” or “very well” rating to describe how the hybrid course met their learning needs. Thus, less positive sentiments are evident for the hybrid course when compared to those for the traditional course.

Lastly, Question 18 sought to investigate the impact of learning technologies used within the hybrid courses of the EDLP hybrid master’s program at the Northern California public university. This question asked survey participants to describe how well the use of learning technologies in a hybrid course met their learning needs. Once again, the 19 graduate students were given the option to choose from the descriptions of “very well,” “well,” “moderately well,” and “not well at all.” Interestingly, the results for this question revealed more favorable opinions regarding the learning technologies in comparison to those for the hybrid course model in the previous question. Of the 19 survey participants, nine (47.37%) elected the “well” description rating and two (10.53%) chose the “very well” rating. The results for these two ratings combined have garnered a higher percentage of positive descriptions for the question on how learning technologies meet student learning needs in comparison to the percentages for the positive descriptions for the same question on the hybrid course. Additionally, 7 of 19 survey participants (36.84%) gave this question a “moderately well” rating and only one participant (5.26%) chose the “not well at all” rating. As indicated by these results, the 19 survey participants
from the EDLP hybrid master’s program communicated a positive sentiment toward the learning technologies used in their hybrid program.

**Hybrid Course Instructors**

**Learning Facilitators**

In this study on hybrid education and student learning experiences, the researcher wanted to focus a part of the investigation on the importance of the instructor’s role during the student’s learning process. To accomplish this, questions were included in the survey to specifically target student perceptions on how the instructors facilitate learning and the impact on their overall learning experience within a hybrid setting.

Table 6 presents the survey responses for Question 22. This question asked the 19 respondents to indicate how important the interaction between them and their course instructor was in the process of learning any necessary information and passing the hybrid course. As previously done, Question 22 contained the specification of “passing the hybrid course” to imply a positive learning outcome from the learning experience. Survey participants were asked to rate online and face-to-face interactions separately. As Table 6 shows, 52.63% of survey participants rated the instructor’s role in the process of learning and passing the hybrid course as “somewhat important” for online interactions and 63.16% rated it as “very important” for face-to-face interactions. Clearly, the data from this study demonstrates that the 19 graduate students from the EDLP hybrid master’s program find interactions with the course instructor very important during the
face-to-face time spent with them. This may stem from the fact that the hybrid course model splits a student’s interactions with instructors between in-person and online time. Compared to the traditional course model, students in the hybrid model spend less in-person time with their instructors. Furthermore, interactions may not be as crucial for the graduate students during online interaction because the learning technologies heavily facilitate the learning process.

Table 6

Importance of Instructor Interactions to Learn Necessary Information and Pass Hybrid Course

<table>
<thead>
<tr>
<th>Interaction Setting</th>
<th>Rating</th>
<th>Number of Participants</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online</td>
<td>Not Important</td>
<td>1</td>
<td>5.26</td>
</tr>
<tr>
<td></td>
<td>Somewhat</td>
<td>10</td>
<td>52.63</td>
</tr>
<tr>
<td></td>
<td>Important</td>
<td>3</td>
<td>15.79</td>
</tr>
<tr>
<td></td>
<td>Important</td>
<td>5</td>
<td>26.32</td>
</tr>
<tr>
<td>Face-to-face</td>
<td>Not Important</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Somewhat</td>
<td>3</td>
<td>15.79</td>
</tr>
<tr>
<td></td>
<td>Important</td>
<td>4</td>
<td>21.05</td>
</tr>
<tr>
<td></td>
<td>Very Important</td>
<td>12</td>
<td>63.16</td>
</tr>
</tbody>
</table>
Furthermore, still investigating the instructor's role and learning technologies, Question 25 asked the 19 survey participants from the EDLP hybrid master's program to rate how much the instructor's ability to operate the learning technologies affected their overall learning experience in the hybrid course. The survey participants were given the rating choices of “not at all,” “somewhat,” “a lot,” and “completely.” Ten of 19 survey participants (52.63%), a little more than half, responded that this relationship affected their overall learning experience “a lot.” Then 4 of the 19 (21.05%) respondents selected “completely.” The remaining three survey participants (15.79%) selected “somewhat” and two participants (10.53%) replied that it was “not at all” important. These figures demonstrate that within the EDLP hybrid master’s program at the Northern California public institution, the 19 survey participants considered the instructor’s use of the learning technologies vital to the outcome of their learning experience.

This particular study found that the instructor’s ability to operate the learning technologies affects the overall learning experiences located in the EDLP hybrid master’s program. Of this study’s survey participants, 52.63% said it affected their learning experiences “a lot.” The findings clearly communicate the importance of the instructor’s role within hybrid courses and support similar findings from previous studies. Survey responses further indicated the need for instructors to facilitate the learning process in consideration of reduced in-person interactions with students. Definitively, data on the impact of the instructor’s role within this hybrid model setting communicates its potential to either benefit or challenge student learning experiences.
Hybrid Course Model

Questions for the online survey were also designed to address the broader topic of the hybrid course model. The 19 EDLP hybrid master’s program survey participants all had at least one full semester of experience within hybrid education and many had more. Their responses gave insight into student learning experiences within the hybrid model as well as related to the potential impact from learning technologies used in combination with in-person interactions. Questions 26, 27, 29, 30, and 35 each asked questions that rendered statistical interpretations for student learning experiences and the hybrid model.

Question 26 prompted the survey participants to describe how frequently the hybrid model allowed them to collaborate with other peers in the course compared to the traditional course model. It was important to the researcher to make the comparison between the hybrid setting and the traditional setting to identify whether there was an enhanced learning process occurring with the hybrid model. The 19 survey respondents had the option to describe the frequency of peer-to-peer collaboration in a hybrid course as “more frequently,” “frequently,” “somewhat frequently,” or “not frequently at all.” A majority of the 19 survey participants (47.37%) replied that, compared to the traditional course model, they collaborated with peers in the hybrid course model “somewhat frequently.” These results were somewhat surprising considering the hybrid model incorporates more opportunity for collaborative work and peer-to-peer interactions. Furthermore, 26.32% of survey participants described the frequency of the hybrid model
allowing peer collaborations as “frequently,” 15.79% selected “not frequently at all,” and only 10.53% chose “very frequently.”

In turn, Question 27 asked survey participants how they would describe their current ability to learn all necessary information required to pass the hybrid courses while receiving both online and face-to-face instruction. As previously mentioned, results for Question 3 demonstrated that all 19 survey participants had been enrolled at least two semesters in the EDLP hybrid master’s program. Therefore, the survey respondents’ selections for Question 27 reflected about a year’s experience within hybrid education. Twelve of the 19 survey participants (63.16%) described their current ability to learn all necessary information required to pass the hybrid course while receiving both online and face-to-face instruction as “good.” None of the survey participants selected the “poor” description. However, five survey participants, or 26.36%, chose “average” and two (10.53%) chose the “excellent” description. Thus, the very design of the hybrid model appears to be a beneficial feature to student learning experiences inside the EDLP master’s program in this study. The incorporation of both online and in-person formats seemed to have assisted students in learning the information being delivered. Almost two thirds of survey participants (63.16%)—a large portion of the study’s total respondents—described their ability to successfully learn through the hybrid model’s combined formats as “good.” These results, which speak favorably about combined online and face-to-face interactions, could persuade those within higher education to consider the adoption of the hybrid model.
To assess how the hybrid model impacted the learning experience of the graduate students within the EDLP hybrid master’s program, the researcher asked survey participants if they would enroll in another hybrid program after completing their current one. An overwhelming majority of 15 of the 19 survey respondents answered “yes.” This was a total of 78.95%. Only four participants replied “no,” they would not enroll in another hybrid program after completion of their current one. This, however, was a small percentage of participants (21.05%) communicating that they would not continue education set within the hybrid model setting. These numbers are very important when considering student learning outcomes inside hybrid education because the responses give insight into the learning experiences occurring within this setting.

**Learning Experiences**

In fact, to specifically target the overall learning experiences set within the EDLP hybrid master’s program at the Northern California public university, the survey was created to yield findings on this topic. Questions were also meant to highlight the beneficial features of the hybrid model for student learning experiences and outcomes located within the EDLP hybrid master’s program. For example, Questions 32-34 asked survey participants to rate various features of the hybrid courses and the impact on their learning experiences.

Question 32 asked survey participants to state whether or not they agreed that the overall leaning experience was effective in the hybrid courses taken thus far. Twelve of
the 19 survey respondents (63.16%) replied that they did “agree.” One survey participant (5.26%) selected “strongly agree” indicating that the overall learning experience was effective. These two results combined show a total of 68.42% of survey participants expressed a positive sentiment toward the learning experience occurring within the EDLP hybrid master’s program. No survey participants responded “strongly disagree” and the remaining six respondents (31.58%) disagreed that the overall learning experience was effective in the hybrid courses taken thus far.

Similarly, Question 33 pertained to the issue of effectiveness. This question asked survey respondents to “strongly agree,” “agree,” “disagree,” or “strongly disagree” with the following statement: the learning technologies used in the hybrid course have been effective for an overall positive learning experience. No participants answered “strongly disagree.” Five of the 19 survey participants (26.32%) disagreed with the statement. However, a majority of survey participants held more favorable considerations for the learning technologies and overall positive learning experiences. Thirteen of 19 respondents (68.42%) agreed with the statement and one participant (5.25%) did “strongly agree” with it. These results include a combined total of 73.67% participants.

Ultimately, when asked to rate the overall learning experience while in their current hybrid program, an overwhelming number of the 19 survey participants from the EDLP hybrid master’s program gave responses that indicated an approving opinion. The 19 survey participants were given the option of responding with a “positive” or
“negative” rating. Fifteen survey participants (78.95%) rated the overall learning experience in their current hybrid program as “positive.” That is a significant percentage of the total respondents who considered their learning experience positively. Moreover, 68.42% of respondents felt comfortable using learning technologies in their hybrid program to successfully pass a course. These findings are important when considering the association between the hybrid model’s learning technologies and student learning experiences. In a hybrid course, a majority of the information is maintained and transferred electronically, so operation of the technologies is critical for accessing this knowledge. Much of the appeal of hybrid education has been the flexibility that learning technologies offer students. In fact, 57.89% of the survey participants described learning technologies in the EDLP hybrid master’s program as “convenient.” The draw to the hybrid model, therefore, seems to primarily be the expansive potential of learning technologies to move information more freely and the flexible learning setting offered to those in pursuit of higher education.

**Beneficial Features**

It was important for the researcher to discover, through this study, which features of the EDLP master’s hybrid program were beneficial to the graduate students for their overall learning experience. Therefore, certain questions were allocated within the online survey to draw out these beneficial features of the hybrid model. In the beginning of the online survey, participants were asked in Question 7 if they chose a hybrid program because of a perceived flexibility with schedules. Twelve of 19 (63.16%) survey
respondents said “yes” and seven respondents (36.84%) replied “no.” Clearly, flexibility is one feature that is appealing about and potentially beneficial to the unique format of the hybrid model, which combines online with in-person interactions.

Schedule flexibility, as indicated in Table 7, was one of the potential beneficial features the survey participants were asked to rate. Specifically, Question 20 asked survey respondents to rate how beneficial each of the course components (see Table 7) were with regard to their learning experience. As in Question 21, the 19 survey respondents used a 1-5 rating system for each benefit listed. The rating of 1 indicated the “most beneficial” and the rating of 5 signified the “least beneficial.” The first three beneficial hybrid components listed in Table 7 received ratings from only 17 of the total 19 survey participants. This indicates that two respondents skipped rating the first three benefits. Also, only 18 of the 19 potential survey respondents rated the last two benefits. Therefore, none of the benefits received ratings from the full 19 survey participants.

Nonetheless, “flexibility with time and schedule” received nine “most beneficial” ratings of 1 from 17 survey participants in the EDLP hybrid master’s program. This benefit received the highest percentage (52.94%) for the “most beneficial” rating out of all those listed. In contrast, the benefit “builds a sense of community with my peers” received six (33.33%) ratings of 5, which was the highest amount of “least beneficial” ratings. Thus, for the 19 EDLP hybrid master’s program participants in this study, building a sense of community with peers was not considered one of the most beneficial features of the hybrid model for student learning experiences.
Table 7

Most Beneficial Hybrid Course Components

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Number (%) of Participants that gave a 1-2-3-4-5 Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility with time and schedule</td>
<td>9 (52.94%) - 4 (23.53%) - 1 (5.88%) - 1 (5.88%) - 2 (11.76%)</td>
</tr>
<tr>
<td>Access and affordability</td>
<td>0 (0.00%) - 5 (29.41%) - 6 (35.29%) - 4 (25.53%) - 2 (11.76%)</td>
</tr>
<tr>
<td>Convenience with reduced traveling to campus</td>
<td>4 (23.53%) - 3 (17.65%) - 2 (11.76%) - 3 (17.65%) - 5 (29.41%)</td>
</tr>
<tr>
<td>Builds a sense of community with my peers</td>
<td>4 (22.22%) - 0 (0.00%) - 3 (16.67%) - 5 (27.78%) - 6 (33.33%)</td>
</tr>
<tr>
<td>Combination of face-to-face and online interactions meet</td>
<td>1 (5.56%) - 6 (33.33%) - 5 (27.78%) - 4 (22.22%) - 2 (11.11%)</td>
</tr>
</tbody>
</table>

Summary

In conclusion, the results yielded from the online survey used in this study speak only for the student learning experiences located within the EDLP hybrid master’s program in a Northern Californian public university. The findings pertain to the 19
survey participants and their interactions with learning technologies and individuals situated within the EDLP hybrid master’s program. However, this research is relevant to a larger discussion on the hybrid model and its impact on student learning experiences in general. These results can be used to inform anyone considering the implementation of the hybrid model in higher education. In summary, the findings for the online survey reveal an overall positive opinion for the hybrid course model. Furthermore, survey participant responses expose the importance of the instructor’s role in facilitating the learning process both with and without the use of learning technologies. The findings also revealed a potential challenge of the hybrid model on student learning experiences, reduced in-person interactions between students and instructors. In turn, the flexibility component the hybrid model offers students appears to be considered a benefit of this educational setting. All in all, it can be deduced from this study’s findings that while opinions vary toward the hybrid model located within the EDLP hybrid master’s program, most students have had positive learning experiences.
Summary

This study took place in Northern California on graduate students enrolled in an EDLP hybrid master’s program. The findings reflect the student experiences located at this specific institution. The literature on hybrid education relays its growing presence in higher education and the continuous implementation of increased technology use for the purpose of teaching and learning. For this reason, the researcher intended to investigate the learning experiences of graduate students in the EDLP hybrid program and explore any impact from increased technology use on student learning. The findings from this study offer new conclusions as well as reinforce patterns already found within prior research on the hybrid model (Prince, 2004). The researcher sought to explore the hybrid model in its entirety. However, the study was also designed to explicitly unveil both the potentially beneficial qualities to student learning experiences and the qualities that posed challenges to positive outcomes for those experiences. A quantitative research method employed for this study utilized an online survey to collect data. This survey was guided by and was meant to answer the following research questions:

1. Which learning technologies are most helpful and of efficient use in delivering instruction to students in a hybrid program?
2. What features of the learning technologies have been most obstructive to student learning?

3. What features of the hybrid program have been beneficial to student learning experiences?

4. How does the instructor facilitate the learning process within the hybrid course model?

The literature collected on hybrid education, or blended learning, expressed a growing presence of the hybrid model in higher education (Crabtree & Rodden, 2008; Olapiriyakul & Scher, 2006; Thille, 2010). The emergence of this model has been facilitated by the equally growing presence of technology and its use both inside and outside the model. Therefore, both instructors and students alike heavily depend on learning technologies for instruction. As it happens, learning technologies create new forms of teaching and learning within higher education.

It is also important to consider that these same learning technologies, if not implemented efficiently, can pose some challenges to positive learning experiences for students learning in the hybrid model. If not corrected, such challenges could negatively impact the student learning experiences in this setting. When the technologies malfunction or do not work properly this can create undesirable effects, especially on the quality of hybrid education. Hybrid course instructors must then also be able to properly operate technological learning modalities.
Consequently, faculty roles emerged as another major factor contributing to student learning experiences within the hybrid model (Olapiriyakul & Scher, 2006). How instructors manage learning technologies is an important factor in the transfer of course materials over the Internet and in the effectiveness of class sessions held online. Their interactions with students are reduced due to the combination of online and face-to-face platforms; therefore, the reduced in-person interactions are crucial to the learning process.

The concepts mentioned above are all well documented in past studies on the hybrid model and its dependence on learning technologies to transfer information. However, this study yielded similar findings. Similar patterns emerged in these findings on the challenges and benefits of the hybrid model and the resultant impact to student learning experiences. As previously mentioned, the results for this study were collected through the quantitative method of an online survey. The data were further categorized into the following subtopics: 1.) demographics, 2.) hybrid education, 3.) learning technologies, 4.) learning needs, 5.) learning experiences, 6.) hybrid course instructors, and 7.) the hybrid course model. This study drew conclusions uniquely indicative of the students and the learning experiences occurring at one distinct institution within higher education.
Conclusions

All quantitative data for this study were obtained from graduate students in the EDLP hybrid master’s program at a Northern California public university. A majority of the survey participants fell between the ages of 21 and 39 years old. Survey results revealed that 52.63% of the graduate student participants were between the ages of 21 and 29 and 36.84% were between the ages of 30 and 39. The age data indicated that a majority of the participants were born in the 1980s and early 1990s and, thus, grew up around most of the technological advances available today. The student population in this study was also 42.11% male and 57.89% female. Also, 52.63% of the graduate students in the study had not taken a hybrid course prior to enrolling in their current hybrid program and 47.37% had. Specifically, 27.78% of the survey participants had taken three or more hybrid courses before their enrollment in the EDLP master’s hybrid program. These findings support the claim of an increased use of technology within higher education. The hybrid model, however, uniquely facilitates the implementation of such technologies for the purpose of learning and teaching by combining traditional face-to-face time with newer online interactions.

Learning Technologies Within the Hybrid Model

The hybrid model is changing the way students receive and learn information and learning technologies are acting as the mediums through which these changes can occur. Learning technologies are at the center of hybrid education because this instructional model cannot exist without its online components. Technology has allowed the learning
process to expand beyond the physical campus. The technologies are, therefore, a crucial feature for the implementation of the hybrid model in higher education. Consequently, learning technologies are one of most important features of the hybrid model impacting student learning experiences. This study supported this notion and found that student interactions with learning technologies can either hinder or strengthen the quality of a hybrid program.

**Instructor Facilitated Learning Experiences**

A subsequently crucial feature of the hybrid model and its production of positive learning experiences is the course instructor’s role. This role has changed, or evolved, from the traditional lecture-based and in-person practices because of the online platforms utilized in hybrid education. It then becomes imperative to student success that hybrid course instructors properly use learning technologies to efficiently deliver information to students. If not managed adequately, technological learning modalities can actually pose challenges to student learning experiences.

**The Hybrid Model’s Beneficial Features**

As previously mentioned, a large part of the appeal surrounding hybrid education is the potential flexibility this model offers students during their time in higher education. The EDLP hybrid master’s program is at the graduate level and many of the students work full-time jobs. An additional beneficial feature explored in this study was the importance of peer interactions for students in the process of learning the necessary information to pass the hybrid course. However, the benefit of these interactions seemed
to be slightly more relevant during face-to-face time within the program under investigation in this study. These results, along with the findings on student-instructor interactions, suggest that exchanges between individuals are more desired and advantageous to the learning experience when conducted in-person and not necessarily online. This is an interesting point not previously documented in the literature on the sense of community fostered within the hybrid model.

The Hybrid Model's Challenging Features

Nonetheless, it is also important to consider the potential challenges that certain hybrid model features could pose for students in terms of their learning experiences. This study used challenges previously identified in past studies on hybrid education and listed those potential challenges to student learning experiences in the online survey. The list of potential challenges can be observed in Table 5. Ultimately, reduced in-person lecture time with instructor and technological problems with learning technologies were identified as the biggest challenges. This is an interesting finding because it illustrates how the potentially most beneficial features of hybrid education—learning technologies and time/space flexibility—may also pose the potentially greatest challenges to the hybrid model and student learning experiences if not properly addressed.

Recommendations

This study was initiated to investigate how an increased use of technology within higher education is impacting the way students are taught and learn information. This
exploration led to a study on the hybrid model and student learning experiences. The investigation also revealed the presence of learning technologies and the implementation of such learning mediums for the purpose of transferring knowledge interchangeably between online and face-to-face platforms.

Research for this study was conducted quantitatively with an online survey. Results revealed two crucial findings regarding the hybrid model and student learning experiences, the significant impact of learning technologies, and the importance of instructor interactions. These findings, however, are contained to a Northern California public university and all results from the online survey represent the experiences of graduate students within the EDLP hybrid master’s program. Still, the results from this study are important because they are situated within a larger discussion on the effectiveness of hybrid education. This is a significant conversation that needs to take place inside institutions of higher education due to the fact that technological advances move more and more technology onto campuses every year, both within and without the hybrid model.

Thus, learning technologies need to be properly utilized to enhance the quality of student learning experiences inside higher education. This is especially true for instructors who teach with and use these technologies to guide and manage the transmission of information to students. The improper use can consequently negatively impact student learning experiences. Similarly, the efficient use of learning technologies by course instructors could also greatly enhance student learning outcomes. Therefore, it
is the recommendation of the researcher that appropriate training be made available, if not mandatory, for any hybrid course instructors. Additionally, this training should be accompanied by continuous technological support for hybrid course instructors. The findings in this study, as well as in previous ones, clearly relay how crucial instructor interactions are for students within the hybrid model and this relationship must be supported.

As such, instructor support should be considered just as crucial because it strongly impacts student learning. This reality is at the core of any recommendations for further studies on the hybrid model, especially with regard to student learning experiences. To investigate the need for adequate technological support and training for hybrid course instructors, the research on the hybrid model should shift its focus from students to instructors (Ocak, 2010). Future studies on hybrid education must widen the investigations to explore the experiences of the instructors in depth. Prior studies on the hybrid model, including this one, have already revealed what can benefit and challenge student learning (CFHE, 2013). For this reason, a change in the direction of research on hybrid education is needed. Future studies should focus less on determining the benefits and challenges of hybrid education and redirect the focus to findings solutions to the already identified challenges impacting positive student learning experiences.

For example, studies should focus on what forms of training and continuous support are needed from hybrid instructors as well as what impedes the effectiveness of their instruction. Future research on the hybrid model and student learning experiences
should specifically identify what types of technical support improve the quality of hybrid education to then improve student learning experiences (Jaffe, 2003; Olapiriyakul & Scher, 2006). The link between the two is well documented and the impact should be made more positive or beneficial in the future. This can be accomplished by supplying support to hybrid course instructors to thus enhance the teaching process impacting the learning process. In addition, this support would address two crucial features of the hybrid model impacting student learning experiences: the learning technologies and instructor-student interactions.

It is, therefore, the hope of the researcher that this study will serve to support already existing data on the importance of both the efficient use of learning technologies and the significance of instructor-student interactions. It is also hoped that this study will either inspire new explorations or strengthen current petitions for further investigations into what forms of training and continuous technological support are needed for hybrid course instructors for the purpose of delivering high quality teaching. This is especially imperative considering that the instructor’s teaching has been shown to affect both the efficiency of learning technologies and student learning experiences situated within the hybrid model.
APPENDICES
APPENDIX A

Survey

1. Please indicate your age:
   A. 21-29
   B. 30-39
   C. 40-49
   D. 50-beyond

2. Please indicate your gender:
   A. Male
   B. Female

3. How many semesters have you been enrolled full-time in your current program?
   A. 1
   B. 2
   C. 3
   D. 4
   E. 5 and more

4. How many years are between the last degree you attained and your enrollment in your current program?
   A. No years
   B. 1 year
   C. 2 years
   D. 3 or more years

5. When you enrolled in your current program, did you know it was going to be Hybrid?
   A. Yes
   B. No

6. Did you choose a hybrid program because of a perceived flexibility with your schedule?
   A. Yes
   B. No
7. Had you taken a hybrid course prior to enrolling in your current program?
   A. Yes
   B. No

8. How many hybrid courses had you taken prior to enrolling in your current program?
   A. 0
   B. 1
   C. 2
   D. 3 or more

9. How would you describe your level of experience using learning technologies, such as Blackboard, prior to enrolling in your current program?
   A. High level of experience
   B. Moderate level of experience
   C. Little experience
   D. No experience

10. How would you describe your current level of experience using computers?
    A. High level of experience
    B. Moderate level of experience
    C. Little experience
    D. No experience

11. How well would you describe your ability to learn through the use of learning technologies in your hybrid courses, which use a combination of face-to-face and online interactions?
    A. Not well at all
    B. Moderately well
    C. Well
    D. Very well

12. How comfortable do you feel using learning technologies in your hybrid courses to successfully pass the course?
    A. Not comfortable at all
    B. Somewhat comfortable
    C. Comfortable
    D. Very comfortable
13. How would you overall describe the learning technologies as they are used in combination with face-to-face interactions in your hybrid courses?
   A. Obstructive
   B. Confusing
   C. Helpful
   D. Convenient
   E. Additional Support

14. Please rate each of the following learning styles according to how you best learn information.
   A. Visually 1 2 3 4 5
   B. Auditory 1 2 3 4 5
   C. Kinesthetically 1 2 3 4 5

15. How well does a traditional course meet your learning needs?
   A. Not well at all
   B. Moderately well
   C. Well
   D. Very well

16. How well does a hybrid course meet your learning needs?
   A. Not well at all
   B. Moderately well
   C. Well
   D. Very well

17. How well does the use of learning technologies in a hybrid course meet your learning needs?
   A. Not well at all
   B. Moderately well
   C. Well
   D. Very well
18. Please rate the following educational priorities from most to least important, with regard to how you define your learning experience during the time in your hybrid program.

(1=most important & 5=least important: Please select each number only once)

A. Learning new information 1 2 3 4 5
B. Passing the course 1 2 3 4 5
C. Time spent on the campus 1 2 3 4 5
D. Working in groups with peers 1 2 3 4 5
E. Attaining my degree 1 2 3 4 5

19. Please rate how beneficial each of the following hybrid course components are with regards to your learning experience?

(1=most beneficial & 5=least beneficial: Please select each number only once)

A. Flexibility with time and schedule 1 2 3 4 5
B. Access and affordability 1 2 3 4 5
C. Convenience with reduced traveling to campus 1 2 3 4 5
D. Builds a sense of community with my peers 1 2 3 4 5
E. Combination of face-to-face and online interactions meet my learning needs 1 2 3 4 5

20. What is the most challenging component about the hybrid course for your overall learning experience?

(1=most challenging & 5=least challenging: Please select each number only once)

A. Figuring out how to use the learning technologies 1 2 3 4 5
B. Reduced in-person lecture time with instructor 1 2 3 4 5
C. Working with groups 1 2 3 4 5
D. Less in-class face-to-face time 1 2 3 4 5
E. Technological Problems with learning technologies 1 2 3 4 5
21. How important is the interaction between you and your course instructor in the process of you learning any necessary information and passing the hybrid course? (Please give each interaction only one rating)

I. Online
   A. Not important
   B. Somewhat important
   C. Important
   D. Very important

II. Face-to-Face
   A. Not important
   B. Somewhat important
   C. Important
   D. Very important

22. How important to you is the interaction with your peers for the process of you learning the necessary information and passing the hybrid course? (Please give each interaction only one rating)

I. Online
   A. Not important
   B. Somewhat important
   C. Important
   D. Very important

II. Face-to-Face
   A. Not important
   B. Somewhat important
   C. Important
   D. Very important

23. Based on your overall experience within hybrid courses, how well does the instructor facilitate the learning process when compared to your experience in traditional courses?

   A. Not so good
   B. Somewhat better
   C. Better
   D. A lot better
   E. The same
24. How much does your instructor’s ability to operate the learning technologies affect your overall learning experience in the hybrid course?
   A. Not at all
   B. Somewhat
   C. A lot
   D. Completely

25. How frequently does the hybrid course model allow you to collaborate with other peers in the course compared to the traditional course model?
   A. Not frequently at all
   B. Somewhat frequently
   C. Frequently
   D. More frequently

26. How would you describe your current ability to learn all necessary information required to pass your hybrid courses while receiving both online and face-to-face instruction?
   A. Poor
   B. Average
   C. Good
   D. Excellent

27. Which course model do you prefer as better satisfying your learning needs to pass a class?
   A. Traditional
   B. Hybrid

28. How would you describe your comfort level with the format (online & face-to-face) of the hybrid course at the beginning of the first semester of your current program?
   A. Not comfortable at all
   B. Somewhat comfortable
   C. Comfortable
   D. Very comfortable

29. How would you describe your comfort level with the format (online & face-to-face) of the hybrid course now in your current program?
   A. Not comfortable at all
   B. Somewhat comfortable
   C. Comfortable
   D. Very comfortable
30. Please rate the overall learning experience in your current hybrid program.
   A. Positive
   B. Negative

31. In the hybrid courses you have taken thus far, the overall learning experience was effective.
   A. Strongly Disagree
   B. Disagree
   C. Agree
   D. Strongly Agree

32. The learning technologies used in the hybrid course have been effective for an overall positive learning experience.
   A. Strongly Disagree
   B. Disagree
   C. Agree
   D. Strongly Agree

33. You have been satisfied with the overall learning experience that has occurred in your hybrid courses.
   A. Strongly Agree
   B. Disagree
   C. Agree
   D. Strongly Agree

34. Would you enroll in another hybrid program after completing your current one?
   A. Yes
   B. No
APPENDIX B

Informed Consent

The Hybrid Model and Student Learning Experiences

You are invited to participate in a research study, which explores the potential impact of instruction through the medium of technological learning modalities (e.g. Blackboard) on the student learning experience of graduate students enrolled in a hybrid program.

My name is Sarah Nava, and I am a member of the Fall 2013 graduate cohort at California State University, Sacramento, in the Educational Leadership and Policy Studies M.A. program. You were selected as a possible participant in this study because of your current full-time enrollment status in the Educational Leadership and Policy Studies M.A. program.

The purpose of this research is to investigate the learning experiences of graduate students enrolled in a hybrid program where instruction is maintained through the medium of technological learning modalities, in combination with face-to-face instruction. If you decide to participate, you will be asked to follow a link to Survey Monkey and take an online anonymous survey. Your participation in this study will last no more than 20 minutes.

There are minimal to no risks involved for participants. All responses will remain anonymous. There are some benefits to this research, particularly that you will assist in furthering the study on hybrid education and student learning experiences. The data obtained will be maintained in a safe, locked location and will be destroyed after a period of three years after the study is completed. Your participation is greatly valued and appreciated.

If you have any questions about the research at any time, please call me at [Redacted]. If you have any questions about your rights as a participant in a research project please call the Office of Research Affairs, California State University, Sacramento, (916) 278-5674, or email irb@csus.edu.

Your participation is entirely voluntary and your decision whether or not to participate will involve no penalty or loss of benefits to which you are otherwise entitled. If you decide to participate, you are free to discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled.
You may withdraw your consent at any time and discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled, that you will receive a copy of this form, and that you are not waiving any legal claims, rights or remedies. If you would like any information on the results of the study please email me at [redacted].
REFERENCES


Fox, S., & Livingston, G. (2007). *Latinos online: Hispanics with lower levels of education and English proficiency remain largely disconnected from the Internet*. PEW Hispanic Center and PEW Internet Project.


