To the Faculty of Washington State University:

The members of the Committee appointed to examine the dissertation of 
KATHLEEN J. CHATFIELD find it satisfactory and recommend that it be 
accepted.

__________________________________________
Richard D. Sawyer, Ed.D., Chair

__________________________________________
Tamara Holmlund Nelson, Ph.D.

__________________________________________
Amy Roth McDuffie, Ph.D.
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Prior to completing a project of this volume and duration, I did not fully appreciate the depth of gratitude one would attempt to convey in a page like this. This project would not have been completed without their encouragement, support, and contributions.

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THE HYBRID COURSE DESIGNER’S EXPERIENCE USING
THE ABCDE INSTRUCTIONAL DESIGN MODEL

Abstract

by Kathleen J. Chatfield, Ed.D.
Washington State University
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Chair: Richard D. Sawyer

This research investigated a new instructional design model intended to provide higher education faculty with guidance that will contribute to their successful design of a hybrid course. The goal of this research was to explore through observation and interviews how first-time designers of a hybrid course experienced the use of the ABCDE instructional design process model and to discover their perception of the effect that their course design had on students accomplishing their course learning objectives. Case study methodology within an action research context was used to collect observations of them as well as their perceptions, feelings, and experiences as characterized by each instructor. The constant comparison method was used to analyze findings across time and scope as well as across cases to identify the benefits and challenges that were associated with using the model. The discussion and conclusions offer reasons for success as well as suggestions for improving the use of the ABCDE model by faculty seeking direction and support with the hybrid course design process.
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Dedication

This dissertation is dedicated to my parents

who raised me to believe in myself

and to my husband, Melville,

who believed in me from the moment we met.
THE HYBRID COURSE DESIGNER’S EXPERIENCE USING
THE ABCDE INSTRUCTIONAL DESIGN MODEL

CHAPTER ONE: INTRODUCTION

One of the more recent eLearning modalities in higher education is hybrid (also called blended) learning, where a portion of the traditional face-to-face seat-time instruction is replaced with online instruction. While in-person consulting and traditional class sessions in both two- and four-year institutions as well as other educational venues have been deliberately transitioning to incorporate video conference, web enhancements, online simulations, and electronically-accessible course materials and resources, the hybrid course type has naturally and quickly progressed in its own right and has been publicized as the best of both worlds (online and face-to-face instruction) (Yohe, 2003). Today we no longer merely have brick and mortar classrooms with inherent possibilities and limitations therein; technology allows us to expand our learning environments far beyond the classroom itself, potentially offering more variety and flexibility within a deep and reflective experience for learners.

From an annual survey that tracks the impact of eLearning at community colleges around that nation, Lokken (2012) reported that a continued challenge identified by community college administrators is that there was more student demand for distance education courses than faculty with necessary skills to build and teach them. This survey’s results indicated that the hybrid course modality was the most current area needing attention. With almost 80% of all community college online course content and instructional materials being developed onsite by faculty (in contrast to instructional designers, administrative staff, and textbook publishers), Lokken’s report identified the critical need by faculty for professional development and design processes.
Statement of the Problem

Courses taught in the hybrid modality have been met with mixed success. In many cases, the definition of hybrid has not been clear to the instructor during the development or teaching phases. Picciano (2007) describes the complex process of defining blended learning beginning with the acknowledgement that its design means something different depending upon the person you are talking to (student, faculty, course designer, administrator). For purposes of this study, a hybrid course is defined as one that integrates online with traditional face-to-face learning activities in a planned, pedagogically valuable manner, and where portions of the traditional face-to-face class time are replaced by technology-based, online activities (Laster, Otte, Picciano, & Sorg, 2005).

The instructional implementation of technology is a driving force and critical factor in the design of a hybrid course. During my interview with several directors of distance learning programs in Maryland, J. Hilke confidently stated: “Hybrid is a course [where] online technology determines, or at least guides in a significant way, the instructional methodology and the instructional setup of the course” (personal communication, June 28, 2007). According to Kaleta, Skibba, and Joosten (2007), faculty discovering the hybrid modality find that much of their face-to-face teaching skills must be adapted when teaching is primarily facilitated with technology and at a distance. Where faculty teaching face-to-face courses traditionally had role models to follow and the personal experience of being an in-class student, eLearning modalities are new enough that any online role modeling and experiences are likely limited in volume and narrow in scope. Faculty incorporating online teaching components in their courses for the first time are left, instead, to apply eLearning strategies and technologies on their own with few or no experiences to emulate.
To help provide direction for faculty designing a hybrid course for the first time, I designed a process that I refer to as the ABCDE model. To develop the ABCDE model, I synthesized existing instructional design strategies and provided a series of five course design stages (labeled A, B, C, D, and E). Each complex in itself, these design stages are presented in an intentional order to be fully completed prior to advancing to the next stage. Through this research, I studied the efficacy of the order of the model stages with the intention of revising and improving its design, clarity, and usefulness. Research describing such a model or comparable practices does not currently exist in the literature. The results of this study, then, will be pertinent to hybrid course designers.

**Project Setting and Rationale**

It is appropriate to briefly describe an earlier research project to properly introduce this current study. This prior research is a precursor to and foundation for this project, but is not included in the current study beyond the description presented in this project setting and rationale.

In 2007 I conducted a small, informal research project with the intent of increasing my understanding and improving the effectiveness and quality of eLearning courses at my institution. That project sought answers to the following questions: (a) What do learning environments look like when they are combinations of online technology and face-to-face learning strategies, (b) how is learning enhanced or impeded by them, and (c) how are these learning environments implemented in college courses?

Between June 20 and 29 in 2007, I conducted a total of 10 in-person semi-structured interviews at eight state universities, private colleges, and community colleges in New York, Pennsylvania, and Maryland. I selected the participants from conference attendance listings,
conference workshop presenter information, and referrals. Each individual was a hybrid modality expert, had notable experience in the field of eLearning and, in particular, had experience with the delivery, development, or administration of hybrid courses at their institution. Each of these professionals was interviewed for one to two hours with questions regarding the teaching perspective (faculty), the administrative perspective (institution), and the course design perspective (instructional designer) of the hybrid course type as they understood each.

One message from the findings and analysis was dominant and consistent with the literature: As academia continues to move from a teacher-centered to learner-centered focus (McCombs & Vakili, 2005), and as learning styles are increasingly analyzed and evaluated on a student-by-student basis (Olapiriyakul & Scher, 2006) often supporting self-regulated learning (Barnard-Brak, Lan, & Paton, 2010), preferred teaching practices and strategies must take into account current and emerging technologies and ensuing delivery models such as the hybrid modality.

Each interview revealed that the implementation of the hybrid modality was desirable both for teaching and for learning, but none of the institutions had been free of associated challenges. Based on my 2007 research results, extensive reading of relevant literature, and the ensuing years of professional experience, issues and challenges associated with the hybrid modality seemed to be centered around (a) how the hybrid modality was defined differently by different people in various places; (b) how professional development and support for faculty was crucial to effective hybrid course design; (c) how the course design process was unique to this modality; and (d) how the student learning activities needed to include a high level of active learning, collaborative exercises, and all tied tightly to the course learning objectives.
Upon further reflection, a pattern began to emerge for me. Faculty were being asked to take on the project of teaching a hybrid course without realizing the differences between a hybrid and face-to-face course or the degree to which student confusion would need to be tackled. Many of these faculty did not have online teaching experience; some had lower levels of technology competency. It was very common to hear of faculty starting the hybrid course design process by taking their face-to-face class and selecting a few of its components to push online. These faculty were making decisions about what should take place online based upon the knowledge and perception they had about eLearning teaching practices at that point. Unfortunately, for the faculty and the students, the hybrid course was often a disappointment. It was not uncommon to hear that the course was described as not having enough class time and including confusing or ineffective technology and online activities.

I began to formulate a practical hybrid course design process to address the identified issues and challenges. The process started with the course designer first transitioning all course components for fully online delivery and subsequently selecting components that would be better taught and experienced in a face-to-face setting. The formulation resulted in the first version of my ABCDE instructional design model (see Figure 1).

During the course of this project, the ABCDE model was expanded from a graphical depiction of the process to a five-stage process with text-based detailed steps and based on a theoretical framework for blended environments (both more fully described in Chapter 3). The order of the model stages, specifically instructing that all components be designed for online delivery (the Conductor stage) occurring prior to considering the face-to-face class activities (the Director stage), has remained a constant from the start.
Figure 1: First version of ABCDE model (K. Chatfield, 2008).
Focus and Purpose of the Study

The bulk of published research and instruction guides on hybrid and blended learning fall short of suggesting a specific step-by-step process for the design and development of a hybrid course. The purpose of the ABCDE model is to contribute a clear plan that emphasizes process, structure, quality, learning theory, and accessibility in hybrid course design for the benefit of first-time hybrid course designers. To that end, the goal of this research was to explore through observation and interviews how faculty experienced the first-time design of a hybrid course using the process outlined in the ABCDE model and to study their perceptions of the effect the course design had on student learning. From the onset, it was hoped that the project findings would reveal how the ABCDE model could be refined such that it might contribute to the resolution of hybrid course development issues and challenges and, thereby, positively impact the fields of eLearning and hybrid course instructional design.

The basis for this study is that the development of hybrid courses is not intuitive to those who would be assigned and agree to take on the venture. It is presumed that an instructional design model is needed that offers the convenience of a step-by-step process. The uniqueness of the ABCDE model is that it prescribes that the course designer first face the task of considering how course components will exist and perform in the online venue, and then intentionally and with pedagogical reasoning, select course components that will take maximum advantage of the in-person, synchronous, face-to-face class meetings (very commonly once per week).

The process of designing a quality online or hybrid course is very different from having the assurance that the course is, in fact, of high quality. This is where an introduction to the Quality Matters™ Program is helpful. Originally researched and developed with funding from a 2003 Fund for the Improvement of Postsecondary Education (FIPSE) grant, the Quality Matters
program has been a research-centered approach to quality assurance and continuous improvement for online learning for more than a decade. The components include (a) a set of standards (in the form of a rubric with detailed annotations for each standard) against which the quality of the design of online courses and the online components of hybrid courses can be measured, (b) a three-person peer review team (annually certified master reviewer and two peer-reviewers) rigorously assesses the application of these standards in online or hybrid courses, and (c) related professional development for faculty in both the course design process and in the skill of reviewing a peer’s online or hybrid course (MarylandOnline, 2010). The 2011-2013 Quality Matters rubric, with more details about the Quality Matters program for higher education are provided in Appendix A.

The ABCDE model, as designed, proposes to complement the research on hybrid modality and course design. It also provides guidelines and principles for successfully designing a hybrid course that would meet Quality Matters standards by illustrating a distinct and orderly process that has been absent from the research to this point. This research study seeks to explore these presumptions by gathering data from each participant during their use of the ABCDE model, combined with my records of observations during regular and individual instructional design meetings with each participant, and compared with recommendations derived from a Quality Matters review of the design of each of the hybrid courses made by a certified Quality Matters Master Reviewer using the Quality Matters rubric and associated annotations as a guideline.

Research Questions

The goal of this research was to investigate through researcher observations and participant reflections how faculty experience the design process in their first hybrid course
while using the process and prescribed order of the ABCDE model for their first hybrid course. Also studied was the faculty’s perception of their students’ learning during the initial offering of that newly designed hybrid course.

I sought to explore the following questions with this research:

1. What challenges and successes did first-time course designers of a hybrid course experience from the use of the ABCDE model and its order of stages as they developed their courses?

2. What impact did the participants (instructors) think their hybrid course design had on their students’ learning?

The subject of this research was the person who engages in the development of the design and curriculum of a hybrid course whether they are the instructor of the course or an instructional designer/curriculum developer. For purposes of this research, the term course designer is used to identify this capacity.

Individual course designers and the understanding each had before, during, and after their engagement with the hybrid design of one of their courses was the context for the case study analysis and comparison in this investigation. Reflection of underlying circumstances and conditions that might interfere with their design of a hybrid course were among the data gathered for analysis. Investigating designers’ experience with the ABCDE model and developing recommendations for improving the effectiveness of the ABCDE model provided the focus of the action research context for this project.

**The Study Procedure and Description of Methodology**

This research project utilized case study methodology (applied to individual course designers and the work on their course) within an action research context (that of my studying
how course designers experienced using the ABCDE model for purposes of garnering feedback specifically related to ways in which I could improve the model).

For this study, three individual course designers followed the ABCDE model stages with one of their own courses and documented their course design and teaching experiences before, during, and after completing this design process. Each course designer and the design of her hybrid course represented an individual case study (Merriam, 1998; Stake, 1995; Yin, 2003). Following use of the constant comparison method of data analysis, I present both individual and cross-case analysis in my quest for revisions to the ABCDE model that would increase its effectiveness in a broader application to the extensive eLearning community.

The action research context consisted of each case study participant working through the ABCDE model process with my assistance in the role of instructional designer. This approach was a particularly appropriate consideration for this study since its intention was to provide me with an opportunity to reflect on my own practices (Creswell, 2008; Herr & Anderson, 2005; Mills, 2011); in particular, the design and implementation of the processes and order of the ABCDE model. With this research, my study of the ABCDE process model and the experience of course designers with its application to their hybrid courses is hoped to be an important contribution to the field.

The stages of the action research are graphically depicted in Figure 2.
Beginning with the ABCDE model at the top of Figure 2, prior to the start of the study, I created the ABCDE model. For the study, three case study participants built their courses with my assistance as instructional designer. Each participant recorded their experiences of working through the design process throughout via surveys and reflections. I recorded my observations of working with each participant and conducted a final interview with each to discuss her perceptions of her students’ learning in the new course. I then examined all collected data, read and reread the data, coded and identified themes within the data, reflected upon the findings, and compared themes and findings across the cases. A Quality Matters review was conducted by a certified Quality Matters Master Reviewer on each course, and her expert recommendations were used to compare with my observations. All of the data and Quality Matters Master Reviewer’s recommendations were analyzed and compared, which resulted in informed revisions for improvements to the ABCDE model.
Terminology and Definitions

A challenge surrounding the hybrid modality includes nomenclature. Hybrid and blended, hyflex and flipped classroom, web-enhanced and technology-based—each are relatively new and inconsistently defined terms within the eLearning world. Students, faculty, and administrators often define these terms differently without realizing it. The two most frequently heard terms for this part face-to-face, part online modality are hybrid and blended.

For purposes of this project, I will distinguish between the terms hybrid and blended. In the most general sense, I will not use the term blended to identify a type of course, although it is increasingly used in that way within the literature. I will use the term hybrid as an adjective to describe the type of course delivery and learning and modality. Specifically, the term hybrid will indicate that a portion of the learning experiences are conducted with all course members together in the same place while another portion is conducted outside of class. Additionally, the terms blend or blending are used as verbs to describe the action of incorporating more than one intended learning experience. In this sense, the two terms are complimentary one to another, and encompass all components of the hybrid course along with the process of blending them together in an intentional manner. As necessary, since some references use the term blended exclusively, explained exceptions to my stated practice may occur.

Other terminology relevant to this study and used throughout this paper are presented and defined below.

Andragogy. Introduced by Malcolm S. Knowles in the late 1960s as the art and science of helping adults learn (Galbraith, 1998, p. 6).
Asynchronous e-learning. A mode of learning that typically uses email, online discussion forums, and other learning activities that do not require all learners to be learning in the same place or at the same time (Hrastinski, 2008).

Blended learning. A wide variety of technology/media integrated with conventional, face-to-face classroom activities (Picciano, 2007, p. 8). Also, an alternative term to describe the hybrid course type.

Chunking. Garrison, Schardt, and Kochi (2000) use the word “chunking” to describe the organization of instructional materials for a course. There are two aspects involved in effective chunking: the organization of grouping similar items together and the limitation of the number of components such that a person is not overwhelmed.

Delivery. The facilitation of learning and curriculum providing access to and engagement with course materials by participants.

Discussion forum. An online, asynchronous communication tool for multiple participants over a span of time. Typically an individual posts a comment or question, which is subsequently read and potentially responded to by another individual.

Distance education. Originating with correspondence courses first observed in the early 1800s, distance education is characterized by remoteness and proximity between the learner and teacher in the study process (Guri-Rosenblit, 2005).

eLearning. Easily utilized by both distant and on-campus students, a relatively new phenomenon relating to the use of electronic media for multiple learning purposes (Guri-Rosenblit, 2005).
Face-to-face (F2F). Traditional educational in-person meetings where learners meet together at a scheduled time (often on a weekly basis), in a scheduled location (usually on a college campus) over the period of an academic term.

Flipped classroom. The flipped classroom is described as a face-to-face class where the lecture is delivered via technology outside of the classroom and homework becomes learning activities that occur during the regularly-scheduled class hour. If face-to-face time is replaced with technology, the course is probably coded as hybrid (or blended) instead.

Hybrid course modality. Courses that integrate online with traditional face-to-face class activities in a planned, pedagogically valuable manner; and where a portion of face-to-face time is replaced by online activity (Laster et al., 2005).

Hyflex modality. Similar to the hybrid modality, hyflex is generally without the face-to-face attendance requirement. The primary emphasis is on the flexibility of the learning venue. Students can attend class when they determine a need for assistance.

Instructional design. A system of interdependent and synergistic procedures for developing education and professional development programs in a consistent and reliable fashion (Gustafson & Branch, 2002).

Instructional designer. A person who uses systematic design procedures in an effort to make instruction more effective, efficient, and relevant by coordinating all learning activities against course-level learning objectives (Gustafson & Branch, 2002).

Instructional technologist. A person who promotes innovation in teaching and learning with the use of technology (Donovan, 1999).
Learning community. A general sense of connection, belonging, and comfort that develops over time among members of a learning group who share purpose or commitment to a common goal (Conrad, 2005).

Learning management system (LMS). A comprehensive and self-contained website designed to manage the electronic delivery of course content and instructional materials like assignments, participation, and assessment individually for many different courses or groups of people, whether for online or face-to-face instruction. While not specifically identified, the learning management systems used within this study included ANGEL, Blackboard, and Moodle™. Unspecified, each is referred to as an LMS.

Learning objective and learning outcome. Terms used somewhat interchangeably to represent measurable guidelines of learning achievements; alignment of and consistency among learning objectives with course materials, learning activities, assessments, and course technology is required for courses that strive to meet Quality Matters standards (MarylandOnline, 2011). In this work, learning objective is the term predominantly used except in quotations.

LMS. Acronym used in this report to represent a learning management system.

Modality. A reference to an individual type of educational delivery, such as mail or correspondence, video-conferencing, fully online, hybrid, etc.

Multi-modal. The use of mixed modalities for the delivery of instruction.

Online course. A course where most or all (80% or more) of the content is delivered online. Online courses typically have no synchronous face-to-face meetings (Allen, Seaman, & Garrett, 2007).

Pedagogy. The art and science of leading or teaching children (Knowles, 1984).
Quality Matters. A faculty-centered, peer review process that is designed to certify the quality of online and hybrid courses.

Quality Matters Master Reviewer. A member of the Quality Matters course design peer-review team who has additional certifications in reviewing online and hybrid course designs with the Quality Matters rubric and annotations.

Seat time. The number of hours a student typically attends a face-to-face course each week during a normal term (quarter- or semester-based). The seat time is associated with the credit hour; for example, a 5-credit course requires five hours seat time each week for the duration of the term. For purposes of this project, this may be referred to as face-to-face time.

Synchronous learning. A mode of learning where participants must be present at the same time, and often the same place. Synchronous e-learning meets virtually at the same time using videoconferencing, chat, etc., but not necessarily the same physical location (Hrastinski, 2008).

Traditional classroom. The physical location where learning has taken place within a school building or on a campus.

Virtual learning environment or virtual classroom. An online-based education portal used to share course instructional materials, provide learning resources and activities and assessments, offer online discussion participation opportunities, and facilitate communication between learners and the instructor. It may or may not include the use of a learning management system (LMS).

Web-enhanced course. A face-to-face course with no reduced seat time, where online course resources and access to web-based tools supplement the course materials (Shea, Li, & Pickett, 2006).
Summary of Introduction

This introduction has provided an overview of this project by first identifying the problem that exists for designers in the development of hybrid courses. The ABCDE model offers a possible solution to resolve this problem by providing a step-by-step process for hybrid course design. This research pursued how course designers experienced the use of the ABCDE model in the development of a first hybrid course through case study methodology by reporting, comparing, and analyzing the challenges and successes each experienced as well as identifying the effects on student learning and recommendations to the course design from both their perspective and a Quality Matters Master Reviewer’s review of the course design. The desired results of this research were to discover improvements that could be made to the ABCDE process model such that it might be considered a contribution to the fields of eLearning and hybrid course design.

This research study is grounded in extensive literature and the development of a theoretical framework for blended environments, both of which emphasize established characteristics of the hybrid modality, instructional design for course development and good teaching, and the need for faculty development in hybrid course development and the instructional application of technology.

This report is organized into seven chapters, a bibliography, and appendixes in the following manner: Chapter One presents the introduction to the study. Chapter Two presents a review of the related literature dealing with the evolution of hybrid course design and faculty development within a historical context of distance education. Chapter Three contains my theoretical framework for blended environments, the underlying basis of what constitutes quality learning experiences particularly in blended learning environments and a description of the
ABCDE Instructional Design Model and its course design stages. Chapter Four delineates the research design and methodology of the study. Chapter Five presents the findings including the backstory and individual experiences of each of the case study participants during the course design process. Chapter Six presents the cross-case report and discussion, and Chapter Seven contains the implications, conclusions, and recommendations of the study.
CHAPTER TWO: LITERATURE REVIEW

Introduction to Literature Review

The abundant studies that present comparisons of student success and engagement across face-to-face, hybrid, and online course modalities have not presented teaching styles, strategies, instructional methods, and instructional design on the part of the teacher and designer of the course. To provide the conceptual context for my evaluation of designers’ challenges and successes when using the ABCDE process model for hybrid course design, I will use existing literature to document the evolutionary path of the hybrid course modality and how online course design quality is measured within higher education. As they relate to the course design, instructional design and faculty development are woven throughout this discussion.

Distance Education

While traditional higher education is most often thought of as taught in face-to-face courses that meet weekly in a classroom on a college campus, alternative formats for college courses have existed for more than one hundred years (Nasseh, 1997). Prior to computers, distance education modalities included mail correspondence (beginning around 1870), lantern slides and motion pictures (1910-1920), instructional radio (beginning around 1918), educational television (beginning in the 1940s), and teleconferencing (beginning in the 1980s). For each modality, researchers who were both champions and skeptics examined overall effectiveness, characteristics of learners’ understandings, students’ needs, effectiveness of communication, and the value of learning objectives. (Nasseh, 1997).

Technology and eLearning arrive. In the 1990s large numbers of people began to use computers and access the Internet, and distance education officially went online. It would not be too long before the characterization of distance education would be differentiated from
eLearning. Distance education has had a long history of being defined as learning that is distinctively separated by place and time from both the teacher and other learners. While eLearning may take place for learners at a distance, more and more institutions are utilizing technology to supplement learning that may take place in or out of the classroom (Guri-Rosenblit, 2005). Many reasons support the use of technology for teaching; reasons include (a) accessibility to learning, (b) varied and accommodating learning options, and (c) potential for deeper and more reflective or transformative learning (University of Wisconsin-Milwaukee Learning Technology Center, 2011). Newer delivery models that utilize Internet access and associated technologies like blended, hybrid, hyflex, and the flipped classroom have necessitated refinement to the term distance education since portions of these modalities generally take place in the classroom.

Technology and the Online Modality

The advantages of technology. With each new day, advances in and facts about technology are broadcasted through media and by word of mouth. On November 27, 2012, a graphic was widely distributed by bachelorsdegreeonline.com in a blog posting representing research results published by Educause in September of the same year. The research collected responses from over 100,000 students from 195 institutions around the world. The statistics represented in both report and graphical formats suggested that students believed that technology is no longer a choice or mere consideration for learning. Two out of three students indicated that technology is an essential tool for both engagement with the learning as well as communication with the instructor, other students, and the institution (Dahlstrom, 2012).

Technology benefits for students: accessibility and flexibility. It can be argued that one of the primary advantages of eLearning is the increased accessibility to education and flexibility
in scheduling that benefits students regardless of their locations, employment, family obligations, and other factors that prevent today’s busy human beings from advancing their education.

According to Allen and Seaman (2011), more than 90% of all academic leaders from over 2,500 institutions indicate that the flexibility provided in online course scheduling is superior to that of face-to-face course scheduling. The need for this flexible scheduling is undeniable when more than 6.1 million students are reported as having taken at least one eLearning course during the fall 2010 term. Technology is significant to the delivery of this outcome.

*Technology use issue for faculty and students: inexperience and skill.* The use of technology has been saturated with issues ranging from inexperience on the part of the presenter (faculty, designer, etc.) to potentially exceeding the average recipient’s capacity in either understanding or access. It is more important that technology be used to compliment and support the learning rather than consist of the latest gadgets touted in the media. The Dahlstrom (2012) research that surveyed more than 100,000 students at 195 institutions from around the world, reflects that in 2010, less than 50% of those students agreed that their instructors used technology effectively. Just two years later, the same report stated that nearly 70% of the “…students agreed that most or all of their instructors have adequate technology skills, have used technology to aid understanding of course materials, use the ‘right kinds’ of technology, [and] use technology effectively” (p. 9). It was suggested that students prefer assistance with their own technological skills over the instructor implementing new or flashy technology.

**Controversy: Is Online Education Effective?**

Strong suspicions towards the effectiveness of online education have always been present. Addressing this challenge, in the mid-1980s and early 1990s both distance education literature classificatory bases and two conceptual frameworks were introduced for related
research. The frameworks identify three logical attributes: (a) input and (b) outcome variables representing student or system issues and (c) process variables addressing either development or delivery topics (Mishra, 1998). In his review of distance education research structure and methodological issues, Mishra declares that the ensuing research began to dispel some of the misconceptions that led educators to question the effectiveness of distance education as a whole.

**Distance education research focus.** Smith, Ferguson, and Caris (2001) conducted a qualitative study that involved interviewing 21 instructors who had experience teaching in both online and face-to-face modalities. While many of the instructors noted the vast difference between (a) in-person communication with the use of body language and (b) learning environments that were largely text-based with greater requirements for precise use of language, they also acknowledged students’ deeper thinking and the connections between instructor and students that were often stronger within online courses than in face-to-face courses. The findings in this study are adequately compared between online and face-to-face given the same faculty considered each of the modalities. Identified as common among much of the literature, it is unfortunate that the study does not include any qualifications of the faculty in teaching either online or face-to-face. They may have taught face-to-face for many years and online for only this course, or they may have taught face-to-face and online courses for the same amount of time. Many studies, such as this one, do not include these details.

Over the years, other researchers have asked similar questions leading to a comparison between online and face-to-face courses. The research has found, overwhelmingly, that in quality online courses there are high levels of interaction, reflective learning, critical thinking, access to course materials, and clear communication among course participants (Anderson, 2003; Chou, 2010; Conrad, 2005; Garrison & Cleveland-Innes, 2005; Johnson, Aragon, & Shaik, 2000;
Schrire, 2004; Smith et al., 2001). This finding provides promise for the design of quality hybrid courses as there is no evidence that quality is elusive in one modality over another.

**Educational demand for online modality.** By the arrival of the 21st century, there was minimal debate regarding the demand for both fully online and partially online courses in higher education. According to recent Babson Survey Research Group studies and published reports (Allen & Seaman, 2011), 65% of the more than 2,500 reporting institutions said that online learning was a critical part of their long-term strategy. The Babson report indicates that the number of students taking one or more online or hybrid course during the fall 2010 term represents a 10% growth rate for eLearning enrollments since the previous year. This compares with a 1% growth of the overall higher education student population. Allen’s and Seaman’s study reports that the projected future rates of growth show a further increase. These and other studies indicate acceptance of eLearning within higher education. Educators and academic institutions are increasingly convinced of the growth influence of technology-mediated learning and searching for solutions to accommodate it.

The growth in eLearning offerings creates new requirements for faculty and course designers: the skills and willingness to develop courses that integrate instructional use of technology which includes the less familiar asynchronous communication venue with and among students. This challenge is complicated when (a) these faculty have not had the same role models for online teaching as they may have had for face-to-face teaching and (b) many faculty have not had sufficient professional development in curriculum design or technological presentation (Lee, Dickerson, & Winslow, 2012). In the ITC 2011 Distance Education Survey Results, Lokken (2012) reports that the top three challenges faced regarding distance learning faculty at community colleges are (a) workload issues, (b) training, and (c) technical support. Lokken also
reports that of the 143 institution responses, 79% develop their own course instructional materials and other content in contrast to using components created by a textbook publisher or other content provider. One response in addressing these and other challenges by institutions around the globe has been the addition of instructional designer and faculty developer positions.

**Instructional Design**

**What is instructional design?** Instructional design is a complex process employed in the development of education and professional development programs. While the practice is creative, purposeful, and iterative, the goal of the resultant learning experience is that it consistently and reliably will lead the learner to deliberate learning objectives through an instructional design system that is effective, efficient, and relevant (Gustafson & Branch, 2002).

Instructional design consists of several particular components. Regardless of modality, the learning objectives, student learning styles, and interaction with instructional materials must all be cohesively incorporated to form a well-designed course. The path that arrives at quality course design is frequently guided by the use of an instructional design model (Gustafson & Branch, 2002).

*Instructional design models: for process-, strategy-, or theory-based purposes.* The application of instructional design principles routinely takes place within the guidance of a model. Possibly the most widely known instructional design model is referred to as ADDIE, an acronym describing its core design process stages:

- **analysis** (often involves conducting a needs assessment),
- **design** (writing learning objectives in measurable terms),
- **development** (preparing relevant student and instructor materials),
• implementation (delivering the instruction in the setting for which it was designed),

and

• evaluation (both formative and summative, identifying and completing necessary revisions) (Gustafson & Branch, 2002).

The ADDIE model is recognized today as a process that contains the core elements upon which almost every other instructional design model has been based (Branch & Merrill, 2012).

There are a number of established models—models like those from Gagne as well as Dick and Carey are process-based and others like the RapidID from Thiagi and the minimalism model are strategy- or theory-based (Akbulut, 2007; Culatta, 2012; Gagne, 1985; Gustafson & Branch, 2002; Thiagarajan, 1999).

Instructional design models serve the purpose of steering the design of instruction within and across learning units that either stand on their own (a single-topic workshop), comprise a term-long course (quarter- or semester-based), or make up a multi-course program (certificate or degree). Dick and Carey (1996) explain that learning components are meaningful and interrelated when the course design is based on a systems perspective that considers an entire course or program. According to Gustafson and Branch (2002), process-based models are generally comprised of incremental steps that encourage consideration of all aspects of individual elements within the larger curriculum development. Dick and Carey’s instructional design model, for example, leads the educator through a series of steps comprising (a) assessment, (b) analysis, (c) writing learning objectives, (d) developing assessment instruments, (e) developing instructional strategies, (f) developing and selecting instructional materials, (g) evaluating, and based on that evaluation, (h) revisiting the development for possible revision (Branch & Merrill, 2012). The level of detail and preciseness demonstrated in models such as
Dick and Carey’s has increased the curriculum designer’s ability to create complex and integrated instructional environments as established by (a) learning objectives, (b) student learning styles, and (c) interaction with content within the context of a course (Akbulut, 2007; Lee et al., 2012). Following are expanded descriptions of these three required considerations.

**Learning objectives and outcomes.** Referencing learning regardless of modality, Garrison and Vaughan (2008) are committed: “Education is a structured learning experience designed to achieve intended outcomes effectively and expeditiously” (p. 32). Shaping a worthwhile learning environment that is well structured and strongly supported is the role of an effective teacher. Therefore, learning objectives that carefully lead to distinct learning outcomes must be a critical component within the design and facilitation of the curriculum. Garrison and Vaughan offer the following principles for the design process:

- Establish a climate of open communication and trust;
- utilize activities that encourage critical reflection, exchange of ideas, and systematic inquiry;
- create a purposeful learning community where students are held accountable for their independent and collaborative work;
- build in a closing of the question loop and provide detailed feedback to contribute to the learners’ knowledge and motivation; and
- ensure the assessments mark success in accomplishing the intended learning outcomes. (p. 32)

This alignment and scaffolding of the learning activities, feedback, and assessment components directly contributes to effective learner acquisition and application of the content.
The variety and flexibility within which the curriculum is delivered contributes to varied student learning styles.

*Student learning styles.* Students learn in a variety of ways. Preferred learning styles differ from student to student. A single student may require several different learning strategies to adequately acquire one concept. One long-standing classification of learning style groups is provided by Keirsey and Bates (1984) and includes (a) sensation and perceiving, where a person leaning toward this style needs physical involvement or kinesthetic methods and multi-media utilized for their learning; (b) sensation and judging, where the learner needs structure and clear, explicit instructions to be successful and prefers that the instructor lead the learning or lecture with little requirement for group activity or discussion; (c) intuition with thinking, where the learner excels in exchanging ideas with other learners and engages in independent learning with anticipated follow up from the instructor; and (d) intuition with feeling, where the learner needs to communicate in a personal way with others, participating in group work, and garnering individual feedback on their work and performance. With regard to these four learning styles and teaching strategies and student success in accomplishing the learning objectives, Neuhauser’s (2002) parallel study on face-to-face and online learning styles and effectiveness of instruction found no significant difference between face-to-face instruction and online instruction.

All learning modalities benefit from varied techniques and strategies employed within the learning experience. Instructional design aims to incorporate varied learning activities and assessment types, each of which must align with the learning objectives in order to facilitate the learner’s interaction with the curriculum.

*Interaction with course content.* Facilitators of learning, whether in face-to-face or online courses, usually facilitate learners’ exploration of and engagement with the concepts, theories,
and skills and their subsequent application. One aspect of Schwab’s (1983) conceptualization of curriculum is that which is:

…) successfully conveyed to differing degrees to different students, by committed teachers using appropriate materials and actions, of legitimated bodies of knowledge…, which are chosen for instruction after serious reflection… [to] …a known group of students[ w]ho will differ from time to time and place to place.

(p. 240)

To aid in the effective delivery of instructional materials, learning activities, and assessments in their online courses, Johnson and Aragon (2002) identify three instructional design techniques and strategies used to accommodate individual differences: (a) provide content in multiple formats, i.e., audio, visual, group work, supplemental content from sources other than the textbook publisher, etc.; (b) allow for individual movement through the course content, e.g., while a linear and chronological structure is provided and encouraged, students are also able to access content in random order; and (c) encourage active and collaborative interaction, using learning activities such as problem solving, case study analysis, and group projects.

Instructional design conversations such as these are centered on the effectiveness of learning environments and the role of the instructor and designer of the course. Galbraith (1998) summarizes the principles as follows: “Good teaching should be a balance of understanding one’s self as a teacher and knowing how to develop learning encounters that are meaningful and useful in the promotion of personal and professional growth” (p. 4). As the conversation extends from traditional to contemporary learning modalities, determining the quality of the design of a course that effectively facilitates the use of technology is an essential focal point.
The requirement of quality design in online courses. An essential question now facing institutions is how to design and implement high quality eLearning courses. Research reveals that intentional, outcomes-based, and well-structured curriculum development and course design in a fully online delivery model can provide high quality of learning equal to the same course taught face-to-face. In their comparative analysis of face-to-face and online courses, Johnson, Aragon, and Shaik (2000) found that while “…students in face-to-face courses held slightly more positive perceptions about the instructor and overall course quality…” than those in online courses, “…there was no difference between the two course formats in several measures of learning outcomes” (p. 29).

Similar results contributing to course quality indicators were determined in a parallel study of one faculty’s online section and consecutive but separate face-to-face section of the same course. Regardless of gender, learning styles, age, or years of work experience, there was no significant difference between the average test scores or the final grades across the two course sections (Neuhauser, 2002).

It is interesting to note that the quantitative studies available within the literature are primarily conducted annually and on a very large scale, most of which examine student responses to eLearning issues from multiple higher education institutions. The findings in these studies consistently show growth in all areas of eLearning from year to year (most starting around 2000) while traditional education shows little or no growth in comparison during that same time (Allen & Seaman, 2011; Dahlstrom, 2012; Lokken, 2012).

In contrast, qualitative research studies have examined student and faculty perceptions of eLearning issues; comparisons of student performance between online, hybrid, and face-to-face modalities; and case studies surrounding topics such as interaction and cognition and how online
or hybrid courses differ in those areas from that of a traditional venue. The majority of qualitative studies report no significant difference in the performance of students and no significant difference by faculty or students in their perceptions of whether online or hybrid learning is more effective than face-to-face learning (Conrad, 2005; Garrison & Cleveland-Innes, 2005; Johnson et al., 2000; Neuhauser, 2002; Schrire, 2004; Smith et al., 2001).

Both quantitative and qualitative studies fail to address characteristics related to teaching experience and abilities or quality standards of course design. Each comparison limits the results to test scores or student opinion about their experiences in the course—limitations which might be interpreted to imply that all teachers teach the same or that the teaching skill does not affect the learning. However, the results are more likely an indicator that the modality itself does not have to be a factor in the quality of the course design or the effectiveness of the learning.

The Quality Matters rubric. Certainly all teaching situations can be of high or low quality in spite of the modality; however, eLearning, being the “new kid on the block,” would naturally be scrutinized more rigorously and seemingly held to a higher standard than traditional forms of delivery. In response to this concern and based on research supported by a three-year grant originating in 2003 that was provided by the U.S. Department of Education Fund for the Improvement of Postsecondary Education (FIPSE), a rubric of 41 quality-portraying standards was created by a group of faculty in the MarylandOnline state consortium. The Quality Matters rubric was constructed to use for the purpose of evaluating course design and providing feedback for the continuous improvement of the design of eLearning courses. With assistance originally from the grant and subsequently from paid subscriptions, the Quality Matters program for higher education has expanded to include the certification of faculty peer-reviewers so they can conduct an organized review of a course. More than 1,870 individual courses from higher education
institutions around the world were reviewed and certified to meet the Quality Matters standards from 2005 through the 2012 calendar year (MarylandOnline, 2010). For more information about the Quality Matters program for higher education and rubric, see Appendix A.

**The Quality Matters rubric: a guide for online faculty.** There is little dispute that most higher education faculty are familiar first with face-to-face teaching strategies for in-person courses, having likely developed them from watching other face-to-face teachers and exercising them in their current practices. The disciplines degreed in by most higher education faculty do not include instruction in face-to-face teaching skills—let alone online teaching. The online venue is a significant portion of the eLearning environment and requires extra attention and acquisition of teaching skills that differ from face-to-face facilitation in order for the course to be a beneficial learning experience for the student. While experience with online teaching has undeniably increased in the last decade and continues to grow year after year (Lokken & Mullins, 2014), I assert that many faculty who have approached the teaching of an eLearning course have not yet been either a student or teacher in an online course nor sampled the unique characteristics of online delivery including the instructional use of technology.

Tools like the Quality Matters rubric are providing new and consistent ways to consider quality of online and hybrid course design. The standards within the Quality Matters program have been created to authenticate the meaning and measurement of quality as it applies to eLearning courses. Research was conducted by faculty on behalf of the Quality Matters program for higher education, and the online and hybrid course design standards were organized into the following eight categories called General Standards: (1) course overview and introduction, (2) learning objectives (competencies), (3) assessment and measurement, (4) instructional materials,
learning interaction and engagement, course technology, learner support, and accessibility (MarylandOnline, 2010).

Central to the determination of quality design by the Quality Matters rubric is an alignment of learning objectives across multiple standards. The second general standard annotation identifies five standards focused entirely on the inclusion of measurable learning objectives at both the course and unit levels. All learning objectives in the course are then studied for (a) alignment across each of the course assessments, (b) support from all instructional materials used, and (c) promotion of the students’ achievement of the learning objectives from the learning activities (MarylandOnline, 2011).

The Hybrid Modality

Brief background of hybrid courses. While the online modality was still a new concept in many circles, courses referred to as hybrid began to slowly appear in the late 1990s. Succinctly, a hybrid course has some face-to-face meetings in addition to online participation.

A definition of “hybrid.” It has not been easy to settle on a way in which to define the hybrid modality as it has been confusing for practitioners, students, and institutions from the beginning, being both inconsistent and varied. Picciano (2007) describes a work session during a blended learning workshop where the participants alternated between one broad and one narrow definition for the hybrid modality: (a) a wide variety of technology/media integrated with conventional, face-to-face classroom activities (broad) versus (b) an online component that replaces seat time in the conventional face-to-face classroom (narrow). Ultimately, the participants adopted Laster, Otte, Picciano, and Sorg’s (2005) following two-part definition:

1. Courses that integrate online with traditional face-to-face class activities in a planned, pedagogically valuable manner; and
2. Where a portion (institutionally defined) of face-to-face time is replaced by online activity. (p. 9)

Educational demand for hybrid modality. Survey results from Allen, Seaman, and Garrett’s 2007 report show that nearly 55% of more than 1,000 participating institutions offer at least one hybrid course, while 64% offer at least one online course (p. 7). Public institutions offer more hybrid courses at the undergraduate level and private institutions offer more hybrid courses at the graduate level. Additionally, hybrid course offerings increase dramatically as the institution size increases (Allen et al., 2007).

Allen, et al. (2007) find that although hybrid courses have a perception of being the best of both worlds, almost two-thirds of academic leaders indicate at least an equal value in fully online courses. Only one-third of these leaders see the hybrid modality as having more promise than other modalities. Additionally, while learners are open to new learning options like hybrid learning, they do not necessarily prefer the hybrid learning model over other options such as fully online.

Fully online courses show more evidence of growth in offerings between 2003 and 2005 than do hybrid courses, although there is “a slightly larger percent of blended program offerings than online programs across all disciplines” (Allen et al., 2007, p. 2). There is a strong preference for fully online and hybrid delivery methods by over half of all undergraduates and an even higher percentage of graduate level students (Allen & Seaman, 2011). Fully on-campus and fully online modalities are both easier to conceptualize, while there is less clarity regarding the hybrid delivery method and its influence on learning. Growth in both online and hybrid modalities will continue and require effective implementation (Center for Distributed Learning, 2012).
Whether labeled hybrid or blended or mixed mode or something else, technological advances and accessibility have inspired educators to incorporate face-to-face components with online (out-of-class) components. This results in a new learning experience. Learners and faculty alike cite the flexibility and self-directed learning opportunities as appealing aspects of this unique innovation (Vaughan, 2007).

**Studies suggest viability for the hybrid modality.** A considerable amount of research has been published in the last decade for the purpose of evaluating whether online, hybrid, or face-to-face delivery is more effective than the others. Almost at the inception of this new delivery method for learning, studies revealed that hybrid courses were at least as effective as either online or face-to-face modalities. Lin (2008) characterizes three lines of research in the field discussing superiority among these modalities: (a) fully online delivery is better, (b) hybrid delivery is better, and (c) there is no significant difference in hybrid courses compared with other delivery models.

The research presents course after course with either qualitative or quantitative results declaring that (a) the online course was more effective than hybrid and face-to-face, for example in the study by Reasons, Valadares, and Slavkin (2005), or (b) that the hybrid course was more effective than online and face-to-face, for example in the studies by Boyle, Bradley, Chalk, Jones, and Pickard (2003) and Dowling, Godfrey, and Gyles (2003), or (c) that there was no significant difference, for example in the studies by Olapiriyakul and Scher (2006) and Bowen, Chingos, Lack, and Nygren (2012). Johnson, Aragon, and Shaik (2000) and Neuhauser (2002) noted no significant difference in either learning or assessment scores between online and face-to-face instruction.
Student perception of the hybrid modality. Studies also show no significant different in students’ perception of learning effectiveness among face-to-face, online, or hybrid. Rivera, McAlister, and Rice (2002), who included hybrid, face-to-face, and online modalities in their research found that student satisfaction was the highest with the hybrid learning model and that test scores were the same for all three methods of delivery. Wu and Hiltz (2004) found that hybrid courses using asynchronous communications improved students’ perception of learning. According to Bhatti, Tubaisahat, and El-Quawasmeh (2005), student satisfaction increased with the hybrid modality while, at the same time, the students exhibited self-directed learning and used available resources to seek out answers with less dependency on the instructor.

According to Allen et al. (2007), of the 2,033 students surveyed for their study, almost half had experience with online education by 2006. The preference for primarily face-to-face course offerings totaled 46% while fully online, primarily online, and an equal blending of face-to-face and online delivery totaled 53%. This near 50-50 split indicates that there was no significant difference in a preference for face-to-face over fully online or hybrid courses. “Rather than indicating an endorsement of a particular delivery mode, this data more likely reflects consumers’ uncertainty about the inherent value of particular modes…” (p. 18).

Individual institutions like the University of Central Florida (UCF), with a specific focus on offering effective hybrid learning opportunities by experienced faculty and course designers, report that they are showing favorable results with their hybrid courses. In Dziuban, Moskal, and Futch’s (2007) research, a 22-item student satisfaction instrument was distributed to 14,794 students enrolled in at least one hybrid course section between summer 2004 and fall 2005. While a meager 10% responded at all, two-thirds of those with completed questionnaires expressed satisfaction with the hybrid course type. The nature of the survey questions addressed
overall satisfaction with the course, amount and quality of interaction with other students and the instructor, course organization, and the degree to which class activities encompassed online assignments. The premise that “student satisfaction depends on faculty satisfaction and vice versa” (p. 198) was the backdrop for their research.

The hybrid course composite. Successful hybrid learning environments are comprised of highly interactive learning communities that challenge students while providing the flexibility that most adult learners require in their daily lives. Dziuban, et al.’s (2007) findings declare that a logical pedagogy of hybrid learning comprised of “interaction, cooperative involvement, learning by doing, iterative feedback, recognizing multiple thinking patterns, engagement, and high expectations” contributes to quality and satisfaction in learning (p. 199).

Dziuban, et al.’s (2007) conclusions are supported in Lin’s (2008) research, which identifies three primary themes highlighting the benefits of hybrid delivery for learners: (a) diverse learning approaches accommodate varied learning styles and contribute to a well-organized delivery of the course; (b) self-control and self-paced learning within the flexible learning environment allow for balance between school and home and work; and (c) connectivity and interactivity among and between the students and teacher. Each of these benefits could be identified by a clear connection between the online coursework and the in-class coursework as well as student performance demonstrating increased understanding of the course learning objectives (pp. 60-61).

A strong message from these studies is that many students believe that learning can happen successfully both on and off campus given effective course design. Daily life is such that many learners do not have the ability to spend most of their time on campus in classes; employment is required, marriage and family obligations exist, extra-curricular activities abound.
In this 21\textsuperscript{st} Century, flexibility in learning is necessary and anticipated (Dziuban et al., 2007). However, students in non-traditional teaching modalities like hybrid and online courses demand that the quality be high—in some cases, even higher than what is expected in face-to-face courses.

**Faculty perception of the hybrid modality.** When interviewed, faculty have cited both advantages and disadvantages to the hybrid modality. Some of the hybrid course benefits include (a) providing multi-modal learning options to address various learning styles (paras. 28 and 32); (b) flexible schedules so work, family, and other obligations can be met (paras. 38 and 39); (c) some activities work best online—others work best in person (paras. 33 and 40); and (d) students can be exposed to a global education with international guest faculty able to be more accessible (paras. 42 and 43). Faculty also cite advantages such as gaining in-class time for learning activities and reduced commute-related issues (Garnham & Kaleta, 2002).

While a common concern expressed by faculty who are inexperienced in online facilitation is that of decreased interpersonal relationships with their students, research has predominantly shown that online participants highly utilize social and emotional interactions with expressions of personal greetings, feelings, humor, and other forms of interpersonal exchange (Lin, 2008). Combined with that, Garrison (2003) emphasizes that reflective learning and critical thinking are additional strengths that have the potential to be cultivated within the online venue. He states, “The collaborative and reflective properties of asynchronous online learning offer the potential to create an environment with both social and cognitive presence” (p. 48).

**Hybrid, online, or face-to-face: How does one decide?** Given that online, hybrid, and face-to-face venues all have the potential to become learning environments for students, how
should an educator determine the most appropriate venue for a course? Learning modality selection must be based on several driving factors: (a) strengths and weaknesses of each learning venue, (b) current skills of the course designer and instructor, (c) characteristics of the discipline learning requirements, and (d) accessibility and relevance of available instructional technology. McCombs and Vakili’s (2005) research is clear: the focus of effective course design and delivery must be on the individual learner and on changing the educational progress where “…technology is in service to learners” (p. 1597). Technology is only one part of the consideration, and it must be used appropriately. “As an overriding principle, it is necessary to look for not only the match or mismatch of technology uses with learning principles, but also its match or mismatch with learners and their diverse needs” [emphasis removed] (p. 1595).

**Examples of hybrid course advantages.** While a well-designed hybrid course is not the exclusive solution to all eLearning challenges, there are examples within the literature where hybrid delivery was an advantage in the learning process over either fully face-to-face or fully online modalities due to the ability to accommodate varied learning styles, increase the flexibility in the learning environment, and improve the understanding of course content. Examples follow that describe large enrollment courses, foreign language courses, and courses with complex topics.

**Hybrid modality used for large enrollment course.** Johnson (2002) explained three areas he believed hybridization would positively impact students’ learning within his large-enrollment face-to-face course: (a) increased accessibility of the course materials to students who might miss one or more class sessions; (b) increased effectiveness of his lectures, although he observed that his lectures were regularly met with interest and enjoyment; and (c) the opportunity to encourage an increased level of connectivity between teacher and learners. Johnson considered
teaching the course fully online, but that possibility “did not really bubble into my consciousness” (para. 7). In fact, teaching a course in the hybrid modality was not appealing until Johnson was offered the opportunity to learn more and receive assistance with the development of the course by an instructional design team at his institution.

**Hybrid modality used for foreign language courses.** Detwiler (2011) studied the feasibility of online foreign language instruction noting that languages have been taught online for a number of years. His conclusion was that those fully online courses sacrificed an essential face-to-face communication component and that technology, while providing valuable and useful communication tools, was not fully accessible to all learners to the extent that his courses could be taught exclusively online in what he considered a responsible manner. For those reasons, Detwiler opted for hybrid delivery for his language course as an alternative to a fully online course.

**Hybrid modality used for courses with complex concepts.** In one of my interviews during the prior research project of 2007, a question I asked one hybrid expert, Anthony Picciano at Hunter College in New York City, prompted him to tell the story of what originally compelled him to teach a hybrid course. His account was of teaching a research methods course originally face-to-face for years, then online for a few years. During the online teaching, he was never happy with how the complexity of the statistics portion of the course faired for the students. Often if they became confused, they could not even identify the right questions to ask. In the face-to-face course, the professor used an in-class learning activity that resulted in his students understanding and applying the concept very effectively; additionally, he could look over their shoulders to see what they were doing and provide relevant feedback to them on the spot. He decided to bring the online course students to campus for a statistics weekend, which
accommodated the immediate resolution for the problems. Thereafter, he continued to teach that course mostly online but blended with the statistics component in a face-to-face setting (personal communication, June 20, 2007).

*Hybrid modality used for students to benefit from socialization.* In another of his courses, A. Picciano (personal communication, June 20, 2007) felt it was essential to provide intentional socialization for a group of freshmen students so he designed that achievement by implementing several face-to-face sessions to compliment the rest of the delivery of an online course. Similarly, Dziuban (workshop proceedings, April 16, 2008, Chicago) reported that first-time students in hybrid programs at the University of Central Florida relished the face-to-face opportunity to build relationships with peers. After completing several hybrid classes, survey results revealed that a number of these students had reached a comfort level that extended their academic success across fully online courses as well.

**Hybrid Course Design**

*Designing and teaching a hybrid course for the first time.* The use of the hybrid course modality does not seem to create the same degree of apprehensiveness in many faculty as compared with a similar consideration of teaching in the online course modality. Young’s (2002) report from interviews with faculty indicates that although some professors worry about any move away from the familiar traditional classroom, “…hybrid models appear less controversial…” than fully online courses (para. 10).

Faculty from Estrella Mountain Community College in Arizona are quoted for providing the following four reasons for choosing to redesign their courses for hybrid delivery: (a) the hybrid course format allows for new teaching opportunities, (b) hybrid courses promote better student performance and better student learning, (c) hybrid courses promote greater student
engagement and interaction, and (d) redesigning a course for hybrid delivery affects the way faculty approach their other face-to-face and online courses (Yohe, 2003).

**Issues in hybrid course design and delivery.** Effective design and delivery of curriculum using the hybrid modality has been met with various complications—not the least of which has included a fairly common confusion by both faculty and students of how the hybrid course would look and function. Given the wide variety of design, delivery, and schedule that might make up the hybrid course, it is not surprising that misunderstandings would abound. These hybrid course design and delivery issues can be discussed in three classifications: nomenclature, multiple categories of blended learning systems, and online teaching competency.

**Nomenclature.** A consideration of the nomenclature within the hybrid modality highlights complications surrounding the effectiveness of course design and delivery. The most commonly used terms for this modality have been hybrid and blended (Picciano, 2007). A few institutions have used the term hyflex (Beatty, 2007) and the University of Central Florida’s (UCF) website has referred to their offerings of this type as mixed-mode (*reduced seat time*) (Center for Distributed Learning, 2012). The question we must ask regarding this variety of term usage is whether there is a difference between these terms or if these terms are synonymous with one another and merely a matter of semantics. The answer to our question introduces an additional complication with the nomenclature because we will discover that some institutions define blended the same as others define hybrid or hyflex or mixed-mode, and others define their term uniquely from any other institution (Picciano, 2007).

The adopted definition noted previously (Laster et al., 2005) is most often labeled as hybrid, blended, or mixed-mode (as used at UCF). The selection of term seems to be determined on an institution-by-institution basis, although Picciano and Dziuban’s (2007) edited collection
of research certainly marks the use of the term blended as the popular choice. Blended, however, has been defined to describe many components beyond the online and face-to-face venues of course delivery. A problematic result of the multiple terms and definitions is confusion on the part of the students regarding the expectations for their participation in the course (Chatfield, 2008b). For the course design experience to be surmountable by those new to the experience, the nomenclature at their institution must be clearly and consistently used.

**Multiple categories of blended learning systems.** The confusion created by inconsistent nomenclature is accompanied by the fact that it would be difficult to locate several hybrid courses that looked the same or were taught in a comparable manner. Graham (2006) identifies three general categories of blended learning systems that he uses to explain this phenomenon. The following categories describe the degree of difference between one hybrid course and another hybrid course by either using the system to enable, enhance, or transform the learning. While Graham asserts that “none of these blends is necessarily bad” (p. 13), I contend that they are dramatically different from each other and one is preferable to the others in the quest for the design of a high quality hybrid learning experience.

1. The **enabling blends** learning system focuses on using technology solely to provide increased access and convenience (Graham, 2006). This system might also be referred to as a web-enhanced class, which often has no reduced face-to-face time or any interactive activity or communication via technology, both of which would be required characteristics of a true hybrid course as identified in the afore-mentioned adopted definition. This system delivers the least overall change for the course designer; allowing for the course to exist from prior, non-hybrid design, and simply include some online components represented, such as the schedule or syllabus.
2. The “**enhancing blends**” **learning system** allows incremental changes to the pedagogy, but no radical change in the way teaching and learning occurs (Graham, 2006). While it would not be reasonable to generalize any singular design representing this system, an example might be that the digital learning environment contains a series of online exercises that students complete but do not obviously connect to the face-to-face learning experience. With this system, the course designer must become familiar with technological features and ways in which to facilitate them for the students. The delivery of enhanced learning will affect some, but not a majority of the course design.

3. The “**transforming blends**” **learning system** indicates a radical transformation of the pedagogy with the goal of enabling intellectual activity that requires technology for practical application (Graham, 2006). According to Graham, those institutions having documented the most years of experience with hybrid learning align most closely with this system, as evident within their instructions and recommendations to faculty. This system requires a significant commitment by course designers because it affects all aspects of their courses. One example of the extent of this is the encouragement from the University of Wisconsin-Milwaukee Learning Technology Center (2012) that faculty should plan to use a minimum of six months for professional development, course design, and LMS development activities prior to teaching the first hybrid course.

**Online teaching competency.** The enhancing and transforming systems listed above describe hybrid courses with reduced face-to-face time. In my daily instructional design work with over 800 faculty at the second largest community college in the State of Washington, I am
witness to the fact that few course designers anticipate the need or commitment requirement for the effective redesign that results in the radical transformation of a course. The “enhancing blends” learning system seems more intuitive and would likely be envisioned as the satisfactory result of simply providing access for students to static resources with the LMS or a website. However, many faculty and course designers discover an unanticipated requirement for enhanced explanation when communicating primarily using the written word or via the creation of audio-visual materials (Kaleta et al., 2007). It is often not realized until the course is under way that this important characteristic is a third great contribution to the confusion and complexity of designing and delivering an effective learning experience in the out-of-classroom portion of the hybrid modality.

The hybrid modality is deceptive: It seems more intuitive than it is. Hybrid course design has not been without controversy and challenge. The very nature of unfamiliar nomenclature and inconsistent structure creates frustration and disillusionment for both faculty and learners (Picciano, 2007).

“Blended learning means different things to different people” (Picciano, 2007, p. 8). Hybrid learning (referred to as blended in this quote) is a relatively new form of eLearning, realized for the most part in the last decade. The instructional portion of a face-to-face college course primarily takes place in person, on campus, with all students physically together at the same time. According to the United States Department of Education Regulation 34 CFR 600.2, a typical five-credit course at an accredited higher education institution meets in person for five hours each week with at least ten hours each week expected for homework, a total of 15 hours per week (Ochoa, 2011). Conversely, a five-credit online course consists of those 15 course hours per week (representative of the traditional classroom plus the homework), all potentially
occurring entirely outside of class. The classroom of the online course is most commonly represented by facilitation within an LMS such as Blackboard or Moodle or Instructure Canvas. Consequently, a blending of or hybrid version of those two modes is the mixture of in-class interaction and online instruction (Buzzetto-More & Sweat-Guy, 2006) and the 15 total hours of a five-credit course are divided between these modes.

A 5-credit course as described above is graphically demonstrated in Figure 3. Here you can see how the hybrid course is administered using face-to-face (F2F) or synchronous time in class as well as online or primarily asynchronous activity outside of class.

![Graph showing hours per week in hybrid vs. online and F2F modalities.]

Figure 3: Hours required per week in hybrid vs. online and F2F modalities.

The preconception of the hybrid course being primarily face-to-face with a portion moved online is not uncommon. It is clear, however, from the blue bars above that the face-to-face portion of the course is not the majority of the course instruction.
**Intentional design and integration within hybrid courses.** It is important, therefore, to study how the course designer goes about developing instruction that takes place partially face-to-face in a standard classroom-style environment, yet includes a major portion of technology-infused content delivery, online interaction, and real-world application. Likewise, the practitioner must explore the pedagogical reasons for implementing this type of design in order to create the appropriate learning environment.

Allen et al’s (2007) study, however, does not include details about how the hybrid or online courses were developed or taught; nor does it include the level of support provided to the course designers. Therefore, we cannot determine the quality of the courses or the potential of effective learning therein. If, for example, the online courses in the study were mature, having been taught a number of times, but the hybrid courses were in their infancy or taught by faculty who are less experienced with this modality, it would stand to reason that the online courses would be found favorable. For these and other reasons, the research consumer can concede that the statistical findings include unacknowledged variables, and therefore, should not be considered viable for generalization.

While it is usually understood that a hybrid course is part online and part face-to-face, it is more difficult to identify the causes for an ineffective hybrid course design. Dziuban, Moskal, and Futch (2007) explain that determinations of the proportion of face-to-face and online elements contained in each venue, and thus the course design, vary by institution, discipline, and instructor. They compare the challenge by citing Jared M. Diamond’s principle of “blueprint copying versus idea transmission” (p. 179). Where blueprint copying would enable an observer to closely replicate precise hybrid course components, the consequent complexity, adaptability, and flexibility as well as individuality of faculty and course designers dictate more likelihood to
simply identify the idea and attempt to apply it within their own culture and meaning. In other words, there can be no single template for a hybrid course, nor is it even thought to be appropriate in higher education circles (A. Picciano, personal communication, June 20, 2007).

One instructor suggested that becoming competent with the hybrid modality “may challenge you in a whole new way of teaching” (Kaleta et al., 2007, p. 123). Kaleta, et al. (2007) also report that all faculty who participated in program designed to teach skills relevant to hybrid course design found their teaching to be more centered on the student with their new hybrid course design.

When teaching a hybrid course, the instructor’s role is unique in two ways: (a) the week-to-week progression of course activity as well as (b) the transition of moving back and forth between face-to-face and online as it relates to both venue and technology. Additionally, making decisions regarding instructional strategies that work effectively in both face-to-face and online teaching environments was critical to a successful learning environment (Kaleta et al., 2007).

Scheduling the online and face-to-face components, organizing the course layout and design, and assisting students with time management comprise other important items requiring attention within the instruction and design process (Kaleta et al., 2007).

Willingness and the ability to change are critical for faculty who choose to decide to teach hybrid courses. Knowing how to effectively facilitate learning as well as manage the discussion and interaction both in the face-to-face class session as well as online are minimum requirements for a positive learning experience (Kaleta et al., 2007).

Pelz (2010) found that designing hybrid course that was perceived to be successful requires (a) solid development and layout or structure of the course and delivery of the curriculum, (b) the interlacing of the online and face-to-face components, (c) the development of
online teaching skills on the part of the educator, and (d) the recognition of the increased responsibility of learning on the part of the student.

J. Hilke (personal communication, June 28, 2007) shared that there are specific learning purposes for bringing students together in a classroom (face-to-face) as well as effective learning experiences that students can have outside of the classroom (online). He stated that in both cases, “…online technology [should] at least guide, in a significant way, the instructional methodology and the instructional setup of the course.”

The use of technology often loses effectiveness—even to the point of being detrimental to the learning—when intentional and purposeful application is not attained. Technology should never be used solely because it can be used or because it is easy or because it is there. Each technological component or enhancement should be evaluated for nothing less than its role in the sound pedagogical delivery of and engagement with the learning (Bhatti et al., 2005; Chou, 2002; Kaleta et al., 2007; University of Wisconsin-Milwaukee Learning Technology Center, 2012).

**Instructional design for hybrid courses.** An educational environment is a “…complex composite of many interacting influences that need to be aligned towards supporting deep active learning…” (Entwistle, McCune, & Hounsell, 2003, p. 104).

Sharma (2010) emphasizes that hybrid learning should be a combination of “…the best of the teacher with the best of technology…” (p. 457), which is perhaps the most significant challenge for hybrid course designers. Even extensive teaching experience in the face-to-face classroom does not naturally develop skills necessary for online teaching. While it might seem that the teaching process, particularly in higher education, would be the same regardless of the
modality, both online teaching and face-to-face teaching include many unique characteristics that require distinctive strategies and practices in order to create effective learning environments.

Wunker (2010) declares that teaching differently than one would in the traditional face-to-face classroom is the key to a successful hybrid course structure and that instructors must be willing to use methods of teaching other than what they are most familiar with. Glazer (2012) notes that the very strength and value of blending online and face-to-face learning components is its combination of synchronous and asynchronous methodologies. When designing courses, the educator must understand the assets of both in order to take fullest advantage of each.

Instructional design knowledge and skills are recommended in hybrid course design for the course designer just as they were for online course development. Strategy-based instructional design models hold value in supporting the design around learning objectives, incorporating varied learning activities, and creating effective interaction with the course content.

What is currently missing in this field is any sort of instructional design process model specific to hybrid course design. The literature lacks a picture of what hybrid courses might look like, the instructional steps involved in developing them, and any form of explanation as to what was required for them to be in that condition. Most course designers will likely require instruction on how to begin the process of building a hybrid course. The process should include what the design stages are comprised of as well as guide the designer as to when course components and learning strategies should be planned before others. This study will provide some feedback in relation to the use of the ABCDE instructional design process model.

Who Are Higher Education Course Designers and Faculty?

All teachers begin as novices, requiring time and experience to develop competence and expertise in their craft. The ability to blend learning environments is no exception to these
requirements; perhaps more than either face-to-face or online learning, the hybrid course requires additional time to become fluent (Dziuban et al., 2007). Should that expertise be pursued, Dziuban, et al. (2007) contend that the hybrid learning modality provides opportunity for faculty and course designers to improve course instruction by becoming competent in using both online and face-to-face environments for (a) the facilitation of learning, (b) the effective communication of ideas and concepts, (c) the display of interest in and respect for the learning, (d) the organization and flow of the course, and (e) the assessment of student progress.

Amid the confirmation that quality is possible in online learning, there remains a number of faculty who are neither interested nor willing to develop online courses. According to Donovan (1999), the mainstream majority of faculty, in contrast to early adopters, (a) generally must be convinced of the advantages of the change to them and to their students, (b) identify whether the change is unduly complex and time-consuming, and (c) determine whether they can see examples that they believe they can implement in their own teaching. Donovan suggests that this general resistance is viewed as protecting students from ineffective learning experiences.

**Studies reveal challenges for the hybrid course designer.** Maguire’s (2005) research collected faculty concerns that might prevent them from the pursuit of teaching online or hybrid courses. The general categories relate to time, money, technology issues, teaching and pedagogical skills, and sacrificed relationships with students. A limited list includes these details:

- intimidated by technology/need assistance developing effective technology skills;
- lack of understanding of distance education and what will work at a distance;
- resistance to innovation;
- concern about course quality;
- lack of student interaction;
concern about Internet's misinformation;

- inappropriate for traditional-aged students;

- concerns about faculty workload/extra time required to develop and maintain course;

- lack of grants for materials, expenses, design, development/merit pay/release time;

- high need for technical support/professional development;

- delay in dealing with critical issues; and

- weak communication (pp. 9-13).

Smith, Ferguson, and Caris’s (2001) research articulates an additional point quite well: “Some instructors feel as if a lifetime of teaching skills goes by the wayside. They cannot use their presence...[,] classroom skills...[,] oral skills to improvise on the spot to deal with behavior problems or educational opportunities” (p. 22).

In a qualitative research study on the topic of instructors’ skills in designing and teaching hybrid courses, Kaleta, et al. (2007) conducted interviews with 10 experienced University of Wisconsin-Milwaukee (UWM) faculty members, each having taught at least four years, six having taught for more than 10 years. Coming into this study, each of these faculty had previously participated in a hybrid course faculty development program offered by UWM’s Learning Technology Center.

Findings included that learning new teaching and development skills and the unanticipated amount of time involved in that adventure can be obstacles for faculty. Some of the faculty erroneously assumed that teaching a hybrid course was only half the work of teaching an online course, when in fact it involved designing not only the fully online course but also likely the most complex portions of a face-to-face course. These misconceptions led to the potential for
under-preparedness, disorganization, distress, frustration, dissatisfaction, and ineffectiveness for both instructors and students.

Implementing technology was seen as another challenge. To address this, Kaleta, et al. (2007) discourage the use of too much technology too quickly. Students do not want to pay the price from this challenge either. Caufield (2011) conducted interviews with students to learn about their experiences when taking hybrid courses. One student response prompted the following recommendation for teachers, “Don’t use technology that is smarter than you, as generally you will be the first one contacted when that technology fails” (p. 176).

A hybrid course should be the best of both worlds (Sharma, 2010), but the instructor must be able and willing to direct the course effectively. Hybrid learning environments are a valid direction for higher education to be heading, but we must confirm that all necessary and appropriate tools and resources are in place and there is a defined process that will assist in the development of expertise.

**The need for hybrid course designers.** The 2011 Distance Education Survey Results published by the Instructional Technology Council (ITC), states that 55% of the institutions represented in the survey continue to increase the number of hybrid courses each term, resulting in student demand that exceeds the faculty capacity to design and teach them (Lokken, 2012). Thus, the hybrid modality is often thrust upon faculty by administrators who are experiencing pressure to meet student demand. The report also cites that 79% of all online instructional materials, learning activities, and assessments at community colleges is developed in-house by faculty, instructional designers, or administrative staff, rather than being created for them by a publisher or licensed from a content provider. Professional development for faculty in this field was reported to be currently offered by 85% of responding community colleges for the 2011
year. A reported challenge for community college administrators is that there is more student demand for distance education courses than faculty who have developed skills to build and teach them. The hybrid modality was identified as the most current area needing attention (Lokken, 2012).

The value of comprehensive faculty development. Many courses taught in the hybrid modality have been met with mixed success. In a number of situations, the nature of the hybrid modality is not clear to either the student at the time of registration or the instructor during the development phase. Kaleta, Skibba, and Joosten (2007) confirm the complexity:

Developing a hybrid course for the first time is challenging for any instructor.

Hybrid courses are substantially different from wholly face to face or online courses. They require faculty to develop new teaching skills and to learn how to design hybrid courses. Although effective hybrid courses can result in a number of benefits for faculty, students, and institutions, poorly designed and taught courses can be disastrous. (p. 111)

A mission facing faculty development programs is to determine a theoretical perspective upon which a hybrid learning design can be grounded. The University of Wisconsin at Milwaukee (UWM) maintains an extensive website and faculty resources resulting from a strong focus on hybrid course work. Conditions include the need for faculty to (a) rethink course design toward a more student-centered active learning approach, (b) learn how to facilitate online discussions, (c) learn how to manage the dual-learning environment of face-to-face and online, and (d) prepare the students to understand their roles and use of technologies (2011). A distinct correlation between prior online teaching and effective delivery of hybrid design is evident.
The integration of technology contributes a confusing aspect in this venture. Technology can occasionally appear as that shiny object that attracts course designers but ultimately adds little pedagogical value to the learning experience. Without an apparent understanding of UWM’s mandate to rethink course design and transform the way students learn (University of Wisconsin-Milwaukee Learning Technology Center, 2011), traditional pedagogies are predominantly used with occasional online resources appended to the course, providing unimpressive course designs and practices without introducing learner-empowering methods of learning (Walker & Baets, 2009).

As a means of addressing these and other challenges, having a comprehensive faculty development program was viewed as critical to a faculty’s successful teaching and designing of and anticipating hybrid courses. Faculty development was also suggested to provide structure, dedicated time, motivation, and networking with colleagues that might be necessary for trying this new learning model (Kaleta et al., 2007).

**Hybrid course development requirements.** Simply taking an existing face-to-face course and uploading its contents into an LMS rarely results in an effective hybrid course. Redesigning the instruction for hybrid teaching includes re-examining course goals and learning objectives, creating online learning activities, building varied and sequenced assessment tools such as project and learning events to replace a typical midterm and final exam, and designing and facilitating effective discussions that flow in and out of the classroom (Kaleta et al., 2007).

Kaleta, et al.’s (2007) findings indicated that instructors dealt with three challenging aspects of hybrid course development:

- the re-examination of the learning objectives,
• the selection of the most appropriate learning activities in each of the face-to-face and online sessions, and

• the misconception that there was no need for limitation in the quantity of content provided for the learners.

Selecting which portions of a course are best delivered online and which parts are better facilitated during face-to-face sessions proves challenging to many instructors who are new to teaching with technology (Anderson, 2003; Kaleta et al., 2007; McGee & Reis, 2012; Yohe, 2003). Initially, most instructors used the face-to-face environment to facilitate better student understanding where presenting information needing context and interpretations. In contrast, the online environment was used for information that was independent in nature or was clearly conveyed and easily facilitated in the online environment (Kaleta et al., 2007). Kaleta, et al., extend that later, with more experience, hybrid instructors included more critical reflection and interactive discussions online, and “then they continued those discussions in class” (p. 126).

UWM’s Learning Technology Center originated the expression “course and a half syndrome” (University of Wisconsin-Milwaukee Learning Technology Center, 2012) as an alert that the hybrid course can easily be expanded beyond what is appropriate to meet the student learning objectives for that course level.

**Quality Matters add annotations for hybrid course design in 2006.** Not unlike the quality standards for fully online courses, hybrid courses have several unique annotations within the Quality Matters rubric. There should, for example, be a clearly defined relationship between each of the online and face-to-face activities as well as a schedule that is explicit in timeline and a description of the intension of both online and face-to-face portions and how they connect throughout the course (MarylandOnline, 2011).
Gaps in the Literature

While there is a large and growing body of literature on the subject of the hybrid modality available on the World Wide Web, in published books, and in scholarly journals, the majority of these writings focuses on the definition of a hybrid course, the value of the hybrid modality for both learners and teachers, the role of an institution’s administration in supporting hybrid courses, the comparison of hybrid learning to fully online and face-to-face modalities, and the use of the hybrid modality in corporate training. As a critical consumer of this research, I believe there are gaps in the literature related to the research designs of the studies and how the results were interpreted that lead to the question of whether the results can be generalized (Roy, 2006). For example, most of the research fails to provide the quantity and breadth of teaching experience, for either online course faculty or face-to-face course faculty. Additionally, I have not been successful finding research that includes any mention of instructional design experience or professional development being necessary for the course designer.

One might suggest that the absence of research leads to findings that favor traditional methods. This does not seem likely, however, for in his extensive analysis of No Significant Difference findings across dozens of research articles, Russell (2001) clarifies that as long as the message remains the same, the designation of “no significant difference” purports that each modality is equally valuable for learning. Thus, the mere quantity of results finding no significant difference supports the premise that online, hybrid, and face-to-face instruction can each be achieved with positive results (just as each can fail).

Both online and hybrid modalities consist of many teaching and learning characteristics that differ from face-to-face teaching environments. More detailed information is required on three levels in order to provide any degree of trustworthiness in the research so that the results
might be considered in comparable situations. Those levels are the roles, responsibilities, and expectations of (a) the educator, (b) the course designer, and (c) the learner.

**Information needed about the educator.** Research that compares student results within an online course to those of a hybrid or face-to-face course must also provide a background of the educator and his experience with teaching each of the modalities. The study should reveal whether the courses in the online modality in the research have been taught more or fewer times than other modalities by this same educator, and whether the educator has taught other courses in each of the modalities being compared. Without these specifics, the results of no-significant-difference on many of the findings encourage us to assume that a teacher who ordinarily is high performing can garner similar results regardless of the modality and a teacher who ordinarily is low- or average-performing can also garner similar results regardless of the modality. The literature clearly identified the need for teaching experience as well as skill with varied teaching strategies specific to online environments. However, we are unable to discover what steps an educator should specifically take to achieve high results in course design and teaching performance of a hybrid course.

Uncharacteristic to many other research journal articles on the hybrid modality, Bowen, Chingos, Lack, and Nygren (2012) provide qualifications in their research report as a footnote to their statement, “…we could not randomize instructors in either group and thus could not control for differences in teacher quality” (p. 13). They describe that for the online and hybrid courses compared in the research, those educators teaching the tradition face-to-face courses had an average of 20 years overall teaching experience where the educators teaching the new hybrid courses had an average of 5 years teaching experience. Additionally, while the course materials were created by Carnegie Mellon University (CMU) and all courses used the same materials,
those educators teaching the traditional face-to-face courses had taught with the materials “…for years…” (p. 13) and the educators teaching in the hybrid course “…were using the CMU online course for either the first or second time…” (p. 13). The findings of this study must, therefore, take into consideration these differences of experience and varied use of materials when attempting to compare results and recommendations for application purposes.

**Information needed about the course designer.** Similar to circumstances related to the educator, hybrid course research is more difficult to replicate without (a) indicators of the expertise of the designer employed in the design and development of the courses in all modalities and what those processes involved, including (b) a comparison of the learning materials, and (c) knowing whether the course was fully designed prior to the start of the term or whether it was designed and developed over the progress of the term.

Perspective would be increased if the researcher included more specific background information about the experience of the course designer, for example the number of courses he has designed, and the span of time across which the designer’s experience extends. There would be value to knowing if the designer received formal education in instructional design and pedagogical principles as well as learning about the extent of the designer’s experience with face-to-face, online, and hybrid courses.

**Information needed about the learner.** Finally, the research should indicate the experience of the learners within each of the modalities. Details might include whether it was their first time taking an online course, whether they had participated in numerous online or hybrid courses. It would be of value to learn whether the learner was a first-year college student or in a graduate-level program. When comparing modalities based on student success, it would be helpful to know the learner’s success experience in other classes they have taken and how the
learner’s success compared between the class being studied and other courses. Another helpful comparison would be how the teaching practices of each of their instructors align with their preferred learning styles. Without details and specifics like these, it is impossible to anticipate similar results to classes in these studies.

**Summary of Literature Review**

The review of the literature indicated an extensive quantity and range of research on all modalities within the eLearning field including online, hybrid, blended, hyflex, the flipped classroom, and others. The chronicle of distance education is historically solid and forecasted for growth in higher education, but is not without skeptics regarding its validity and usefulness. Amid claims that it offers the best of online and face-to-face, the hybrid modality is the most enigmatic as it is not intuitive in either its design or execution. The immense availability of and flexibility introduced by the use of technology compels educators to apply it effectively and innovatively. However, students indicate the desire that technology integrations be, first and foremost, beneficial to their learning.

The field of instructional design exposes the most capacity for transformative hybrid course design and comprehensive faculty development. Faculty must be both willing to overcome challenges and able to learn and apply the necessary skills required for the endeavor of the development of a high quality hybrid course.

The research, however, fails to produce replicable studies that would aid course designers and faculty with the process of developing a hybrid course from the perspective of the practitioner. Since the design, structure, and pedagogical interlacing of the technologically-enhanced curriculum and in-class learning activities for a high quality hybrid course are not
intuitive or experienced in the same way as either fully online or fully face-to-face courses, a process-based instructional design model would likely fulfill this gap.
CHAPTER THREE: THEORETICAL FRAMEWORK
AND THE ABCDE MODEL

A Challenge within the Field of Blended Learning

Hybrid learning has been applauded as the “best of both worlds” with proponents such as the past-president of Pennsylvania State University, Graham Spanier, publically stating, “Hybrid instruction is the single greatest unrecognized trend in higher education today” (as posted on the Penn State Teaching-Learning Center website). However, findings from my 2007 research revealed that the implementation of effective hybrid delivery was more complex than one would suppose, and many who tried teaching or taking hybrid courses were disappointed with the results: students failing, students dropping courses, and faculty indicating that they will never try this mode of delivery again. The culprit of that continuing complexity seemed to stem primarily from a misunderstanding about what hybrid learning and hybrid course development actually entailed.

The University of Wisconsin at Milwaukee has an extensive website and faculty resources resulting from their focus on hybrid course work. Challenges described include the need for faculty to (a) rethink course design toward a more student-centered active learning approach, (b) learn how to facilitate online discussions, (c) learn how to manage the dual-learning environment of face-to-face and online, and (d) prepare the students to understand their roles and use of technologies (University of Wisconsin-Milwaukee Learning Technology Center, 2011). A distinct correlation between online teaching and effective use of technology is evident for the proficient delivery of a hybrid course.

The challenge facing course designers, then, is finding a blended learning design process with roots in a solid theoretical perspective. This chapter will identify the components that
comprise a foundational theoretical framework for blended environments, based on the literature as provided in the previous chapter, and then introduce a practical set of steps that can be followed by a first-time hybrid course designer in developing an effective hybrid course.

A Theoretical Framework for Blended Environments

In his contribution, espousing the need for a conceptual framework related to learning in blended environments, Shea (2007) effectively addresses the complexity involved in designing a hybrid course. The hybrid course will be successful if it includes a blending of pedagogies and learning theories, a blending of synchronous and non-synchronous technologies, a blending of instructional formats, and a blending of modalities.

Based heavily on Garrison’s (2008) Community of Inquiry (CoI) framework, with concepts from the How People Learn framework (Bransford, Brown, & Cocking, 2004) and the How Adults Learn framework (Merriam, 2001), as well as the Technological pedagogical content knowledge (TPCK) framework (Mishra & Koehler, 2006), I have constructed a resulting theoretical framework as illustrated in Figure 4. The Blended Environment Theoretical Framework consists of two layers—the base or foundation layer on the bottom and the overlaying effects layer hovering above. The base layer consists of the learning environment and technology, the course content, and the teacher’s role and pedagogy. The effects layer suggests how the learner may be affected when any of the two base components are combined. For example, combining course content with learning environment provides a particular structure and process for the learner. Combining learning environment and the learning facilitator provides a particular effect on the interactive learning community. Combining the learning facilitator and content bases provides a particular set of reflective/cognitive experiences for the learner.
THEORETICAL FRAMEWORK: LEARNING EXPERIENCE IN BLENDED ENVIRONMENT

PREFERRED PRACTICES:
- Environment is designed to facilitate active learning; technology supports strategies; f2f creates connections with content and community

CONTENT+ENVIRONMENT-
Structure/Process (Design & Teaching)

ENVIRONMENT+TEACHER-
Interactive Learning
Community (F2F, online)

Student’s blended learning experience

PREFERRED PRACTICES:
- Content is designed to accomplish learning objectives; scaffolded to challenge learner; address interests of the learner

TEACHER+CONTENT-
Reflective/Cognitive (online & F2F)

PREFERRED PRACTICES:
- Teacher gives prompt feedback; provides guidance, encouragement, support; facilitates learning and interactivity

F2F

ONLINE
As Mishra and Koehler (2006) point out, their TPCK framework is grounded in the role of the educator transforming the subject matter for teaching. When extended to include technology, their framework emphasizes that “Teachers will have to do more than simply learn to use currently available tools; they also will have to learn new techniques and skills as current technologies become obsolete” (p. 1023).

**Content base plus environment base advocates structure/process effect.** In the Blended Environment Theoretical Framework, the combination of the environment and content bases suggests the effect of a structured course design and process for teaching and learning. This represents the layout, look, and organization of the tangible curriculum components of a course.

One of the challenges involved in delivering instruction with the use of a website or LMS like ANGEL, Blackboard, Moodle, or Instructure Canvas is the structure that must be built for the course to be formed around. “Chunking” is a term first used in the field of psychology in experiments related to the capacity of human working memory. There are two aspects involved in chunking effectiveness: the organization of grouping similar items together and the limitation of the number of components such that a person is not overwhelmed. This concept is desirable for course design practices as well. Garrison, Schardt and Kochi (2000) uses the word “chunking” to describe the organization of course materials. Smith (2008) clarifies that the course designer’s job is that of assisting students through the content. Whether the content is organized chronologically (on a week-by-week basis) or by topics, the structure of the course design is the first connection the learner has with the course materials, and is their first impression regarding whether the online or hybrid course will be manageable.
Within the LMS, the course structure should present itself as inviting and resourceful, encouraging the student to return for information, collaboration, connection, and support. It should not require that the learner “figure it out” or have to try to understand what the designer did or where various course components are located. The structure should be intentional, sequential, complete, consistent, and organized.

For a hybrid course to be designed in a fashion that is recognized as being effective, its structure and process have all of the characteristics of a high quality online course. Additionally, the design will also include planning and preparation for each face-to-face class session in the form of either a detailed lesson plan or instructions for activities and problems to be prepared for and addressed during each session. The structure must fully represent the flow of the course in its entirety. Furthermore, it must demonstrate the incorporation of the out-of-class experiences along with the in-class activities, clearly revealing the relationship among all components and the student’s involvement with each.

**Example of structure and process in a hybrid course design.** The curriculum content within the course’s structure and design will take one of two general forms: a learning resource/material or a learning activity/assessment. Both of these forms must contribute to the overall course learning objectives. The curriculum developer must confirm that the resources are relevant and sufficient for the accomplishment of the learning activities. The design process described in Understanding by Design (Wiggins & McTighe, 2005) begins with the careful consideration of the learning goals, then creation of assessment tools that aptly measure those goals, and ultimately assembling learning activities based upon the requirements of those tools that provide practice and application of concepts for successful understanding. The focus is results-oriented (for example, “What will students know and be able to do as a result of
instruction?” rather than input-based (for example, “What instructional methods and materials will be used?”).

An example of the structure and reflection union in the hybrid course design might look like the following:

a. In preparation for in-class session—
   i. Learners are encouraged to review learning objectives
   ii. Content is available to learner for exploration and discovery

b. In class—
   i. Instructor facilitates active learning activity of new concept
   ii. Learners are given opportunity to construct meaning, relevance, application via small groups
   iii. Instructor and learners debrief activity, making connection to learning objectives

c. Follow-up to in-class session—
   i. Learners are assigned one or more reflective online discussion questions
   ii. Learners are encouraged to apply learning through project work or journaling
   iii. Instructor presents introduction and connection to next learning component

Active learning is a primary consideration with this model. It is a broad term that contrasts passive learning activities such as listening to a lecture to more engaging activities that might involve group work or experiential learning. Demonstrations of active learning might
include situations where the learner is practicing a principle or concept, collecting artifacts, creating a project, and collaborating with others to realize a goal.

The How People Learn (HPL) framework (Bransford et al., 2004), stresses an immediate and active engagement with the learning that connections to preconceptions, an organization of the content that facilitates application of knowledge, and a metacognitive approach that encourages the learner to monitor and follow-up on their own understanding. The course designer’s role in the pursuit of structured and reflective learning is to converge the flow across the course design with emphasis on the goals, objectives, needs, and interests of the learner (Shea, 2007).

The effects layer of the Blended Environment Theoretical Framework incorporates learning theory, teaching strategies and methods, and instructional design practices in a holistic view of this theoretical basis for understanding.

**Content base plus teacher base advocates reflective/cognitive effect.** In the Blended Environment Theoretical Framework the combination of the content and teacher bases suggests the effect of deeper learning processes that can be realized through reflection and cognition. The focus is on learning activities that are more independent, encouraging each learner to engage with the content whether it takes the form of tangible course materials provided by the instructor or reflection upon class discussions and engagement encountered during a face-to-face session or within the online environment.

Higher-order learning constructs include properties such as reflective inquiry, self-direction, and metacognition (Garrison, 2003). The online environment does not detract from any of these applications, and Garrison suggests that online learning probably provides an advantage over traditional face-to-face learning.
Furthermore, it has been argued that if educators capitalize on the integration of the central properties of online learning and dimensions of higher-order learning—asynchronicity/reflection and connectivity/collaboration—there is a high probability that deep and meaningful learning outcomes will result. (p. 54)

The reflective/cognitive element contains half of a two-headed arrow illustration. On the reflective/cognitive end of the arrow, the online portion of the course is emphasized. The other half of the arrow represents course face-to-face experiences (discussed further in the next section of this chapter) and the overlapping arrow signifies the interlacing of the face-to-face and the online portions of the course. While deep reflection is certainly possible during in-person class sessions, it often benefits from time and additional prompts to fully develop. Therefore, the online end of the arrow represents deep reflection that might occur while not necessarily in the presence of others, enabling the learners to bring resulting discoveries and revelations from independent thinking back into the class to be shared with each other and enrich the overall experience of the course. This requires that the course designer consider each nuance in learning activities that function best asynchronously online and synchronously online or face-to-face.

The hybrid course is a flexible approach that supports the conveniences of fully online courses without losing the face-to-face connection (Rovai & Jordan, 2004). To initiate the online environment such that it drives the face-to-face exchange, an instructor might facilitate a learning activity taking place before or after a face-to-face class session that leads into or follows-up from the session. The correlation between the online and face-to-face components should be relevant and undeniable, directly contributing to the course learning objectives. Learning strategies for out-of-class engagement can be supported with the use of reliable technology which requires learning, practice, and experience to be utilized effectively by the facilitator of the course. In a
solid design, the online component becomes a natural extension of the face-to-face classroom, and the structure therein should emphasize how the technology supports and enhances specific teaching and learning objectives.

**Example of interactivity and reflection outside of class.** Although the concept of community has been associated with higher levels of perceived learning for students (Rovai, 2002; Schrire, 2004; Shea et al, 2006), interaction alone does not ensure profound cognitive engagement. The collaboration must also be deliberately focused and systematic (Garrison & Cleveland-Innes, 2005). The hybrid course design should utilize the strengths of written communication in the online portion and incorporate critical thinking questions that lead the learner to the more advanced layers as described in Bloom’s Taxonomy: **analyze**, where the learner distinguishes, classifies, and relates the assumptions, hypotheses, evidence, or structure of a statement or question; synthesis (renamed to **create** in the revised version of the taxonomy), where the learner originates, integrates, and combines ideas into a product, plan or proposal that is new to him; and **evaluate**, where the learner appraises, assesses, or critiques on a basis of specific standards and criteria (Krathwohl, 2002).

**Environment base plus teacher base advocates interactive learning community effect.** In the Blended Environment Theoretical Framework, the combination of the environment and teacher bases suggests the effect of an interactive learning community with the element of high-level communication between learners and the instructor throughout the learning experience.

According to Palloff and Pratt (2007), the “learning community” is at the heart of successful learning objectives. It requires a social presence of participants, each engaging at various levels from low to high and having that engagement interpreted by the other participants.
as either acceptable or questionable. While there is wide consensus that a learning community
can take place online as well as face-to-face, it is also noted that the formation of a healthy
online community requires more effort to develop and more facilitation on the part of the
instructor (Conrad, 2005).

In a hybrid course, the learning community has the opportunity to grow both in person,
real-time as well as at a distance and asynchronously. Rovai and Jordan (2004) found that
“blended courses produce a stronger sense of community among students than either traditional
or fully online courses.” The variety of contexts available for learners with which to engage
provides multiple perspectives of each other participant in the community. A questionable
written word might be read with more understanding after connecting with the author during a
face-to-face discussion in a class meeting.

The interactive learning community component also contains a half of the two-headed
arrow illustration, with this end of the arrow representing the face-to-face portion of the course
and the dependent gear representing the online experiences. While fully online courses can have
extremely rich communication between learners and the instructor, a face-to-face session can
exponentially increase the speed with which communication can take place. Additionally, body
language can be automatically observed and translated along with the spoken word, where online
communication requires that “body language” and other indicators of tone be carefully spelled
out within the words that are typed by each participant.

For one possible scenario, the instructor might provide activities that learners can work
on together as a team during the face-to-face session and subsequently discuss the results or next
steps together online after each person has had the opportunity for further exploration and
consideration. The connection between the face-to-face and online learning strategies should support the learning objectives in a cohesive and comprehensive manner.

*Example of interactivity and reflection in class.* The face-to-face sessions should be a springboard for launching online discussions or used to identify themes, summarize concepts, practice applications, or foster new concepts. An example of the interactive and reflection union in hybrid course design might include a group project with components taking place during the face-to-face class session and continued via electronic communication outside of class. The face-to-face session can contribute to the efficiency in the building of learning communities. Once a firm foundation has been built in person, it can often continue effectively online.

The instructor’s role in this union of the Interactive and Reflective components is characterized within Chickering and Gamson’s (1987) *Seven principles of good practice in undergraduate education*, where (a) student-faculty contact includes the provision of guidance and encouragement, (b) discourse is supported, (c) learning is facilitated and structured, and (d) where there are frequent opportunities to perform and receive prompt feedback and suggestions for improvement.

The hybrid course’s interaction may take place entirely during the face-to-face components; however, Rovai and Jordan (2004), in their empirical study, found that the compliment of social face-to-face interaction mixed with reflective online interaction (whether synchronous or asynchronous) produced the strongest sense of community among students.

Amid this framework with solid ties to the literature in the field, challenges with designing a hybrid course still exist. A planned process for beginning, carrying out, finalizing, and subsequently evaluating the design of a hybrid course is needed. Based on the literature as well as theories constructed in the framework, the five-stage process identified in the ABCDE
model provides one manner in which to address these challenges. The following section describes the current ABCDE model, its stages in their prescribed order, and an explanation of following the steps within each stage.

The ABCDE Model: A Possible Solution to Address Hybrid Course Challenges

My prior research on hybrid courses revealed that course designers, most often faculty, were frequently hesitant to commit to, and sometimes oblivious to the complexities of preparing to teach a hybrid course. The natural inclination for designing a first hybrid course is commonly to take a face-to-face course and put some of its content or learning activities into an online learning environment. Much of what was done in that exercise was without the designer really understanding which content would be most effective online and which content would be better conducted in a face-to-face venue. Additionally, how the online and the face-to-face components could be meaningfully woven together was frequently not taken into consideration (Chatfield, 2008b).

In an attempt to address the issues and overcome some of the challenges, particularly as they relate to the design and development of hybrid courses, I created and began to test a model that provides a straight-forward path through the hybrid course development process. Originally drafted in late 2007, the ABCDE model describes a process that can be followed by faculty and other course designers during the development of a hybrid course. Commonly, teachers of face-to-face courses have believed that hybrid was a step between teaching face-to-face and teaching fully online and many gravitate first to hybrid believing it to be easier than teaching fully online (Kaleta et al., 2007). The ABCDE model places the online modality between the face-to-face modality and hybrid modality, and provides a five-stage process around that premise.
The original four-stage graphical model. The ABCDE model was originally represented graphically as shown in the Introduction of this report in Figure 1. This graphic was intended to depict the basic premise of my process in the following four-stage order: (a) start with the course building blocks of learning objectives, content, and student learning styles; (b) chunk the instructional materials, learning activities, and assessments into structured weekly learning units possibly using a tool such as the Course-at-a-Glance (CAAG) worksheet as depicted in Figure 6; (c) transition the entire content to online delivery considering the strengths and weaknesses of accessible technology; and (d) strategically “pulling back” elements that, for various reasons, are more effectively delivered in the synchronous face-to-face environment.

The current ABCDE model. After several national pre-conference workshops as well as a number of workshops for faculty at five different community colleges, it became clear that the graphic illustration needed to be accompanied by a more extensively and narratively described checklist of steps for the process. This resulted in the 5-stage, text-based ABCDE model as shown in Figure 5, including the final process stage for evaluating how the course performed at each iteration of teaching it.

The actual model is used in professional development sessions to teach about the nature of hybrid courses, the complexity involved in designing and delivering them, the stages of development that are involved, and the rationale behind the order of stages and the steps comprised within each. Please note that some of the language used in the model is overly dogmatic in order to emphasize suggested solutions to observed and perceived challenges associated with hybrid courses during the teaching of the model. This dogmatism should in no way be interpreted as superseding this research or its findings. All parts of the model, including specific language, were subject to recommendations for improvement.
**Figure 5: Current 5-stage ABCDE model (K. Chatfield, 2012-2014)**

<table>
<thead>
<tr>
<th>Architect</th>
<th>Builder</th>
<th>Conductor</th>
<th>Director</th>
<th>Evaluator</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Invention stage</strong></td>
<td><strong>Curriculum Building stage</strong></td>
<td><strong>Transition to Online stage (CRITICAL)</strong></td>
<td><strong>Direct each part of the course and act to its strength (technology or face-to-face)</strong></td>
<td><strong>How will we do things differently next time?</strong></td>
</tr>
</tbody>
</table>
| A1. Course learning outcomes  
- Measureable list of intended learning outcomes: what students should be able to do upon completing the course | B1. Common course components  
- Syllabus, reading/lectures, reflective learning, interactivity, homework, labs, projects, quizzes, assessments | C1. Adapt learning activities with effective online teaching strategies  
- What can be done to avoid mostly reading and writing for all course requirements?  
- How can strong interaction among learning participants be designed and nurtured for maximum effectiveness?  
- How will submission of course requirements and subsequent feedback from instructors be managed? | D1. “Pull out” online components that must take place face-to-face  
- Which ones include complicated concepts? Which ones would benefit from in-person socialization or presence?  
- D2. Preserve online learning activities that excel with technology or do not require face-to-face meetings  
- Reflection, maximum participation for discussion, individual project work, studying course content within reading and listening exercises | E1. Inspect each:  
- Effectiveness of assessments to measure stated learning outcomes  
- Online components; should any be embellished, revised, removed?  
- Face-to-face components; did they make the most of the time together?  
- Relationship between online and face-to-face components; did they complement each other? Did they collectively scaffold the learning?  
- Whether there are any barriers that clarification can resolve. | **WHAT IS THE PURPOSE AND INTENT OF THE COURSE? WHO IS THE LEARNER AND WHAT DO THEY COME INTO THE COURSE WITH?**  
| **COMPLETING THIS STAGE MEANS ALL F2F COMPONENTS ARE BASED UPON WHAT THE DESIGNER DOES NOT KNOW ABOUT EFFECTIVE ONLINE TEACHING STRATEGIES.** | **SKIPPING THIS STAGE MEANS ALL F2F COMPONENTS HAVE BEEN IDENTIFIED AS APPROPRIATE, AlIGNED WITH OUTCOMES, AND BALANCED.** | **THERE IS THE STAGE WHERE THE RUBBER MEETS THE ROAD BECAUSE THE EFFECTIVE HYBRID COURSE HAS PERFECT HARMONY AMONG ALL OF ITS COMPONENTS AND IN THE FLOW OF THE COURSE AND HOW THE LEARNERS INTERACT WITH IT.** | **IN ALL GOOD INSTRUCTIONAL DESIGN MODELS, EVALUATION AND SUBSEQUENT REVISION CAN NEVER BE NEGLECTED. ALL COURSES SHOULD BE “LIVING” COURSES, ON THE PATH TO CONTINUOUS IMPROVEMENT!** | **What is the purpose and intent of the course? Who is the learner and what do they come into the course with?**  
| **Completing this stage means all F2F components are based upon what the designer does not know about effective online teaching strategies.** | **Skipping this stage means all F2F components have been identified as appropriate, aligned with outcomes, and balanced.** | **This is the stage where the rubber meets the road because the effective hybrid course has perfect harmony among all of its components and in the flow of the course and how the learners interact with it.** | **In all good instructional design models, evaluation and subsequent revision can never be neglected. All courses should be “living” courses, on the path to continuous improvement!** |
Combining course design strategies into the ABCDE model. A clear pattern began to form and support the use of a theory in the hybrid course design process. Drawing from the literature on principles of quality course design, I have developed a staged process that includes the online development component prior to the face-to-face integration with the online, a non-intuitive practice for many. Although the design of the ABCDE model does not inherently dismiss course designers who do not have online teaching experience, its process deliberately starts with the course being converted from an existing face-to-face course directly to fully online delivery. Once that stage is completed, the next exercise is to identify which elements would excel in face-to-face sessions. Completing the design tasks in this order means that there will likely be additional expertise for course designers to acquire before they can skillfully integrate the different modalities (online and face-to-face). It is a designer’s experiences while using the ABCDE model and its order of processes that are the focus of this exploratory study.

The ABCDE Model Stages (pre-research version)

Through its stages, the ABCDE model ideally nurtures the transformation of a face-to-face course into a successful and interactive hybrid course and blended learning environment with continuous attention given to student accomplishment of the identified course learning objectives. Actual assessment of student learning and further evaluation of the design (the last stage of the model), while the ultimate determining factor of effective course design, is outside of the scope of this research study and provides a future research opportunity.

The ABCDE model is comprised of five ordered stages (A, B, C, D, and E), and there are individual steps labeled with the stage letter and a sequential number, each representing the course designer’s role during that stage: Architect, Builder, Conductor, Director, and Evaluator. The uniqueness of this model for the design of a hybrid course is the intentional order of the
stages, and in particular, the completion of the Conductor stage prior to the start of the Director stage—a non-intuitive process, particularly for faculty with experience teaching in the face-to-face modality. A brief description of each stage provides an overview of the process for the course designer, including the manner in which that stage is taught during professional development and presentation of the model and its use. This overview is followed by a description of each step of the stage in more detail.

**A is for Architect: The course invention stage.** When assuming the “architect” role, the course designer is addressing questions like, “What is the purpose and intent of the course?” and “Who is the learner and what do they come into the course with?” just as would be done for any curriculum design process (Ko & Rossen, 2001). The Architect stage of the ABCDE model includes four steps: the course learning objectives, identification of the course content and resources, course prerequisites, and a consideration of student learning styles.

The Architect stage sets the foundation for the course where the course designer identifies measurable learning objectives, pays attention to varied student learning styles and course prerequisites, and appropriates the source of course content. When teaching the steps of the Architect stage, I begin by suggesting that the course already exists in terms of student learning objectives, course content in the form of a textbook or other instructional materials, and course prerequisites or a knowledge of the student’s point of entry. The determination of these elements is somewhat out of the scope of the model; however, all of these components should be integrated throughout the course design, so each is a prerequisite before moving to the next stage.
A1. Course learning objectives. In an article reporting findings from online design-based research, Swan (2011) asserts that a course developed around stated learning objectives resulted in better student learning that specifically related to those learning objectives.

In this step, the course designer should verify that the learning objectives are written in measureable language and clearly indicate tangible results that students should be able to interpret and produce upon completing the course (Jiang & Elen, 2011).

A2. Course content/resources. Instructional materials might be selected from publishers, from web and library sources, from open source resources, written by the instructor or institution, or originate from other sources. In this step, the materials should all be collected and evaluated for consistency with and for contribution to student achievement of the learning objectives (Lee et al., 2012). They should be organized by learning unit or module, and begin to form the course structure (Smith, 2008).

A3. Prerequisites. If the course requires foundational skills and knowledge, those should be identified and used as a prerequisite upon which to begin the course instruction. Course designers should determine whether an initial or early unit of review, a student readiness assessment, or prerequisite concepts is required to support student success (Britto & Rush, 2013).

A4. Student learning styles. Who is the student? How do they learn? What are their backgrounds? Answering questions like these helps to keep the learner in focus during the course development. As noted in Lin’s (2008) research, diverse learning approaches accommodate varied learning styles and contribute to the well-organized delivery of a course. The course designer will want to incorporate learning activities that accommodate multiple learning styles and should identify resources to aid in that endeavor.
At the conclusion of the Architect stage, all course learning objectives should be written in measurable and meaningful language for both students and instructors. Additionally, corresponding course materials should be identified and gathered.

**B is for Builder: The curriculum building stage.** The Builder stage steps are comprised of the course designer having identified all course components as being (a) relevant to the topic and institution, (b) aligned with the learning objectives, (c) varied to meet the learning styles, and (d) balanced to create a course that flows evenly in scope and quantity of work (Smith, 2008). The knowledge requirements are best scaffolded (Basham & Meyer, 2010) such that they begin with a solid foundation and incrementally step up a progressive ladder of learning from week to week across the entire term. A tool such as the Course-at-a-Glance (see Figure 6) grid may be a convenient way to aid the course designer through this Builder stage. In the ABCDE model, stages A and B primarily contain the guidance for achieving both structure and process from the Content-Environment union of the Blended Environment Theoretical Framework.

The Building stage begins the course designer’s collection and organization of all course curricula, instructional topics and issues, and associated learning components (activities and assessments) into fairly routine units. This stage includes an evaluation that the learning objectives are attainable through the materials and structure. Teaching the Building stage involves the concept of chunking all course components evenly across the quarter, each chunk addressing events of instruction such as those presented by Gagne (1985). I use the Course-at-a-glance grid tool to aid in this process (see Figure 6), explained in more detail later in this chapter.

The Building stage also includes the development of the course components into a Web site space, most commonly an institution’s adopted learning management system. Learning how to use the available system is outside of the scope of what this model teaches, and additional
professional development sessions are often required for participants to complete this stage depending upon their experience with features and nuances of the system. If the course designer has already developed their course to be web-enhanced with course resources and other elements, this course building may be partially complete and will be expanded upon in the next stage. During the presentation of the model, how to evaluate that degree of completion is explored and supplemental training recommended as needed.

For this stage to be complete, the chunked structure of the course will be created with components appropriately organized and in place. These units, sometimes called modules, can either be created in most common learning management systems with the use of a folder that contains all components for the unit or an area with the system that creates a visually modularized unit. Each unit should contain a representation of the determined instructional events; for example, (a) reading, (b), learning activity or application, (c) reflective activity, (d) assessment, and (e) connection with following unit.

**B1. Common course components.** Course components typically include a syllabus, reading or lectures or other means for learners to acquire the content, reflective learning experiences (Anderson, 2002; Garrison, 2003; Rovai & Jordan, 2004), engaging and relevant learning activities, homework and practice, labs and experiments, projects and authentic learning exercises (Rovai & Jordan, 2004), quizzes and other means by which students can measure their learning progressions, and assessments whereby the instructor can accurately measure the stated learning objectives (Lee et al., 2012). This first step is required as preparation for the remaining steps in this stage.

keep students from feeling overwhelmed and provided them with the essential information for completing the exercises and grasping the concepts without exhausting them with too much written content” (p. 7). Chronological chunking is common for a single-entry point course. As Smith (2008) notes, benefits of chunking includes increased retention, increased comprehension of results, convenience of accessing course materials, increased coverage of materials by students, and measurable results. Using the course components identified in step B1, the course designer should organize the course into equal and routine chunks (Lee et al., 2012; University of Wisconsin-Milwaukee Learning Technology Center, 2012; Young, 2002) that represent the entire term—frequently 10 weeks for a quarter and 15-17 weeks for a semester. The Content-Environment union of the Blended Environment Theoretical Framework illustrates this concept, and the Course-at-a-Glance grid worksheet is a recommended tool intended to aid in facilitating this step.

**B3. Appropriate unit of duration determined for chunks.** Although any comparable organization process can work (Smith, 2008), chunks divided into seven-day weeks generally appeal to adult learners for the smallest learning unit because weeks sync their own schooling schedules with other family and work obligations. The course designer should double-check the chunks delegated in B2 to confirm that the content and quantity is absorbable and will fit nicely in a weekly schedule. There may be several different days within that week when things are due, but the creation of a single chunk across that time is the essential action in this step.

**B4. Basic routine determined for weeks (unit of duration).** In this step, the course designer should evaluate the tasks completed for B2 and B3 in consideration of a basic weekly routine. Gaps or overflows should be identified and an attempt made to retain the balance sought for in prior steps as much as possible. Subsequently the entire course is examined in order to
study the quantity, quality, and organization of the learning components (Lee et al., 2012). Here, again, the completed Course-at-a-Glance grid worksheet is helpful for identifying weeks that might have missed components or overly heavy workloads (both for students and for faculty).

**B5. Learning objectives identified for units.** Unit-level learning objectives may be on the first page of each chapter of a course textbook. If they do not exist already, for this B5 step the course designer should consider everything to be learned in the individual units and write measurable learning objectives for each (Krathwohl, 2002; University of Wisconsin-Milwaukee Learning Technology Center, 2012). The sum of the learning objectives across the units should align with and result in the achievement of the overall course-level learning objectives (Lee et al., 2012). The course designer should assess throughout the course design process whether this is the case and make adjustments to curriculum, learning activities, course materials, and assessments to create the degree of harmony within which the course-level learning objectives can be accomplished.

**The Course-at-a-Glance (CAAG) worksheet.** The Course-at-a-Glance worksheet/grid (Figure 6) assists in the hybrid course design process by providing the course designer with a template for identifying structure; content can be arranged and considered for consistent implementation across the teaching term. According to Garrison et al. (2000), successful web-based educational experiences are contingent upon good design and planning on the part of the course designer. During the evaluation phase of their web-based course design, they found that the quality of the design of a web-based course requires organization and “chunking” of the core content to help keep students from feeling overwhelmed and being confused about where they are in the course. A worksheet like the Course-at-a-Glance grid provides a framework that assists in the visualization of structured units of learning across an entire term.
Figure 6: Course-at-a-Glance planning worksheet (Chatfield, 2010).

<table>
<thead>
<tr>
<th>COURSE</th>
<th></th>
<th>TERM</th>
<th>INSTRUCTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE LEVEL</td>
<td>LEARNING OUTCOMES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORIENT'N</td>
<td>UNIT ONE</td>
<td>UNIT TWO</td>
<td>UNIT THREE</td>
</tr>
<tr>
<td>1st day/unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DUE DATE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F2F/ONLINE</td>
<td>F2F</td>
<td>ONLINE</td>
<td>F2F</td>
</tr>
<tr>
<td>Unit-level learning outcomes</td>
<td>Getting Started/ About the Course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bridge-in/ Hook (connect w/ prior)ing</td>
<td>Welcome</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ch pg/ Other (Content)</td>
<td>Intro to content sources &amp; Moodle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning Activity/ Practice/ Submit AFB</td>
<td>Overview of course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussion/ Reflective learning</td>
<td>Intro self</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quiz/ Self-check w/ Feedback</td>
<td>Intro quiz/ commit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment/ Project</td>
<td>Installit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bridge out (summary)</td>
<td>What's next</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
At the conclusion of the Builder stage, the goal is for all instructional materials, learning activities, and assessments to be developed, balanced, aligned, and positioned across the entire course. It is strongly advised to not continue with subsequent stages of the model until this process is completed.

**C is for Conductor: The transition to online modality stage.** The Conductor stage addresses the question, “What does everything in the course look and function like when delivered with technology?” This stage involves work with which many faculty have the least amount of experience: converting the entirety of what was identified and organized in the Builder stage to an interactive, expertly facilitated, fully online course, by adapting to pedagogical, social, managerial, and technical instructional roles for online learning (Bonk & Dennen, 2003).

While the hybrid course is not a fully online course, skipping this Conductor stage by working with a previously designed face-to-face course and identifying various components to put online means that the components reserved for the face-to-face portion of the hybrid course (what will be considered during Stage D) are designated as such based entirely upon what the designer does not know about effective online teaching strategies. The Conductor stage, instead, insists that the course designer try to consider as thoroughly as possible everything as though it will be delivered online, which can result in teaching options that would otherwise be undiscovered. This is not intuitive and might be a daunting prospect for many course designers with limited online teaching experience. Still, this is a crucial stage for instructors to complete. It is, in fact, the order of this Conductor stage preceding the Director stage that sets the ABCDE model apart from every other hybrid instructional design tool or process that I am currently aware of.
The Conductor stage is the crux of what makes the ABCDE model unique by requiring that the course designer commits to developing each course component as though it would be delivered fully online. This will not be a simple part of the process, and many first-time designers and teachers of hybrid courses will not be easily convinced to carry through as fully as this model suggests.

Part of teaching this stage includes explaining the rationale of evaluating all course items for fully online delivery before moving further. Since a large number of course designers moving to the hybrid modality have most, if not all, of their teaching experience with face-to-face instruction, there is a tendency to start with what they are already doing during their face-to-face sessions and only include basic elements such as links to online resources or space to submit course requirements. Part of my presentation of this stage involves explaining how the face-to-face time with students is dramatically shorter than the learning that students will be doing outside of class (whether using technology or not) This is where I also explain to the participants the importance of discovering what they can do best online versus what they might do better face-to-face. This is a challenging prospect because each individual has their own strengths both in person and with their use of technology, and most people need to take the time to explore and discover which forms of technology will contribute best to their students’ learning. This is also challenging because the vault of possible technology options is daunting and complex. It requires time and persistence on the part of the course designer as well as a presentation of examples and demonstrations to help them get started with this task.

Since so much about instructional technology is generally unknown to the beginning hybrid course designer, I remind them through a fairly assertive statement that if they do not give consideration of everything in their course to be delivered via technology, they will likely resort
to what they are comfortable with and what seems obvious and consequently miss some
opportunities for innovation and other powerful learning experiences for their students. To help
the hybrid course designer get started with this, I teach some reasonably attainable and more
commonly-used strategies that might be appropriate for various types of learning activities in
their course, and teach them how to continue to explore and evaluate others as they continue.
Web-based learning activity options are vast, and for this reason, this Conductor stage is likely
the most instructional-design-intense stage.

C1. Learning activities adapted with effective online teaching strategies. The course
designer should ask several questions as he or she considers modifying content and learning
activities for the online environment: (a) What active learning strategies (Chickering & Gamson,
1987; Gier & Kreiner, 2009; Schunk, 2012; Yohe, 2003) can be implemented for all course
topics? (b) How can strong learning communities (Anderson, 2002; Chou, 2010; Conrad, 2005;
Garrison & Anderson, 2003; Palloff & Pratt, 2007; Rovai, 2002; Rovai & Jordan, 2004; Shea et
al., 2006) be designed and nurtured for maximum effectiveness? And (c) in what forms will
students receive feedback and guidance to further their learning (Chickering & Gamson, 1987;
Garrison et al., 2000; Lee et al., 2012; Rovai & Jordan, 2004; University of Wisconsin-
Milwaukee Learning Technology Center, 2012)?

There are many resources available that provide ideas for both online assessment options
and online learning activities that often work very well, and some believe they can be better than
face-to-face options (Lee et al., 2012; Neuhauser, 2002; Rovai & Jordan, 2004). Unless already
an experienced online teacher, the designer will be required to perform considerable research and
experimentation in order to complete this Conductor stage (University of Wisconsin-Milwaukee
Learning Technology Center, 2012). Website resources like the Illinois Online Network online
teaching activity index are of tremendous value (http://www.ion.uillinois.edu/resources/otai/)
with instructions provided for various online learning activities like debate, ice breakers, interviews, jigsaw, journaling, peer reviewing, presentations, role playing, scavenger hunts, and many more. It is thought that the more these types of technology-facilitated learning strategies are practiced by course designers, the more comfortable they will become with including them in a course (Donovan, 1999; Lee et al., 2012; Rovai & Jordan, 2004; Yohe, 2003).

In the Conductor stage of the ABCDE model, particular attention is given to researching and then applying appropriate learning strategies that enhance the student learning community in the course as supported by the Blended Environment Theoretical Framework union of the environment and teacher bases.

**C2. Active learning designed.** Some of the resources from the C1 step will inspire both online and face-to-face techniques. For the Conductor stage, the course designer should concentrate primarily on applying online strategies to each component in the course. For the C2 step, the course designer should look over the course to see if at least one online active learning component can be incorporated for each unit. It is desirable to vary the types of instructional engagement so that multi-modal learning can exist (Chickering & Gamson, 1987; Coffield, Moseley, Hall, & Ecclestone, 2004; Lee et al., 2012; Neuhauser, 2002). In addition to or instead of reading, for example, the course might utilize instructional videos, documentaries, web searches, or other options. The online environment itself makes it improbable for most learning to be passive; however, that same online environment can easily lose a student if it is not organized, engaging, and enticing enough to draw their regular return (Lee et al., 2012; Lin, 2008; Wiggins & McTighe, 2005).
C3. Course components evaluated and explained for alignment with course- and unit-level learning objectives. As the considerable work from steps C1 and C2 is applied in the course, continuous evaluation against the learning objectives is required for consistency. Work on each unit must identify individual learning objects, and the course designer should consider each of those objects separately against the learning objectives, making refinements to either the objects or the manner in which they are used as necessary to continue to support the learning objectives (McGee & Reis, 2012). Then the collection of learning objects and associated unit-level learning objectives should be studied across a whole unit in an effort to affect the teaching and assessment of learning (Biggs, 2003). When each unit is considered complete, the course designer should consider all learning objects across all units to try to confirm that they offer the learner the ability to achieve the course-level learning objectives. Reviewing all organized components at once through the Course-At-A-Glance tool should help instructors identify any remaining gaps and inconsistencies or needed adjustments to the course structure and organization.

Every part of the Conductor stage must be completed before continuing on with the next stage. The course should appear as though it is a fully online course at the conclusion of this stage.

D is for Director: The online and face-to-face incorporation stage. The Director stage is where the course ultimately comes together through the stages of the ABCDE model because the effective hybrid course requires a high level of harmony among all of its components, in the flow of the course, and in how the learners interact with it. The course designer’s role is to direct the coordination each part of the course (both online and face-to-face elements) and take advantage of the strength of technology and the strength of the in-class meetings. Again
connecting back to the structure/process concept in the Blended Environment Theoretical Framework, it is this Director stage in the ABCDE model that focuses on the strong relationship that should exist between and intentional weaving together of the online learning activities and the face-to-face session experiences.

The Director stage then proposes that the course designer take the fully online course and determine all components that likely are better suited for the face-to-face environment. In this stage, the course designer must make a strong connection between what occurs online and what occurs in the face-to-face class sessions must be made evident to the learner, so they understand that each part is equally important to the accomplishment of the learning objectives. This connection might appear on a course schedule that identifies both in- and out-of-class activities or within individual assignments that could contain before-, during-, and after-class aspects for the students to complete. This stage of design often occurs at the point when the frequency and duration of face-to-face meetings can be most appropriately defined. It is likely, however, that the institution or department will have pre-determined meeting days, times, and location for the course and as such, these variables may no longer be adjustable.

Given the optimal situation, a hybrid course should have just enough face-to-face meetings to facilitate the most effective learning experience for the student and balance the effectiveness with the online portions (Yohe, 2003; Young, 2002). Due to the schedules and other life circumstances of contemporary students (Lokken, 2012), it is imperative that the course designer be able to justify the need and value of face-to-face meetings in the hybrid course (Beatty, 2007; Smith et al., 2001). The learner has historically been confused about the definition of the hybrid modality. Instructors have reported that some students believed that the few hours of face-to-face time was the entire course without any online component required
while other students indicated that they thought the face-to-face component was optional and they should have been able to fulfill all course requirements fully online (Chatfield, 2008b). The most effective hybrid course is designed to capitalize on the best of what can be offered with technology and the best of what can take place in person. What is preferable in each of these modalities will, in part, be determined by the strengths and weaknesses of the teacher (Neuhauser, 2002; Yohe, 2003). It will also be determined by the strength of the learning activities that are needed to accomplish the learning objectives.

Another crucial determinant is the amount of time available for the face-to-face session. If a hybrid course meets once a week for half of the traditional face-to-face time, a 5-credit course will be meeting each week for 2.5 hours in person with 2.5 hours out of class for online instruction, and then another 10 or more hours outside of class for homework activities (Ochoa, 2011). This factor illustrates why the position and timing of the Conductor stage was central to the hybrid course design process. Approximately half of what would take place in a fully face-to-face course will now occur exclusively online. The Director stage provides the answers as to which items should remain fully online and which should be pulled back into the shorter, more precious, face-to-face meetings.

**D1. Online components that must take place face-to-face are pulled back.** This D1 step requires that the course designer look at each of the online learning activities and consider questions like, “Which topics include complicated concepts that would benefit from a more efficient face-to-face meeting?” and “Which topics would benefit from in-person socialization or presence or group work?” (A. Picciano, personal communication, June 27, 2007). The course designer should avoid selecting everything that was presented face-to-face prior to the hybrid course design process primarily because it is the most familiar and comfortable thing to do. And
before making absolute decisions about what will be face-to-face, the course designer should continue with step D2.

**D2. Learning activities that excel with technology or do not benefit from face-to-face meetings are preserved for online delivery.** Similar to step D1, in this step course designers should consider which learning activities profit from (a) the additional time required for reflection, (b) having everyone participate in a written discussion or other collaborative work that can be executed via technology, (c) the time needed for individual project work, or (d) studying instructional materials through reading or listening. The Blended Environment Theoretical Framework identifies the deeper learning processes that can be realized through learning activities that encourage reflection and cognition when the content and teacher bases are combined.

**D3. Combination of individual learning components is studied for effectiveness.** Step D3 provides the opportunity for the course designer to examine the flow of the course resulting from determinations made in steps D1 and D2. It is an additional chance to evaluate whether a face-to-face activity would be more effective than an online activity. In the next step, D4, the course designer will be encouraged to study whether part of a learning activity should be started online and continued when the students come together in the face-to-face meeting.

The course designer should continue to evaluate the effectiveness of each activity as the teaching begins, and while it is better to avoid making significant changes in the middle of a term, the course designer should always be considering how something might be adjusted for the following term.

**D4. Incorporation of online with face-to-face (intentional weaving or interlacing between the two is arranged).** As step D4 is approached, the course designer is considering
which course elements to keep online and which activities to transition instead to the face-to-face class sessions. Questions like the following should be considered: (a) What should be front-loaded (or done first, perhaps in the online portion)? (b) What should be back-loaded (or done second, perhaps in the face-to-face portion)? (c) How do those components interact with each other? (d) Does the flow of students working online, then coming to class for a hands-on activity, and then more online work make sense for the learning? And (e) is there an obvious and direct connection between what is in class and what is out of class (Chatfield, 2008a)? Each activity out-of-class should lead into the face-to-face meeting. The goal is for any reinforcement that takes place in the face-to-face meeting to complement and enhance the out-of-class learning.

**D5. Each aspect of technology and face-to-face learning is evaluated for indispensability.** Step D5 is where the course designer revisits the value of the course being developed in the hybrid modality. Does the course really need the face-to-face component to have comprehensive instruction? Is the technology utilized for the online components accessible and appropriate? For the course to be effective in the hybrid modality, each online and face-to-face component must be indispensable to the students’ ability to satisfactorily accomplish the learning objectives.

In this step, each decision about learning activities, whether online or face-to-face requires another look to confirm their value alongside, their connection with, their flow within, and their contribution to the learning.

**D6. Clarity of course structure is provided to students.** The hybrid modality is frequently misunderstood by students, faculty, and at the institutional level. When not appreciated, students had an initial impression that there would be less quantity of work and responsibility required on their part (Chatfield, 2008b). Once they realize what is involved, they can be angry, confused,
frustrated, and can blame the teacher or drop the course or fail (J. Humbert, P. Anderson, K. Shattuck, J. Runyan, S. Subocz, personal communication, June 25-29, 2007). It is vital that in as many ways as possible, the modality is defined and explained with clear schedules, detailed expectations for students and instructor, and identified connections between the face-to-face and online portions of the course (McGee & Reis, 2012; Picciano, 2009).

If at all possible, this information should be provided in the course description, in the registration materials, in a pre-term email from the instructor, in the course syllabus, as part of the course orientation activities, and during a thorough discussion at the first face-to-face class meeting. The importance of clarifying this information cannot be overemphasized. Ensuring that all students are aware of all obligations and requirements is crucial for success and learning (Beatty, 2007; Center for Distributed Learning, 2012; University of Wisconsin-Milwaukee Learning Technology Center, 2012).

At the conclusion of the Director stage and confirmation that course components remain organized and interlaced, the delivery of the course can begin. There are many reasons that might have caused the course to begin prior to this point, but it is recommended that the process be completed in full.

**E is for Evaluator: How will things be done differently next time?** In certain instructional design models, evaluation and subsequent revision are central considerations (Lee et al., 2012; McGee & Reis, 2012; Rivera et al., 2002; Ruhe & Zumbo, 2009). All courses should be “living” courses—all on the path to continuous improvement. In this Evaluator stage, the course designer should consider multiple sources of data: the instructor’s perspective, the students’ perspective, and the perspective from use of a measurement tool like the Quality Matters rubric.
The final stage of the ABCDE model is the Evaluator stage where the course designer assesses the course for possible revisions based upon feedback from a third-party review using Quality Matters standards; feedback from students; and instructor observations regarding the usefulness of the assessments, the connection between the learning objectives and the course materials and learning activities; and other considerations such as how the course went for them during the teaching. The course designer is encouraged to seek insight from other instructors and instructional designers when analyzing the findings.

The Evaluator stage should occur before, during, and after the course is taught in pursuit of continuous improvement to the design. While instructors might make minor adjustments to course content throughout the term, they are encouraged to delay more significant changes until a future iteration of the course. This is intended to lessen the possibility of confusion and frustration that is sometimes heightened for online learners. Additionally, it is recommended to evaluate the design of the course as a whole prior to making substantial changes so as to maintain the integrity of the learning objectives.

**E1. The course designer should inspect each of the following:** (a) How effective were the assessments in measuring the stated learning objectives (Angelo & Cross, 1993; McGee & Reis, 2012; Wiggins & McTighe, 2005; Wunker, 2010)? (b) Should any of the online components be embellished, revised, removed, or converted to face-to-face? (c) Did the face-to-face components make the most of the time together or could some be revised, removed, enhanced, or converted to the online activities? (d) Consider the relationship between the online and face-to-face components; did they complement each other (Foulger, Amrein-Beardsley, & Toth, 2011; Gedik, Kiraz, & Ozden, 2013)? Were the components designed to collectively scaffold the learning from a strong foundation to new, achievable learning (Marzano, 2010)?
And (e) were there any barriers or misunderstandings that additional or revised clarification might resolve?

**E2. Quality Matters standards considered.** How does the course stack up against the standards in the Quality Matters rubric, particularly those standards with special hybrid/blended consideration? Ideally, the Quality Matters standards would have been considered throughout the design process, so this step is an opportunity to have someone else review the course design, if possible. The third-party Quality Matters course review provides a perspective that otherwise may not be discovered.

**E3. Student feedback is solicited.** What feedback did the students provide about the course and its effectiveness for their learning? If possible, the course designer should create a questionnaire to gather information from the students about what they believed was the most helpful learning experience they had during the term as well as what they believe would benefit from being changed about the course and why (Foulger et al., 2011).

**E4. Appropriate course revisions are made.** Based upon instructor experience and observation, student feedback, and recommendations from a Quality Matters review, the course designer should make revisions to the course in preparation for teaching it additional times (Center for Distributed Learning, 2012; Detwiler, 2011; McGee & Reis, 2012). This evaluation cycle should be repeated for future iterations of teaching.

**Summary of Theoretical Framework and the ABCDE Model**

The Blended Environment Theoretical Framework described herein is based on the literature in the fields of distance education and instructional design and provides a foundation upon which the ABCDE model can be based. The key components of interaction, structure, and cognitive reflection and their associated balance and integration are pivotal in learners achieving
the desired course learning objectives. Keeping the learning objectives within our focus at all times guarantees the course designer is on the path that leads to the ultimate goal: accomplished and successful learners.
CHAPTER FOUR: METHODOLOGY

The goal of this research project was to study the experiences that course designers have with the first-time development of a hybrid course while implementing the ABCDE instructional design model. As part of the study, I considered course-design recommendations based upon the Quality Matters standards. It was my desire that this study inform my practice and design through illumination, understanding, and extrapolation as to the potential effectiveness of the ABCDE model process order and, ultimately, reveal revisions that might be beneficial to the model as well as contribute sample results from a new instructional design model for hybrid course development to the eLearning field.

This chapter describes in detail the design of the study using case study methodology within an action research context, restates the research questions, describes the scope and sources of data, and provides a description of the data gathering instruments, data collection procedures, data analysis procedures, and consideration of the value of this research to the eLearning field.

Statement of the Problem

Courses taught in the hybrid modality have been met with mixed success. In many situations, the definition of hybrid has not been clear to the instructor during the development or teaching phases. Picciano (2007) describes the complex process of defining blended learning beginning with the acknowledgement that its design means something different depending upon the person you are talking to (student, faculty, course designer, administrator). For purposes of this study, a hybrid course will be defined as one that integrates online with traditional face-to-face learning activities in a planned, pedagogically valuable manner, and where portions of the traditional face-to-face class time are replaced by technology-based, online activities (Laster et al., 2005).
The instructional implementation of technology is a driving force and critical factor in the design of a hybrid course. During my interview with several directors of distance learning programs in Maryland, J. Hilke confidently stated: “Hybrid is a course [where] online technology determines, or at least guides in a significant way, the instructional methodology and the instructional setup of the course” (personal communication, June 28, 2007). According to Kaleta et al. (2007), faculty discovering the hybrid modality find that much of their face-to-face teaching skills must be adapted when teaching is primarily facilitated with technology and at a distance. Where faculty teaching face-to-face courses traditionally had role models to follow and the personal experience of being an in-class student, eLearning modalities are new enough that any online role modeling and experiences are likely limited in volume and narrow in scope. Faculty incorporating online teaching components in their courses for the first time are left, instead, to apply eLearning strategies and technologies on their own with few or no experiences to emulate.

As I developed the ABCDE model, I synthesized existing instructional design strategies and provided a series of five course design stages (labeled A, B, C, D, and E). Each complex in itself, these design stages are presented in an intentional order to be fully completed prior to advancing to the next stage. Through this research, I studied the efficacy of the order of the model stages and the hybrid course designers’ experiences with the model with the intention of revising and improving its design, clarity, and usefulness. Research describing such a model or comparable practices does not currently exist in the literature. The results of this study, then, will be pertinent to hybrid course designers.
Research Questions

1. What challenges and successes did first-time course designers of a hybrid course experience from the use of the ABCDE model and its order of stages as they developed their courses?

2. What impact did the participants (instructors) think their hybrid course design had on their students’ learning?

Case Study Methodology in an Action Research Context

The case study research method is generally considered a type of ethnographic design (Creswell, 2008). Creswell suggests that rather than exploring the shared culture of a group of people, case study researchers focus on cases such as a program and its activities, an event and its processes, or an activity involving individuals. For this particular study, the case consists of the course designer and the course she designed using the ordered instructional design process of the ABCDE model.

While the case study research method can be used in both qualitative and quantitative research (Yin, 2003), Merriam (1998) states that for education it is more likely to be qualitative in nature and has been informing educational practice since the 1960s. Hoepfl (1997) explains “Where quantitative researchers seek causal determination, prediction, and generalization of findings, qualitative researchers seek instead illumination, understanding, and extrapolation to similar situations” (p. 48). Creswell (2007) provides a comprehensive description of the qualitative approach of case study research wherein the researcher:

...explores a bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of

...
information (e.g., observations, interviews, audiovisual material, and documents
and reports), and reports a case description and case-based themes. (p. 73)

**Contribution of qualitative research.** Briefly summarizing Hoepfl (1997) and Creswell
(2007), I consider prominent characteristics of qualitative research to include that the researcher

- uses the natural setting as the source of data;
- is the instrument for data collection;
- collects multiple sources of data;
- engages in inductive data analysis;
- presents descriptive and expressive reports;
- aims to discover the meaning in events and what the participants perspective about an
  issue;
- seeks the idiosyncratic as well as the pervasive;
- uses an emergent research design; and
- makes judgments based on whether it makes sense, the findings are consistent with
  experience and evidence, and the degree of usefulness in the qualitative research
  helping us to understand a situation.

Qualitative research was appropriate for this study since the case study participants were
performing normal course design duties with my assistance as the instructional designer, as I
describe in greater detail later in this chapter. The goal is for my data to be varied, unique, and
individual to each participant. The findings are provided in the form of case study reports, rich
with details and specifics. The data analysis is inductive, utilizing the constant comparison
method, originating with research questions and comparing data source to date source first within
each case and then comparing across cases to find what emerges from the evidence.
Consistent with documented qualitative methodology, I used interviews, observations, and the study of documents and other artifacts for this study. I attempt triangulation of multiple sources of data in order to experience consistent findings over time and thus lend credibility to the study. For this study, the data analysis can be triangulated due to the ability to compare responses in surveys occurring at three different intervals across the course design process (duration of four to five months), then compare field notes and reflections taking place regularly throughout the course design process (duration of approximately two months), then compare a one-hour interview taking place after a full teaching term completed (occurring approximately seven months after the start of the course design process), and finally, compare an external review of the quality of the course design (occurring two to three months after the completion of the teaching term).

**Contribution of case studies.** Case studies are well suited for research on topics in the field of education due to the three-fold nature of this methodology’s characteristics.

First, a case study is particularistic such that it can recommend what others might or might not do in a similar situation, investigating multiple variables in order to understand the phenomenon at hand.

Second, a case study is descriptive by thoroughly illustrating a situation and the many factors contributing to its complexities, advancing a field’s knowledge base.

Third, a case study is heuristic because it can explain the reasons for, the background of, and why something worked or failed to work, with the anticipated goal of informed application particularly because of the authentic nature of the fieldwork involved in the data gathering stage (Merriam, 1998).
Case study design was an appropriate means for this study of how course designers experienced the order of the instructional design process as outlined in the ABCDE course development model. Each of the three individual case study reports include observations and reflections of the course design experience as well as the results of teaching the course and the course designer’s subsequent reflection on their learners’ accomplishments of the course learning objectives. It is desired that readers of this research will understand the order of the instructional design process in the ABCDE model and the complexities within that application (descriptive) and thereby determine if the process would be advantageous for their own design of a hybrid course (particularistic), trusting in the authenticity of and reasons for the order of the process model stages (heuristic).

**Action research.** Mills (2011) describes action research as being “any systematic inquiry conducted by teacher researchers, principals, school counselors, or other stakeholders in the teaching/learning environment” (p. 5) Action research designs are often used by individuals within educational settings to gather information and study teaching and learning issues or problems they face (Creswell, 2008), as well as gain insight, develop reflective practice, and effect positive changes on education practices in general (Mills). The field of education would be hypocritical if it were not constantly and consistently seeking to increase knowledge of, solve problems in, and improve methods and strategies for learning.

Action research may be based on either a critical action theory or practical action theory. The critical perspective of action research is participatory and democratic and intends the knowledge gained from the research to liberate those affected and enhance learning, teaching, and policy making. In contrast, components of a practical perspective of action research have a less philosophical focus and include teacher researchers wanting to reflect on their practices by
using a systematic approach and choosing their own area of focus and data collection techniques. The researcher then seeks to develop action plans from the analysis and interpretation of the data (Mills, 2011).

The action research perspective for this project is based on the practical theory. I have pursued whether the ABCDE model could be more effective if revised based on what I learned by observing and exploring the experiences of the case study participants using it. Specifically I observed and analyzed the experiences of the hybrid course designers while they were using the ABCDE process model in order to determine whether the model might be revised to increase its effectiveness. Case study methodology was the catalyst for data collection of the experiences of course designers as they followed the order of processes outlined in the ABCDE model inside this action research context.

**Research Design**

**The action research context.** This is an action research study intended to improve my instructional design practice, utilizing a case study methodology. Based upon case study participants’ experiences using a hybrid course design process model and their perceptions of the effects that course design had on the learning of their students, this research sought recommendations for improving the ABCDE Instructional Design Model.

My role in the action research was that of creator of the ABCDE model. In 2004, I earned a master’s degree in adult education and instructional design systems. Since 2006, I have held the position of senior instructional designer for the eLearning department of Clark College. Continuous professional development is expected in such a career and I have a strong propensity towards life-long education with the goal of excellence in teaching and learning. In Chapter Three of this report, I have provided a theoretical framework that illustrates my teaching
philosophy through the connection with the contents of the ABCDE model and continuing professional development for educators. My own professional development requires consistent reading of literature, mastering emerging technology skills and implementations, participating in annual conferences, attending frequent workshops and courses, studying and conducting research, and learning from my consulting with faculty regarding the design of their course curriculum and their facilitation of student learning.

From experiences during my instructional design work with several hundred faculty at various institutions of higher education, I have observed that faculty often appreciate processes, including lists of steps to follow, when learning new applications. Finding such a model to be missing for the development of hybrid courses, in 2007, I created a process model intended to guide in the full design of a hybrid course. The model begins with steps for conceiving the course and continues through the evaluation of the course design and its effects on student learning. Since I anticipate continuing a career of instructional design in higher education and working with faculty in the development and building of their online and hybrid courses, the study of how the ABCDE model could be revised and enhanced for increased effectiveness was the focus of this project.

While the ABCDE model is comprised of five stages for this comprehensive development, what is unique about the ABCDE model is that the course designer is led through a series of steps involved in adapting all instructional materials, learning activities, and assessments for fully online delivery (Stage C) and that those steps be completed prior to the designer considering what would take place during the face-to-face sessions in the course (Stage D). With this study, I sought to observe the first-time hybrid course designer’s experience of using the ABCDE model, and the area of greatest interest was in determining whether a hybrid
course could be successfully designed by following its procedures of completing Stage C before Stage D. Additionally, findings from the study were used to compile a list of recommendations for improving the steps in all stages of the model based on the experiences of the study’s participants. I used case study methodology for purposes of collecting relevant data.

The case study methodology. Case study design includes several characteristics supporting its value: (a) the consideration of the methodology design, (b) an assessment of the benefits and limitations to case studies and the associated contributions or liabilities to the importance of the results, (c) the factor of appropriate selection of a case or cases and whether the case object is clearly definable for each, and (d) the matter of ethical issues and whether they will be resolvable in a satisfactory manner (Merriam, 1998; Stake, 1995; Yin, 2003, 2012).

The case study process was a preferred approach for this project since using the instructional design process order in the ABCDE model provided a clearly discernible boundary, and because an in-depth understanding within and across individual situations was sought. The primary focus of the results was heuristic and guided the research by the observation of personal experience of and success for, first-time hybrid course designers.

Population and case definition. A matter requiring great attention in case study research is the appropriate selection of the case or cases. The minimum requirement, as previously noted, is that the case be clearly bounded. An additional criterion includes whether the case can be considered typical. Since generalizable results are most widely accepted from reliable data on large populations (usually quantitative research), the case study must either provide validation of the typicality of the selected case or insist that readers come to their own conclusions (Bogdan & Biklen, 1998). Readers are accordingly invited to make connections between the elements of this
study and their own course design endeavors. Such transferability by the reader is a desirable outcome of the interpretation from this research study.

The selection of the case is, therefore, critical in the sense that the results will be a description of the phenomenon that can be related to rather than a prediction of future practice and procedure (Creswell, 2007).

**Participant selection and eligibility.** I selected three (of six) faculty who voluntarily agreed to commit to my project’s stated purpose, design, and procedures. For this study, the requirements for case study participants (course designers) were that they (a) were scheduled to teach their first hybrid course in an upcoming term, (b) had previously taught in higher education, (c) had never taught or designed a hybrid course (defined as some of the regular face-to-face time replaced with out-of-class work), and (d) were willing to make a commitment to follow the prescribed order of the ABCDE process throughout the development of their course. Not only was the research positioned to be conducted within an action research context and was, therefore, completed with the course designers rather than being done to them (Herr & Anderson, 2005), but it was also to the benefit of the study that participants were working intentionally to follow the prescribed order of the instructional design process as outlined in the ABCDE model. In this way, the course designers could then document challenges when following the model’s order as well as successes they experienced throughout the hybrid course design process.

The course designers worked individually with me as instructional designer on a weekly or biweekly basis in order to (a) keep the participant and her design work progressing through each of the instructional design stages of the process as outlined in the ABCDE model, and (b) provide opportunities for regular observation of the designer and her development process. Therefore, the rationale used to implement a purposeful sampling strategy was to approach
(either personally or through eLearning directors) individual faculty who were scheduled to teach hybrid courses in an upcoming term, explain the nature of the study and the process and order involved in using the ABCDE model, and offer my assistance in instructional design throughout the development of the course in exchange for the course designer’s consideration of participating in the study. Each participant was given the assurance that the instructional design support would continue if they wanted it to whether they continued to participate in the study or not.

**Description of data instrumentation.** The data selected for collection in this project was intended to support me with the observation of the hybrid course design process as experienced by first-time hybrid course designers and to identify the factors contributing to the complexities involved. Both the literature review and theoretical framework informed the instrument design, and I included related survey questions aimed at gathering data that I found to be lacking in the literature, such as the design and teaching backgrounds of each of the participants. Additionally, the theoretical framework for blended environments encourages hybrid course designs that incorporate active learning strategies, interactive learning communities, and accomplishment of learning objectives—all of which are topics of questions incorporated in the surveys, participant reflections, and interview.

The specific instruments used for this study included (a) a pre-hybrid survey completed by the course designer before the start of the project, (b) observation field notes recorded by me during instructional design meetings, (c) reflections recorded by the participant after the instructional design meetings, (d) a post-hybrid survey completed by the course designer after the course design phase, (e) a post-teaching survey completed by the course instructor after the first teaching term ended, and (f) an interview between me and the course designer
approximately three weeks into the second teaching term. For this study, the course designer was also the course instructor. Each data instrument was pre-approved by the IRB office at Washington State University and is described below and characterized in Appendix B.

*The pre-hybrid, post-hybrid, and post-teaching survey instruments.* The three surveys all gathered data electronically via individual survey tools created within the Washington State University Skylight Survey system. The pre-hybrid survey was administered prior to any work conducted by the case study participant and the instructional designer researcher (see Appendix C). The post-hybrid survey was administered approximately three weeks after the start of teaching the course, but after the majority of the course design had been completed (see Appendix D). The post-teaching survey was administered within three weeks of the end of the teaching term (see Appendix E).

The questions within the surveys were designed to capture the background story of each case study participant and measure changes that occurred as a result of the participant’s experience with the use of the ABCDE model. Each survey was intended to gather a variety of information that built a picture of the participant’s prior and current academic experience as well as basic attitudes and considerations surrounding this new experience. Surveys included questions related to (a) biographical information including education and disciplines studied and taught, (b) teaching experience and greatest career accomplishments or disappointments, (c) technology experience and self-assessed skill levels, (d) teaching style and philosophy and examples of favored strategies and methods, (e) curriculum development experience prior to this point as well as anticipated for the future, and (f) eLearning design and teaching experience which was partially intended to be compared with face-to-face teaching experience.
The surveys were comprised of nearly identical questions and intentionally administered at three distinct points in time—before, during, and after the hybrid course design process. The survey responses provided measurements and comparisons of experience in teaching, technology, teaching style, curriculum development, and eLearning experience. This parallel process was intended as a means of creating several different baseline points for comparing data of the participants’ perceptions and experiences and thereby providing more trustworthy data.

Researcher observation field notes and participants’ reflections—documentation from instructional design meetings. To record consistent field notes and participant reflections that occurred during the instructional design meetings, a series of questions were devised for both me (in my researcher role) and the participants (as course designers) to respond to between meetings. These question prompts were distributed via email and remained consistent throughout the duration of the course design process. The questions for reflections and observations were intended to track the stage that the participant was at in the ABCDE process model as well as her experiences up to and through that point. Questions included the level of participant understanding of the model to that point, any questions the participant might have, whether the participant felt confident about following the process, whether and how the participant was modifying the process, and an invitation for any other general comments the participant or I might have wanted to make. These data were to be captured for the purpose of reminding both researcher and participant about particular thoughts, feelings, perspectives, and experiences occurring at a specific time. It would be compared against data collected through the surveys to check for consistencies and discrepancies. Appendix F contains a copy of the questions used for this instructional design meeting documentation.
In a continued attempt to create triangulation among the findings, these researcher field notes and participant reflections were intended to be consulted in comparison to other data collected in order to supplement and clarify the data provided in the surveys. For example, a comparison was made between the post-hybrid or post-teaching survey responses and the participants’ reflections to ensure no misunderstandings had been recorded. Additionally, a member check was conducted to ensure that all wording and impressions in the case study reports were considered accurate by the case study participant.

The post-teaching interview. While layout and organization can depict some aspects of quality course design, faculty are often most interested in and concerned with the learning of their students. Therefore, the focus of the post-teaching interview was primarily to spend time with the course designer after their completion of teaching the hybrid course and inquire about their perceptions of student learning as it related to the course design process implemented for this research. The interview questions directly inquired about the students’ success or failure with the course learning objectives and asked the participant for their perspective on the contribution to their learning by the hybrid course design. Additionally, since strategies outlined in the ABCDE model addressed varied learning styles, the interview requested that the participant compare the effectiveness of their hybrid course design to face-to-face by providing examples and sharing their thoughts on intended revisions. Finally, an interview question inquired as to whether the participant believed that their discipline was more or less suited for the hybrid modality than other disciplines. With these questions focusing on the results of the course design, a perspective was requested of the participant that could not be provided during the course design. However, strong assessment principles include procedures such as a comparison of student performance before and after events like course design (Angelo & Cross, 1993;
John et al., 2000). The results of those comparisons can reveal areas for revision or restructure. The interview questions can be found in Appendix G.

The participants’ journey through this project. Figure 7 below illustrates the journey of the case study participants for this hybrid course design journey in a flow chart diagram. The process began with the electronic Pre-hybrid Survey to provide a baseline position for the participants as they entered the project. Next, work began on the hybrid course design by each participant starting with a private tutorial of the ABCDE model and weekly meetings to work on their course. Data from those meetings included reflections from semi-structured interview questions by the participants and my own field note observations.

An electronic Post-hybrid Survey was administered followed the hybrid course design process and was intended for me to compare the participants’ responses between the start of the project and after their initial work with the ABCDE model. The instructor then taught their courses. Following the term, the electronic Post-teaching Survey was administered. This provided the post-teaching data in the pre- and post-hybrid survey format.

All three participants taught the hybrid course a second time and during that teaching term, a one-on-one interview was conducted to provide the opportunity for open-ended questions to have follow-up clarifications and additional comments. This second teaching was not anticipated and no data was specifically gathered from this process to compare with the first teaching experience. However, the interview responses were influenced from this additional experience on the part of each hybrid course designer, and therefore, the second teaching was included as part of the participants’ journey through this project.
**Figure 7:** Flow chart diagram of participant’s journey through this study.

**Trustworthiness.** Case study research is often conducted with a triangulated strategy in order to improve the accuracy and provide alternative explanations within the actual process (Stake, 1995). Triangulation seeks to promote the validity of the study results, contributing to the legitimacy of case study methodology. In my case study, I attempted to facilitate trustworthiness through the use of triangulation. Specifically, I (a) administered three time-spaced surveys, (b) compared responses with researcher field notes and participant reflections, (c) solicited member checks by asking the participants about the plausibility of the case study reports and requesting corrections, (d) retained the same three participants throughout all phases of the study, ultimately an average of eight months, (e) utilized the nationally-recognized Quality Matters rubric and a certified Quality Matters Master Reviewer to review the course designs of each of the
participants and produce recommendations with which comparisons of my observations and the perceptions of the participants were made, and (f) presented my assumptions and biases about instructional design and use of the ABCDE model throughout the study, considering each during the analysis and interpretation of the findings.

**Ethical considerations.** There are three broad categories within the realm of research ethics: respecting the rights of participants, honoring the research site, and reporting the research completely and honestly (Creswell, 2008) by taking great care to represent the data accurately and avoid misunderstanding (Stake, 1995).

**Respecting the rights of participants.** The nature of much qualitative research in adult education differs from the original intent of the existence of institutional review boards (IRB) in most universities, where the purpose is to assure that the research process contains steps to protect human subjects in a research study from exploitation when they are not capable of choosing to participate for themselves (http://www.irb.wsu.edu/about.asp). After submitting each instrumentation component to the Washington State University IRB, this study was certified as exempt. All portions of this research were noted to be ethical in consideration and within normal academic practices without data collection of any student-originated materials.

In this research study, the participants were offered voluntary and confidential involvement, provided detailed information about the general premise of the study at the forefront, and told that they could withdraw from the study at any time. For this study, the case study participants were recruited only after a complete explanation of (a) what the ABCDE model was and what its process and order of stages would involve, (b) the role I would play as instructional designer to assist each of the course designers, and (c) the expectations of completing all surveys, interviews, course design work, and instructional design meeting
documentation (participants’ reflections) if they continued to participate in the research. Each participant was reminded in writing with each reflection request and with each survey that they did not have to continue the research if they did not wish to do so.

Participants have the right to gain something from the study that measurably exceeds any risk or vulnerability they might encounter from their involvement (Creswell, 2008). For this study, I paid for each to receive a Quality Matters review of their hybrid course. Additionally, the instructional design assistance was guaranteed to continue as long as the course designer wanted to take advantage of it.

I kept the participants’ names, the names of their courses, and the names of their institutions confidential in the reporting of data. I arbitrarily selected the pseudonyms for the participants of Gloria Lawson, Karen Howard, and Jeanine Johnson. Each one taught her course at a different higher education institution in the Pacific Northwest region of the United States. Each participant used a course in a discipline different from one another: language arts, graphic arts, and education. Each one used an LMS different from one another: Moodle, Angel, and Canvas.

**Honoring the research site.** Similar to practice in my full-time instructional design position, the research site for each case study participant was either virtual or in a college campus office or workroom. Each meeting was private and individual in nature. The hybrid course design work was exchanged between me and the case study participant either through email or by permission-granted access to the course on the LMS she was using for the course.

For each academic institution associated with the case study participant, a brief written description of the research study was offered, with a thorough version of the plan available upon
request by anyone at the site (Stake, 1995). Both participants and their supervisors or guiding departments were apprised of the work and the process as well as the research.

**Reporting the research completely and honestly.** In an effort to be ethical, attentive, and sensitive to desired conclusions on the part of the participants (Merriam, 1998), I took great care to observe whether the ultimate objective of creating the hybrid course design was progressing as necessary in preparation for the teaching term start date. Regardless of my research results, it was anticipated that each of these case study participants would be delivering the course in an authentic teaching situation at the culmination of our work together.

For purposes of the research results, observation was a noteworthy component for each separate case study (defined for this project as the course designer and her hybrid course). As an investigator experienced in the field of education, I assume that possible bias and subjective assertion will exist to some extent within my conclusions. Stake (1995) reminds an investigator such as myself that “Good case study is patient, reflective, willing to see another view of [the case]” (p. 12). In the reporting and summarizing data, findings, and interpretations, I sought to attain and practice objectivity and honor participant perspective as valuable traits. “…[T]he most important trademark of a researcher should be his or her devotion to reporting what the data reveal” (Bogdan & Biklen, 1998, p. 45).

The reporting of the findings has been taken directly from typewritten responses on the surveys, typewritten responses on the instructional design meeting documentation, typewritten recommendations in the Quality Matters review (conducted by a certified Quality Matters Master Reviewer), and the final, one-on-one interview (transcribed by an experienced court reporter). In every possible instance, actual participant words were used for their descriptions, explanations, examples, and other comments.
Limitations. Cautions to be addressed during the consideration and administration of case study research include length of time, excessive details, misrepresentations of findings, and insufficient validity of the data (Merriam, 1998). Successfully addressing each of these issues as identified in the following paragraphs resulted in a profound and holistic account of a phenomenon, offering insights otherwise not as feasible with alternative research methodologies.

Length of time. Case studies are comprised of studying people within projects and events, which may result in unanticipated and extensive time obligations. The complexity of each unique circumstance may add to that time on either the front end of gathering data, the back end of interpreting the results, or, more likely, a combination of both. The flexibility of extra time and the contingency of more case study participants than ultimately needed were secured at the forefront of the project to protect the results of the study from inadequacy. Neither was found to be necessary for purposes of this project.

Excessive details. The degree to and manner in which case study details are expounded should be evaluated for maximum value to the audience of the research study. Only themes with the highest transferability and relevance should be considered for inclusion in the report with an influential section identifying the lessons learned.

Misrepresentations of findings. Case study findings can be extremely complex, and therefore, are difficult to present accurately and in a straightforward manner. In order to avoid acting in error on misrepresentations or misinterpretations of findings, the case study researcher must independently evaluate and document her own subjective values prior to approaching the study and continuously strive for multiple perspectives as the study takes place. To write an accurate and comprehensive story, the researcher must be open-minded about what is gathered and observed so as to accurately represent each case. My theories are flavored, for example, from
years of practice with curriculum development, knowledge of teaching strategies that are effective for adults, and first-hand experiences with teaching fully online and hybrid courses. I have worked diligently to keep an open mind in order to invite discovery and acknowledgement of eLearning environment options and capabilities not previously realized. Use of multiple and varied data collection instruments and strategies, thereby seeking triangulation, contributes to the effort of preventing misrepresentations of findings.

**Insufficient validity of the data and lack of generalizability.** Because case studies typically consist of small sample sizes and findings are extensive and unique to the individual case, there is no way to establish the probability that the data are either valid or representative of a larger population (Hodkinson & Hodkinson, 2001). For this research project, however, the objective was to ultimately identify ways to revise and enhance the ABCDE model. The experiences of the case study participants during the design of their first hybrid course, while limited and not generalizable, were believed to provide varied and trustworthy perspectives on the use of a tool. When combining what was learned from those observations with recommended teaching strategies and instructional design practices, the process did not require generalizability to fulfill the desired outcomes for the research.

**Data Collection Procedures and Flow of Research Project**

The collection of data began with the pre-hybrid survey and continued through the post-teaching interview, and span of approximately eight months for each of the three case study participants. The table in Appendix B illustrates each of the following instruments, the time frame for their collection, and the format in which they were delivered. Following is a description of the collection procedures nested within an explanation of the flow of the research process.
The pre-hybrid survey. A pre-hybrid (pre-design) survey (see Appendix C) was administered at the beginning of the process to each of the case study candidates. The intent of gathering data through a survey prior to an introduction to the ABCDE model and the impending design work was to begin to build the back story of the course designer’s prior experience and practice in teaching, both face-to-face and online, and set a baseline upon which course design questions could be compared. These data were collected via the WSU Skylight Survey System and responses were stored in electronic form, each in the author’s original words.

The course designers then participated in an initial overview session on the use of the ABCDE model followed by some basic instruction related to online teaching strategies and techniques, active learning strategies and techniques, instructional design practices, and the application of Quality Matters standards, as needed for each individual. For example, if a participant was already familiar with the implementation of Quality Matters standards, additional time for that practice was not used. The requirements within each stage of the ABCDE model guided the instructional needs and the implementation of strategies, techniques, and practices employed in a successfully designed hybrid course. A record of which of these additional professional development topics delivered to each of the participants was not collected, although in retrospect that information would have contributed to the analysis of their cases.

Instructional design meeting documentation (research observation field notes and participants’ reflections). Throughout the duration of the course design portion of the study, for approximately two hours weekly or biweekly, each course designer and I met privately and specifically to work on their hybrid course design. The meetings provided the opportunity for the course designer to seek advice, discuss strategies, brainstorm ideas, and confer with me regarding other standard instructional design matters. The course designer and I each
documented the experiences in our instructional design meetings and corresponding progress on their hybrid course design from our separate perspectives.

To gather these data, I sent an email with a series of prompts and questions to the course designer (see Appendix F) and requested that they reply with responses as soon thereafter as possible. I copied the email to myself and replied to my original email just as the course designer did, responding to the prompts as soon after the meeting as possible. Both researcher field notes and participant reflections were consequently recorded and stored in electronic form, each in the author’s original words.

**The post-hybrid survey.** The conclusion of the instructional design work between the course designer and me was anticipated to be the completion of the design and development of one hybrid course by each original case study participant. Approximately three weeks after the completion of the design work, a post-hybrid (post-design) survey (see Appendix D) was administered to the course designer requesting that they reflect on (a) their changes in practice and perception about teaching since the pre-hybrid survey, (b) the overall experience of the course design process, (c) the use of the processes and prescribed order of the ABCDE model, (d) the degree to which the course could be considered radically redesigned, and (e) any prediction as to whether the course designer would continue to apply principles of quality course design, active learning strategies and techniques, and other newly acquired teaching skills and methods in future courses subsequent to this project.

The window of time between completing their hybrid course design and the start of their teaching term was narrow in all three cases. Consequently all three case study participants complete this post-hybrid survey while they were within the first few weeks of teaching their first hybrid courses using the new design. Therefore, instead of this survey purely reflecting the
perspective of the design process alone, the course designers (instructors) already had an early impression of how the course was going. While this was not desired, the timing was consistent across all three case study participants, so the comparison process of their data was performed in equivalent timeframes.

These survey data were collected via the WSU Skylight Survey System and responses were stored in electronic form, each in the author’s original words.

*The post-teaching survey.* Approximately one month after the conclusion of the teaching term, the post-teaching survey was administered (see Appendix E). Similar to the post-hybrid survey, the post-teaching survey again inquired as to any changes in the course designer’s perspective or anticipated or realized revisions in the course structure and layout and curriculum that may have occurred after the teaching experience and potential feedback and reaction from students.

These survey data were collected via the WSU Skylight Survey System and responses were stored in electronic form, each in the author’s original words.

*Perspectives of student learning interview.* Roughly two months after the first full teaching term using the new hybrid course design was finished and grading was completed, the course designers had each started the process of revising their courses to teach again in the following term. In a relaxed setting, over a casual lunch, I interviewed the case study participants during those circumstances. The open-ended, semi-structured interview questions (see Appendix G) were designed to learn more about the case study participants’ perspectives of the learning that occurred with their students and how that learning might have been affected by the hybrid course design. The conversation and response to questions from each interview was
digitally recorded with an Apple iPod, and a professional court reporter was hired to transcribe and deliver an electronic copy of each conversation word for word.

**Data Analysis Procedures**

The constant comparative method was used for the analysis stage of this research (see explanation for use under heading “The constant comparative process for this study” later in this section). While often associated with the grounded theory approach, comparison is also the dominant analysis principle in other qualitative research methods (Boeije, 2002). According to Boeije, the careful use of comparison analysis increases the internal validity of findings. Therefore, the constant comparative method is particularly appropriate for this project when studying and comparing the responses across the three surveys, field notes and reflections, interview, and recommendations from the Quality Matters review. Additionally, the comparison of the results from these different instruments strongly supports the triangulation in this study.

The texts that resulted from (a) responses in three surveys, (b) weekly or biweekly research field notes and participant reflections, and (c) transcriptions of the interviews were compared with the Quality Matters Master Reviewer’s recommendations from a Quality Matters review of the course design provided the input for the analysis process used to make sense of the data and to reconstruct the perspectives of the case study participants being studied.

*Quality Matters course design review.* Overlapping the post-teaching interview and within three months of the initial teaching term using the new hybrid course design, each of the new hybrid courses was reviewed by a certified Quality Matters Master Reviewer. The Master Reviewer followed designated procedures for use of the Quality Matters rubric (see Appendix A) which resulted in well-crafted recommendations for continuous improvement of the design of the course. These recommendations for each course were typed into individual Microsoft Word
documents and stored electronically. The Word document was sent via email attachment to me as well as the course designer. Aiming for continuous improvement in the quality of online and hybrid courses, the Master Reviewer’s recommendations provided an opportunity for the course designer and me, in my instructional designer capacity, to further discuss the quality of the course design and any revisions or adjustments that might be considered.

*The Quality Matters rubric.* A Quality Matters review is an academically-researched, nationally-recognized certification process that assesses the quality of an online or hybrid course against 41 standards categorized by the (1) design of the course overview and introduction, (2) inclusion of and measurability of course- and unit-level learning objectives, (3) design of assessment and measurement instruments and their alignment with the learning objectives, (4) design of the course instructional materials and their alignment with the learning objectives, (5) design of learner interaction and engagement and its connection with and contribution to students’ accomplishment of the learning objectives, (6) design of course technology set-up and implementation, (7) design of information contributing to learner support, and (8) design of course accessibility and usability with a focus on universal design principles. For more background on the Quality Matters program for higher education as well as a list of the standards in the 2011-2013 Quality Matters rubric, see Appendix A.

An official Quality Matters course review focuses exclusively on the design, rather than the delivery, of an online or hybrid course. Each of the standards (with detailed annotations) are evaluated in a course by a team of three faculty who have online teaching experience and are certified in the application of the rubric’s standards. One of the team members has extra review experience and completed additional professional development, and is certified as a Quality Matters Master Reviewer. During the review, each standard is evaluated to be either met or not
met in the course and recommendations for the course designer to employ with the course are written in precise and descriptive terms by each member of the review team.

To provide comparisons with the study findings from an outside perspective strictly focused on the course design, an unofficial review was conducted on each course. Rather than a full review team of three, I requested written recommendations from a certified Quality Matters Master Reviewer for each case study course. The purpose of the Quality Matters review process for this study was three-fold. (a) The Quality Matters rubric is nationally recognized in the academy to successfully measure a strong degree of quality of online and hybrid course designs, and has rigid requirements for its consistent use by certified reviewers only. (b) The recommendations made regarding the hybrid course designs in this study provided an external perspective of the effects of designing a course while using the ABCDE model for comparison purposes during the analysis phase. (c) The review was a valuable contribution to the course designers as they seek continual improvement in their course design, and I wanted to give the course designers something back in appreciation of their committed involvement in my research (there is a fee associated with a Quality Matters review of each course).

**The constant comparative process for this study.** The following steps were taken to perform the constant comparative method for the analysis of the case study data. I completed steps 1-10 below for each of the cases individually. I completed steps 12-15 below to compare across and summarize the cases. To follow the steps, I:

1. Read and reread survey responses from one case study participant.
2. Organized and labeled questions by topic within surveys.
3. Used a grid that organizes the responses to similar questions from the three surveys in a side-by-side manner for each case study participant, study the responses for similarities and differences (see Appendix H for an abbreviated sample).

4. Printed a hard copy of the organized grid of responses, and coded the responses to find themes across questions within the case by highlighting recurrent concepts, topics, descriptions, and emotions observed in the words used by the participants. Initially, manual highlighting of these items was done with colored highlighter pens.

5. Read and reread field notes and reflections and compared with survey responses for similarities and differences; coded to continue searching for themes in the data by highlighting items and writing margin notes regarding themes that emerged from the data and previous highlighting of items.

6. Read and reread interview responses and compare with survey responses and field notes and reflections for similarities and differences; coded to continue searching for themes in the data by highlighting items and writing margin notes regarding themes that emerged from the data and previous highlighting of items.

7. Read and reread Quality Matters Master Reviewer’s recommendations and compare with all other data for similarities, differences, and emerging patterns; coded to continue search for themes in the data by highlighting items and writing margin notes regarding themes that emerged from the data and previous highlighting of items.

8. Wrote detailed case study report.

9. Read and reread individual case study report.

10. Wrote summary of individual case.

11. Repeated steps 1-10 for each additional case.
12. Read and reread all individual case study reports.

13. Used a grid that organized the data by question topics from all sources of data for all cases in a side-by-side manner, studied the findings for similarities, differences, and emerging patterns (see Appendix I for an abbreviated sample).

14. Studied that codes were appropriate and matched themes across the data, checking for trustworthiness (see Appendix J for the resultant code tree).

15. Wrote cross case report, returning to data to double-check for accuracy and re-analyzing as additional findings and patterns emerged.

The findings from the data are first represented in the detailed case study report with detailed descriptions of each case and its setting, beginning with a backstory based on the participant’s prior teaching experience in higher education as well as the level of comfort she has with technology use in her classes. The data have been compiled and presented for each individual case study participant and analyzed both within her own case and across the other cases to reveal consistencies and variances in both application of the ABCDE model and implementation towards her course design. The case study reports use as many of the participants’ original words and phrases as possible for the narrative; only minimal rewriting exists in order to provide clarification and flow for the backstory. A member check (Merriam, 2002) was performed by each participant reading the case study report prepared from their data. I asked each of the case study participants to take the opportunity to check for agreement with my representation of their world.

Narratives and other survey responses are cited within the case study reports, case summaries, and the cross-case report with instrument code, item or question number, and date of data collection. Citations were identified as follows:
• Each of the data instruments have been labeled (see Appendix B for the complete table of instruments).

• For survey instruments, each item was numbered in sequential order (see Appendix C and D and E for the numbered survey items and wording).

• The interview instrument questions were numbered in sequential order (see Appendix G for the numbered interview questions and wording).

• The Quality Matters rubric recommendations were identified by general or specific standard number (see Appendix A for the standards and wording).

• The date of actual collection, individual to each case study participant, was included, which in some cases provides perspective from the amount of time between the experiences recorded.

Embedded within the reports, summaries, and discussion, the participants and their words are identified by pseudonyms providing their confidentiality. I have distinguished between their comments and mine by that pseudonym usage.

**Consideration of Research Value**

Subsequent to data collection and analysis, I have compiled a list of lessons learned, complementing the research study with a collection of consequences both anticipated and unintentional. Because of the multiple case projects, a cross-case analysis that compares and contrasts lessons, strategies, methods, designs, and faculty involvement provided a comprehensive composite allowing the reader to reflect on the patterns and themes that complement and deter successful course designer participation and quality course development.

The pre-research theory (Yin, 1994), in this case the ABCDE model as it was designed to emphasize a precise order of process to be followed during the hybrid course design, was then
evaluated for possible revision or enhancement, noting the process and scrutiny from which modification resulted. Consideration for change in my design and my practice were then identified and marked for inclusion in a revised model, fulfilling the quest of the action research context.

The culminating report for a case study came about from my ability to understand and articulate the story of the case object as a result of having entered “…the scene with a sincere interest in learning how they function in their ordinary pursuits and milieus and with a willingness to put aside many presumptions …” (Stake, 1995, p. 1) during the exploration and discovery.

**Summary of Methodology**

This study followed steps in action research. Prior to the start of the study, the ABCDE model was created. The case study participants were then taught and applied the process in the model to their first hybrid course design. Using a case study method, I collected and examined the data by reading, studying, comparing, and reflecting on the findings to analyze the results. Using the identified suggestions, I created a list of ways to improve the ABCDE model and implement its process more effectively.

Undoubtedly, the case study methodology has been and will continue to be useful for research in the field of eLearning faculty and course development. The particularistic nature of case study methodology provides authentic examples of eLearning courses and their facilitation.

The next chapter contains the reports and presents findings from each of the case study participants, using data gathered from the surveys, meetings, and interviews. Additionally, the recommendations from a Quality Matters review of the hybrid course design are included in each report for triangulation by subsequent comparison with the case study findings.
CHAPTER FIVE: THE CASE STUDY REPORTS

This chapter contains individual reports for each of the three case studies. As described for this research, a case is defined as the course designer and her hybrid course design.

Case Study Report Approach

This chapter contains the findings for three separate reports, each recounting the participants’ responses to the three surveys and the interview. Also included here are the recommendations written by the certified Quality Matters Master Reviewer, provided for purposes of comparing findings from my observations and participants’ perceptions during the analysis.

The instructional design meeting documentation was used to fill in gaps as necessary in the survey responses. The responses are chronologically organized, grouped and labeled by instrument question, and repeated using as many of the participants’ and reviewer’s original words as possible. A member check was conducted by sending a draft to each participant, offering each the opportunity to clarify any wording or meaning and provide verification of accuracy. This proved of value to one participant’s report, where the meaning behind the words in one response had been missed and was subsequently adjusted.

Case study report and research questions. Following each report, I organized the individual case findings to address the responses as they related to the research questions and include more analysis of the data.

The first research question asked: What challenges and successes did first-time course designers of a hybrid course experience from the use of the ABCDE model and its order of stages as they developed their courses? The participants’ answers were individually grouped into
categories focusing on challenges or successes with the use of the process in the ABCDE model for their hybrid course design.

The second research question asked: What impact did the participants (instructors) think their hybrid course design had on their students’ learning? With responses primarily gathered through a semi-structured, in-person interview, the instructors each spoke of student learning as it related to their disciplines and how the hybrid course design contributed or detracted from accomplishing learning outcomes and additional educational considerations.

**Case Study Participant, “Gloria Lawson”**

**Introduction.** Gloria Lawson participated in this hybrid course design project in order to change a face-to-face course into a hybrid course. The new course would be scheduled to meet face-to-face one Saturday every month across the term with all other course delivery and participation taking place online in a weekly, but asynchronous manner. Gloria’s course was a 3-credit, 300-level, education-based, “train the trainer” type course with approximately 20 students.

**Background and teaching philosophy.** Gloria described herself as an organized, focused, and empathetic teacher who listens to students and has high expectations of them and herself. She earned a master’s degree in dental hygiene and administration and has a total of 40 years teaching experience, 35 of which were with a two-year community college in the Pacific Northwest. In high school, a mentor encouraged Gloria to go into the field of dental hygiene, and she followed that advice, earned an AS degree, and worked in the dental hygiene field for three years. Gloria then went on to get her bachelor’s degree. Through the experience of taking a student teaching course, Gloria realized that teaching was her true profession, and she ultimately earned her master’s degree. During graduate school, she took several courses on curriculum
design and teaching methods, and after graduating she continued her professional development with numerous workshops on curriculum design.

Gloria found teaching to be a joyful experience. She indicated that she loves helping people learn and move toward their life dreams. Gloria reported that she enjoys the intricacy of learning and designing learning opportunities that embrace complexity yet engage the learner in a positive way. She shared that her greatest disappointments are when she is forced to confront students who utilize dishonest methods to get the grade they want. Gloria stated that she believes that the greatest achievement in her teaching career was leading a move from a “teaching-centered” dental hygiene program to a “learning-centered” program.

To Gloria, an exceptional teacher is one who explains the college culture and their expectations of students in a way that students can connect with and understand. They always treat students with respect. They listen and are willing to make corrections to assignments when students point out flaws. Assuming a coaching role, exceptional teachers help students find their strengths and how to use them to be successful. Gloria said that the best teacher “is a co-learner with students” (S1-25, July 27, 2012).

**Using technology in teaching.** Gloria learned to type by touch earlier in life, and reported that she types at a speed of 35-50 words per minute. While occasionally frustrated with the use of technology, Gloria shared that she uses computers often and tackles any challenges that arise such as setting up her own wireless printer. She included that she uses the basic programs on the computer on a daily basis, keeps her calendar electronically, and has trouble with things like getting the pictures from her camera transferred to her computer.

Gloria indicated that for the last six years, she has been using two different LMSs to support students in her face-to-face courses by providing resources like the syllabus, articles,
assignment instructions, and other similar components. Gloria described her technology skill level as average and explained that she uses MS Word extensively with her word processing skills self-rated as excellent.

**Course design process before ABCDE.** In graduate school Gloria took several courses on curriculum design and teaching methodology. After graduating she took numerous workshops on curriculum design throughout her career. Gloria identified that she uses the constructivist theory of learning with adult learning principles in the design of her courses. She acknowledged that she aims for students to be actively engaged in the learning 80% of the time, and utilizes a reflective component regularly so the students can think about how they are learning. Gloria revealed that she changes how she designs the active learning sessions as she reflects on the student feedback, learning, struggles, and attainment of course goals. Gloria said, “I have never taught a course the same way two times in a row” (S1-25, July 27, 2012).

Gloria reported that her favorite teaching strategies include case studies, projects, and group work where students apply factual course content in a variety of ways. In her teaching, Gloria assumes the role of mentor, facilitator of learning, guide, coach, and cheering section. “These roles make the student responsible for their learning and increase the likelihood of deep learning” (S1-21, July 27, 2012).

Gloria described an ideal class session by providing the following specifically-ordered, seven-point list for her survey response, provided here verbatim:

1. Bridge-in or connector of new content to current knowledge,
2. goals for the session written on the whiteboard and reviewed,
3. problem or situation to be addressed presented with instruction difficulty increased as we proceed,
4. students work in groups to accomplish the task, apply learning to the problem,
5. use of Classroom Assessment Techniques to determine if students are learning,
6. whole group activity to discuss misunderstandings or confusion,
7. summary of the session completed by the students. (S1-23, July 27, 2012)

Prior to this hybrid course design project, Gloria’s experience with teaching and
developing course components for online delivery included using the institution’s adopted LMS
to deliver self-paced online components in three face-to-face courses. She had no prior
experience teaching or designing either a fully online or hybrid course.

At the beginning of the hybrid course design work with Gloria, she indicated that for her
face-to-face course development process there were a series of things she determined before each
course began: (a) the course goals, (b) testing and evaluation methods, (c) major projects
including instructions and assessment, (d) weekly learning objectives and readings, and (e) a
basic outline of the active learning activity in each class session (S1-26, July 27, 2012).

As she approached the idea of teaching segments of her course online, concerns regarding
effectiveness or limitations expressed by Gloria included (a) not being able to be spontaneous,
(b) not being able to react to ideas immediately, (c) losing voice tone and body language that add
so much to communication, and (d) the coldness and misunderstandings within typed words on a
computer screen. Gloria expressed, “I am concerned about the loss of the sense of community
that occurs when real people are surrounding you and the communication encourages the learner
on the spot” (S1-31, July 27, 2012).

Gloria’s change of perceptions about teaching and design following the ABCDE
design process. After the course design was completed, Gloria described herself as being a
“more organized” teacher and having a “consistent structure” with “clearer directions and
assignments” in her courses (S2-9, October 11, 2012). While her teaching philosophy was unchanged, Gloria described that her teaching style was affected during the hybrid course design process: “My teaching philosophy is the same[,] but my teaching style has changed somewhat as a result of learning how to make my course more organized and how to formulate on-line assignments that meet the course goals” (S2-15, October 11, 2012).

After the design process was completed, Gloria selected the survey choice that identified she felt she was fairly skilled with technology: “I use computers often, and have only occasional periods of frustration with them” (S2-11, October 11, 2012). During the time between the beginning of the design process and prior to teaching the course, Gloria purchased a new Mac computer and iPad and learned to use both. She also transitioned to her third LMS, and became one of the institution’s pioneers to teach with it. She reported, “Improving my hybrid course forces me to learn to use the current LMS in a more advanced way” (S2-12, October 11, 2012). We can see by this quote that Gloria was growing more confident with the technology she was using and was more willing to take a chance with new technology.

Once Gloria had completed the hybrid design process on her course, she described her role as having changed over the previous year. She stated, “I am much more involved with the students each week now, both through the [LMS] and email. I think I am doing a better job facilitating learning” (S2-17, October 11, 2012). In response to my asking what factors had influenced the change in her role, Gloria wrote,

The number one factor that influenced my change was working with Kathy and using her ABCD[E] model. As I went through each step I was able to see the gaping holes in my course structure and get assistance in fixing the problem.

(S2-18, October 11, 2012)
When considering her intentions for future course development once she had completed the hybrid course design process, Gloria said, “I will design all the discussion and paper prompts before the course starts and some of the assignments will be designed as I observe how the students are progressing with applying course content” (S2-23, October 11, 2013).

There were two primary teaching strategies and methods that Gloria believed she newly acquired during the hybrid course design process: (a) having assignments submitted online and completing her feedback and evaluations electronically and (b) facilitating online discussions. “My assignments are designed to be submitted through [the LMS] and evaluated that way. Discussions were totally ineffective before and now I have a much better strategy to formulate the discussions to allow students to fully participate effectively” (S2-16, October 11, 2012).

One of the survey questions asked on each of the three surveys was, “What do you currently believe are examples of things that an exceptional teacher does for and with their students?” (S1-25, S2-21, S3-17). Following the design process, Gloria reported both of the following items and each were evidenced in her new hybrid course design:

- Make the due dates clear and consistent in every format and place that a student might look, especially on the assignment itself, in the syllabus, in the list of weekly assignments, in the location where students submit the assignment, in an email, and in weekly announcements.

- Provide a very clear rubric for writing assignments, give appropriate feedback about student writing, allow the students to rewrite their work using the feedback, and use classmates to edit each other’s work. (S2-21, October 11, 2012)
Impressions from using the ABCDE model during course design. Once the course design had been completed using the process outlined in the ABCDE model, Gloria’s perception was that the course was “smoother running[,] more organized, clearer and more directed toward [the] course goal (S2-7, October 11, 2012). This was an improvement over how she felt about the course when taught face-to-face during the previous academic year. While the survey was inquiring about accomplishments and disappointments in teaching since responding to the same question in the pre-hybrid survey (since July 2012), Gloria described the same course when it had been taught in January 2012. She said that course was “…very ‘disjointed’ and I felt that the students were not receiving the full benefit of what the course could offer” (S2-8, October 11, 2012).

Applying the ABCDE model, Gloria’s course was designed to be very consistent from week to week. She carefully and intentionally aligned learning objectives with assignments and assessments. She used a clear structure that allowed her to be more creative in designing assignments and assessments.

Gloria’s observations made at the beginning of the teaching term included that as a result of applying the ABCDE design process, the students were very comfortable with the course from the start. Gloria’s perception of this was from the number of student questions and concerns having greatly diminished. “I think the students are learning more, understanding more and better able to apply the content to specific assignments. Students see the connections clearly between the assignments, readings, and discussions/papers” (S2-25, October 11, 2012).

With regard to how other designers of hybrid courses in higher education might perceive the ABCDE model, Gloria stated,
Teachers are very busy and this process makes it possible to build a course that meets the learning objectives for the course and one that allows students to learn. It will also help the teacher be more effective and this will show up in their professional evaluations. (S2-28, October 11, 2012)

**Gloria’s perceptions after teaching the course.** The term ended and the course concluded. Gloria described the highest point or greatest accomplishment of that teaching as follows:

All students in the class were able to successfully meet the course learning objectives. Students were satisfied with their performance. I was pleased that the assessment rubric elements were clear and the students worked to meet each of them. My highest point was the last day of F2F class where students demonstrated their learning (S3-3, December 30, 2012).

Similar to the post-hybrid stage of the process, at the conclusion of the term Gloria described herself as being more organized, systematic, able to provide clearer directions and assessments in her course design. She declared that her role as a teacher remained the same as before the project, and she described herself as a mentor and coach for the students, helping them develop the skills they need to reach their learning goals. She stated that she was confident both in her use of Internet technology and her ability to learn new systems and applications and use of them where needed. She upgraded her technology skill level after the term of teaching and reported that she uses technology outside of work to do banking, shopping, connecting with others through email, searching the Internet, and using some apps on her computer and iPad.

Gloria’s use of technology for teaching increased specifically with online grading and rubrics. She stated that she felt much more organized in her use of technology. She used more
videos and websites, although she did not believe she was ready to create her own videos yet. Gloria shared,

I was much more organized in my use of technology. I used more videos and websites, but provided much more guidance for the students and was much more selective in providing just what they needed and not overwhelming them with lots of sites with lots of in-depth information they were not able to absorb. (S3-10, December 30, 2012)

Gloria’s teaching philosophy remained consistent through all phases of the project, but additional strategies and methods were acquired both before and during the teaching phase. After the term concluded, Gloria listed her favorite strategies and methods as follows:

- Very specific assignments each week that build toward the creation of a student-selected project,
- new assignments that are each scaffolded on the previous assignment,
- assignments that are targeted on one major project, even though there are several projects across the term,
- readings and videos used only when essential and presented at the time students need them. (S3-12, December 30, 2012)

Gloria described her ideal learning environment as being organized in a systematic way, consistently following one organized pattern for structuring the course, using very clear directions and assessment rubrics, and having learning objectives that are meaningful to students and their goals.

According to Gloria, the exceptional teacher provides considerable feedback and encourages the construction of learning. Specifically she lists the following:
• The teacher gives the students positive feedback on the areas of work they did well and opportunities to improve their work where needed.
• The teacher gives the students opportunities to resubmit work as they learn how to improve it and learn from the assignment.
• The teacher allows the students to learn from each other.
• The teacher publicly praises the positive aspects of the students work.
• The teacher gives many positive comments on student perseverance. (S3-17, December 30, 2012)

For future curriculum and course development, Gloria vowed that she will develop 98% of the hybrid course prior to the start of the term. The course syllabus, instructions for papers and weekly assignments will be complete. Most readings and videos will be selected. Gloria stated, “I make modifications on these things during the course based on student work and feedback” (S3-19, December 30, 2012).

Gloria’s statements consistently emphasized the value she found in creating a course where both instructor and students can begin immediately with the learning and not spend a great deal of time trying to make sense of how the course itself is going to be run. Online and hybrid courses are often confusing, especially at the beginning, because a great deal of information is presented verbally during initial class sessions and students can ask questions immediately when confronted with confusion. Here we can see that Gloria was comfortable with the structure of her course and its clear connection with the learning objectives. Additionally, she believed that her students were also comfortable because they were able to progress with the instructions as they were written.
In Gloria’s case, the process of following the stages and steps in the ABCDE model revealed areas in her course that might have been issues once the term began. She was able to identify these potential problems and address them early. This enabled Gloria to attend more to student learning from the first day of the course as well as assess in a more thorough manner the adjustments that students needed to make their learning in relation to the learning objectives even more effective.

After teaching the course, Gloria’s concerns about the effectiveness in online or blended learning environments included the student working alone, feeling alone, and not having the regular emotional stimulation that real face-to-face contact brings. She was concerned that the students would miss “[t]hose serendipity moments that come up in class and everyone hears the comments and we instantly discuss this moment together” (S3-20, December 30, 2012). Gloria indicated that she is generally more confident about knowing whether a student has done the reading after meeting the student in person rather than by just observing their work submitted online.

Gloria described the most positive aspects of teaching that course as including student feedback about expectations, course organization, and the quality of student work. She said:

I did not receive negative student feedback about not understanding what [the students] needed to do or [questions about] why they were reading or doing a particular assignment. Because the course was organized[,] it was easier for me to follow what needed to be done [just] as it was for the students. The quality of student work greatly improved and that was due directly to Kathy’s design process. (S3-21, December 30, 2012)
While Gloria cited that the students did not apply the reading material to the weekly assignments to the degree that she envisioned necessary, both she and the students found it easier to navigate the expectations of the course because it was organized well. Gloria felt the process contributed to her becoming a better teacher. She said, “Thank you, Kathy, for helping me to become a better teacher. It is very rewarding to do a quality job that meets my standards and results in substantial student learning” (S3-25, December 30, 2012).

The course design from the Quality Matters Master Reviewer’s perspective. The course designed by Gloria was reviewed with the Quality Matters rubric based upon the design used for teaching the course the first time and not revised yet for teaching the course a second time. The course design received accolades from the Quality Matters Master Reviewer on all eight general standards regarding the overall design of the course. In the first general standard on Course Overview and Introduction, the Quality Matters Master Reviewer reported finding excellent directions on the course home page to guide the students on how to get started. The structure of the course was very clear in the course design as well as in the syllabus. Recommendations provided by the Master Reviewer for this first general standard were included only for student and teacher introductions to be added online as well as during the first class session (QM, Sts. 1.7 and 1.8, January 22, 2013).

For General Standard 2, Learning Objectives (Competencies), the Quality Matters Master Reviewer reported that learning objectives at both the course and unit levels were clearly stated, measurable, consistent across the course and with the learning activities, learning materials, and assessments, and were all written from a student’s perspective.

For General Standard 3, Assessment and Measurement, the Quality Matters Master Reviewer reported that the assessments were authentic and able “to really assess the student’s
ability to apply what they’re learning” (QM, St. 3.1, January 22, 2013), and that “there is variety within the assignments as there are individual and group assignments, papers, and presentations” (QM, St. 3.4, January 22, 2013). Grading rubrics were used to provide descriptive criteria for the evaluation of student work and participation and were tied to the clearly stated course grading policy. The students’ ability to self-assess their learning progress was provided through reflection and feedback from peers.

For General Standard 4, Instructional Materials, the Quality Matters Master Reviewer reported that current and properly cited instructional materials and technologies included engaging (although uncaptioned and without transcripts) videos and presented a variety of perspectives on the course instructional materials. The learning activities included collaborative, group projects to engage students. “The 5 reaction papers are particularly engaging and require active learning to apply what [the students] are learning to relevant, real scenarios” (QM, St. 5.3, January 22, 2013). The requirements for student interaction on group assignments were clearly articulated. The Master Reviewer made a recommendation in this general standard that suggested the inclusion of a clearly stated plan for instructor response time and feedback on assignments and emails, perhaps in the syllabus.

While the Quality Matters Master Reviewer found that each of the specific standards in General Standard 5 (Learner Interaction and Engagement) had been met, reporting that the course tools and media supported student engagement and guided the student to become an active learner, the reviewer noted that online discussions had not been utilized in the course. The Master Reviewer wrote about that initial course design:

I would consider, however, that discussion forums are often a tool that are used with online and hybrid courses to keep the energy and momentum and
engagement going, which can be important in a hybrid format when there are only two class sessions face to face [per week]. (QM, St 6.2, January 22, 2013)

Collaborative connections that often occur within online discussion forums are believed to contribute to the development of learning communities (Chou, 2002; Conrad, 2005; Hrastinski, 2008; Rovai & Jordan, 2004; Yohe, 2003). Gloria used this feedback for the teaching of the course the second time, integrating the use of discussions that are mentioned in some of her survey and interview responses. Overall, the course design (having followed the guidelines of the ABCDE model during development) satisfied Quality Matters standards for all structure, organization, and alignment with learning objectives in the initial review.

Gloria’s perspective of how the hybrid course design affected student learning.

When asked what she believed the students learned in this train-the-trainer type course, Gloria described that the students successfully demonstrated concepts or skills that revealed their learning about the following:

- Engaged or active learning,
- authentic learning,
- deep and lasting learning,
- adult-learning theory,
- how adults learn, and
- how to engage adults in learning.

Additionally, students were successful learning how to write learning objectives as well as how to plan a lesson or workshop session.

Gloria associated that the way the ABCDE design contributed to these successes was that it taught her to lay out a coherent course that aligned the learning objectives very clearly for the
students. Additionally, the assignments were shorter and chunked, which she thought made the directions clearer for students to follow. Because of the structure of the assignments, Gloria could evaluate what the students were doing and where they were struggling, and then address those topics with classroom activities when they came together. “[t]he students repeatedly said how much the classroom part helped them” (INT, Q3, May 8, 2013).

The Director stage of the ABCDE model follows the Conductor stage. Once all course components have been considered for fully online delivery, the Director stage encourages the course designer to carefully evaluate what the shortened face-to-face class sessions should contain. One ideal use of that time spent together is dealing with issues that students find complex and challenging. In the way that Gloria describes her assessment of learning above, we can see that she did just that by having students submit small portions of assignments online that would reveal issues and concerns followed by using the face-to-face time to specifically target and potentially correct problems before students continued with the next part of the assignment.

The effectiveness of this strategy was confirmed by the students.

A portion of the course requirements included the students teaching training lessons they had prepared. Gloria believed that less successful concepts or skills during this hybrid course were primarily demonstrated by a lack of their mastering the delivery of the training lessons. While she reported that all of the students gave professional-appearing presentations, she also indicated that some of her students needed to work at skills like moving out into the room from behind the podium as well as improving upon the effectiveness of their lesson closing.

A second item identified as less successful was the development of a long-term action plan for their career. This project was due at the end of the term, but Gloria had not had the students submit any part of that incrementally, and since she did not review smaller parts of it
along the way, she did not realize that some of the students were having trouble with it until after it was submitted. Gloria indicated, “I fell back on my old habit of giving them a detailed packet. It was too much information, and the people who were procrastinators procrastinated” (INT, Q4, May 8, 2013). Gloria could see the problem with the assignment during the term, and when asked whether the course being in the hybrid modality created a difference in the way she would handle that, she said,

I think if it were fully face-to-face, I would have made some changes and asked them to turn some things in, because I would have been able to talk to them in class. Versus, online, I was very hesitant to say, “I know I gave you this big assignment, but now I’ve changed my mind, and now you’re going to have to do it differently.” (INT, Q4, May 8, 2013)

This statement suggests that Gloria felt differently about making changes that would affect students’ work during an online or hybrid course than she did about making changes in a face-to-face course. In other statements, Gloria expresses her concern of missing the voice tone and body language that happens in a face-to-face course. Here, she seems to apply that concern to the way a change might affect her students, even though that change might have had some benefit to the students. As a result, she moved forward during the current quarter with what she felt was an undesirable situation.

Gloria addressed student learning styles in her design of the course by including multiple learning activity types, both in and out of class. She used online videos with follow-up questions in addition to reading, group work, and progressive-type assignments where the students would begin by (a) having a concept introduced, (b) apply[ing] the concept, (c) talk[ing] in a group
about that, (d) work[ing] individually, then (e) react[ing] in a way that required they take a stand about the concept (INT, Q5, May 8, 2013).

Since the course was designed to teach the students how to design and facilitate training programs, Gloria prepared the students for an impending adult learning exercise by first role-modeling the process during one of the class sessions. She started by presenting a problem that needed to be solved, clarifying the problem, reflecting on that information, talking with others about it, analyzing it again, perhaps talking with others again, and so on. “But we always move back into that talking and then move back out, move back in, and move back out. So I wanted to keep modeling that that is how adults learn” (INT, Q5, May 8, 2013).

When asked how the student learning styles were supported by the course being delivered in the hybrid modality, Gloria expressed more confidence and success in those that took place during the face-to-face portions of the course: “…when they came into the class period, we would focus on a part of that assignment, and there were times that they wrote….And I might have them get up and present” (INT, Q6, May 8, 2013). While the students were working online a majority of the time (meeting face-to-face just one Saturday per month), Gloria found that the group work, which was significant in the course and intended to support multiple student learning styles, was more challenging to administer online. The students were to complete group work on a weekly basis, and that took place online three of the four weeks each month. This group work required students to use tools like Google Docs, Skype, telephone, email, or find ways to meet in person, even though some of them lived 100 miles from other people in their groups. Students each had different levels of skills with computers, and some of the online tools were completely new to them. Gloria experienced some of the group work activities to be a bit more challenging when online than in prior face-to-face courses she had taught. She explained:
In face-to-face, and when I’ve taught my classes and they get in groups every week and they’re in class, because they’re in class every week there’s scheduled times, certain thing that are done. But this group, they had to make all these arrangements on their own, … so some of the students, they wanted to be face-to-face. If we were in the group, they wanted to see the other people—very important to them. Well, the reflective observer didn’t really care to see what—they were very fine functioning on their own and resisted these group meetings all the time—felt there were way too many meetings and they didn’t need to do that. They could just read the stuff and figure it out. And so I think that made it harder because, like I said, if it were face-to-face, they would already be physically in some place. And I think if it were fully online, they might set up a regular schedule that they meet…and [it] would be incumbent on me to help them do that, to sort of get that going, how to do it, and make an assignment at the beginning in which they learn to do that right away. (INT, Q7, May 8, 2013)

Gloria had shared in the initial Pre-hybrid Survey that she had background and additional education in instructional design and pedagogy. Additionally, she describes examples throughout the data that support her experience with facilitating teaching strategies within a face-to-face setting. It was more complicated for her, however, to support student use of web-based technologies for group work and collaborative assignments. While Gloria’s self-assessment of technology skills increased over time and with experience, her practice may not have yet included as many technological tools that could be used for collaborative learning. We can see where Gloria’s increased confidence allowed her to build the use of these tools into an
assignment, but there is an additional level of skill required to support student use with the tools as well.

When asked what she might do differently with future hybrid courses to better support and encourage student learning, Gloria said she would do more with videos and the reading. Gloria thought she could prepare the videos and some other kinds of things in a more targeted way. With regard to reading, Gloria said,

I have a format that I have already selected for next time to make that much more worthwhile and to make the discussion more worthwhile….I have a couple of ideas that I think will make that work better for the students, for very targeted things that they do with the reading and then that they could comment on. (INT, Q8, January 22, 2013)

The final interview question was whether Gloria believed that her discipline was well suited for a hybrid modality. Without addressing other courses, Gloria stated that it worked well for this course because of the structure of presenting concepts to students on how to teach, then students actually teaching their own lessons, and continuing by developing those presentation skills further. Gloria was not sure how she might achieve the same assignments that involved the teaching presentation if the course was fully online. Additionally, since some of the students lived so far away, they likely would have had a more difficult time if they had to travel more frequently for a fully face-to-face course.

When offered the opportunity to say something that she had not been asked about, Gloria identified three instructional design topics she had gained from the time working on this project: (a) the course structure, (b) learning more through an online workshop on how to teach
effectively with online discussions, and (c) how to set up group work with individual responsibility as well as collective responsibility (INT, Q10, May 8, 2013).

Findings for the Gloria Lawson Case

Successes experienced by Gloria from the use of the ABCDE model. As a first-time designer of a hybrid course, Gloria embraced the use of the ABCDE model, the order of its stages, and each step involved. Gloria stated that using the model and working with me as an instructional designer helped her “to become a better teacher” (S3-25, December 30, 2012). She added: “It is very rewarding to do a quality job that meets my standards and results in substantial student learning” (S3-25, December 30, 2012).

The following items identify the nature of the successes that Gloria identified while using the ABCDE model. Items in the surveys expanded the definition of successes to include benefits, conveniences, clarifications, and compatibilities with design styles. Additionally, based on an analysis of the findings, I have reported areas where the ABCDE model might benefit from revisions and enhancements.

Gloria perceived that the organized and structured course had a positive impact on certain aspects of teacher instruction and student learning. In each of the three surveys, Gloria used the words organized and structured to describe herself as a teacher and the design of her new hybrid course. When compared with the perspective of the Quality Matters Master Reviewer, the course is also recognized as being very organized and structured. The Builder stage of the ABCDE model focuses heavily on the organization, structure, and routine that can be built into the course design as it exists in the LMS. All course materials should first be gathered, then chunked across the term (ideally in a chronological and week-by-week order), then routinely organized by types of instructional materials, learning activities, and assessments.
Gloria’s course was built in such a manner, and she describes the effects in several ways that affected her and her students. Each effect is described next.

In response to the post-teaching survey question about the positive aspects of the ABCDE model, Gloria wrote, “Because the course was organized[,] it was easier for me to follow what needed to be done as it was for the students…” (S3-21, December 30, 2012). Additionally, Gloria stated that she believed the students were comfortable with the course content and navigation from the start, increasing the time available to address learning topics. Then, in both the post-hybrid and post-teaching surveys, Gloria shared that she believed this structure and organization resulted in students clearly seeing the connections between assignments, readings, discussions, and papers. Once the term was completed, Gloria shared that she believed the quality of student work was greatly improved when compared with previous face-to-face offerings of the course, and “that was due directly to [the ABCDE] design process” (S3-21, December 30, 2012).

**Gloria perceived that the course requirements aligned with learning objectives reduced problems and elevated student learning.** The Quality Matters Master Reviewer’s observations support that the fundamental quality standards addressing alignment between learning objectives and course materials, learning activities, and assessments were each found to be met in Gloria’s course design during the initial Quality Matters review. Additional recognition noted that the assessments were authentic and able to assess the students’ ability to apply what they were learning across the variety of assignments, papers, and presentations. Gloria attributed taking a workshop on how to apply the Quality Matters rubric to giving her a more holistic view of online learning and succeeding with this recognizable alignment of the objectives with all of the course components.
During the final interview, Gloria attributed student learning successes to the design of a coherent course that aligned the clear learning objectives and structured assignments that were chunked across the term. We know from other statements from Gloria that she believed her coherent course design related directly to her use of the ABCDE model process when building her course. The Conductor stage encourages the alignment of learning outcomes with each course component. The Director stage encourages an evaluation of the effectiveness of individual learning components across the course. The assignments, as chunked and structured, allowed Gloria to evaluate what the students were doing and where they were struggling so she could provide them with relevant and timely feedback as well as address these specific topics when they met together during the once-per-month face-to-face sessions. According to Gloria, both she and the students recognized the value that both the feedback and the face-to-face reinforcement brought to the learning.

**Gloria perceived that the application of the ABCDE design resulted in teaching strategy enhancements.** In addition to a tighter course design, Gloria identified some enhancements to her teaching strategies in the post-hybrid and post-teaching surveys. Her courses had very specific assignments chunked across each week that built toward the creation of a student-selected project. Each assignment was scaffolded on a previous assignment, providing a solid foundation for her perception that learning continued at a fairly consistent pace. Gloria also indicated targeting the number of readings and videos, believing that those she used were essential to the learning and just what the students needed at the time they were assigned.

Gloria stated that she utilized the face-to-face class time to address issues that she believed were confusing and complicated for the students. To identify these issues, Gloria had used out-of-class assignments that revealed possible student needs. The course design involving
an intentional weaving together of out-of-class with in-class learning activities is one of the primary objectives for the Director stage of the ABCDE model.

*Gloria perceived that her technological skills were more competent after the experiences involved in designing and teaching a hybrid course.* Gloria’s use of technology appeared to become increasingly proficient with each progression through the project and particularly during the teaching phase. Effective use of technology is the cornerstone of any online or hybrid course; therefore, the development of such skills is an integral part to determining both online and face-to-face course components. At both the beginning of the project (S1-15, July 27, 2012) and just after completing the design of the course (S2-11, October 11, 2012), Gloria rated her own skill level at fairly skilled or “I use computers often and have only occasional periods of frustration with them.” After teaching the course, Gloria’s self-rating advanced to very skilled or “computers are my friend; I can navigate through almost all situations with little problem; I could or do teach introductory computer skills” (S3-7, December 30, 2012), revealing that during those five months of Gloria’s practice and use of technology, she perceived her computer skills to have increased. Part of the evidence we find that supports Gloria’s self-advancement is her increased confidence in trying instructional technologies for out of class collaborative student work, as mentioned previously regarding the inclusion of online group work for assignments.

**Challenges experienced by Gloria from the use of the ABCDE model.** The following analysis relates to challenges experienced with the use of the model. Items in the surveys expanded the definition of challenges to also include complications, confusion, frustration, inconveniences, incompatible style or processes. Again, I have identified areas where the ABCDE model might benefit from revisions and enhancements.
Most identified challenges are more delivery-specific than design-specific. While survey items and interview questions were specific in requesting details on challenges or frustrations that resulted from designing the course with the ABCDE model, most of Gloria’s responses to those questions were actually more associated with the hybrid modality itself rather than the process of using the ABCDE model to design the course.

From Gloria’s data, we can see that skills and knowledge related to the effective use and application of instructional technologies might be responsible for the challenge in each of the following situations:

- Students did not do as well as Gloria desired in the delivery of their teaching presentations in class.
- Students struggled both logistically and with their desire to collaborate online for group work between face-to-face sessions. Gloria described that the asynchronous group work was complicated to facilitate.
- Students seemed less accountable for completing the homework in weeks between face-to-face class sessions, possibly implying that the obligation felt in person was more influential than adhering to online submission deadlines.

For each of the issues above, the learning objectives were in place with learning activities assigned and organized and set up in the LMS for student interaction (Stages A and B). The process of having completed the building of the course with online components and weaving in appropriate face-to-face components was in place (Stages C and D). This would suggest that the course design was complete per the intent of the model, and the delivery of the course would begin to reveal what was working and what could be improved upon. To that end, the Evaluator stage recommends that each concern be identified and considered for revision in the course.
Specific questions should be asked: What could be changed to help students increase their presentation skills? How might group work be adjusted to work more effectively for students? What might enhance student accountability with homework completion? Since the face-to-face class sessions are reduced for a hybrid course, solutions using web-based technologies should be included in the considerations.

MOVE TO IMPLICATIONS!!! While extensive professional development in the identification of and effective use of specific instructional technologies is somewhat of a parallel prerequisite and, therefore, outside of the scope of the ABCDE model process, it may be possible and appropriate to incorporate into the model construct the idea of needing some level of instructional technology support for the hybrid course designer who is new to this environment. The range of this support would be immense and this is very likely the reason that the literature identifies that professional development for hybrid course design focuses almost exclusively on the use of specific instructional technologies without more course design and structure foundation as found in the ABCDE model. Therefore, it is possible that the ABCDE model should include a new step in the Conductor stage. This new step might suggest building the course at first with more common instructional technologies such as online discussions and videos or simulations. Other possible new steps in both the Conductor and Director stages, maybe even the Evaluator stage, might suggest subsequent exploration and integration of new instructional technologies that could be added on a trial basis, perhaps one per term, and include some sort of back-up plan in case the new activities fail the intended learning objective.

Gloria perceived that making course adjustments during the term was problematic for the students. Starting with the initial survey, Gloria identified her practice of applying a constructivist learning theory in her teaching. She explained that she considered student feedback
and performance to guide her adjustment of active learning exercises. For the hybrid course design, however, Gloria identified that her strategy would be to structure and build 98% of the course into the LMS prior to the start of the term, leaving some minor discussion and assignment details flexible until she saw what most needed to be refined to best benefit the students’ learning. We can see here that Gloria was adhering to the recommendation in the Builder stage to fully plan and build course components before teaching commenced, yet was retaining some option to change details if she determined it to be necessary.

A time that Gloria felt prevented from following through with adjustments that she believed would improve the student experience was when she had provided what she later saw as too much information that she had failed to chunk out for the students. Having seen the success from chunking a prior assignment, she recognized fairly quickly that the packet details were not getting the attention they required for student success. Gloria was concerned with the problems in this assignment, but did not believe she could do anything to remedy them because the communication would have been online instead of in person where she would have been able to gauge the students’ responses to the change and negotiate things as necessary.

**Summary of Gloria’s experiences with the ABCDE model.** Gloria followed the prescribed order in the model as it was designed by building the entire course into the LMS prior to the start of the term (Stage B), considering each course component for fully online (Stage C) and then strategically pulling back individual items to be used during the total of three, monthly face-to-face sessions (Stage D). At the end of the project, Gloria provided a statement that she believed that the ABCDE process was successful, and she did not have any suggestions for changes, differences, or improvements to the model.
Gloria perceived successes with the use of the ABCDE model to include (a) the organization and structure of the course, (b) the alignment of course requirements with learning objectives, (c) the enhancements in teaching strategies, and (d) the increased competence with technological skills. The challenges she perceived were mostly identified during the delivery of the course and involved student presentation skills not fully achieved, students not engaging as fully in group work as desired, and students not completing homework as expected. Additionally, when a course adjustment was realized, Gloria felt it would be more difficult to make that adjustment solely in writing and not coordinated with the students in person.

The impact the participants (instructors) thought their hybrid course design had on student learning. Subsequent to the surveys and teaching, an interview was conducted with Gloria to collect her perspectives of how the hybrid course design affected the student learning either positively or negatively.

Gloria’s course was an education course intended to teach the students how to design and conduct training. One of her foci was to role-model the practice of course design and facilitation of learning that she ultimately wanted her students to learn. Therefore, a strong structure and organization within her course was important to Gloria. She explained as follows:

I had the assignments around that—around the structure, and I kept talking [to the students] about structure and building structure [in their lessons]….Structure is very important—they have to be able to see the structure and how things fit. (INT, Q5, May 8, 2013)

As she reflected back on prior terms of teaching the course without the hybrid modality, she believed that the organization in her course that she accomplished through the process of following the ABCDE model contributed to what she described as “[t]he quality of student work
greatly improved” (S3-21, December 30, 2012). She had followed steps within the Builder and Conductor stages to promote what she believed was a routine structure and full layout of course components.

Related to the Director stage, Gloria stated that she had developed what she perceived to be a strong relationship between the out-of-class and in-class learning.

By looking at the [out-of-class] assignments and so forth, I could see the things that the students were struggling with or I could anticipate where they were going to struggle, and I made sure those were classroom activities that we talked about and that they worked on in class, because we were in class for three hours, so it was a true opportunity to work on some of the concepts or skills in class to clarify. (INT, Q3, May 8, 2013).

Gloria capitalized on studying how students were doing in the online portion of the course, and followed-up during the face-to-face sessions with clarifications, reinforcements, and adjustments as necessary to affect the student’s learning.

There were some aspects where Gloria associated the reduced face-to-face time of the hybrid modality with a disadvantage to the learning. She cited one instance where she might have adjusted an assignment because she could see students were experiencing some confusion with it, but because she could not observe their body language when discussing it, she refrained from making desired changes.

And to write [those changes] out in an email or something like that, I feel that comes across differently than if they saw me, my facial expressions. I could see their body language, I could respond to that. But online I feel somewhat more
distant from the students…so I was thinking it could mushroom into something and I wouldn’t know. (INT, Q4, May 8, 2013)

The Gloria Lawson case summary. Gloria used the ABCDE model as it was intended to design her first hybrid course. Gloria is a proponent for structure and strong connections among the course curriculum and learning objectives, and she found the ABCDE model process to support both. Gloria applied teaching strategies in her hybrid course that she had not previously used such as scaffolding large assignments into progressive steps that were easier for students to follow as well as assigning content very intentionally when it supported the tasks at hand. Gloria reported that her own instructional technology abilities improved during the teaching of her first hybrid course, having utilized the technologies with students during the term.

Gloria’s frustrations seemed to mostly be associated with issues more related to the delivery of the course than its design. She reported students not complying with the reading of assigned course materials and not engaging fully in group work for the collaborative learning or online discussions for the reflective learning experience. She did perceive there to be success with a large assignment being chunked into smaller components and then expressed the consequential struggles of neglecting to do that with a different assignment later in the term. Gloria was enthusiastic about the course being successful and it was her view that she was a better teacher for having had the experience of learning to apply the ABCDE instructional design model to her course.

The [ABCDE model] process was successful for me….Thank you, Kathy, for helping me to become a better teacher. It is very rewarding to do a quality job that
meets my standards and results in substantial student learning. (S3-25, December 30, 2012)

Case Study Participant, “Karen Howard”

Introduction. Karen Howard participated in this hybrid course design project in order to transform a course that previously met face-to-face on Mondays, Wednesdays, and Fridays each week into a hybrid course that had been scheduled to reduce the face-to-face sessions by one and meet only Mondays and Wednesdays. The course planning and institution scheduling initially envisioned that the Friday would be spent working online on a somewhat more flexible schedule than the normally scheduled class session. Karen’s course was a 3-credit, 100-level, graphic design, computer lab-based course with a registration cap of 25 students.

Background and teaching philosophy. Karen shared that she has been teaching photography, graphic design, and art full-time at the same Pacific Northwest community college for 12 years. Her love of photography led her to earn a bachelor’s degree in that discipline, which naturally led to a career in graphic design and multimedia and to work for graphic design agencies.

Karen reported that she finds teaching far more demanding and challenging than previous jobs, but that she finds it very rewarding and loves being able to be immersed in the pure theory and practice of art and design. She admitted, “[Teaching] does feel like I make a difference in people’s lives and that is a big motivator in staying in this job” (S1-10, July 5, 2012). Karen described herself as being dedicated to helping students gain the skills and resourcefulness to achieve their dreams.

Karen described her role as a teacher: “Very often it is as mentor, cheerleader, or counselor. Sometimes it is ‘clearer of roadblocks.’ But when it is working best, it is as organizer
of materials, and guide through a variety of resources” (S1-22, July 5, 2012). She indicated that she tries to be very accessible and demonstrate that she started where the students are now and that the skills and expertise she has acquired are attainable to them as well. She explained that she shows them the path she took or helps them define their own path by bringing into focus their ideas, interests and ambitions.

Karen recounted that her teaching style utilizes a discovery-type approach. She stated that she believes it is important that she empower students to learn on their own by being resourceful, engaging in problems, and thinking their way through situations critically. Karen described how she employs tailored mentoring and encouragement to help students be patient and figure out an open-ended problem. Karen shared, “It is a process-driven subject, and it isn’t so much about the end result as the journey” (S1-20, July 5, 2012).

Karen confessed in two surveys that she finds students who are closed-minded, lack self-esteem, or lack belief in their abilities to be the most challenging to teach. In the pre-hybrid survey, Karen shared:

- Closed-mined individuals are the most challenging to teach. Especially if they try to draw others in class into their own closed-minded world view. They can really poison the well with negativity.
- Those with low self-esteem or lack of belief in their own abilities are challenging; those who believe they need constant hand-holding and credit me or classmates for their success (or failure), instead of themselves. (S1-24, July 5, 2012)

Seemingly in response to that survey item, Karen qualified in the next item that she believes an exceptional teacher would:

- Make [the students] believe they can do it.
• Inspire students to believe that it matters. This is really cool and powerful stuff.

• Be on [the students’] side, even if that means practicing “tough love.” (S1-25, July 5, 2012)

Karen indicated that she believes strongly in group work and relies on it heavily in many classes: “I believe in analysis—both individual and group-based. I incorporate analysis in most of my assignments whether written or in oral critique” (S1-21, July 5, 2012).

**Using technology in teaching.** Karen reported that she is very confident in her use of technology, placing herself at an advanced user level both teaching advanced computer skills and helping others troubleshoot their technology problems. She acknowledged that it is very time consuming and sometimes frustrating to “catch up” to her prior position after making all of the revisions required when changing technologies. Karen learned to type by touch earlier in life, and believes she types at a speed of 35-50 words per minute.

Karen explained her use of technology at home and at work:

*We embrace technology at home. I usually am not a first adopter, waiting to hear the reviews on items before purchasing. I don’t love cell phones—they are intrusive, but I have an iPhone, a Kindle, and love [I]nternet resources. I feel comfortable with adapting new technologies and using them in the classroom. The biggest frustration for me is always the amount of time it takes to stay current with constant upgrades. I am just too busy all the time to learn and adopt 3-5 new technologies every year. I don’t have problems learning them, I just don’t have the time.* (S1-18, July 5, 2012)

While Karen had used technology extensively in her teaching to make her courses web-enhanced with resources, prior to this project she had no experience teaching online or hybrid
courses. She shared that she now felt like students were prepared for the hybrid modality, which she had not always felt in the past. Upon consideration of the hybrid modality, Karen was concerned that her students might struggle with the online component and that a hybrid course would prove more difficult for auditory learners.

**Course design process before ABCDE.** Karen admitted that she always strives to perfect her courses, and while similar in content, she changes details quite a bit from term to term. She explained that she develops the schedule and assignments before the term begins and tweaks or revises the day-to-day lessons, slideshows, and daily activities as she goes. Before beginning the hybrid course design project, she had a goal of the details being more solidified prior to the start of the term. She was conscious about changing this, even though she explained that her nature is to be more spontaneous, because she realized that changing her mind during the term is frustrating to her students when they know it is happening. Karen said that she found it easier for changes in a face-to-face course to appear as her being flexible and adjusting to the needs of the students. However, she reported that she can earn the reputation with her students of being a “flip-flopper” for changing aspects of a course when the details are published online.

**Karen’s change of perceptions about teaching and design following the ABCDE design process.** When asked about her greatest accomplishment for teaching in the last year, Karen stated it was the considerable task of designing and building her Graphic Design Exploration hybrid course. She stated that she was more familiar with the LMS after that work, and acknowledged that she had an introduction to using Tegrity (a lecture-capture recording system) and Camtasia (audio/video production software). Still labeling herself at an advanced skill level with technology, Karen wished she had more time to keep up with the new technologies. She said, “I feel more empowered with [the LMS] tools giving me more versatility,
but also feel very harried” (S2-9, November 6, 2012). She found that she has more flexibility to work on her courses now from home, but also believes that she is putting more time into them than she did prior to the hybrid course commencing.

When describing how her use of technology had changed during the hybrid development process but prior to the teaching term being completed, Karen replied, “I am rethinking how I deliver content via technology to my students. I am branching out from the ways I have been doing things” (S2-14, November 6, 2012). She explained that she is shifting the way she thinks about classroom time activities and assessments, broadening her views about what holds the most value and what is the most effective use of both students’ and her time. Karen admitted that she is not sure what she will have developed prior to the start of the term and what she will develop as she goes. She stated, “I will definitely be giving this a fair amount of thought as I prepare for future courses. It has been an issue for me this quarter” (S2-23, November 6, 2012). Karen also expressed concern that some design activities were less efficient and were taking her so much time that it was affecting her ability to spend time on other aspects of teaching during the term.

Karen mentioned her situation of being quite busy a number of times in several instruments. During our meetings, she described to me in person that some of her other responsibilities were as division chair for several departments, which involves scheduling all courses, interviewing and hiring adjunct faculty, dealing with student complaints and issues, and addressing faculty concerns as they arise. In her academic unit, there was no reduction of teaching to accommodate these extra responsibilities, so she also still had a full teaching load. All of this was in addition to her learning about the hybrid modality, complying with my requests for providing survey responses and time for instructional design meetings and an interview, and
building the new design of this hybrid course. These types of additional responsibilities and obligations are not uncommon for full-time faculty, and with such, a consideration of the time involved in this hybrid course design process cannot be taken lightly.

When asked if Karen had acquired new teaching strategies or had identified any favorite teaching strategies and methods for her hybrid course, she responded that online discussions were new for her. She added that the use of media and Internet content as well as methods within the LMS for distributing information and collecting assignments were becoming favorites. She said, “Hybrid and [use of the LMS] has opened up new [possibilities] and that will probably influence all my courses in the future” (S2-22, November 6, 2012). Karen noticed a potential and possibly exciting shift in her role of teacher in her classes by her facilitation of more peer-to-peer learning amongst her students, and she declared that she wants to pursue that more fully. “I think that is really exciting and need to see where I can take that realization” (S2-17, November 6, 2012).

It continued to be important to Karen to challenge her students by convincing them they are capable and they can achieve their learning goals and they can get excited about the learning. After the design process, she added that an exceptional teacher also provides structure for the learning to happen. Karen stated that the components she believes are required for the “ideal” learning environment include building community, having an organized plan for the day, using the LMS for constant emphasis and contact with students, and allowing a reason for engaging in the course and the community of learners. She explained that she finds it frustrating when students do not take advantage of the resources or do not engage in the critical thinking and new ideas of the course.
Impressions from using the ABCDE model during course design. When asked about the most positive aspects experienced in using the ABCDE model during the design process, Karen stated that the structure was immensely helpful by forcing her to be more strategic. Karen added that using the model affected her design in that she now provides the students with the process for learning. Karen shared an explanation regarding why she believed the ABCDE process model should be provided to those designing hybrid courses:

If you’ve never taught hybrid before, you really don’t know what difficulties you will encounter, or really, what to do first. I would have started in such a different way and would have taken much for granted if it wasn’t for [the ABCDE model].

(S2-27, November 6, 2012)

Karen suggested that I provide more introductory or overview material that would help designers of hybrid courses understand the process. By doing this, she felt that those using the ABCDE model might more quickly understand the motivations of developing courses for hybrid modality and what learning activities are more or less suited for it. After teaching the course through one time, Karen expanded on this concept:

I think part of what Kathy was trying to tell me, that only really made sense to me later, was that you should have a really good reason for teaching hybrid. What works best online and what works best face-to-face? If that could be a more explicit part of the training, I think [designers] could plan for it better than I did.

(S3-24, January 6, 2013)

Karen’s perceptions after teaching the course. The term ended and the course was finished. Karen described the highest point or greatest accomplishment of teaching the hybrid course she had designed with use of the ABCDE model as follows: “A successful first-time class
that I taught fall quarter. I got good student feedback on it which was rewarding given my
inexperience with the hybrid format and having a very, very busy quarter” (S3-1, January 6,
2013).

Similar to statements made in the pre-hybrid survey, Karen continued to describe herself
as dedicated and hard-working. She reiterated her state of feeling overly busy and emphasized
that the lack of time is disappointing, creates a general feeling of dissatisfaction, and contributes
to her behaving less patiently than normal. She said that she had, “…a very, very busy quarter
because I took on too much at once. That led to the disappointment of not being able to put as
much time into my hybrid class as I wanted…” (S3-4, January 6, 2013).

After completing the teaching of her hybrid course, Karen described her skill of using
technology with and for her students as probably unchanged with the exception of having learned
more particulars about the LMS. Each of the three surveys (before, during, and after the design
process, see Appendices C, D, and E) included a Likert-type item asking for a self-perception of
 technological skill. In the first two surveys, Karen ranked her technological skill as Advanced.
However, in the third survey following the teaching of the course the first time, Karen
downgraded her level of technological skill from Advanced to Very Skilled. While no inquiry
was made as to why she had selected differently at that point, Karen reacted to this information
when discovered through the member check for this case report: She said she had not been aware
she changed her response, and she was somewhat surprised by it.

Following the completion of teaching the hybrid course, Karen responded to a survey
item that inquired whether her teaching style and philosophy had changed as a result of using the
ABCDE design process:
I think my philosophy is fairly unchanged. I like my students to be given challenges in which they can problem-solve and be active learners, as well as learning from the community of classmates. I believe everyone is on his/her own growth path and try to accept that all students learn differently. (S3-11, January 6, 2013)

Karen indicated that new teaching strategies and methods used for the hybrid course include having students take online quizzes that are mostly self-regulated, which are less of an assessment but good as study aids, and they can be retaken up to three times to encourage mastery. She also assigned her students preparatory homework before coming to the face-to-face class sessions that met twice per week. She then used the first part of those meetings for student questions. Karen mentioned online discussion forums again, similar to the post-hybrid survey response, and explained, “Discussion forums are something I am just becoming acquainted with and plan to expand their use in my courses” (S3-12, January 6, 2013).

When asked whether her role as a teacher had changed since prior terms, Karen shared that use of the LMS encourages students to email with questions (sometimes even content that was covered during one of the twice weekly face-to-face class sessions): “This is providing a new challenge for me both in how to write the answers as well as the increased time it takes to do this task” (S3-13, January 6, 2013). Karen was consistent before, during, and after the design and teaching phases in believing that an exceptional teacher listens to her students and shows interest in them as individuals. She maintained that one must make their students believe they can succeed.

An enhanced emphasis of what is required for an “ideal” class session or learning environment emerged upon the conclusion of Karen teaching the course:
• In the post-hybrid survey, Karen stated, simply, “[B]uilding community” (S2-19, November 6, 2012). In the post-teaching survey, Karen expanded this concept with: “I think student engagement and preparation are the keys to an ideal session for me” (S3-15, January 6, 2013).

• In the post-hybrid survey, Karen stated, “[A]n organized plan for the day” (S2-19, November 6, 2012). In the post-teaching survey, Karen clarified her explanation with: “From the student’s part, I think they like [the course] to be organized and easy to follow. They want to understand what is expected of them” (S3-15, January 6, 2013).

• In the post-hybrid survey, Karen shared the narrower point, “[S]hared goals, allowing a reason for engaging in the course and the community of learners” (S2-19, November 6, 2012). In the post-teaching survey, Karen broadened her statement with: “Mutual respect amongst everyone in the classroom is critical. (S3-15, January 6, 2013)

Karen verified that she still believes that students who are close-minded to the curriculum can create an unfavorable learning experience or environment, but after teaching the course, she added other factors that interrupt the learning—students not taking personal responsibility for their learning and students being preoccupied with other things during face-to-face sessions that are unrelated to the course. She felt somewhat of an improvement for the second time of teaching the course and explained the difference with, “…I maybe did a better job covering what the expectations were for that, having known that there were some students who weren’t utilizing [the LMS] effectively the first time through” (INT, Q7, April 29, 2013)
On the topic of course delivery, Karen expressed some concerns and solutions that appeared possibly incompatible. While being encouraged about student achievements that were completed because of the course materials being available in the LMS, Karen noted a significant concern regarding online or hybrid effectiveness and limitations: “I definitely felt like I could not cover as much material effectively with the hybrid format” (S3-20, January 6, 2013). She shared that she was also frustrated that her students missed some requirements because they failed to fully engage with the online components. Karen attributed that students may have underestimated the importance of referring to the online information themselves, thinking it would be repeated for them in the face-to-face class meetings that were occurring twice each week. Karen subsequently stated that she believed she should reduce the face-to-face time to a single meeting per week and make necessary changes to some of the assignments for future offerings of the hybrid course. These quotes suggest that Karen has high expectations for students and holds them responsible for their learning. It also suggests that she may be thinking that fewer class sessions in person would make students more reliant on content and information provided through the LMS; however, she did not directly provide a corresponding resolution for the problem with the amount of material that could not be addressed.

The course design from the Quality Matters Master Reviewer’s perspective. Karen’s hybrid course design received commendations from the Quality Matters Master Reviewer on several standards: The introductions and instructions for getting started in the class were clear and the syllabus noted the significance of the hybrid format of this course and the requirement of reliable technology (QM, St. 1, April 4, 2013). It was also noted that the course- and unit-level learning objectives were consistent and measurable and supported by the tools and media utilized; that the course- and unit-level learning objectives were written from the student’s
perspective; and that the course- and unit-level learning objectives were aligned with the course assessments, instructional materials, and learning activities (QM, St. 2, April 4, 2013). Student interaction opportunities and active learning activities were also highlighted by the Quality Matters Master Reviewer: “There are some excellent engaging and collaborative activities to promote authentic assessment! Your ‘You’re the teacher: design principles’ and ‘Visual timeline poster’ are excellent examples of this” (QM, St. 5.2, April 4, 2013).

Recommendations for possible revisions to the course provided by the Quality Matters Master Reviewer included that Karen should:

- Add more specifics to the information provided online such as etiquette expectations (QM, St. 1, April 4, 2013),
- add clear and adequate instructions on how students can meet the learning objectives (QM, St. 2, April 4, 2013),
- make the grading policy consistent between what is stated in the syllabus and what students find in the LMS (QM, St. 3, April 4, 2013),
- incorporate all instructional materials into the LMS (QM, St. 4, April 4, 2013),
- state the instructor’s anticipated response time for communication and feedback on assignments (QM, St. 5, April 4, 2013), and
- describe access to and availability of the institution’s technical support (QM, St. 7, April 4, 2013).

Not all course content was included in the LMS course shell by the review, so several recommendations were made by the Quality Matters Master Reviewer such as,

There doesn’t appear to be any instructional materials in this [LMS] shell. They must be covered in class? As mentioned [before], this could be helpful to add to
[the LMS] for students to review additional times to be successful in the assessments. (QM, St. 4.2, April 4, 2013)

Overall, the course (having utilized the ABCDE model during design) satisfied standards for course structure, organization, and alignment with learning objectives in its initial review. Quality Matters standards for hybrid courses require that all course content, information, and instructions be accessible within the course design, including the instructional materials and at least a reference to learning activities and assessments that would be distributed during the face-to-face meetings. This provides appropriate accommodations in the event that a student is absent from a face-to-face meeting or not an auditory learner.

**Karen’s perspective of how the hybrid course design affected student learning.**

Karen shared that overall she believes that courses in the field of graphic design are quite suited to a hybrid modality. She described that (a) the value of the face-to-face sessions was in providing guided hands-on work and (b) that it was appropriate for the study and acquisition of concepts and theories to be delivered online. In Karen’s first hybrid-taught course, some of the concepts or skills successfully demonstrated by the learners included (a) small groups preparing material and delivering an in-class lesson from out-of-class learning of theories presented in the textbook and (b) students applying principles of graphic design in a “make-over” for an existing business (who’s the audience, what’s the budget, what would be more effective than the brand and logo and identification that they have). While her explanation does not specifically identify which components were online and which were face-to-face, Karen described changes she applied to this make-over project for her hybrid course:

And I did change the way I was doing [the make-over project assignment] for the hybrid class versus the face-to-face class, and I did reorganize a lot of content into
installments towards this project, and I do think that presenting it as such helped the student understand the connectedness of the material and, you know, how the material all works together versus the way I had it organized before. (INT, Q1, April 29, 2013)

Karen thought that students were less successful in this first hybrid course with pre-reading and studying the instructional materials prior to coming to the face-to-face class meeting. This was enough of a problem that Karen stated “it was getting in the way of the progress of the class” (INT, Q2, April 29, 2013). This was a different result from that of the fully face-to-face version of the course, and Karen believed that this was because her face-to-face process had involved first reading assigned instructional materials and then submitting study questions before hearing a lecture on the content during one of the face-to-face meetings. For the development of the hybrid course, it was that lecture session and the submission of study questions that she had eliminated to accommodate the reduction of face-to-face time. Karen had intended to create online quizzes that could check comprehension of the reading prior to students attending the face-to-face class sessions, but she was not able to finish that time-consuming task in time for that first class.

In retrospect, Karen realized that in converting her course from fully face-to-face to hybrid, she had kept the same course design and just eliminated one of the weekly face-to-face sessions, keeping much of the rest of the design the same. She stated,

I felt like the two-day-a-week model required more substantial redesign than I had anticipated. It was more than just moving it and fitting it into two days. I thought by just making it fit into two days a week, plus extra stuff as homework, that that would fit. But it really turned out that it didn’t. (INT, Q4, April 29, 2013)
Karen elaborated on these realizations further:

…I really have to focus a lot more on the online components…and also, I think, doing a little more holistic thinking about what hybrid would look like versus starting with the face-to-face and trying to adapt it to hybrid. I think going into it, that was my main thing because that whole three-day-a-week versus two-day-a-week thing I think was really key for me in thinking that it was just a matter of adapting it, and it wasn’t. Like you said, [I had] that big misunderstanding that people come in with as to what a hybrid [course] is. And even though I think I still, like, intellectually understand what it is, I don’t think that my design for it really reflected that completely. I tried, but it didn’t get there. (INT, Q8, April 29, 2013)

We can see by this that although Karen had indicated her compliance in following the ABCDE process and order of its stages, she admitted in the statements above that she actually had not completed either the Builder or the Conductor stages. In other statements where Karen recommends that the ABCDE model process include more introductory and overview material and ways to help the course designer understand the process, we get insight to ways Karen was trying to reconcile the ABCDE model with her practice. We know she was challenged with time. Additionally, we know that Karen’s prior teaching practice was exclusively face-to-face and involved designing class sessions throughout the term. It may have also been more helpful to Karen to view the entire model more holistically instead of broken into separate stages of design.

When Karen was asked a follow-up question to clarify why she had not been able to design the course to reflect more of what she perceived a hybrid course should be, she responded
that she believed the problem was related to her having “…very limited online teaching experience” (INT, Q8, April 29, 2013). Karen elaborated:

… [B]ecause I think if I would have really, like, focused and, like, had the time to sit down, and before I got started on the hybrid to think about again, you know, your suggestion of figuring out your outcomes and figuring out, how would I teach that outcome online? If I only had online, how would I teach it? And I don’t think I did that enough, to the extent that was needed, because I kept envisioning [the course] as my face-to-face or my hybrid, and I just don’t think I fully went there to the online mode. (INT, Q8, April 29, 2013)

Karen acknowledged that both the failures and successes she identified from teaching her course informed her teaching and future course development:

The one thing I know for sure is that it did get me thinking about a lot of different ways to teach….going through that [course design] experience really caused me to think about things and have a lot of new ideas and conclusions of what happens there and how I can do this better. So definitely worthwhile. (INT, Q4, April 29, 2013)

Realizing that students learn differently one from another had originally enticed Karen to redesign her course for the hybrid modality. At the beginning of this hybrid course design project, she had anticipated that with the hybrid modality she could provide alternative methods for students to display their learning. For example, she suggested that students could display their learning of course material by either (a) writing answers to questions or (b) creating a graphical poster. To accommodate varied student learning styles, Karen had given attention to design both
for the face-to-face sessions and with the hybrid redesign of her course as she describes in the following:

I used to do more testing with the face-to-face version and then balance that with in-class activities (things that are hands-on). Also discussions, so auditory, listening, talking types of activities. So I think that all three were present anyway, you know, things that [students] had to do at home, things that they had to do in class, things they had to do in groups, things they had to do alone, things they had to do that were hands-on, things that they…had to show me that they understood it and that they had to tell me how they understood it. So I think that that was not terribly different between the two modalities. (INT, Q5, April 29, 2013)

When asked what she might do differently in the future to better support and encourage student learning with a hybrid course, Karen revealed having some problems with the linkage between the online and the in-class components and the timing of those items. She indicated that she would have to focus a lot more on the online components declaring that, “Even after all of our [instructional design] meetings, it was still hard to imagine the online component versus the just kind-of amped up web-enhanced experience, which did end up being a lot different” (INT, Q8, April 29, 2013).

Findings for the Karen Howard Case

**Successes experienced by Karen from the use of the ABCDE model.** Karen’s background and strength is creativity and spontaneity, assessing both student progress in learning and accomplishment on a day-to-day basis. She and her students were accustomed to attending her course three days a week, delivering instructional materials when it was needed and appropriate, and providing and guiding the flow of the curriculum one day at a time. And,
although extremely comfortable with technology, Karen had not previously found a significant need to utilize the institution’s LMS extensively.

During the course design process, Karen believed that she had bought into the approach of the ABCDE model. She found that learning to use the ABCDE model changed the way she had intended to approach the design of her first hybrid course. “I would have started in such a different way and would have taken much for granted if it wasn’t for [the ABCDE model]” (S2-27, November 6, 2012). The following item identifies a success Karen experienced while using the ABCDE model.

*Karen perceived that the use and management of the LMS had a positive impact on certain aspects of student learning.* Karen reported that her greatest teaching accomplishment in the prior year included teaching her first hybrid course: “A successful first-time class that I taught [last term]. I got good student feedback on it which was rewarding given my inexperience with the content and having a very, very busy quarter” (S3-3, January 6, 2013). The hybrid design required an increased use and management of the LMS that Karen had not previously found necessary for her teaching. She described that she felt the ABCDE model provided a helpful structure, forcing her to take a more strategic and planned approach in her course design than she previously had with her face-to-face courses. The entire design process required rethinking how to deliver content via technology, which she found to be a good exercise, but she struggled with having all the course components in place prior to the start of the term. Karen noted that students like the course to be organized and easy to follow, to know what is expected of them, and to not get surprises from class-to-class changes. Other comments revealed additional conviction about this because Karen acknowledged that her course was not developed enough for the first teaching.
Challenges experienced by Karen from the use of the ABCDE model. Karen noted a number of challenges and complications associated with her hybrid course design. Most were associated with skill with instructional technologies, the investment of time, and the unanticipated rethinking of face-to-face learning activities.

The ABCDE model might assume too much prerequisite knowledge on the part of the beginning hybrid course designer. Karen expressed that it was difficult for her to get started with the ABCDE model. She believed it would be important to have had a better understanding of the process up front. Karen stated that she would have benefitted from the model including more explicit guidance in terms of figuring out what works best online and what works best face-to-face. She indicated that without this guidance, she had not been able to fully complete the Conductor stage of the ABCDE model during her design process. Also, she had not considered every aspect of the course for online delivery prior to the start of the term.

Karen described that during the design process, she tended to stray back to thinking of the course as being face-to-face with some online components. From the inception of the hybrid course, her idea was to take a Monday-Wednesday-Friday face-to-face course and make it a Monday-Wednesday face-to-face course with Friday activities put online. She also attributes this divergence primarily to having more experience with teaching face-to-face and less experience with teaching online, so she felt limited as to the online learning activities she could design. Having experienced that the strategy of starting with her existing face-to-face course and putting a little of it online did not work for her class, Karen advised me to be more insistent in future teaching of the ABCDE model—that I should encourage new hybrid course designers to envision the entire course online, “because I do wish now that I had put more effort into that and just in general known more about online teaching…” (INT, Q10, April 29, 2013).
Karen’s explanations and reports indicate that she did not complete the Builder stage, the Conductor stage, or the Director stage as designed in the model. She believed she was doing this, but indicated after the fact that she had not understood the extent to which this was recommended. She also indicated that she had tried to complete everything per the model, but was not able to due to the initial idea of not redesigning the entire course and putting only the Friday class session online. In designing her course, it appears that Karen was relying considerably on her face-to-face teaching knowledge.

Per Karen’s insistence, this must be made more explicit in the presentation and teaching of the model. The ABCDE model dictates a fairly dramatic paradigm shift for the faculty member who has spent considerable time teaching face-to-face without instructional technologies beyond making course resources available. Additionally, it may be helpful to add a step to the end of each of the stages identifying what the course design looks like when the stage is completed.

*Karen perceived that the radical redesign of a course for hybrid modality took an unexpected amount of time.* Another challenge was that Karen was concerned about the time required to become familiar with the technological aspect of a hybrid course. While she had reported that her skill level with technology is quite high, and she has taught complicated Adobe software products for many years, the addition of utilizing the LMS and other technological learning tools took time away from her teaching and preparation. She found that some things about the hybrid design were not as efficient as teaching the course face-to-face.

*Karen perceived that in-class activities required unexpected rethinking to align with out-of-class work and preparation.* Karen noted that following the ABCDE model required shifting the way she had been thinking about class activities and assessment. Given the new
emphasis on what would take place out of class, Karen realized that she had some problems with the linkage between the online and the in-class components and the timing of each. Included in this, Karen talked about broadening her view regarding what she believes holds the most value and what is the most effective use of both students’ time and her time. As a result of the hybrid redesign, Karen did notice a shift of more peer-to-peer learning happening amongst students, which she found to be exciting and hold some promise. But she wanted to find a balance between in- and out-of-class activities since students simply were not as responsible as they needed to be.

In comparison, the Quality Matters Master Reviewer’s recommendations included (a) adding clear and adequate instructions on how students could meet the learning objectives and (b) making the grading policy consistent throughout all of the course materials and the syllabus. Karen noted that since she had struggled with the in-class and out-of-class activities, there were some course components in the syllabus that were not available yet in the LMS. Karen indicated that having consistency between these two elements was of immense value to the students.

It is likely that Karen approached this project believing that most of her course design was already complete or that she was competent with it, because she thought she was only changing one out of three face-to-face class sessions per week.

Karen perceived that adjusting the course design for hybrid modality competed with time for teaching. In several surveys, Karen shared that it was one of her primary goals to provide a variety of learning experiences to meet the various needs of her students and encourage a learner-centered environment. In fact, she had originally decided to pursue the hybrid modality because she thought that meeting only two of the normally three times per week and moving that third day online would add a layer of learning alternatives that would benefit the students. Karen was also providing choices to students for ways to meet the course learning objectives (for
example, written responses or graphical representation of concepts), and giving students multiple opportunities on quizzes that covered questions from the reading.

**Summary of Karen’s experiences with the ABCDE model.** The challenges experienced by Karen during her first hybrid course design included the possibility of the Conductor stage depending upon more experience with web-based learning activities than would exist for those new to teaching with online technologies. Additionally, the degree of redesign for the course and time required for development was unexpected. Karen had anticipated designing only extra online components and not spending additional time integrating them with her previously-used face-to-face components. Amid the list of challenges Karen experienced, she believed that the structured use and management of the LMS was a success in using the ABCDE model, and ultimately a beneficial to her students.

**The impact the participants (instructors) thought their hybrid course design had on student learning.** Subsequent to the surveys and teaching, an interview was conducted with Karen to collect her perspectives of how the hybrid course design positively or negatively affected student learning. Karen’s responses to the interview questions focused mostly around the design of the course, and she seemed to attribute inadequacies in student learning to what she had not accomplished when building out the course design in the LMS.

Karen was encouraged by the student learning she observed through both group work and appropriately applying principles of graphic design in a project. She was discouraged by the students seeming less than prepared from out-of-class study for the next in-class learning activity. Due to the reduced face-to-face time, Karen had replaced an out-of-class study strategy that had previously been followed by in-class review in her face-to-face class with all out-of-class responsibilities for the students to accomplish on their own. She had intended to replace the
in-class review with quizzes for the students to complete prior to the class meetings. Digitizing quizzes, however, is time-consuming for the course designer, and Karen was not able to accomplish that task prior to the dates she would have wanted to schedule them.

Karen realized that the bigger obstacle with her hybrid course design was having modified her face-to-face course with the “enhancing blends” learning system (putting a little bit of her existing face-to-face course online) rather than using the “transforming blends” learning system (Graham, 2006) (radically transforming the entire course, converting everything first to online, then strategically pulling critical components back to the face-to-face sessions). She believed that the breakdown that ended up affecting the students’ learning the most was thinking that the entire re-design was just replacing one of the three meeting days each week with online components and building only the learning activities for that third day into the LMS. Doing that seemed to affect her ability to utilize effective online elements that wove in nicely with the face-to-face components. She said she did not think she asked herself extensively enough how she would teach a specific learning objective with online components.

**The Karen Howard case summary.** Karen received positive feedback from students in her first hybrid course and said she felt the experience was busy but successful. She reported noticing a shift of more peer-to-peer learning happening amongst the students in her classes as a result of the new design, and she was motivated to see where that takes the course as times goes on.

The ABCDE instructional design model process was considerably different from any teaching strategy that Karen had used before in its extensive use of the entire course being populated in the LMS rather than providing the course resources only. It was also different given the encouragement to have the course fully designed prior to the start of the term, and Karen, a
Karen’s design process went from a three-day-a-week fully face-to-face course to meeting two days a week in a hybrid course schedule. Her preconception of how to do this was to continue everything she was already doing in the face-to-face sessions during the two days she kept and put the third day’s activities online. This is a relevant example of Graham’s (2006) “enhancing blends” learning system category for blended learning design, where the ABCDE model aligns more closely with Graham’s radical transformation as described in the “transforming blends” learning system.

During the final interview, after the course had been designed and taught for a full term, Karen stated that she strongly believes that a hybrid course would be designed better if all components are first evaluated for functioning fully online as well as if the face-to-face sessions are redesigned to address the critical moments for learning complex topics rather than mimicking their purpose in a fully face-to-face course. This was a part of learning the ABCDE model that Karen advised my discussing more emphatically when I teach the model in the future. Additionally, more time and work was necessary for her to understand how online learning activities and assessments work and could be applied to her course.

**Case Study Participant, “Jeanine Johnson”**

**Introduction.** Jeanine Johnson participated in my study with this hybrid course design project in order to meet training requirements set by her institution for teaching a hybrid course and to learn how to transform a course previously face-to-face into a hybrid course. The new
course would be scheduled to meet face-to-face every Tuesday and Thursday across the term with all other course delivery and participation taking place online in a weekly, but asynchronous manner. Jeanine’s course was a 5-credit, 100-level, English composition course with a registration cap of 25 students.

**Background and teaching philosophy.** Having spent 17 years in the business world, Jeanine went back to school intending to pursue an AA degree in business. Out of boredom, Jeanine took a 200-level literature class with a fantastic teacher and ended up changing her major to English. She ultimately earned a doctorate and has taught developmental English, English composition, and English literature part-time for 20 years, almost exclusively for the same community college in the Pacific Northwest. Jeanine stated that she believes that she is making a real contribution to society and that makes the very hard work of teaching worthwhile.

Jeanine described herself as “a teacher with very high standards, devoted to trying to help students succeed, and often frustrated” (S1-13, July 21, 2012). She declared that her high points are when she knows that a student finds learning exciting, and her low points are when full-time faculty in higher education are supplanted by part-time faculty, diminishing the numbers of full-time faculty.

Jeanine reported that her teaching style and philosophy incorporate class participation and discussion: “I believe in class participation and in sharing the responsibility for ‘lecture’ with a variety of other voices, online and in film” (S1-20, July 21, 2012). She explained that she adjusts her styles to the course type, where literature courses require student presentations (often in pairs) and class discussion and where composition courses require group work participation. She added that she uses a lot of graded reading questions to motivate the students to do the extensive required reading.
Jeanine shared that she demonstrates enthusiastic interest in her courses by applying hard work to the design and presentation of information, skills, and strategies for success. She noted that she recognizes a difference in her role as an instructor between her older and younger (many times high school aged) students. Jeanine reported that she believes that the exceptional teacher does the following:

- Treats all students with respect,
- insists that students show respect for each other,
- expects a lot of students and herself,
- learns along with her students, and
- makes herself available outside the classroom (not easy if you’re part-time).

(S1-25, July 21, 2012)

Jeanine explained that an “ideal” class session or learning environment involves the following:

- Students [are] able and willing to engage;
- a teacher [is] able and willing to guide but also to listen; and
- a topic challenges students with sufficient ambiguity, which allows for multiple angles of approach, but which students are able to find a defensible stance within, preferably but not necessarily a comfortable one. (S1-23, July 21, 2012)

Jeanine admitted that she finds her teaching challenged when students are ill-prepared for or unable to engage in serious learning with a characteristic lack of interest in either history or current events, or who talk “without shedding much light” (S1-24, July 21, 2012).
Using technology in teaching. Technologically, Jeanine considered herself fairly skilled, using computers often with only occasional periods of frustration. She has mastered a limited number of functions necessary for her fields of composition and literature, but acknowledged that she does not learn new functions quickly. Jeanine reported that she has an above-average typing speed of between 50-65 words per minute.

Jeanine described having a long background with computers, starting with a stand-alone word processor in the 1980’s and acquiring a home computer when she began graduate school in the late 1980’s. She indicated that she updates her computer equipment fairly often and uses her home computer almost daily, primarily for email, online shopping, and researching interesting topics and ideas.

At her earliest opportunity, Jeanine began using electronic technology in her classroom to visually display in addition to verbally explain to students what she was teaching (the classroom was equipped with a “smart desk” for instructors’ use around 2002). Prior to that, Jeanine’s classroom technology use was limited to the overhead projector.

Jeanine shared,

A computer is essential to me in preparing materials for students. Because of my business training, and because I teach English, and because I am very particular, it is important to me that documents are error free and clear. I can't think of a time when I used a program other than Word to create a document. Following completion of the assignment provided to students via my document(s), I very frequently provide a significant amount of typed feedback to students individually. There is no way in a full classroom to do one-on-one teaching to
address each student’s problems individually, so the typed feedback is my solution. (S1-18, July 21, 2012)

**Course design process before ABCDE.** At the beginning of this project, Jeanine stated that her course design process involved rarely doing things exactly the same way from one term to the next. When preparing for the next term, Jeanine explained that she considers what worked, what did not work, why it worked in one term and not in another, what current events have taken place that she should incorporate—then she adds new content to the curriculum and removes content that has become outdated. She recounted that she begins each term with a general plan that meets the college requirements for quantity and category of writing by students:

I plot assignments to fulfill those requirements on a calendar and then add material in between. The added materials, such as staggered quizzes, may also be plotted on the calendar, but a significant portion of a given term is somewhat fluid in that I draw on a “bank” of materials but do not have a rigid schedule for presenting it. (S1-27, July 21, 2012)

Jeanine anticipated that future course design will incorporate uploading content for online consumption. She shared that she has experience with two different LMSs in delivering course materials such as writing assignments, research assignments, and skill-building assignments. Jeanine had used online discussion forums, but was unimpressed with the quality of thoughtful discussion it generated.

**Jeanine’s change of perceptions about teaching and design following the ABCDE design process.** Jeanine explained that her application of the ABCDE model for her hybrid course utilized a greater employment of her institution’s LMS than what she had used before.
She found the LMS cumbersome and stressful, and indicated that she will likely avoid the use of some functions in future teaching terms as a result.

The LMS was the single most mentioned aspect of Jeanine’s experience of designing her hybrid course: 12 times overall; six times in the post-hybrid survey (October 8, 2012), and six times in the post-teaching survey (January 11, 2013). Nine times she expressed frustration and three times (only in the post-teaching survey) she focused on ways she has increased her use of the LMS for her course. It is interesting to note that Jeanine did not mention the LMS a single time during the final interview (April 19, 2013) which was focused on the students’ learning and took place after the second full term of teaching her hybrid course. This could mean that Jeanine eventually conquered the challenges with the LMS and was more comfortable with the system six months into its use; or, this could mean that Jeanine’s attention to the students’ learning superseded her frustrations with the LMS.

Throughout this project, Jeanine consistently described her level of technological skill as “fairly skilled,” and she acknowledged that the self-ranking might have been due to the limited number of programs she uses (primarily MS Word). Jeanine expressed that after the course design process, she found herself, as a teacher, “more aware of areas that were previously less strong and of strategies to improve them” (S2-9, October 8, 2012). Jeanine declared that her teaching philosophy has changed in response to her participation in the hybrid course design process. She provided the following statement:

My philosophy has changed to adapt to the kind of students who take hybrid classes in that I keep in mind their desire for predictability and adequate time to see and absorb assignments before they are due. I am also working on the idea of
building a community of learners in this environment—I’m not there yet. (S2-15, October 8, 2012)

In terms of her role as teacher, Jeanine said that she was, “trying to limit my role as ‘the guru of information/knowledge’ to allow/guide student groups to expand on it themselves. This is not easy for me” (S2-17, October 8, 2012). Upon completion of the design and at the beginning of teaching the new hybrid course, Jeanine believed she would experience some success, but perhaps not as much as she would have liked because it was a different style of teaching for her. In the post-hybrid survey, Jeanine rephrased the components she had previously indicated were required for an “ideal” class session or learning environment to now include (a) mutual respect of students for teacher and for their classmates and of teacher for students, (b) strong work ethic, (c) open-mindedness, and (d) empathy (S2-19, October 8, 2012).

At the completion of the design process, Jeanine believed an exceptional teacher is one who “not only responds positively to students’ conscientious effort to engage and succeed in learning but actively solicits it from all students. This is not easy because my repertoire of ‘solicitation’ strategies is somewhat shallow” (S2-21, October 8, 2012).

Following the hybrid course design phase, Jeanine cited three concerns about hybrid course effectiveness or limitations:

- One concern is the same as for some [face-to-face] students—no shows or absenteeism.
- Also, I don’t (yet) feel I’m getting to know my students as easily as in the [face-to-face] classroom.
- I feel my limitations in so far establishing effective learning communities in these classes, something that, while not unimportant, was less critical in the [face-to-face] classroom. (S2-24, October 8, 2012)

Possibly in response to these concerns, Jeanine reported spending more time online via the LMS in activities such as interacting with students, grading, and helping them troubleshoot problems. She also stated that she is now aware of working on the idea of building a community of learners in the hybrid learning environment, but still has work to do in that area.

**Impressions from using the ABCDE model during course design.** Jeanine acknowledged that she does not believe her course assignments, learning activities, or assessments will change significantly when teaching her course in a future term, but she does believe that future hybrid courses will elicit the use of more strategies. She said:

I think the content will not change dramatically, but as I teach more hybrids, I will try to use more strategies more effectively to create a community of learners.

There were so many moving parts to getting hybrid training, designing a course based on new concepts, and working with a cumbersome LMS, that changing my teaching style mindset is still evolving. (S2-22, October 8, 2012)

She had felt limited in her ability to implement a learning community strategy so far, and recognized that it is more critical for a hybrid course than for a fully face-to-face course.

Jeanine found that the ABCDE process model includes pre-term planning and development in the LMS of the full course, and completing that task proved a great benefit once the term began. She described the following to respond to ways in which using the ABCDE model changed the way she designs or thinks about designing courses:
The most significant change is total pre-quarter design and loading of the course to the LMS. In particular, the model changed the way I think about designing courses in order to meet hybrid student needs. Now that I’ve done it once, it may be easier to do again, but it is no small task. (S2-27, October 8, 2012)

Although she had been resistant to this pre-term work and was concerned that she would not have time to complete it by the start of the term, Jeanine testified that she plans to continue to design the entire course before the term begins in the future, allowing for and expecting a limited number of additions throughout the term. This was a change for Jeanine: “In the [face-to-face] classroom, I have let the number of writing assignments and their length determine the structure and pace of the classes along with reading assignment questions and quizzes” (S2-23, October 8, 2012). Jeanine said, “The hybrid class is much less strain if it was fully designed and loaded [in the LMS] ahead of time” (S2-23, October 8, 2012).

In response to whether she could see the ABCDE process model benefiting designers of hybrid courses in higher education, Jeanine suggested that teaching hybrid is not for everyone:

Some time ago, a teacher said to me that s/he was thinking as s/he drove to class, “What shall we do today?” Now this is not a completely disorganized person hoping for learning in an “open classroom” environment. But [the ABCDE] model is a radical shift for that somewhat unstructured style of teaching, and [those courses] wouldn't adapt well to hybrid or online [modalities]. (S2-28, October 8, 2012)

We can see from Jeanine’s course design experience that her focus was primarily on the ways the hybrid modality was different from the face-to-face modality. She discussed changing her style, communicating differently with the students, dealing with the mixed curse and blessing
of pre-building the course fully in the LMS, and learning to use more collaborative learning and
collaborative teaching strategies in her hybrid course design. Instead of being the “guru” and
potentially teaching at the students, Jeanine expressed an awareness of needing to understand
who the students were and what she would need to understand about their learning needs in order
to facilitate their learning in a hybrid course. Jeanine even extended this awareness to situations
with her colleagues and the possibility that all of them might not be able or willing to
successfully pursue this change of style. For those who were suited to teaching with the hybrid
format, Jeanine shared that learning the process in the model would help them see the need for
design.

Jeanine’s perceptions after teaching the course. Upon completion of teaching her first
hybrid course, Jeanine reported that her greatest accomplishment or highest point for her
teaching was the transition of her complex face-to-face course into the hybrid format and the
successful completion of the courses by some students. She did, however, experience enough
decline in student retention to plan for a change in her role as a teacher for upcoming terms:

The change is the result of the attrition rate in the previous quarter. I believe
students need more support from me. I was alarmed at the attrition rate. It is early
yet in this [second] quarter to gauge the effect of the change. (S3-13, January 11,
2013)

Near the beginning of Jeanine’s second time of teaching her new hybrid course, she
described an example of how her role as teacher has changed:

I am taking more time in the face-to-face sessions to make sure that assignment
requirements are understood; I’m demonstrating methods that students will be
expected to use all quarter and not relying as heavily on written instructions,
although the latter have also been “tweaked” for clarity. (S3-13, January 11, 2013)

Jeanine described herself after the first teaching term to be both more experienced and more competent in new areas of teaching. She continued to rate herself at a fairly skilled technological level. Her primary difference technologically was the more complete use of the LMS than before she started, and she reached a lower frustration level even though she continued to think that the LMS was cumbersome and non-intuitive in some important areas. Jeanine cited a specific example of how awkward the particular LMS used by her institution was to set up and maintain when attempting to automate the sequential presentation of a learning process, opening the next step to the students only when the prior step had been completed.

Jeanine found herself placing many more learning opportunities into the LMS than in previous classes that were fully face-to-face. She was learning what did and did not work and adapted her course based on that experience. Jeanine described that a change in her teaching style “…includes staying ‘tuned in’ to the LMS, perhaps in an obsessive way. This could be a negative, but definitely helped me cope with a serious student issue at the beginning of [the term]” (S3-11, January 11, 2013).

Jeanine did not implement online discussions in the first or second teaching of her hybrid course. She acknowledged the contribution of this feature for the creation of an effective community of learners and indicated that she has made adjustments to the course in preparation for use of online asynchronous discussions in future terms.

After her first hybrid teaching experience, Jeanine described the components required for an ideal class session or learning environment to include the following:

- Teacher’s passion for her subject,
• teacher’s willingness to allow herself to be taught, [and]  
• students whose attitudes transcend “I have to take this course” [with an]  
  eagerness to learn. (S3-15, January 11, 2013)  

She also indicated that she believes an exceptional teacher provides students as many opportunities as possible for opening their eyes and minds to the world beyond themselves. In English composition courses, Jeanine described that this depends heavily on reading and writing. She shared that she is continually adjusting her course to add more and different information and include more ways for students to engage with each other about what they’ve read and written.

When asked about her intentions for future curriculum and course development, Jeanine indicated that she will be watching closely throughout her second term of teaching a hybrid course to see whether she has more successfully engaged an increased number of students, see whether more of the students are keeping up with the work, and evaluate the result in consideration of future changes. Since Jeanine was convinced that a hybrid course must be fully designed prior to the start of the term, she recognized that it was not easy to make significant structural changes during the term like adding a new category or an assignment that was not already accounted for in the syllabus. Following that process was different for her from the 20 years of face-to-face teaching.

During the post-teaching survey, Jeanine shared that she had found the ABCDE model to be helpful:

The model was and is invaluable to my course design. Left to my own devices, I would have had a far less coherent structure. It has been a challenging learning experience for me that was and is stressful at times (I feel a great sense of responsibility to serve students well and am a natural born worrier), but I am very
glad to have the opportunity to learn the model and to teach the hybrid format.

(S3-21, January 11, 2013)

The course design from the Quality Matters Master Reviewer’s perspective.

Jeanine’s course received praises for all significant hybrid and online course development standards except for having a somewhat high number of different links to content and instructions in the course. She was also missing any sort of component that would make sense of all the pieces, perhaps a weekly “overview” or checklist-type item that includes unit-level learning objectives and instructions on how to meet the learning objectives (QM, St. 2, April 6, 2013). The associated recommendation from the Quality Matters Master Reviewer stated: “[By including this,] students can see how the weekly materials help them achieve the unit-level objectives that build them toward the achievement of the ultimate course-level objectives” (QM, St. 2.2, April 6, 2013). The Master Reviewer also noted,

…[T]here are a lot of separate word documents that require clicking on and downloading and then reviewing, which takes a fair bit of time. So, having one document at a glance to start the week and to check off as students go along could help ensure that they track where they’re at and complete everything for the week.

(QM, St. 2.4, April 6, 2013)

The Quality Matters Master Reviewer acknowledged that Jeanine had designed her course to begin with a very clear announcement and “welcome” letter as well as requirement for submitting a course commitment letter (QM, St. 1, April 6, 2013). These components made clear how the hybrid course would function as well as what was required for the face-to-face sessions and what the online portion of the course would entail. Information about course requirements, expectations, and college policies was clearly provided and easily accessible to students (QM,
St. 1, April 6, 2013). The course assessments, instructional materials, tools and media, and learning activities were all confirmed to align consistently with the course-level learning objectives (QM, Sts. 2-6, April 6, 2013).

While all of the course components were designed, included, and available for the students by the first day of the term, the Master Reviewer’s recommendation was to revisit the structure and layout of items in order to assist in making the course navigation and labeling of course content organized, logical, consistent, and efficient (QM, St. 6.3, April 6, 2013). The Master Reviewer noted: “Students find this consistency to really help them not worry that they might have missed something and [they are able to] focus on the learning and application” (QM, St. 6.3, April 6, 2013).

So while Jeanine had mentioned that the ABCDE model had contributed to a more coherent structure in the course than she believed she would have had otherwise, the Quality Matters review indicated that the structure of the course was still in need of work. Given the seemingly continuous struggle with the LMS that Jeanine reported throughout the project, it is difficult to tell where the problem with this may lie: the ABCDE model or this particular LMS. Jeanine also specified that she was enhancing instructions and demonstrations during the face-to-face components for the second teaching of the hybrid course. This could be an indication that Jeanine had dismissed some use or hope for use of the LMS as a result of the challenges she had experienced with it.

Jeanine’s perspective of how the hybrid course design affected student learning.

Critical thinking and writing skills were two important course objectives for Jeanine. She observed that students made good progress on the critical thinking skills and would be able to utilize those skills in future classes. She thought that students who seemed somewhat
predisposed to feel negatively about writing did not do well or did not follow up on suggestions for how to improve such as going to the institution’s writing center or getting a tutor.

Jeanine further thought that the hybrid course format seemed to contribute to the success with critical thinking in her course through information prepared for and brought to share in the face-to-face class discussions, even though this had not originally been planned to occur. She observed that from the online learning activities not ordinarily assigned in the traditional face-to-face classes, students were finding information online or sharing something they “…knew personally through some other means, a book or something, and were really adding to the [in-class] discussion in very meaningful ways” (INT, Q3, April 19, 2013). Jeanine believed that students who were not doing that same level of exploration were also benefiting because of it being shared publicly in class.

Jeanine wondered whether the decreased amount of face-to-face class time (meeting in person for two 50-minute sessions instead of a total of five hours per week) may have contributed to the writing skills deficiency. She had experienced in the past with face-to-face classes that student peer readings had not been particularly beneficial, “…but sometimes the stories that students tell in their writing grab the attention and students get ideas about how they might have approached the assignment differently themselves” (INT, Q4, April 19, 2013). Without the full amount of traditional face-to-face time, Jeanine believed there was less interaction and, “students were simply on their own time, in their own space, preparing an essay by themselves” (INT, Q4, April 19, 2013).

Jeanine intentionally attempted to accommodate multiple student learning styles in her course design by providing collaborative opportunities for students both during the twice weekly face-to-face sessions as well as outside of class during their online work. One example was
called “Quiz Prep” where Jeanine had the students work in pairs during a face-to-face class session to answer questions that they were going to be quizzed on later. In her fully face-to-face classes, the quiz had been administered during class. For the hybrid course, the quiz was administered outside of class through the LMS. In both modalities, the students were allowed the use of resources, notes, and other study materials while taking quizzes.

For the hybrid course, Jeanine also had the students discuss those questions as a larger group online. This extra work around the quizzes was intended to mitigate the student impression that these “open book” quizzes were simple and something they could skirt through without reading and studying for them. Students, historically, had not done well on these types of quizzes and Jeanine wanted to change that trend. In comparison, however, Jeanine found the quiz scores to be about the same between the fully face-to-face classes and the hybrid classes. She recalled that for the hybrid course, one student had failed the quiz and some students did not submit anything at all.

Another example related to student learning styles (and perhaps student attitudes) that Jeanine employed for her hybrid course addresses group work that incorporated both collaboration and critical thinking skills. Having considered that a number of students express having had a terrible experience working in groups in the past, and therefore entering the term resistant to group work, Jeanine posed a challenging, elephant-in-the-room type question right up front:

How are you going to solve that problem this time? And here’s my suggestion for how you do that: everybody pulls their own weight, and if someone in the group is not doing that, you need to talk to them. (INT, Q6, April 19, 2013)
For the students who seemed to have learning styles challenged by the course being delivered in the hybrid modality, Jeanine cited (a) technical problems, (b) non-native English speakers, and (c) late registrants (a school policy that permitted students to add classes up to ten days into the 10-week term without instructor permission). In each of these cases, Jeanine believed it might have been easier to help the student in a fully face-to-face course without a significant portion of the course being online.

When asked what she might do differently in future hybrid courses to better support and encourage student learning, Jeanine referenced recommendations from the Quality Matters review including reducing the multiple places that student could find information in the LMS course design. Another recommendation she planned to implement involved her creating a to-do list:

And one of the things that I’m going to follow up on is to create a to-do list, I guess we could call it, in the weekly folders so that [students] can go to one place and say, “Okay, there are lots of things in this week, but the only ones that are due that I have to complete before this week is over are these—one, two, three, four, and five.” (INT, Q8, April 19, 2013)

Regarding whether the discipline of English composition is more or less suited for the hybrid modality than other disciplines, Jeanine responded that she did not believe the discipline had much to do with that. She believed that the success of a hybrid course was more related to whether a particular course from any discipline could be facilitated effectively in the hybrid modality (considering whether the content was suited for both instructional technology as well as face-to-face class sessions) and whether the teacher was prepared to teach a hybrid course. Jeanine clarified:
I really think that a very good course can be designed for many different kinds of disciplines and that it really takes a lot of work and dedication to do it and a willingness to be able to change it probably quarter to quarter and so forth. (INT, Q9, April 19, 2013)

**Findings for the Jeanine Johnson Case**

**Successes experienced by Jeanine from the use of the ABCDE model.** As a first-time designer of a hybrid course, upon the completion of the teaching term, Jeanine cited, “[t]he transition of my complex face-to-face class to the hybrid format and the successful completion of the hybrid classes by some students” as a high point and accomplishment during the hybrid course design process (S3-3, January 11, 2013). The approach for Jeanine involved making a radical shift in course design from what she had previously experienced, requiring continuous evaluation and anticipated edits between each teaching term, and addressing several concerns about student retention, as explained further below.

While she did not openly indicate that experiences were negative, it would be a stretch to suggest that any of Jeanine’s experiences with the ABCDE model were specifically a success or benefit or convenience for her. Jeanine did state that she felt successful in fully building her course in the LMS before the term started. Additionally, she felt her course contained structure and organization as a result of following the ABCDE model that it would not have had otherwise as a hybrid course. Every other experienced described is more neutral, and as such, will be included with the category of challenges perceived with the use of the model’s process.

**Challenges experienced by Jeanine from the use of the ABCDE model.** A description of the key points experienced by Jeanine follows and includes her perceptions of how hybrid teaching is very different from face-to-face teaching, the building of the course is time-
consuming, the ABCDE model encourages the teacher to facilitate learning rather than teach students, and tools such as non-intuitive LMSs can impede the course design process.

*Jeanine perceived by the hybrid modality as a radical shift from face-to-face teaching.*

Although having previously utilized the LMS to provide resources for students in face-to-face courses, Jeanine’s hybrid course used the LMS far more completely than ever before. Jeanine placed many more learning opportunities into the LMS than in previous face-to-face classes. She studied what worked and what did not work, and then she adapted the course for future terms based on that experience. Jeanine stated that she found it important to design and build the entire hybrid course in the LMS prior to the start of the term. She did, however, plan to accommodate for some changes along the way.

More than just building the course, however, Jeanine responded to most questions about the ABCDE design process in terms of new and different teaching strategies from those she had used in her face-to-face classes. Jeanine was sensitive to understanding who the students were and the reasons they were electing to take a hybrid course. She identified that her teaching style would need to adjust to accommodate for these differences, and she spent time detecting issues and actively addressing them. After the project, Jeanine cited her intention to evaluate whether she had successfully engaged more students and whether more of the students were keeping up with the workload. Based on the results, she would adjust the course before the next teaching term. She acknowledged that changes during the term were less possible with the hybrid modality than in a fully face-to-face course.

Although the Quality Matters Master Reviewer recommended improvements to the course structure and organization, Jeanine acknowledged that she would have had a less coherent structure in her hybrid course if she had not used the ABCDE model during the design process.
And while she found the process both challenging and stressful, she followed the order of the ABCDE model process throughout as much as she was able to. Jeanine was initially surprised that the process encouraged complete pre-term build-out, but expressed that she found that to be a great benefit once the class started.

As Jeanine progressed through the ABCDE model process, she reported that it was changing the way she thinks about designing courses in light of the hybrid student. She was designing the course requirements and policies based upon her understanding of the hybrid student and “their desire for predictability” and “adequate time to see and absorb assignments before the due date” (S2-15, October 8, 2012). Jeanine had previously considered herself the authority in the classroom and was limiting that role to allow students to expand on the information themselves (S2-17, October 8, 2012). She reported trying “to use more strategies more effectively to create a community of learners (S2-22, October 8, 2012). While Jeanine felt that not everyone would adapt well to these kinds of characteristics of hybrid or online classes, she suggested that “[a]nyone interested in teaching hybrid or online classes can benefit by recognizing the need for design and from learning this model” (S2-28, October 8, 2012).

Jeanine perceived that the time required to build the course in the LMS prior to the term was substantial. Although followed immediately with the converse result, Jeanine identified that a challenge associated with the use of the ABCDE model for hybrid course design was that the course development (that of fully developing or building the course by loading its components into the LMS) took considerable time. The time ultimately was realized as an appreciated investment in that the course design was complete and it allowed Jeanine to concentrate solely on the students and their learning rather than to also be building in the LMS once the term had begun.
Jeanine perceived that some adjustment of the course design in response to student performance was normal and expected. Jeanine said, “I believe an exceptional teacher not only responds positively to students’ conscientious effort to engage and succeed in learning, but activity solicits it from all students” (S2-21, October 8, 2012). This was something she had purported to accomplish in her face-to-face classes by allowing the students’ pace through assignments to determine the structure of the class, thereby utilizing some of the characteristics of constructivist theory and focusing on a learner-centered environment. For this hybrid course design project, Jeanine followed the encouragement of the ABCDE model and spent considerable time before the term to create organization and structure ahead of time, building her instructional materials and assignments into the LMS. She was not sure this was going to be a successful strategy for her to use, but stated afterwards the degree of relief it had provided by then being able to concentrate on the student learning rather than continuously working on course design.

After teaching, Jeanine indicated that she would continue the practice of building the whole course in the LMS before the quarter, but would expand on the task by expecting and allowing for a small number of refinements throughout the term as she assessed how the student learning might benefit from it. While pre-setup of a course might be perceived by some faculty to be a rigid learning environment, Jeanine realized that she gained flexibility while the term was under way and could better assess what was working and what was not working as well for her students and their learning. MOVE TO IMPLICATIONS: It may be an improvement to the ABCDE model to build course design assessment steps into the Conductor and Director stages that can be considered prior to the Evaluator stage. Or, it may be helpful to restructure the Evaluator stage to commence with the term and complete evaluations of the course design and
student learning throughout the term. Jeanine shared specifics indicating that she was doing just that throughout the teaching term, continuously assessing what was working and what was not. Within the structure of her course design, she was able to adjust the tasks during the face-to-face class sessions for immediate accommodation, and consider other, more extensive changes for the following term.

Jeanine perceived that following the ABCDE model had an effect on the teacher’s role in the classroom. Jeanine mentioned several times throughout her responses how teaching a hybrid course is different from her face-to-face teaching experience. She described having used strategies and processes that seem to make learning lean heavily on the instructor’s shoulders. At the beginning of the project, Jeanine described her role as teacher in her prior face-to-face classes as follows:

I believe the teacher must show enthusiastic interest in the subject and be a work ethic role model. I think “enthusiastic interest” is demonstrated by the heard work I put into the design and presentation of information, skills, and strategies for success. (S1-22, July 21, 2012)

In the middle of the project, Jeanine was moving towards allowing students to construct their own meaning. She describes this as follows:

I am trying to limit my role as “the guru of information/knowledge” to allow/guide student groups to expand on it themselves. This is not easy for me. (S2-17, October 8, 2012)

MOVE TO IMPLICATIONS: By the nature of a hybrid course reducing the in-class time, more independent work is expected of the student. If a teacher is less practiced with that approach, the design of a hybrid course and following the steps in the Conductor and Director
stages would require time to discover and learn. Additionally, the acquisition and support of refocused teaching strategies would also be new, whether for out-of-class or in-class. The Evaluator stage should include a step that assesses for this adjustment. In Jeanine’s case, she mentioned the deficiency of writing skills possibly being due to the decreased face-to-face time and the added responsibility that had become for the students. It would be good to include a point in the course where these student requirements could be evaluated for alternative expectations and strategies to be used. If, however, Jeanine’s experience was limited to what she believed work in class, it would not be a logical conclusion that she would seek alternative approaches.

The majority of remaining challenges identified are specific to the functionality of the LMS and delivery of teaching rather than design of the course. While survey items and interview questions were specific in requesting details on challenges or frustrations that resulted from designing the course with the processes outlined in the ABCDE model, most of Jeanine’s responses to those questions were associated with teaching strategies appropriate for the hybrid modality or challenges with use of the LMS.

Jeanine found the LMS used at her institution to be non-intuitive and clunky. As she worked to build her course fully and completely in the system, each step was a hurdle to accomplish. Jeanine spent a fair amount of time working with the institution’s instructional technologist, getting the LMS to function exactly the way she wanted it to. In the end, she indicated that she would probably do away with some of the automation that she had thought would benefit students solely because it was too complicated to manage in that particular LMS. That institution has since transitioned to a different LMS, and in the member check process, Jeanine confirmed that she was finding it to be a much better experience.
Another area of concern she mentioned was the attrition rate of her students within the term. Jeanine shared:

…I was shocked by the attrition rate in [my first hybrid] classes. I have never had so few students successfully complete in my [face-to-face] classes, and as noted earlier, I am addressing that by relying less on students’ independent ability. Early in the quarter I’m doing more demonstration/explanation in the [face-to-face] portion and have included my student-to-student engagement to follow that.

(S3-20, January 11, 2013)

Jeanine also stated that she believes students need more support from her and consequently built in additional contact between her and each student in the course. MOVE TO IMPLICATIONS: While communication with students is very directly associated with the actual delivery of the course, it would not be difficult to incorporate a step in the Director stage of the model suggesting that a course component involving this contact be built into the course design as a prompt. Including such a step into a process model on course design, however, may be construed as inappropriate by some faculty, and would require additional consideration before implementing.

**The impact the participants (instructors) thought their hybrid course design had on student learning.** Subsequent to the surveys and teaching, an interview was conducted with Jeanine to collect her perspectives of how the hybrid course design affected the student learning either positively or negatively.

Jeanine started by expressing pleasure with her students’ accomplishments of their critical thinking skills:
The critical thinking skills and how to process information was something that we worked very hard on and a number of students learned how to use that process to their benefit. As with most classes, some students didn’t learn as well as others, but that was one thing that was very important to the objectives in the syllabus and that I feel confident that others were able to take forward to other classes.

(INT, Q1, April 19, 2013)

She shared that she thought the newly designed online student activity had contributed to the critical thinking success when the students came to the face-to-face class sessions and shared their experiences with each other.

Jeanine expressed some disappointment with writing skills deficiency in some students. She wondered if the reduced face-to-face time may have contributed to this since the decreased time in class meant that students were not exposed to the same quantity of story sharing, and thus, did not get the same amount or type of opportunities to think through ways to approach the writing assignments.

Jeanine informally performed a comparison of quiz scores between her face-to-face and hybrid course students. The face-to-face course students took the “open book” quiz during class. The hybrid course students took the quiz online. Interestingly, Jeanine found the quiz scores to be about the same between the two modalities. About the same number of students per modality failed the quiz simply by not taking it: Students in the face-to-face class might have missed class that day, and students in the hybrid course might have just not submitted the quiz at all.

To better support and encourage student learning, Jeanine and the Quality Matters Master Reviewer both stated that the course could have provided more information and some form of checklist of activities and assignments for each week to help provide more structure for the
students. Consistent with the Quality Matters Master Reviewer’s recommendations, Jeanine said she realized that student learning was adversely affected when the course was challenging to (a) navigate through, (b) find what was needed, and (c) understand the scope and schedule of the learning expectations.

**The Jeanine Johnson case summary.** Although not accustomed to fully designing a course prior to the start of a term and plagued by what she felt was a non-intuitive and time-consuming LMS, Jeanine faithfully followed the process of the ABCDE model to create a course that she thought was structurally coherent, and she reported “much less strain” early in the teaching term as a result.

Once the course was fully designed, Jeanine was focused more specifically on student learning and especially how she would support learning within a community of learning where students were actively participating in discussions, group work, and peer-reviews.

In the process of designing and teaching her hybrid course, Jeanine recognized that her teaching style and role needed to be different. It would take time beyond the building of the course itself to develop competency to that end.

**Summary of Case Study Reports**

In this chapter I have provided the individual reports of the case studies for Gloria Lawson, Karen Howard, and Jeanine Johnson. Using as many of their own words as possible and promoting trustworthiness in all three reports with participant member checks, I have presented responses from the pre-hybrid, post-hybrid, and post-teaching surveys; recommendations made by the Quality Matters Master Reviewer; and the one-on-one interview regarding the participants’ perceptions of student learning within their hybrid course.
Gloria found the ABCDE model to support a consistent course structure and strong connections between the course learning objectives and instructional materials, and she was able to complete the process as outlined in the model stages. Gloria was primarily concerned with students not completing all preparatory and reflective assignments in the course, and believed that they did not realize the full extent of the learning that they could have.

Karen found the process of using the ABCDE model unique for her on a couple levels. She had not previously included all instructional materials, learning activities, and assessments in the LMS and did not realize the amount of time required to populate the LMS with all course content. While she reported receiving positive feedback from students about the course and feeling favorable regarding an increase of peer-to-peer learning by her students, she stated that she would change some of her presumptions about the frequency of face-to-face class meetings prior to teaching in the hybrid modality again.

Jeanine was dedicated to fully completing the process outlined in the ABCDE model prior to the start of the term. While building the course components in the LMS was more time-consuming than she had anticipated and she experienced considerable trials and tribulations with the use of her institution’s LMS, she persevered and was then able to dedicate most of her time during the term to student learning. Online teaching strategies were something Jeanine had to keep practicing, and she outlined changes she would make for future hybrid classes including providing more consistent and thorough written instructions in the instructional materials, learning activities, and assessments.

Chapter Seven presents a more thorough summary of each case as well as a report of the cases when compared and contrasted one with another.
CHAPTER SIX: CROSS CASE REPORT AND DISCUSSION

This chapter presents a comparison of each of the cases along with a discussion that compares and contrasts the experiences among participants and their hybrid course design.

Cross-case Report

**Participant qualifications.** Each of the three case study participants were qualified for this study because they (a) have taught in higher education, (b) had never taught in the hybrid modality before the study but were scheduled to teach their first hybrid course in an imminent school term, and (c) agreed to implement the process in my ABCDE instructional design model to their first hybrid course design with instructional design assistance from me.

The participants had each taught primarily (if not exclusively) for public higher education institutions in the Pacific Northwest. Gloria Lawson’s course was a 3-credit, 300-level, education-based course. Karen Howard’s course was a 3-credit, 100-level, graphic design, computer lab-based course. Jeanine Johnson’s course was a 5-credit, 100-level, English composition course. Karen’s and Jeanine’s courses were to be delivered at their respective community colleges and Gloria Lawson’s course was to be delivered at a four-year university. Each of the three participants met with me at least every other week for approximately eight instructional design sessions during a summer in preparation for fall term delivery.

Of the three participants, Jeanine is the only one with a doctorate in her field, and Gloria is the only one who had formal education in curriculum design and teaching methods.

When asked at the beginning of the project to describe how they see themselves as teachers, all three indicated their high standards or expectations and devotion to students’ learning. Gloria also specified that she is an organized person, and Jeanine shared that she was often frustrated as a teacher although she did not expand on the specifics of what was frustrating.
Technology background and advancements. In the pre-hybrid survey, prior to the start of the hybrid course design, Karen ranked herself highest in technology skills at an advanced level, where Gloria and Jeanine identified that they were each fairly skilled. Each participant’s self-ranking remained consistent from that pre-hybrid survey through the post-hybrid survey, but both Karen and Gloria selected a different option for the post-teaching survey: Karen reducing her skill level from advanced to very skilled, which may have initially related only to the technologies she teaches in her classes and later related more directly to her use of the LMS. Gloria increasing her skill level from fairly skilled to very skilled, which aligns with her description of expanded use of LMS features. Jeanine identified her level as fairly skilled in all three surveys, which likely corresponds to her continual struggles with the LMS.

All three participants identified that changes in their technology use included more features being utilized through their particular LMS (ANGEL, Blackboard, and Moodle). Gloria noted that she was more organized and intentional in how she selected and how she provided content to her students through the LMS. Karen indicated that the design process was encouraging her to rethink how to deliver content via technology. Jeanine stated that she was learning what worked and what did not work and adapting the course based on that experience.

This study has suggested that new hybrid course designers greatly expand their technology skills when designing and teaching hybrid courses. These skills include:

- Supporting students with their access and use of technology,
- mastering their own use of LMS features,
- building the layout and structure of the course in the LMS,
- learning and properly appropriating instructional technologies, and
- integrating the use of technology with in- and out-of-class learning.
For all three case study participants, a description of ways their technology skills increased is embedded throughout their stories. Karen started out with a background in technology, but gained skills in utilizing the features in the LMS and acknowledged the need to take fully advantage of both the LMS and instructional technologies in the future. Jeanine struggled with a non-intuitive LMS, but succeeded with building her full course in the system prior to the start of the term. Gloria both built her full course and showed innovation by applying new instructional technologies in her course: Some with good success, others with less success. All participants recognized both the investment and pay-off in the time spent learning and setting up the technology side of the hybrid course before the start of the term.

**Concerns about the hybrid modality.** Prior to the start of the course design work, Gloria’s and Karen’s concerns about the hybrid modality were concentrated on missing the face-to-face time with the students where they could answer questions quickly and be there for students who needed them. Jeanine’s concern included the reduced face-to-face time, but was also related to colleagues having shared with her about students becoming frustrated if they could not get answers immediately—even in the middle of the night—and the hybrid environment possibly not being a good learning experience for some students.

Gloria’s pre-design concerns remained consistent through the post-hybrid survey and post-teaching survey timelines. Jeanine’s pre-design concerns migrated toward the attrition rate that occurred in the term as she started teaching the course. Beginning with the work on the course design and continuing through the teaching term, Karen’s concerns focused on time consumption, both in the decrease of efficiency on her part as well as her not being able to cover as much content as in fully face-to-face courses.
Karen highlighted purpose questions: Is there a good reason for the course to be taught in the hybrid modality? Would the content or the instructor be better suited for fully face-to-face? Or, if considering the situations of the students, should and could the course be delivered fully online instead? The answer to these questions contributes a great deal to solving issues that might exist with the hybrid modality. Prompts such as these should very likely be added to the design of the ABCDE model in both the Architect and Evaluator stages.

**Compliance with the ABCDE model.** Although all three participants were surprised at the ABCDE model strategy of Stage C recommending that every aspect of the course be considered for online delivery before planning the face-to-face sessions, Gloria and Jeanine followed the ABCDE model process decidedly more closely than Karen. Prior to the term starting, Gloria had all of her course fully developed and Jeanine had the majority of her course fully developed. Karen started, but did not fully complete the Builder stage, the Conductor stage, or the Director stage. Gloria’s course design was the most radically different from prior iterations of the course, where Karen’s design was the most similar as when teaching it face-to-face. Jeanine and Karen indicated in the post-teaching survey that their highest point or greatest achievement had been to successfully transition their face-to-face class into the hybrid modality and Gloria’s source of pride was that all students successfully met the learning objectives and were satisfied with their own performance.

Gloria and Jeanine followed most of the ABCDE model steps and indicated an appreciation for the process. They identified a common theme of gaining organization of the course structure that they felt would not have been present without the prompting of the model. Jeanine shared that the building of the course in the LMS was more time consuming than she had anticipated and that the non-intuitiveness of the LMS was problematic and frustrating.
Karen described having the pre-conception that her hybrid course design would primarily address the weekly Friday class session she was eliminating, and it is possible that initially thinking she was not adjusting anything about the other two days of class each week contributed to her not completing the Builder stage. Not fully completing the Builder stage may have led to not being able to complete the Conductor stage, and because work from the Builder and Conductor stages was overlapping with the teaching term, the course reverted back to prior face-to-face teaching practice. We can see from all three participants that the Builder stage is time-consuming and hard, and if there are other factors working against them, the Builder stage may be the initial stage that creates ongoing issues.

**Successes perceived from use of the ABCDE model.** All three participants stressed the concept of how their course was organized and structured when asked about the positive aspects of using the ABCDE model to design their courses. The Building stage of the ABCDE model includes chunking the course contents and requirements into consistent units, each comprised of common elements such as the curriculum, learning activities, review, practice, reflection, and assessment. The participants each recognized that her course’s structure provided an increased organization, routine, and systematic approach that aided students in better understanding the flow and learning objectives of each part of the course. Each of the three participants indicated that they would have approached the design stage differently had they not used the ABCDE model, and that their perception was that their courses would not have been as good as they ended up being. None of the participants described what the different approach would have looked like although Karen indicated “just doing whatever I naturally would have wanted to do” (INT, Q10, April 29, 2013), and it is possible that the participants did not know what another approach would have been. They did stipulate, however, that the order in the ABCDE model was
not intuitive to them, and it was initially somewhat of a surprise to consider completing the Conductor stage of designing the course to run fully online before working on the Director stage where the face-to-face components are considered. This perspective is consistent with the beliefs that lead many faculty to approach designing hybrid courses as though they are still primarily teaching a face-to-face course. Since there are more hours of learning taking place out of class than in class for a hybrid course (refer to Figure 3 on page 45), I contend that it is imperative for a hybrid course designer to first pursue the instructional technologies (the online learning activities) that will best affect student learning. Once having worked on the components in the Conductor stage, all three participants indicated that it made sense that this would be considered prior to the Director stage items.

Having used the ABCDE process model for her hybrid course design, Gloria mentioned several times that her students were able to learn what she perceived to be substantially more than students had learned in previous teachings of the class, and she believed it was because of the structured organization of the course. She claimed that the students could see clear connections between the various course components and the learning objectives. Gloria also perceived that she had succeeded in enhancing her teaching strategies because of her use of the ABCDE model. Karen noted that because more course content and the course grades were in the LMS, many of the students who had gotten behind were able to catch up fairly easily. Jeanine shared that the instructional design assistance and using the ABCDE model process had been a catalyst for considering how and why she might use certain assignments and scaffold the learning a particular way to reach her learners more effectively in an alternative format such as the hybrid modality.
These examples of data imply that the use of the ABCDE model and process of designing the hybrid courses within its guidelines influenced the use of teaching strategies and practices that were beneficial to both students and teachers. Learning was addressing multiple learning styles and students were learning more. The ABCDE model encouraged the building and structure of the content in the LMS and the case study participants each found this to be advantageous.

The use and increasing competency with instructional technologies is also noted across all of the participants. Both Karen and Jeanine implied that they struggled with the vastness of available technologies and proper application of appropriate technologies. Gloria rated herself as having advanced in her technological skill level by the end of the project.

**Challenges perceived from use with the ABCDE model.** Jeanine specified that she also had a lot to learn about how hybrid teaching is different from face-to-face and that the model would benefit from more specifics about how to address those differences. In the post-teaching survey, Jeanine stated, “I suspect it would be easier for me to have learned the model in a face-to-face classroom, but the model, now that I’ve used it, seems well designed. I can’t think of specific changes I would make” (S3-24, January 11, 2013).

Each of the three case study participants identified designing and fully building the course in the LMS prior to the start of the term as a challenging part of the process. Both Karen and Jeanine emphasized the amount of time that design and building process took. Jeanine persevered and later reported that she saw the advantage at the point when she was teaching and could instead put more energy into working with her students. Karen reported completing only about half of the build out prior to the start of the term, and made a fairly strong statement after
having taught the class that I should be more insistent about faculty completing that part of the process.

Each participant also specified the need to be flexible with assignments during the teaching term. Gloria said that she would build out 98% of her course before the quarter began and leave some specific details to be included during the term, based on how students were doing. In one instance, however, Gloria believed it would be better if she adjusted an assignment, but felt prevented from doing so because of the confusion and potential frustration she thought the students would experience from her doing that. Jeanine also stipulated the need to develop most of the course ahead of time, but customize small items during the term for future courses. Following the hybrid course design process and partially into the first teaching of her course, Karen said, “I don’t exactly know [how much of the course I will design ahead of time] but will definitely be giving this a fair amount of thought as I prepare for future courses. It has been an issue for me this quarter” (S2-23, November 6, 2012). After teaching her course the first time, Karen shared her intentions for her future course development process as follows: “I always try to look at the entire course before the term begins but there are inevitably things that must be changed as the term progresses. I don’t think that has changed for me” (S3-19, January 6, 2013).

Instructional technologies are, without doubt, a pivotal component of the ABCDE model. The new hybrid course design may not have a background in using technology far beyond word processing, spreadsheets, or presentation applications for instructional purposes. Web-based technologies are newer and constantly changing. Some are associated with a great deal of unsubstantiated hype. Using instructional technologies requires discovery and learning to apply them appropriately, which takes time and patience, both for the instructor and the students. This needs to be strongly considered for the ABCDE model to be met with success.
A fair amount of data from the survey items that addressed challenges with the use of the ABCDE model was related to the delivery of the courses rather than the ABCDE design process. All three participants experienced some disappointment with student completing homework in preparation for the face-to-face class sessions. All three participants indicated that the reduced face-to-face time seemed to contribute to some decline in student performance. Gloria perceived that some of her students were struggling with out-of-class collaboration and group work with other students. Jeanine was concerned about the high rate of student attrition in her hybrid courses. We can see from the mention of these topics the possibility that the design and delivery of a course are inextricably woven together and probably difficult to separate.

**Teaching philosophies and styles and roles.** While teaching philosophies for all three of the case study participants remained consistent between the course design (post-hybrid survey) and teaching (post-teaching survey) phases of the project (only Jeanine expressed a change of philosophy before and after the course design that involved a new awareness for the circumstances under which a student might register for a hybrid course), the teaching styles and roles of all three adjusted along the way. Gloria talked about being a mentor and coach in her teaching role and how her teaching style had been affected by the reorganization of her course; Karen identified a change in role by an increase in peer-to-peer learning and online communication. She also mentioned shifting the way she thinks about classroom time activities and assessments.

Jeanine spoke to the needs of the hybrid student and stated that she believed she had been clear in her course organization and predictability and consistency in due dates as well as the time spent during face-to-face sessions making sure assignment requirements were understood and demonstrating methods that students would be expected to use. Jeanine, however, also
reiterated the differences between teaching hybrid and face-to-face, and ultimately was getting at the differences between a teacher-centered and learner-centered focus. Jeanine identified that with the hybrid modality there is less teacher-centered delivery and more of what might be referred to as facilitating or guiding the learning of the students. This was not as familiar a role for Jeanine, and she reflected on its possibilities a number of times. There were other instances when she identified challenges in the course that might have been resolved with a learner-centered approach, yet Jeanine was challenged in implementing such an approach.

**Teaching strategies for hybrid delivery.** Each of the participants noted additions and refinements to their teaching strategies for their hybrid courses. All three mentioned that their use of online discussions had either not been realized or was not as successful as they had hoped for. Each verified the difference between face-to-face and online discussions as well as the complexities involved in this new online medium for building functional learning communities. Jeanine identified technological issues and language barriers that added to the online complexities. Additionally, each of the three shared examples of strategies that they implemented for increased learning in their hybrid classes.

Gloria was satisfied with the success she perceived had occurred when she took a large project and broke it into smaller sections, delivering incremental portions of the assignment to the students across the term. She particularly realized the difference in student performance in this when she failed to do it for a subsequent project and quickly saw the decrease in student performance. Gloria also noted that she utilized group work and that it was noticeably more difficult to administer during the online portions of the course. She adjusted the way the group work submissions worked to include scoring and feedback for individual work first and then collective work.
Karen explained a process of having students take quizzes and do preparatory homework with the objective that they would then get more benefit during the face-to-face class sessions. She built in accommodations to multiple learning styles by designing work for both individuals and groups, for both in and out of class, for both hands-on and the demonstration of what they understood as well as being able to explain how they understood it. For her hybrid course, she added the assignment of designing a graphical poster for the latter.

Jeanine incorporated a new method of studying for the quizzes on course readings. While open book quizzes had been utilized for this purpose in her face-to-face courses for some time, students had not done well on these types of quizzes and Jeanine wanted to change that trend. Jeanine wanted to mitigate the student impression that they could rush through the course readings and did not need to study to do well since they could use their course materials while taking each quiz. For her hybrid course, she had the students discuss the questions as a larger group online prior to taking the quiz and the quiz scores were comparable overall between her face-to-face and these new hybrid classes.

Participants’ views of student learning within the hybrid course. During the final interviews, each of the participants reported ways the hybrid design contributed to specific successful and unsuccessful aspects of student learning. Without including specifics or explanations, Gloria said that she believed the coherent layout of the course made the learning objectives very clear for students in her class. She also perceived that the students saw the relationship between the learning objectives and manner in which the larger assignments were chunked and assigned separately. Gloria shared that she felt her course design encouraged a deeper and increased learning experience for her students. Karen felt that her students were successful collaborating in small groups as well as in completing requirements for a project. She
thought that she could make a bigger impact on her students’ learning by revisiting the design of the course and incorporating the online elements more intentionally with the face-to-face elements and connecting both more obviously with the course learning objectives. Jeanine reported that the hybrid course contributed to her students’ success with critical thinking skills by completing out-of-class activities and then sharing findings during the face-to-face sessions. She also compared student scores on quizzes between a prior face-to-face class and her first hybrid course and found the scores to be about the same.

Areas where each of the participants expressed disappointed with their students’ learning during the interview seemed to relate primarily to the reduced face-to-face time and quantity of face-to-face time left in the class. The weaker point in Gloria’s course was mastery in the delivery of presentations, which she said she thought may have been improved with more face-to-face time. Karen found that her students did not refer to the content in the LMS as closely as she wanted them to, and she thought this was possibly because of the course still meeting two days per week and keeping their dependence on her presenting all of these details for them during the face-to-face session. Jeanine’s students exhibited a deficiency in writing skills and she wondered whether she could attribute this to less interaction in face-to-face sessions and students preparing their essays by themselves.

How the course designers would provide student support in future hybrid courses.

When asked what they might do differently with future hybrid courses to better support and encourage student learning, Gloria said she would do more with videos and the reading: “I have a format that I have already selected for next time to make that much more worthwhile and to make the discussion more worthwhile…for targeted things that they could do with the reading…” (INT, Q8, May 8, 2013). Karen identified working more on the linkage between the
online and the in-class components and the timing of those: “Even after all of our [instructional design] meetings, it was still hard to imagine the online component versus the just kind-of amped up web-enhanced experience, which did end up being a lot different” (INT, Q8, April 29, 2013). Jeanine referenced two of the recommendations made by the Quality Matters Master Reviewer to reduce the multiple places that students could find information in the course design and include the weekly checklist where students could identify everything that was required for the week, both preparation work and work to submit.

**Participants’ perceptions of ways the ABCDE model will benefit other course designers.** All three participants indicated the value of the ABCDE model for other hybrid course designers. Gloria stated, “Teachers are very busy and this process makes it possible to build a course that meets the learning objectives for the course and one that allows students to learn.” Specifically referencing the characteristic unique to the ABCDE model where the Conductor phase encourages the transformation of the course components to function fully online prior to the Director stage of considering the face-to-face class session activities, Karen shared,

I do think for people who haven’t done online teaching before, you should insist on them…trying to devise an online-only component for [everything]….As an exercise, they should really try to envision the entire course online, because I do wish now that I had put more effort into that….

Jeanine wrote, “Anyone interested in teaching hybrid or online classes can benefit by recognizing the need for design and from learning this model.”

**Key Assertions from the Findings**

Several key assertions stem from the individual case study and cross-case findings:
• Participants’ prior teaching experiences and beliefs and values about teaching affected their ability to apply the process within the ABCDE model.

• Completing the stages in order (particularly completing Stage C before Stage D) is not intuitive to new hybrid course designers and certain aspects (like implementing effective instructional technologies) can be difficult to initially employ. Once learned and experienced, however, the value and purpose of completing each stage before the next was quickly recognized.

• Reducing the traditional seat time for the hybrid course requires an increased effort to address student engagement and motivation for learning. Where student interaction and collegiality may occur effortlessly in the face-to-face course, out-of-class interaction via use of instructional technology is considerably more complex to orchestrate.

• The types of successes and challenges each participant experienced while using the ABCDE model for their course redesign were comprised primarily of the process itself, the course organization and contents, and familiarity with instructional technologies.

• Learning and use of the ABCDE model resulted in a change for the course designers’ with their own instructional technology skill level—all used technology more for their project-related course than they had in the past and each expressed both encouragement and frustration with the experiences depending upon how they perceived the results.
• A rationale can be made that the ABCDE model, once modified based on study implications, can offer a contribution to the eLearning and hybrid instructional design fields.

The following paragraphs describe each of these assertions in more depth.

**Participants’ ability to apply the process within the ABCDE model.** The participants’ ability to apply the process within the ABCDE model was directly influenced by prior teaching experiences and views associated with the hybrid modality. Redesigning a higher education course for the hybrid modality is deceptively complicated (Kaleta et al., 2007). Karen’s experience with this is recounted in the following statement: “I thought by just making it fit into two days a week [instead of three days a week], plus extra stuff as homework, that that would fit. But it really turned out that it didn’t.” Both Karen and Jeanine were concerned by the amount of time the redesign required for them, and where Jeanine completed it prior to the start of the term, Karen’s course was not completed and she ultimately faced extra labor and challenges once the term started.

Gloria’s background included considerable curriculum development and teaching methodologies by taking curriculum design workshops throughout her 30-year teaching career. While the implementation of instructional technologies was new to Gloria, her expertise of connecting learning strategies to the learning objectives prevailed, and she expressed a higher level of satisfaction with the course design and student learning than Karen or Jeanine expressed.

**Completing the stages in order eventually made sense.** All three of the participants agreed to follow the order of stages of the ABCDE model. Based on experiences with the model prior to this research, I suspected that completing the Conductor stage prior to the Director stage would be the most non-intuitive, so I emphasized the order of those stages. Where Gloria could
see logic in the model process from the beginning and could trust the procedure throughout her hybrid course design, Karen and Jeanine required more resolve during the process. Additionally, Jeanine was somewhat troubled by the amount of time it was taking to become proficient in her use of the LMS and get her course built (Stage B), and Karen had not anticipated the amount of time the building of the course would take, so she was not able to complete Stage B prior to starting Stage C and Stage D. This put Karen in the position of have to cycle through Stages B and C and D repeatedly throughout the teaching term. Since that was so time consuming, Karen indicated that she was not able to give as much attention to the teaching as she wanted to and normally did and this was frustrating for her.

At the end of the project, Jeanine recounted her relief at having had the course completely built prior to the term, and Karen expressed regret at the problems created by the unexpected workload that interfered with her time. Gloria was consistent through the duration of the project in the use of the ABCDE model and the results that provided for her and her students as described in more detail in the next section.

Hybrid course design involves more intentional integration for student engagement. One of the concerns highlighted by all three participants was associated with students not completing out-of-class work or being as prepared for the in-class session as was assigned and expected. Some students naturally would be indoctrinated with the more passive learning style that remains pervasive in some higher education campuses and not expect the different requirements for a hybrid or online course. As both Dziuban et al. (2007) and Lin (2008) conclude, the hybrid course designer will, however, find value in recognizing the need for engaging learning activities, accommodating varied learning styles in the course design,
delivering a well-organized course, and facilitating a high level of connectivity and interactivity among and between the students and teacher.

Types of successes and challenges experienced while using the ABCDE model. The categories of successes and challenges each course designer experienced while using the ABCDE model for their course redesign included following the process itself, course organization and contents, and familiarity with instructional technologies. The following sections address these categories and suggest possible adjustments to the ABCDE model to accommodate for them.

Course designers’ experiences of following the ABCDE model process. Working with the ABCDE model, the first-time hybrid course designers described an awareness of a particular process of planning and building the course in an LMS, leaving some small details to be decided during the delivery and teaching of the course. Specifically for them, this process resulted in a structured course design and some use of instructional technologies. The designers also identified differences between teaching hybrid and face-to-face courses in terms of presentation of course content and implementation of learning activities. These challenges imply that the several of the stages in the model need additions that provide users with (a) knowledge of and experience with instructional technologies, (b) assistance with the application of appropriate instructional technologies for delivery of instructional materials, learning activities, and assessments, and (c) guidance for assessing and evaluating the course components and organization. Finally, the hybrid course designer would benefit from assistance in determining what learning activities might be best suited for online or face-to-face delivery.

Course organization and structure of contents. A repeated and consistent finding of this study associates the use of the ABCDE model with strong course organization and structure of
contents. The Builder stage of the model includes chunking curriculum, preferably in seven-day weeks, and designing a learning routine that is similar from one week to another. This might appear in the form of weekly units or modules that each contain a representation of similar course requirements, such as readings, learning activities, reflective activities, review and assessments, and a connection that leads into the following unit. In the post-hybrid survey, the post-teaching survey, and the final one-on-one interview, every participant mentioned the influence of the ABCDE model on the structure within the course one or more times per instrument. The structure/process component in the diagram of my theoretical framework for blended environments focuses on the course appearing inviting and resourceful, encouraging the student to return for information and support throughout the term. The course structure should be intentional, sequential, consistent, organized, and able to be easily navigated. The procedures involved within each of the five stages in the ABCDE model facilitate the idea of structure, with emphasis in the Builder stage on chunking the course content; creating routine and consistent learning units within the course; and aligning all instructional materials, learning activities, and assessments with the course learning objectives.

Each of the course designers implemented that practice in their first hybrid course with varying degrees of organization. In the final one-on-one interview, Jeanine stated that she would revisit her course’s structure to tighten it up; include a checklist for the students; and work to improve the connection between the learning objectives, the assignments, the resources, and the assessments in each unit. In other findings, Gloria gave considerable credit to the structure for her perception of student learning in the course.

**Course designers’ familiarity with instructional technologies.** The use of electronic instructional technologies does not have roots in traditional education and, by the very nature of
the field of technology, they are large in number and constantly evolving. This engulffing, moving target with which academia is required to engage, not only makes it difficult for a course designer to master, but it is well known that some of these technologies are short lived. On more than one occasion, I have opted to not invest in a particular technology for reasons including having a suspicion that it will not be available for long, I might not be able to establish the value added to the learning, and I did not having the funding or time required to pursue the technology adequately.

While an overarching technology, the LMS itself can be a source of contention for many faculty. Learning and effectively using any particular LMS is a significant investment in time and energy, and over the last decade it has been necessary that everyone at most institutions upgrade or migrate an average of three times. Each of the participants in this study was using a different LMS from one another and each of those have since changed. For faculty whose disciplines do not necessitate electronic technology, mastering the use of the LMS is extra work above and beyond their normal curriculum. If a teacher’s natural inclination is not towards these types of technologies, this exertion can be overly time-consuming, discouraging, and frustrating.

Within the LMS, some instructional technologies are routinely embedded (for example, discussion forums) and others are facilitated through other websites and systems. Learning the tool and appropriately adapting the tool for learning are functionally separate activities even though the tool is often perceived to be the learning in itself. Unless there is a direct connection to the learning objectives, the tool is likely superfluous to the course.

Realistically, technology is only the channel for facilitating an online learning activity. Without an intentional focus on the pedagogy and learning objectives, it is common for a technology to be implemented in light of its potential for engagement only. In some situations,
faculty are not skilled with the technology, and students end up being frustrated or unsuccessful at fulfilling the course requirement. Research by Caulfield (2011) on “major lessons learned as identified by hybrid students” revealed the following advice from students to their teachers: “Don’t use technology that is smarter than you, as generally you will be the first one contacted when that technology fails” (p. 176). While this concept complicates the task, Caulfield’s study revealed advice for course designers from teachers that relates: “Start small and start early” (p. 198). Said another way, it is not necessary or recommended for the hybrid course designer to try to know how to do everything for their first hybrid course. The case study participants all reported that they would make changes with each iteration of teaching their courses.

The ABCDE model imposes the process of a specific, yet non-intuitive order for designing hybrid courses—that of designing learning that utilizes online instructional technologies prior to making decisions about the face-to-face components. While the model process indisputably results in the LMS presenting a strong course structure and organization, this is a significant challenge for first-time hybrid course designers because it involves being successful in effectively applying unfamiliar instructional technologies to learning activities, instructional materials, and assessment tools such that they continue to align with and accomplish the learning objectives.

The ABCDE model affected the course designers’ use of and experiences with instructional technology. Closely following the prior statement regarding the course designer’s familiarity with electronic instructional technologies, this next finding indicates that the successful and intended implementation of the ABCDE model in the course of a hybrid course promoted the course designer’s experience with instructional technologies. During the Conductor phase, a significant objective is that of converting the traditionally-taught curriculum to fully
online options utilizing a variety of strategies for providing instructional materials, learning activities, and assessments within the LMS. One of the guidelines in this stage is the following prompt: “What can be done to avoid mostly reading and writing for all course requirements?” This encourages that course designers ask questions like: “How can the reading or other content acquisition be supplemented such that students will be required to engage with it more fully?” Perhaps the students must complete questions in a chapter study guide assignment to encourage deeper understanding of the concepts, or take a multiple-choice quiz that enforces learning new vocabulary, or engage in a class or small group discussion that reflects on confusing or controversial statements presented in the chapter.

Results from all three of the case study participants found that part of the new hybrid course design required that they investigate new ideas and strategies that can be applied to the learning activities, accomplish the learning objectives, assess the learning, and be implemented into the course in an effective manner. This suggests that faculty experience and relative skill levels may increase for those course designers who persist. Once involved in the actual teaching process, the course designer can see that something works but could be improved and consider adjustments as they continue. Little by little, new learning components are adapted and included in the course.

**Contribution of the ABCDE model to the eLearning and hybrid instructional design fields.** At the start of this project, it was my belief that the ABCDE model provided a process that would be helpful to a first-time hybrid course designer in determining what a hybrid course should look like, how it should be structured, and what it should be comprised of. Each of the three case study participants verified that their own approach to designing their first hybrid course would have been different if they had not used the ABCDE model during their hybrid
course design. The following findings describe the influence on hybrid course design when using the ABCDE model.

- The course organization and structured design are beneficial to both students and teachers. Gloria, for example, was adamant on numerous occasions that the learning of her students was noticeably increased from prior terms. Chronologically chunked content provides students with easy and logical access to current resources and requirements. Teachers can effectively build scaffolding into assignments and projects for progressive learning, and make appropriate connections to learning objectives.

- The requirement of including effective instructional technologies makes the design of a hybrid course very different from teaching many traditional face-to-face courses. Where some face-to-face courses might take advantage of online simulations, reading, and learning activities, every hybrid or online course must utilize them. At the very least, a content manager like an LMS should be used. Additionally, given the reduced seat time in a hybrid course, the instructional technologies that are employed should encourage interactivity and engagement on the part of the student to support motivation and interest for learning. This often increases the hybrid course designer’s learning curve for the application of appropriate instructional technologies that students can be successful using outside of class.

- Building the course in the LMS is necessary and very time-consuming, and might be unanticipated. In addition to the instructional materials, learning activities, and assessments that must be identified, gathered, and created for the course, everything for a hybrid course must also reside online in the LMS or content manager in an
organized and structured manner for quick and easy access to the student. Even after almost 20 years of experience, this course building process is still time consuming for me. If not completed prior to the start of the term, the time required always interferes with what is available for students.

- The design of a hybrid course must be continuously evaluated as issues are identified during the delivery of the course; some adjustments might be made during the term, but major changes should probably be reserved for future terms. When students have reduced face-to-face time with the teacher and rely more on course materials in the LMS, it must be assumed that changes to those materials will affect the students. A number of students will have already downloaded and perhaps even printing copies of online course materials. All changes must be evaluated for the degree of disruption they will create for students and the resulting frustration that could occur. The instructor will have to weigh the value of the change with the consequences. Sometimes it is better to save the change for a future term when all things are considered.

- Since making changes to course requirements during the term is potentially problematic for hybrid learners, and since building the hybrid course in the LMS is probably more time consuming than the average instructor’s schedule can afford during the term, having the majority of the course environment with all due dates and weekly routine designed and in place in the LMS at the beginning of the term is desirable.

- To take advantage of the continual evaluation of the hybrid course while protecting the hybrid student against disruptive changes, building some intentional and planned
Flexibility into individual assignments, online discussions, and other course components that promote students constructing knowledge and can easily be adapted for the hybrid course is beneficial to learners and teachers. It is suggested that students be notified of the items that are subject to this flexibility so they can anticipate and prepare for the possible adjustment.

- The intentional interlacing of out-of-class and in-class active learning activities promotes an enhanced learning environment for students. The hybrid course should not give the impression of being two different courses: the face-to-face course and separately the online course. Each portion should be indispensable to the student, and this can be accomplished by designing learning activities that start outside of class and are then followed up on within the class, with possible conclusive work again outside of class. For example, an English Composition course might include an out-of-class assignment to research and study the nature of a thesis statement. The follow-up in-class exercise might include time to practice brainstorming and writing a thesis statement with a partner, share the thesis statement aloud with the rest of the class, and receive feedback during class about possible revisions. In a culminating outside class exercise, the students could each write their own thesis statements for future submission to the teacher.

It is, therefore, my belief that the ABCDE instructional design model, influenced by the Blended Environment Theoretical Framework and revised based on implications from this study, does make a strong contribution to both the eLearning and hybrid instructional design fields. Revisions to the model, suggested by this study, need to be taken into consideration and are discussed later in this report.
Other Findings from the Study

Unforeseen but also valuable findings include the following:

- The instructional design consultant provides value, efficiency, experience, and perspective, and may be important for the course designer confronted with new and unfamiliar curriculum development.
- Many higher education students are unprepared for and somewhat resistant to the individual learning responsibilities required for modalities that include more out-of-class content acquisition like online, hybrid, and flipped classes.
- The design and teaching of the course are inextricably woven together, so the instructor should be the course designer or, at least, be able to adapt aspects of the hybrid course design.

Each of these findings is discussed more fully in the following paragraphs.

The value of utilizing an instructional designer. Upon approaching this study, my focus had been on the sole contribution of the ABCDE model exclusively. When designing the study’s research methodologies, I wrote myself into the study as instructional designer for the two-fold purpose of consistently teaching the model to each of the participants and assuring that all case study participants were accurately following the intended process in order to provide trustworthiness of the findings to the research questions. The natural outcome of this action was my additional influence on the course design as the instructional designer. Reflecting on this, I have come to realize that the first-time hybrid course designer will find value and greater efficiency toward the design of their course by utilizing an instructional design consultant. The ABCDE model step-by-step process should be able to be followed by any person with prior teaching experience, but refined skills with instructional technologies that an instructional
designer should possess will increase the quality and effective implementation of those technologies in a hybrid course.

**Hybrid and online learning puts more responsibility on the learner and involves additional requirements for the instructor.** Students are unprepared and somewhat resistant to individual learning responsibilities required for out-of-class content acquisition. This adds a constant and complex task for the instructor to anticipate and introduce course expectations to the students before and throughout the course, as well as provide motivation and support within the course learning activities and in the face-to-face class sessions. Each of the case participants expressed frustration with students not completing out-of-class requirements in preparation for face-to-face sessions. Each implied that the fault was with the student. Both student and instructor will likely have to address these issues in order to affect the learning. Instructors will be required to build more engaging and motivating learning activities into the course environment. Additionally, the course design should include information about how students can succeed in courses where more responsibility is required of them.

**The course instructor should be designing the course.** The design and teaching of the course are tightly connected. The instructional designer career grew dramatically with the increase of eLearning courses in higher education institutions. Without significant experience teaching online courses, many instructors had no idea how to do it. eLearning pioneers were often faculty who paved the road of online innovation with their many hours of trying new as well as changing existing learning strategies and technologies. Many of these pioneers began publishing research articles and instructional books to help others travel this road, and much of what was shared fell into the field of instructional design.
Instructional designers began to be hired by institutions to help beyond just those faculty whose offices were nearby. Online and hybrid courses increased year after year as survey results consistently show (Dahlstrom, 2012). At some point over the last decade, some instructional designers began to design the courses themselves, even though they would probably never teach them. Other institutions have been using the practice of a team creating what is called a master course and all instructors of that course are forced teach it precisely as it is designed.

The intent behind each of these policies is suspected to increase the quality of the course design without putting the burden of learning new instructional technologies onto the instructor as well as to ensure institutional consistency across multiple sections of the same course (Brenda Boyd, personal communication, May 1, 2014). One missing factor in this equation, however, is the utilization of the strengths and weaknesses of the individual instructor. In the ABCDE model and theoretical framework for blended environments, the course designer is presumed to also be the course instructor, and the design of the course, therefore, should uniquely represent the value that instructor brings to the learning through both their strengths and weaknesses. There is a fine balance required for the effective facilitation of learning, and the experienced teacher is more likely to address students’ unique needs by being able to make calculated adjustments during the term.

Another missing factor is the utilization of the strengths and weaknesses of the students. Each course is likely to have different characteristics each term because the majority of participants, the students, are different each term. Each enters the course from their unique background, their own prior learning and experiences, their own prejudices and opinions. When combined with a group of other students and the instructor, each course has its own culture and climate. While the structure and basic content of the course design might not change with each
different group of students, the instructor must have the flexibility to draw specifically on students’ strengths and weaknesses during the delivery of the course. This includes the ability to make adjustments like change the focus of discussion topics and encourage unique student project work as they determine value in each learning component.

**Summary of Cross-case Report and Discussion**

This chapter featured a cross-case summary of all three case reports and assertions from the research findings. Details outlining the study qualifications, technology backgrounds, and concerns about the hybrid modality introduced the comparison of the case study participants. How the participants engaged with the ABCDE model, the model’s benefits and challenges, and the recommendations regarding ways the course designer might improve the quality of the course design were compared. How the course designers approached teaching, used teaching strategies, and saw the current and future achievements of their students was compared. Finally, the participants provided specifics regarding how the ABCDE model might benefit other course designers. The next chapter includes the implications from the study and the conclusion.
CHAPTER SEVEN: IMPLICATIONS

This study examined course designers’ experiences of using the ABCDE model to learn about, design, and build a carefully structured course to be delivered in the hybrid modality. Specifically, this study aimed to examine (a) course designers’ perceived experiences with both successes and challenges associated with their use of the ABCDE model, and (b) course designers’ perceptions of how their hybrid course design affected their students’ learning.

Placing this study in a larger action research context, I sought to discover appropriate revisions that I could make to the ABCDE model to improve its value and my practice using it. Additionally, I sought to present the revised model as a viable contribution to the fields of eLearning and hybrid course instructional design.

A review of the literature was conducted in order to trace the progression of the hybrid modality beginning with the educational origins of electronic technology and distance education. The literature review progressed through the controversial stage of questioning the effectiveness of learning delivered in non-traditional mediums, introduced the field of instructional design and quality standards, and crossed into the pursuit of hybrid course design and the associated challenges course designers have been facing in the building of hybrid courses with effective implementation of online learning technologies.

There was a lack of literature, however, about replicable studies that would aid course designers and faculty with a process of developing a hybrid course. This study sought to explore how the ABCDE instructional design model might contribute to filling this gap by providing a process with progressive steps necessary to attain the design, structure, and pedagogical interlacing of the technologically-enhanced curriculum and in-class learning activities required for a high quality hybrid course.
With the consideration of the course designers’ experiences using the ABCDE model as the action research context for this project, a case study methodology was employed to record the data including experiences, successes, failures, observations of, and recommendations by first-time hybrid course designers who also taught with their design during at least one term. Each bounded case included the course designer and their hybrid course.

This chapter presents a discussion of the study findings, analysis, and related conclusions. Suggestions for further study are proposed.

Restatement of Findings

The study identified two primary research questions designed to learn how and to what extent the ABCDE instructional design model could be revised such that it would be a helpful process for first-time hybrid course designers to apply.

Research questions. Answers to the following questions were sought by this research:

1. What challenges and successes did first-time course designers of a hybrid course experience from the use of the ABCDE model and its order of stages as they developed their courses?

2. What impact did the participants (instructors) think their hybrid course design had on their students’ learning?

Summary statement of findings. While all of the case study participants began with some reservation about reducing the face-to-face time to accommodate the transformation of their course into the hybrid modality, each one dedicated considerable time learning the ABCDE model and properly attempted to apply its process to the redesign of their course. Each participant experienced both successes and challenges with the implementation and order of the stages in the model. All participants perceived a success with the use of the ABCDE model to
include the course design being structured and organized. Two of the three participants completed the Builder stage prior to the term starting. One of the participants had retained a pre-project perception that the teaching for only one day of the week would be affected by the course design, and was not able to apply the ABCDE model process to her entire course.

Two of the three case study participants recommended specific additions that would benefit those without prior online teaching experience during the Conductor stage (that early stage of converting the course to be fully online) and the Director stage (the stage of interlacing online and face-to-face components more implicitly). Additional revisions were identified through the analysis of the findings.

While each of the participants stated that they had not deviated from the ABCDE model process or order in any considerable way, I found each of them to vary in the degree of employment of the entire process outlined in the ABCDE model. The designers and their courses ultimately reflected their comfort level adapting and teaching course materials with instructional technology applications as well as their past histories as instructors. The Quality Matters Master Reviewer offered recommendations for revisions to the design of each course that were consistent with each of the course designers’ observations about the performance of their course and their perception of their students’ learning. Each participant planned future revisions to address those identified concerns.

A common thread through each of the participants’ experiences included some confusion or acknowledgement that changes to the course design after the term had begun were going to require a specific approach. One participant suggested she would build the possibility of adjustments into her course structure, adjusting small details as necessary along the way. The other participants indicated that they either could not make any changes or that they simply
should not complete their design ahead of time in order to be able to accommodate doing things differently later. In all cases, there was concern about how to address emergent learning within the electronic trap of LMS course design.

Overall, the participants found that the ABCDE model positively impacted student learning and they acknowledged that this design far exceeded any possible independent self-design. However, there were some tensions associated with a balance between applying the ABCDE model stages and pre-building the course in the LMS prior to the start of the term. Tensions included the amount of time involved in the building of the course, the need for professional development in the use of instructional technologies, and a conflict with feeling like once built, the course components could not be changed. The most commonly identified benefit from the use of the ABCDE model was that of a structure or organization of instructional materials, learning activities, and assessments within the course design. This included the emphasis of the course needing to be considered first for as much online delivery as possible (Stage C). This study found that the value of the ABCDE model may increase with revisions to its design, in particular including enhancements that put more emphasis on learning to more effectively apply instructional technology during the Conductor stage and weave together the out-of-class and in-class activities more intentionally.

**A Reconsideration of the ABCDE Model Based on Study Findings**

The ultimate intent of this study was to result in ideas for improving the ABCDE model such that it could be a worthy contribution to the eLearning and instructional design fields. As a result of the aforementioned findings, specific suggestions for improvements to the ABCDE model and process include the following:
• Incorporate more introductory information and materials with explanation for the entire process involved in the ABCDE design process.

• Include motivational background and pedagogical reasoning for evaluating the suitability of a course to the hybrid modality including identifying whether the course has ever been taught online and how the course might be successful with reduced seat time (Architect stage).

• Provide a description of the lengthy timeframe required for the process (three to six months is not uncommon), so trust in following the model can be developed earlier (Architect stage).

• Include a prompt to seek instruction or assistance with use of LMS features such as workshops, tutorials, or one-on-one training time (Builder stage).

• Identify points that can assist with envisioning the course as fully online, particularly with the use of instructional technology alternatives for traditional face-to-face learning activities (Conductor stage).

• Suggest using some common instructional technology components like online discussion, videos, and online quizzes to get started with the transition to the hybrid modality (Conductor stage).

• Provide a prompt to seek professional development with various instructional technologies for use with motivating and engaging learners in the accomplishment of the learning objectives (Conductor stage).

• Encourage the accommodation of some flexibility into the learning activities within the course structure and organization that will be pre-built prior to the term, such as providing choices for the format of a project (Conductor stage).
• Build in guidelines for designing more effective online discussion prompts that engage the learners to make connections with other learners, increasing the interactivity within the course (Conductor stage).

• Promote the chunking of large learning projects into smaller connected installments that scaffold the process and culminate in the full project (Conductor stage).

• Build in guidelines for identifying whether learning activities are better suited for online or face-to-face (Director stage). For example, determining whether a particular video be assigned for out-of-class watching or used during the face-to-face session.

• Incorporate guidelines for determining ways to reduce the impact of the reduced face-to-face classroom time (Director stage). This guidance will help to enforce the reality of the ways the in-class sessions will be different and require more out-of-class requirements as well as the awareness of additional attention needed for student engagement and motivation.

• Include instructions for identifying both course structure and a weekly checklist for students that includes both online and face-to-face course requirements, clarifying the relationship of each to the other and expectations for students in both (Director stage).

• Identify methods that assist the course designer in visualizing the connection of activities and resources across the entire course such that the designer can use a wider panorama view, then focus back to a narrower view, and then back out again to continually assess how each individual piece fits together with the rest of the course (Director stage).

• Encourage a plan for identifying components that might be problematic during the teaching term and build in contingency plans (Director stage). This might include the
pacing of learning, success with course requirements, assessment results, or other issues observed by the instructor.

- Suggest incorporating small formative assessments that can help to identify trouble-areas for students and be addressed in face-to-face sessions (Director stage).

- Advocate identifying points of contact with students to evaluate students’ need for support (Director stage).

- Include guidelines for making adjustments to course throughout or after the term (Evaluator stage).

- Suggest incorporating an initial plan for evaluation of the course design and student learning at the beginning of the teaching term (Evaluator stage).

- Recommend a plan for subsequent exploration and integration of new instructional technologies added to the course on a trial basis, perhaps one per term, with back-up plan in case of failure (Evaluator stage).

- Encourage a post-teaching plan for considering whether course is suited for hybrid modality or requires substantial revision before repeating (Evaluator stage).

The findings from this study are complex and may continue to reveal additional insights for me to consider as I compare them with my ongoing instructional design practice. In the interim, the revised ABCDE Instructional Design Model for Hybrid/Blended Course Development is displayed in Error! Reference source not found. (Stages A, B, C) and Figure 1 (Stages D, E). The ABCDE model encompasses course design from the point of course inception through evaluation and revision of the course. Five stages with a step-by-step process are identified in the ABCDE model. Building courses in an LMS is a time-consuming process, and a recommended timeline of three to six months is not uncommon.
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<th>A</th>
<th>B</th>
<th>C</th>
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<tr>
<td><strong>Architect</strong>&lt;br&gt;COURSE INVENTION STAGE</td>
<td><strong>Builder</strong>&lt;br&gt;CURRICULUM BUILDING STAGE</td>
<td><strong>Conductor</strong>&lt;br&gt;TRANSITION TO ONLINE STAGE (CRITICAL)</td>
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<tr>
<td>- What is the purpose and intent of the course?</td>
<td>- What are the course components? &lt;br&gt;- How do they accomplish the learning objectives? &lt;br&gt;- What and how will content be delivered each week? &lt;br&gt;- How will the LMS be structured and populated?</td>
<td>- How can each course component be delivered and facilitated online and via technology? &lt;br&gt;- Where can instructional technology be learned and assessed for value and inclusion in the course? &lt;br&gt;- How can learner engagement be heightened and motivation inspire continuation to completion?</td>
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<tr>
<td>- What learning characteristics suggest the course be considered for hybrid modality?</td>
<td>- Standard course components &lt;br&gt;- Syllabus, readings/lectures, reflective learning, interactivity, homework, labs, projects, quizzes, assessments</td>
<td>- C1. Envision the course and all components as fully online &lt;br&gt;- Reduced seat time in hybrid means that some things previously delivered F2F will have to be delivered online &lt;br&gt;- Consider all aspects online in order to determine which are best suited for online and which are best suited for F2F &lt;br&gt;- Build all components into LMS; placeholders at minimum</td>
</tr>
<tr>
<td><strong>A1. Hybrid modality considerations</strong>&lt;br&gt;- Has the course ever been taught fully online? &lt;br&gt;- What concerns exist for online delivery? &lt;br&gt;- How can this course be successful with reduced seat time?</td>
<td><strong>A2. Course learning objectives</strong>&lt;br&gt;- Measureable list of intended learning objectives: what students should be able to do upon completing the course</td>
<td><strong>C2. Course designer may need to seek assistance from instructional designer</strong>&lt;br&gt;- What instructional technology options are viable for this particular course type? &lt;br&gt;- How will the instructional technologies support the learning objectives? &lt;br&gt;- What will be involved for the instructor to facilitate and support various instructional technologies?</td>
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<td><strong>A3. Course content/resources</strong>&lt;br&gt;- Materials from publisher, open source, instructor &lt;br&gt;- Cost to students? &lt;br&gt;- Schedule of special events/field trips</td>
<td><strong>A4. Prerequisites</strong>&lt;br&gt;- Skills and knowledge students must have prior to beginning course</td>
<td><strong>C3. Adapt learning activities with effective online teaching strategies and active learning through technology</strong>&lt;br&gt;- What can be done to avoid mostly reading and writing for all course requirements? (perhaps videos?) &lt;br&gt;- How can strong interaction among learning participants be designed and nurtured for maximum effectiveness, engagement, motivation for learning and participation? (perhaps asynchronous discussions?) &lt;br&gt;- How will submission of course requirements and subsequent feedback from instructors be managed? (perhaps auto-graded quizzes, and chunked assignments for sequenced feedback?)</td>
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<td><strong>A5. Student learning styles</strong>&lt;br&gt;- Who is student? How do they learn? What is their background?</td>
<td><strong>A6. Determine basic routine for chunks</strong>&lt;br&gt;- Layout full course in grid (course-at-a-glance) and study quantity and quality of learning components</td>
<td><strong>C4. Evaluate multi-week projects and other assignments for chunked submissions</strong>&lt;br&gt;- Can the project be divided into components that will provide foundational guidance to students? &lt;br&gt;- Will the chunked submissions benefit both instructor facilitation and student completion of the larger project?</td>
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This stage is complete when the course materials have been selected, the learning objectives have been approved, and the student is identified.

This stage is complete when all course components have been identified as appropriate, aligned with objectives, balanced across the term, and at least a skeleton of the course has been built in the LMS.

This stage is complete when all course components have been "auditioned" for online delivery and built in the LMS. There is value in considering even assumed F2F elements for facilitation via technology. Pace yourself, realizing you can expand with additional or new technologies in future terms.

Figure 8: Revised ABCDE Instructional Design Model for Hybrid Courses, Part 1, Stages A and B and C (K. Chatfield, 2015)
**Figure 9: Revised ABCDE Instructional Design Model for Hybrid Courses, Part 2, Stages D and E (K. Chatfield, 2015)**

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<td><strong>Director</strong>&lt;br&gt;Direct each part of the course and act to its strength (technology or F2F)?&lt;br&gt;• How much F2F time is available?&lt;br&gt;• Which of the learning activities are best suited for F2F?&lt;br&gt;• How can the online and F2F components be interwoven to create a cohesive and elevated learning experience?</td>
<td><strong>Evaluator</strong>&lt;br&gt;How will we do things differently next time?&lt;br&gt;• How is the course going?&lt;br&gt;• What parts are working well?&lt;br&gt;• What parts should be adjusted?&lt;br&gt;• What effect will the adjustments have on current students?</td>
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- **D1. Review whole course, week-by-week for flow, timing, clarity, feasibility**<br>  • Consider using the course-at-a-glance grid to lay out each aspect of the course across the term for a panoramic view that allows for zooming into narrower views and back out to wide view of whole course<br>  • Are any weeks overloaded or unbalanced? Does the routine seem fairly consistent?<br>  • Do the time requirements for students fit with the course credits? Have all aspects of the course been considered in the time considerations?<br>  • Which components seem less feasible for online and should other instructional technology or should F2F be considered?<br>  • Which components include complicated concepts?<br>  • Which components would benefit from in-person socialization or presence?<br>  • D3. Preserve online learning activities that excel with technology or do not require F2F meetings or require participation from all students<br>  • Which components would benefit from reflection?<br>  • Which discussions should require participation by all students?<br>  • What makes up individual project work or studying course content within reading and listening exercises?<br>  • D4. Ensure and clarify incorporation of online with F2F (intentional weaving or interlacing between the two)<br>  • Is the course structure comprehensive?<br>  • Does the beginning of each learning unit include an introduction with explanation of online and F2F activities and their connection?<br>  • Does the learning unit contain a checklist or other clear layout of week’s requirements and schedule?<br>  • Is each aspect of technology and F2F indispensable?<br>  • Consider small assessments that identify problem areas that can subsequently be addressed during F2F sessions?<br>  • Build in regular points of contact with each student to identify individual challenges (most frequently at beginning of term, then every few weeks)<br>  • D5. Consider a back-up plan for both F2F sessions and online technologies in case plan and design are disrupted<br>  • Define hybrid/blended, explain schedule, detail expectations for students and instructor | **E1. Continuously review and evaluate effectiveness of course while teaching**<br>  • What can be revised without creating confusion for students?<br>  • What should be postponed for future terms?<br>  • When should parts of a back-up plan be put into motion?<br>  • E2. Beginning of term<br>  • Unless F2F meeting is on first day or two of term, online requirements should reveal student attendance<br>  • Plan to follow-up with students who aren’t attending or participating<br>  • Observe whether multiple students seem confused about an individual component; reserve edits for individual student confusion until further evidence indicates needed action<br>  • E3. Inspect for:<br>    • Effectiveness of assessments to measure stated learning objectives<br>    • Online components; should any be embellished, revised, removed?<br>    • F2F components; did they make the most of the time together?<br>    • Relationship between online and F2F components; did they complement each other? Did they collectively scaffold the learning?<br>    • Whether there are any barriers that clarification can resolve<br>  • E4. Consider exploring additional instructional technologies for future term integration<br>  • Continue consulting with instructional designers for expanded ideas or emerging technology options<br>  • E5. Revise course as appropriate<br>    • Is course suited for hybrid modality?<br>    • Consider Quality Matters standards<br>    • Solicit student feedback, during and at end of term |

This stage is complete when both the online components and F2F components of the hybrid course are fully built in the LMS, each harmonizing with the other so the course environment flows easily and learner interaction is possible.<br>This stage is ongoing and cyclical, continuously evaluating and revising content, flow, participation. It may involve formal review or feedback from student evaluations.
Strengths of the Study

The hybrid course format is an increasingly popular modality and is suggested as a solution for increasing the accessibility of education by many institutions. Many articles have been written in support of its implementation. Other work has shown promise in the effectiveness of hybrid courses for student learning. This study represents a contribution to the field of eLearning course development by providing initial evidence of the helpfulness of a process model in developing the hybrid course structure. This could dramatically decrease the confusion and frustrations surrounding hybrid course development, lending a solid process for use by faculty without prior experience in this realm.

The findings of this study present views of a hybrid design from users that include personal experiences and perceived student learning. They are first-hand, triangulated, word-for-word accounts of three different first-time hybrid course designers at different institutions, teaching different disciplines, with different LMSs. Each case study participant was able to contribute at every phase of the research, including responding to the request of a member check of their case study report as provided herein, thus checking the accuracy and completeness by each.

Each of the participants completed all of their course design work in their own natural setting, with their own courses, in their own classrooms, using their institutionally-adopted LMSs, and with my instructional design assistance, and instructional technology assistance from their respective institutions. It is believed that the findings from this study could be considered in other settings.

Following the teaching of the course for a full term, each of the participants was interviewed in person with questions aimed at exploring the effects of the course design on
student learning. These instructors were asked to reflect on concepts and skills with which their students were successful or less than successful. Each interview lasted approximately one hour, was recorded, and was transcribed word-for-word by a professional court reporter to ensure accuracy and completeness.

**Weaknesses of the Study**

First, I was studying my own design. I have explicitly tried to counter any biases I might show towards my model. I have done this by designing a study for purposes of exploring the use of the model rather than attempting to validate it. I have also adopted all recommendations from my three dissertation committee members that suggest revisions in order to avoid the perception of bias.

Second, the quantity of participants was minimal and the region was limited. While extremely detailed within each case study report and the cross-case analysis, this study may have benefitted from more participants, from additional disciplines, and from regions beyond the Pacific Northwest. For this study, all interested and available participants were women, and the inclusion of male participants may have revealed different findings or added to the strength of the study’s findings. Extending the project timeline and increasing the case number may also have resulted in a change to question base for both surveys and interviews, thereby reaching additional or even different conclusions.

Third, the duration of the study was limited. Each of the course designers taught the course one full time through during this research. Each had started a second iteration of teaching, but had not yet completed it. There would likely be value in identifying changes in both course design evolution and student learning across several years. Additionally, given the flow of design to teaching immediately followed by another term of teaching, there was an overlap of when
surveys and interviews were administered. For example, the post-hybrid survey focused on the process of designing the course only; however, it was administered a few weeks into the teaching term. That likely flavored the participants’ views of the design process, and they were each already considering ways to adjust the course design based upon student response. This situation occurred with the post-hybrid survey and the post-teaching survey, as well as the interview. The Quality Matters review was conducted on a morphed version of the initial hybrid course design, because it occurred at a time after the course was in its second term of teaching.

Fourth, I did not collect data from participants prior to beginning the hybrid course design project regarding their perception of student learning from when the course was taught face-to-face. Therefore, a comparison of the student learning in the face-to-face modality and the hybrid course design modality was available only from one participant who voluntarily mentioned her own comparison of using quizzes for both. Other comparisons between the two modalities by all participants likely would have provided additional findings.

Fifth, while I am not aware of another process model or step-by-step procedure for designing a hybrid course, a comparison of using ABCDE versus another system for design would have provided stronger evidence of the specific benefit of using the ABCDE model over using any process with the assistance of an instructional designer. The question here relates to the extent that the instructional design assistance affected the course design, with or without a model. It is difficult to make generalizations from case study research; therefore, the results of this study suggest that individual course designers with the assistance of an instructional designer who has a strong background in online learning and closely follows the revised ABCDE model will have similar results on a case-by-case basis rather than statistically across many institutions.
Implications from the Research

The use of instructional technology has afforded many conveniences and supported learning in a more accessible, more flexible, and more engaging format. Technology, however, is a significant and extra responsibility for the instructor. Most will find it time consuming to effectively adopt and implement appropriate technologies, ensuring benefit to the learner, all in addition to the time required for advancing in their teaching discipline.

This research validated much of the work I do on a daily basis as an instructional designer. In many ways, findings revealed new and supplemental contributions to my work. The practice of instructional design is intended to design a course that deliberately leads a student to relevant learning objectives effectively and efficiently, frequently guided by the use of an instructional design model (Gustafson & Branch, 2002). The ABCDE instructional design model is not the exclusive solution for everyone. In hybrid modalities, additional support in utilizing the model is necessary to aid those with less experience in the uses of instructional technologies.

From the research findings and analysis, I have compiled the following implications for the design and modification of instructional design models, the use of instructional technologies, and the support required for faculty for the design and development of courses in the hybrid modality.

- The need for the developer of a hybrid course design process model to thoroughly investigate the strengths and weaknesses of that model from its users’ perspectives is of central importance.
- The complexity of such a model from the perspectives of the instructors, highlighting both successes, but perhaps more importantly challenges they faced, and frank and
honest consideration of these challenges is essential for a meaningful redesign of the model.

- There is value for the online and hybrid course design process from the involvement and contributions of an experienced instructional designer who has both taught in the online and hybrid modality as well as gained experience with the effective implementation of instructional technologies.

- The hybrid modality is complex, nuanced, and significantly more challenging to design for and teach than most course designers can anticipate. A hybrid course design process model, such as the ABCDE model, that has been thoroughly investigated and appropriately redesigned will contribute to successes with hybrid course design and reduce challenges otherwise not predicted.

- They hybrid course designer and instructor will benefit from advocacy on the part of institutional administrators who harbor an understanding of the time commitment and additional skills and training necessary to succeed in both the design and teaching of a hybrid course.

- The implementation of instructional technologies is undoubtedly one of the most challenging aspects of online and hybrid course design. Effectively selecting and weaving together the learning that may take place via technology with that which may take place in the face-to-face environment is the pinnacle of challenge for the first-time hybrid course designer. Extra assistance from an experienced instructional designer as well as extra time for the instructor to learn how to facilitate the learning via technologies is required.
This study is considered significant in that it is the first known time, based on the review of the literature, that the full implementation of a step-by-step process for designing a hybrid course has been studied in depth. The findings of this study can be used to make revisions to the ABCDE model that will ultimately benefit course designers who are facing the prospect of designing their first hybrid course. The findings from this study show that a revised ABCDE model process can be helpful in the course design process.

The recommended improvements to the ABCDE model address the likelihood that first-time hybrid course designers have less experience in transitioning face-to-face content to the online modality. They also address specific challenges that each of the case study participants experienced during the design of the course, during the teaching of the course, and following the teaching of the course when reflecting upon the effect of the course design on their students’ learning.

Suggestions for Future Research

There are several future research projects that should be considered for the continuous improvement of the ABCDE model.

- A similar project using the revised ABCDE model would study the effectiveness of the revisions as well as identify new challenges and successes to address.

- A study specifically related to learning, using, and applying instructional technologies in conjunction with the ABCDE model would provide additional information.

- A more in-depth concentration on the Director stage would likely uncover more specifics to aid in the design of professional development and affect the weaving together of the out-of-class and in-class learning activities.
• A more in-depth study of the Evaluator stage, identifying specific categories of course design evaluation with recommendations for appropriate course design revision strategies.

• A study of the implementation of the ABCDE model in discipline-specific courses such as math, science, or English composition, to determine whether the discipline requires unique adjustments to the model.

• Last, but possibly most importantly, a study of issues related to any of the above topics from the students’ perspective is critical for discovering ways to make hybrid course design most effective.

Conclusions

Blended learning is becoming recognized as a means for transforming teaching and learning and increasing access to education while preserving the core values of higher education (Graham, 2006). Technological developments and our ability to capitalize on their effective use will contribute to the attainment of intended learning objectives within worthwhile learning experiences.

Garrison and Vaughan (2008) emphasize the fact that information acquisition is no longer a challenge in higher education as a result of wide-spread access to the Internet. They stress that the new goal for quality educational experiences requires the building and sustaining of online learning communities and the integration of instructional technology applications that support creative discourse and enhance critical reflection whether a student is on campus or not. As educators, we are compelled to continuously explore fundamentally new approaches and designs throughout our teaching careers, considering their instructional value. Students want to be actively and collaboratively engaged in relevant learning experiences that have meaning and
practical implications. Students can and should come to the learning environment armed with the most current information and be ready to engage in the critical and creative process of making sense of the information, begin to explore the implications and applications thereof, and be able to recognize the connection of each component to the learning objectives. There is a shift in focus from teacher-centered delivery to more accountability on the part of the learner (Chou, 2002; McCombs & Vakili, 2005).

As we continue to refine methods and strategies for well-balanced and effective blending of learning activities in hybrid courses, value will be gained from further investigation in studying a blend of all forms of interaction and its relationship to achieving student learning objectives. We should study the variables most likely to influence that mix: in what ways might course structure and interaction differ per discipline? How might student demographics affect design and learning objectives? How do various teaching styles impact reflection and deeper-level thinking and understanding in the learners?

The findings from this study highlight certain aspects of the importance and value of using the ABCDE model in the design of a high quality hybrid course and raise questions about others. The practical implications for professionals working in the field of eLearning and higher education are that increasing confidence in hybrid course development using the ABCDE model will have an impact on hybrid course design, student learning, and the instructor’s perceptions of successful teaching.
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Appendix A: Quality Matters and Internal Review Results

Quality in Online Course Design

Quality, for purposes of this study, is measured against the ability to meet the standards included in the Quality Matters rubric, and is generally related to (a) overall course structure, design, navigability, and accessibility; (b) measurable learning objectives with which assessments, learning activities, instructional materials, interactivity between learners and instructors, and course technologies are consistent and integral to the learning process; and (c) provision of learning, technical, and institutional support levels available to learners (MarylandOnline, 2011).

Background of Quality Matters

According to the FIPSE Grant Project page of the MarylandOnline.org website, between 2003 and 2006, a consortium of approximately 20 community colleges and universities in the state of Maryland ran a grant project with the purpose of developing “a replicable pathway for inter-institutional quality assurance and course improvements in online learning” (MarylandOnline, 2010). This organization was subsequently named Quality Matters and as of early 2014 has more than 800 subscribing colleges and universities across the United States as well as a number of other countries.

Extensive research was initially conducted, resulting in a detailed rubric of quality standards used by consistently trained peer-reviewers for the purpose of certifying the quality of online courses and of online components. Every two to three years, the latest research is reviewed and incorporated to keep the rubric current, and in 2008 hybrid course characteristics were also addressed within the standards. The intent of the rubric and peer-review process is to
be diagnostic and collegial and focuses on course design being evaluated and continuously improved based on solid research and instructional design principles.

**The Quality Matters Rubric**

The 2011-2013 Quality Matters rubric is organized into eight general standards:

1. Course Overview and Introduction
2. Learning Objectives (Competencies)
3. Assessment and Measurement
4. Instructional Materials
5. Learner Interaction and Engagement
6. Course Technology
7. Learner Support
8. Accessibility

A total of 41 individual standards are contained within these general standards. Each is identified as being essential, very important, or important. Those standards characterized as being essential must be met for the course to ultimately be recognized as a Quality Matters course. The 2011-2013 edition of the Quality Matters rubric is displayed in Figure 10.
Figure 10: Quality Matters Rubric, 2011-2013 Edition.
The Quality Matters Review Process

There are primarily two modes in which the design of an online or hybrid course may be reviewed. An official review is conducted by a three-person team, all certified as peer-reviewers. One of the team members has completed extra professional development and is the certified Master Reviewer or chair of the team. At least one team member is a subject matter expert, preferably teaching a similar online or hybrid course in that discipline. At least one team member is from an institution other than where the course being reviewed is taught. When the course design receives recognition as meeting standards, it is added to the Quality Matters online registry. A fee is associated with the review, primarily to cover the cost of peer-review stipends.

An informal review is internal to the course’s institution, and may or may not consist of a three-person team. Generally, all reviewers would be certified as peer-reviewers by Quality Matters; however, the informal review is not recognized within the Quality Matters online registry and is used predominantly for internal quality feedback purposes. No fee is associated with the review, although the institution may elect to provide a stipend to each peer-reviewer.

All reviews utilize the current Quality Matters rubric, addressing at least the essential standards. When the review team identifies that a standard has not been met for a course, a recommendation is written that provides the course designer with ample information necessary to ultimately adjust the course to meet the standard. The intent is that continuous improvement will be achieved as the course designer’s colleagues (review team members) assist with clear, descriptive, and balanced recommendations. The team chair continues to work with the course designer to achieve the desired result. All courses ultimately meet the quality standards unless the course designer halts the process.
### Appendix B: Data Collection Instruments, Timeframes, and Formats

<table>
<thead>
<tr>
<th>Instrument Name</th>
<th>Timeframe for Data Collection</th>
<th>Format of Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1. Pre-hybrid survey</td>
<td>First activity of all case study (course designer) participants upon agreeing to be part of the research, prior to any meetings or design work</td>
<td>Electronic survey of fill-in, multiple-choice, and essay style questions administered via the WSU Skylight Matrix Survey System</td>
</tr>
<tr>
<td>D1. Instructional design meeting documentation – researcher observation field notes</td>
<td>Recorded by me during and after each instructional design meeting held between me (the instructional designer) and the case study participant (the hybrid course designer)</td>
<td>Electronic email with semi-structured questions and prompts to reflect my observations about the process and practices of the hybrid course designers</td>
</tr>
<tr>
<td>D2. Instructional design meeting documentation – participants’ reflections</td>
<td>Written by the case study (course designer) participant after each instructional design meeting held between me (the instructional designer) and the case study participant (the hybrid course designer)</td>
<td>Electronic email with semi-structured questions and prompts to gather their reflections and experiences during the process and practices of the hybrid course design</td>
</tr>
<tr>
<td>S2. Post-hybrid survey</td>
<td>Activity for each case study (course designer) participant upon beginning to teach the newly designed hybrid course</td>
<td>Electronic survey of fill-in, multiple-choice, and essay style questions administered via the WSU Skylight Matrix Survey System</td>
</tr>
<tr>
<td>S3. Post-teaching survey</td>
<td>Activity for each case study (course designer) participant, upon completing the term teaching the newly designed hybrid course</td>
<td>Electronic survey of fill-in, multiple-choice, and essay style questions administered via the WSU Skylight Matrix Survey System</td>
</tr>
<tr>
<td>INT. Post-teaching interview on perspectives of student learning</td>
<td>Interview administered by me with the case study (course designer) participant following the course revisions and beginning to teach the hybrid course a second time</td>
<td>One-on-one semi-structured interview with open-ended questions; recorded via digital recorder and transcribed word for word</td>
</tr>
<tr>
<td>QM. Quality Matters course design review</td>
<td>Review of course by certified Quality Matters Master Reviewer upon the course designer completing the term teaching the newly designed hybrid course</td>
<td>A course review process using the 2011-2013 Quality Matters Higher Education rubric of eight major standards and 41 standards, with Met/Not Met and detailed recommendations provided for each standard transcribed</td>
</tr>
</tbody>
</table>
Appendix C: Pre-Hybrid Survey Instrument (S1)

Thank you for participating in this research by Kathy Chatfield at Washington State University. This questionnaire is designed to collect data consisting of education and experience and perception background of participants volunteering to have their course development experiences used for case studies. This pre-process questionnaire is to be administered prior to the process of designing/developing a first hybrid or blended course. PLEASE NOTE: You have the right to withdraw from this research at any time. You have the right to not respond to any of the questions presented here. Your identity will be respected and kept confidential at all points throughout the data gathering, research analysis, and publishing processes.

Biographical Information
1. First name: Last name:
2. Current institution name: Institution city, state:
3. Please check all degrees you have earned:
   - Associates degree
   - Bachelors degree
   - Masters degree
   - Doctorate (all but dissertation)
   - Doctorate (including dissertation)
   - Other or multiples: (please specify)
4. Please list the disciplines you have taught in your higher education experience:
5. Please record your higher ed teaching experience with the following criteria (a new line for each institution): (Total Number Years, Institution Name, Institution City State, Full-time or part-time) For example:
   - 17, Clark College, Vancouver WA, part-time
   - 15, University of Oregon Continuation Center, Portland OR, part-time
6. List any education/instructional design courses you have taken of benefit to teaching in higher education: (Title, Length of course, Credits, Institution, Brief Description)
7. Briefly describe the factors influencing your discipline decision, i.e., why did you select the discipline you did as your chosen field? If you have multiple or changed disciplines along the way, briefly describe factors influencing that change as well.
8. Please describe any experience you have had as a student in online and hybrid courses. Include examples and aspects of the experience that you felt you would like to duplicate in your own teaching as well as aspects that you would like to avoid in your courses with your students and learning activities.

Teaching Experience
9. Briefly describe when you first thought you would be a college teacher?
10. How does your teaching career compare with other careers/jobs you have had in your life? What makes you continue to teach rather than switching careers?

11. What would you describe as the highest point or greatest accomplishment of your teaching career?

12. What would you describe as the low point or biggest disappointment of your teaching career?

13. In a short sentence, how would you describe yourself as a teacher?

**Technology Experience**

14. Describe your emotional feelings about your own use of computer/Internet technology in general.

15. Select the level of technological skill you are most closely aligned with:
   - Extreme novice
     - (I use computers as little as absolutely possible)
   - Somewhat skilled
     - (I use computers some, but experience periods of frustration with them)
   - Fairly skilled
     - (I use computers often, and have only occasional periods of frustration with them)
   - Very skilled
     - (Computers are my friend; I can navigate through almost all situations with little problem; I could or do teach introductory computer skills)
   - Advanced
     - (I teach advanced computer skills OR I have at least some programming background AND I help others troubleshoot their technology problems)

16. Select the closest level of your keyboarding skill:
   - I never learned to type without looking, and basically hunt & peck for every key
   - I never learned to type without looking, but I am very efficient with my hunt & peck method
   - I learned to type without looking, but I consider my speed to be pretty slow (20-35 wam)
   - I learned to type without looking, and I believe my speed to be average (35-50 wam)
   - I learned to type without looking, and my speed is above average (50-65 wam)
   - I learned to type without looking, and my speed is 65 wam or higher

17. Briefly describe your personal background/experience/use of technology at home, away from work, etc.:

18. Describe your professional use of technology, specifically in teaching, but also in other work besides the actual teaching process itself. Be as specific as possible with regard to software use, skill level, and any area with which you may feel frustrated.
19. Describe the point in your teaching career when you first decided you would use technology with and for your students:

**Teaching Style/Curriculum Development**

20. Please describe your teaching style and philosophy. This can be brief, but you might include an example to help clarify.

21. Describe two (2) or three (3) examples of your favorite teaching strategies and methods. Please number each to distinguish between them.

22. Please describe your role as the teacher in your classes. Indicate the effect this role has on your students' learning.

23. Please describe the various components required for an "ideal" class session or learning environment. Number each to distinguish them from one another.

24. Consider your least favorite individual or group of students. List the various characteristics that you believe contribute to this unfavorable experience or environment. Number each to distinguish between them.

25. In your opinion, what are examples of things that an exceptional teacher does for and with their students?

26. When you teach the same course from term to term, how similar or different are they in their design and content each time?

27. Please consider your previous curriculum/course development process. What parts of a course do you generally design before the term begins? What parts of a course do you generally develop while the term is in progress?

28. Please describe your intentions for future curriculum/course development process. What parts of the course will you design before the term begins? What parts of the course will you develop while the term is in progress? Is this different from what you've done in the past? Why or why not?

**eLearning Design and Teaching Experience**

29. Briefly describe any experience you have in teaching and developing courses for online delivery.

30. Briefly describe any experience you have in teaching and developing courses for hybrid or blended delivery.

31. Describe concerns you have regarding online or hybrid/blended effectiveness and/or limitations you may encounter in the replacement of face-to-face delivery.

32. Thank you for the time you have taken here to provide me with some pre-research information. If you have any comments or questions that haven't been addressed here, please list them below. --Kathy Chatfield
Appendix D: Post-Hybrid Survey Instrument (S2)

Thank you for participating in this research by Kathy Chatfield at Washington State University. This questionnaire is designed to collect data from participants volunteering to have their course development experiences used for case studies. This post-process questionnaire is to be administered subsequent to the process of designing/developing a first hybrid or blended course. PLEASE NOTE: You have the right to withdraw from this research at any time. You have the right to not respond to any of the questions presented here. Your identity will be respected and kept confidential at all points throughout the data gathering, research analysis, and publishing processes.

Biographical Information
1. First name:  Last name:
2. Current institution name:  Institution city, state:
3. Have you completed any new degrees within the last year (since your responses on the pre-hybrid questionnaire):
   - Associates degree
   - Bachelors degree
   - Masters degree
   - Doctorate (all but dissertation)
   - Doctorate (including dissertation)
   - Other or multiples: (please specify)

4. Please record any NEW higher ed teaching experience within the last year (since your responses on the pre-hybrid questionnaire) with the following criteria (a new line for each institution): (Total Number Years, Institution Name, Institution City State, Full-time or part-time) For example:
   17, Clark College, Vancouver WA, part-time
   15, University of Oregon Continuation Center, Portland OR, part-time

5. List any NEW education/instructional design courses you have taken in the last year (since your responses on the pre-hybrid survey) that would be of particular benefit to teaching in higher education:
   Title, Length of course, Credits, Institution, Brief Description

6. If you have added or changed disciplines within the last year (since your responses on the pre-hybrid questionnaire), briefly describe factors influencing your doing that.

Teaching Experience
7. What would you describe as the highest point or greatest accomplishment of your teaching in the last year (since your pre-hybrid questionnaire response)?

8. What would you describe as the low point or biggest disappointment of your teaching in the last year (since your pre-hybrid questionnaire response)?
9. In the pre-hybrid questionnaire, you provided a short sentence describing yourself as a teacher. For data comparison, how would you describe yourself as a teacher today?

**Technology Experience**
10. For comparison with your response in the pre-hybrid questionnaire, please describe your current emotional feelings about your own general use of computer/Internet technology.

11. For comparison with your response in the pre-hybrid questionnaire, please select the level of technological skill you are most closely aligned with as of today:
   - Extreme novice (I use computers as little as absolutely possible)
   - Somewhat skilled (I use computers some, but experience periods of frustration with them)
   - Fairly skilled (I use computers often, and have only occasional periods of frustration with them)
   - Very skilled (Computers are my friend; I can navigate through almost all situations with little problem; I could or do teach introductory computer skills)
   - Advanced (I teach advanced computer skills OR I have at least some programming background AND I help others troubleshoot their technology problems)

12. For comparison with your response in the pre-hybrid questionnaire, please briefly describe your personal background/experience/use of technology at home, away from work, etc. today:

13. For comparison with your response in the pre-hybrid questionnaire, please describe your current professional use of technology, specifically in teaching, but also in other work besides the actual teaching process itself. Be as specific as possible with regard to your current software use, skill level, and any area with which you may feel frustrated.

14. Describe how your use of technology with and for your students has changed in the last year (since your pre-hybrid questionnaire response):

**Teaching Style/Curriculum Development**
15. For comparison with your response in the pre-hybrid questionnaire, please describe your current teaching style and philosophy. Is it the same or different from before your participation in this hybrid course design process?

16. In the last year (since your pre-hybrid questionnaire response), what new teaching strategies and methods have you acquired OR what are the favorite strategies and methods you find yourself using now? Please number each to distinguish between them.

17. Please describe your current role as the teacher in your classes. Has this role changed or stayed the same over the last year? Indicate the effect this role has on your students' learning.
18. If your role as a teacher has changed in the last year (since your pre-hybrid questionnaire), what factors influenced that change? Please be specific by listing your thought processes and possible behavior/action changes and the effect the changes are having on your students.

19. Please describe the various components that you currently believe are required for an “ideal” class session or learning environment. Number each to distinguish them from one another.

20. Consider your least favorite individual or group of students. List the various characteristics that you currently believe contribute to this unfavorable experience or environment. Number each to distinguish between them.

21. What do you currently believe are examples of things that an exceptional teacher does for and with their students?

22. When you now consider repeating a course from a previous term, how similar or different will the two courses be in their design and content?

23. Please describe your intentions for future curriculum/course development process. What parts of the course will you design before the term begins? What parts of the course will you develop while the term is in progress? Is this different from what you’ve done in the past? Why or why not?

**eLearning Design and Teaching Experience**

24. Describe any current concerns you have regarding online or hybrid/blended effectiveness and/or limitations you may encounter in the replacement of face-to-face delivery.

25. Please describe in detail the most positive aspects you experienced in using Kathy's hybrid-design process.

26. Please describe in detail the most frustrating or confusing or troublesome aspects you experienced in using Kathy's hybrid-design process.

27. In what ways did using Kathy's design model change the way you design courses, or change the way you think about designing courses, or change your approach to designing courses?

28. In what ways can you see Kathy's process benefiting developers of hybrid courses in higher education?

29. In what ways could Kathy's process be improved or changed to increase the benefit to developers of hybrid courses in higher education?

30. Thank you for the time you have taken here to provide me with post-research information. If you have any comments or questions that haven't been addressed here, please include them below. --Kathy Chatfield
Appendix E: Post-Teaching Survey Instrument (S3)

Thank you for participating in this research by Kathy Chatfield at Washington State University. This questionnaire is designed to collect data from participants volunteering to have their course development experiences used for case studies. This post-teaching questionnaire is to be administered subsequent to the teaching of the hybrid or blended course that was designed during the research process. PLEASE NOTE: You have the right to withdraw from this research at any time. You have the right to not respond to any of the questions presented here. Your identity will be respected and kept confidential at all points throughout the data gathering, research analysis, and publishing processes.

Biographical Information
1. First name:  Last name:
2. Current institution name:  Institution city, state:

Teaching Experience
3. What would you describe as the highest point or greatest accomplishment of your teaching in the last year (since your post-hybrid questionnaire response)?

4. What would you describe as the low point or biggest disappointment of your teaching in the last year (since your post-hybrid questionnaire response)?

5. In the pre- and post-hybrid questionnaires, you provided a short sentence describing yourself as a teacher. For data comparison, how would you describe yourself as a teacher today?

Technology Experience
6. For comparison with your responses in the pre- and post-hybrid questionnaires, please describe your current emotional feelings about your own general use of computer/Internet technology.

7. For comparison with your responses in the pre- and post-hybrid questionnaires, please select the level of technological skill you are most closely aligned with as of today:
   - Extreme novice (I use computers as little as absolutely possible)
   - Somewhat skilled (I use computers some, but experience periods of frustration with them)
   - Fairly skilled (I use computers often, and have only occasional periods of frustration with them)
   - Very skilled (Computers are my friend; I can navigate through almost all situations with little problem; I could or do teach introductory computer skills)
   - Advanced (I teach advanced computer skills OR I have at least some programming background AND I help others troubleshoot their technology problems)
8. For comparison with your responses in the pre- and post-hybrid questionnaires, please briefly describe your personal background/experience/use of technology at home, away from work, etc. today:

9. For comparison with your responses in the pre- and post-hybrid questionnaires, please describe your current professional use of technology, specifically in teaching, but also in other work besides the actual teaching process itself. Be as specific as possible with regard to your current software use, skill level, and any area with which you may feel frustrated.

10. Describe how your use of technology with and for your students has changed in the last term (since your post-hybrid questionnaire response):

Teaching Style/Curriculum Development

11. For comparison with your responses in the pre- and post-hybrid questionnaires, please describe your current teaching style and philosophy. Is it the same or different from before your participation in this hybrid course design process?

12. In the last term (since your post-hybrid questionnaire response), what new teaching strategies and methods have you acquired OR what are the favorite strategies and methods you find yourself using now? Please number each to distinguish between them.

13. Please describe your current role as the teacher in your classes. Has this role changed or stayed the same over the last term (since you taught your first hybrid course)? Indicate the effect this role has on your students' learning.

14. If your role as a teacher has changed in the last term (since your post-hybrid questionnaire), what factors influenced that change? Please be specific by listing your thought processes and possible behavior/action changes and the effect the changes are having on your students.

15. Please describe the various components that you currently believe are required for an "ideal" class session or learning environment. Number each to distinguish them from one another.

16. Consider your least favorite individual or group of students. List the various characteristics that you currently believe contribute to this unfavorable experience or environment. Number each to distinguish between them.

17. What do you currently believe are examples of things that an exceptional teacher does for and with their students?

18. When you now consider repeating a course from a previous term, how similar or different will the two courses be in their design and content?

19. Please describe your intentions for future curriculum/course development process. What parts of the course will you design before the term begins? What parts of the course will you develop while the term is in progress? Is this different from what you've done in the past? Why or why not?
**eLearning Design and Teaching Experience**

20. Describe any current concerns you have regarding online or hybrid/blended effectiveness and/or limitations you may encounter in the replacement of face-to-face delivery.

21. Please describe in detail the most positive aspects you experienced while teaching the course you developed using Kathy's hybrid-design process.

22. Please describe in detail the most frustrating or confusing or troublesome aspects you experienced while teaching the course you developed using Kathy's hybrid-design process.

23. In what ways do you believe you will adjust your hybrid course before teaching it again? Please be as specific as possible.

24. In what ways could Kathy's process be improved or changed to increase the benefit to developers of hybrid courses in higher education?

25. Thank you for the time you have taken here to provide me with post-research information. If you have any comments or questions that haven't been addressed here, please include them below. --Kathy Chatfield
Appendix F: Instructional Design Meeting Documentation (D1 and D2)

Thank you for participating in this research by Kathy Chatfield at Washington State University. This interview guide is designed to collect data from participants volunteering to have their course development experiences used for case studies. This interview guide is to be completing on a weekly basis by both researcher and participant to record observations and reflections during the research process. PLEASE NOTE: Participants have the right to withdraw from this research at any time. Participants have the right to not respond to any of the questions presented here. The identity of all participants will be respected and kept confidential at all points throughout the data gathering, research analysis, and publishing processes.

1. Date of meeting: ________________________________________________________________

2. Person completing this form: _____________________________________________________

3. Name of participant: ____________________________________________________________

4. Name of course being worked on: ________________________________________________

5. What stage of the design process is this taking place?
   (architecture, building, conducting, or directing?) _________________________________

6. List what has been completed for the course development to this point. ______________

7. (participant) To what degree do you understand the abcde model/
   (researcher) To what degree does the abcde model seem to be understood by the participant?

8. (participant) What progress have you made in the process of developing the course with the
   abcde model strategies?/
   (researcher) What progress has the participant made in the process of developing the course
   with the abcde model strategies? _________________________________

9. (participant) What kinds of questions about the model, the process, or the course
    development do you have now?
   (researcher) What kinds of questions about the model, the process, or the course development
    does the participant have now? _____________________________________________

10. (participant) Do you find that you are following the order of the abcde model process as it is
    designed?/
    (researcher) Is the participant following the order of the abcde model process as it is
        designed? _______________________________________________________________

11. (participant) If yes, what general observations do you have on following the process? If no,
    what are you doing instead of the abcde model process? /
    (researcher) If yes, what general observations are made on following the process? If no, what
        is being done instead? _________________________________________________
12. (participant) If no, what are some reasons that you are doing something other than following the process in the model? How might the model be modified to reflect the process you are using instead?
(researcher) If no, why is the participant deviating from the model? What would have to be adjusted to the model to reflect the process the participant is taking instead? 

13. (both participant and researcher) What other general observations or comments should be recorded for this week? 
Appendix G: Post-teaching Interview (INT)

1. Related to the stated student learning objectives in your course syllabus, what was the nature of concepts or skills that your students were successful at learning in your hybrid course?

2. Related to the stated student learning objectives in your course syllabus, what was the nature of concepts or skills that your students were less or not successful at learning in your hybrid course?

3. Related to the student learning (as you just described), in what ways did the hybrid course design contribute to that?

4. Related to the lack of student learning (as you just described), in what ways did the hybrid course design contribute to that?

5. Briefly describe how you took into consideration varied student learning styles when you designed your course?

6. In what ways were student learning styles supported by the course being delivered in the hybrid modality (in contrast to online or face-to-face modalities)? Please provide at least one specific example.

7. In what ways were student learning styles challenged by the course being delivered in the hybrid modality (in contrast to online or face-to-face modalities)? Please provide at least one specific example.

8. What might you do differently with a course designed for the hybrid modality to better support and encourage student learning?

9. Do you believe the discipline within which you teach is more or less suited for the hybrid modality than other disciplines? Why?

10. Is there anything else that you want to say that you haven’t had the opportunity to?
### Appendix H: Side-by-side Grid Comparing All Surveys for One Case

(one abbreviated example)

<table>
<thead>
<tr>
<th>Question</th>
<th>Response from pre-hybrid svy</th>
<th>Post-hybrid svy</th>
<th>Post-teaching svy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exceptional teacher characteristics</td>
<td>Explain college culture and their expectations in ways students can understand; treat students with respect; listen and make adjustments to learning as appropriate from student feedback, learning, struggles, attainment of goals; coach students to see strengths; is a co-learner with students</td>
<td>Make due dates clear in every format and place that a student might look; assignment, syllabus, list of assignments, submission area, weekly email reminder, weekly announcements; provide very clear writing rubric, give feedback about writing, allow for rewrite using feedback, peer-reviews</td>
<td>Give students positive feedback on areas of work they did well and opportunities to improve work where needed; giving students opportunities to resubmit work as they learn how to improve it and learn from the assignment; allow the students to learn from each other; praise the positive aspects of the students’ work publicly; give much positive comments on student perseverance</td>
</tr>
<tr>
<td>Change courses from term to term?</td>
<td>Before course begins, determine course goals, testing, and evaluation methods, major projects including instructions and assessment, weekly goals and readings, and basic outline of active learning activity in each class session</td>
<td>Courses are very different in design from prior years.</td>
<td>Courses are about 80% different</td>
</tr>
<tr>
<td>What is completed before term begins</td>
<td>Revise all writing assignments to require critical thinking and focus on audience; align the writing assignments with module learning activities; designs about four good discussion session; find videos that explain major topics</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>
Appendix I: Side-by-side Grid Comparing All Cases

(one abbreviated example)

| PRE Course design process before ABCDE | In graduate school Gloria took several courses on curriculum design and teaching methodology. After graduating she took numerous workshops on curriculum design throughout her career. She uses the constructivist theory of learning with adult learning principles in the design of her courses. She aims for students to be actively engaged in the learning 80% of the time, and utilizes a reflective component regularly so they can think about how they are learning. Gloria changes how she designs the active learning sessions as she reflects on the student feedback, learning, struggles, and attainment of course goals. Gloria says, “I have never taught a course the same way two times in a row.” | Karen strives to perfect her courses, and while similar in content, she changes details quite a bit from term to term. She develops the schedule and assignments before the term begins and plans the day-to-day lessons, slide shows, and daily activities as she goes. Before beginning the hybrid course design project, she has a goal of the details being more solidified prior to the start of the term. She is conscious about changing this, even though her nature is to be more spontaneous, because she realizes that changing her mind during the term is frustrating to her students when they know it is happening. | Jeanine’s course design process at the beginning of this project involves rarely doing things exactly the same way from one quarter to the next. She considers what worked, what didn’t, why it worked in term and not another, what changes have occurred that she should incorporate—adding new content to the curriculum and dropping things that have become outdated. She begins each term with a general plan that meets the college requirements for quantity and category of writing by students. “I plot assignments to fulfill those requirements on a calendar and then add material in between. The added materials, such as staggered quizzes, may also be plotted on the calendar, but a significant portion of a given term is somewhat fluid in that I draw on a ‘bank’ of materials but do not have a rigid schedule for presenting it.” Jeanine anticipates that future course design will incorporate uploading content for online consumption. She has experience with both Blackboard and Angel in delivering course materials such as writing assignments, research assignments, and skill-building assignments. Jackie attempted the use of online discussion forums, but was unimpressed with the quality of thoughtful discussion it generated. |
Appendix J: Code Tree

Technology
- LMS
  - Skill in using
  - Ease of use
- Increase in skill/use
- Rethinking use

Time
- Expectations
- When doing what (before, during, after)
- Designing course before quarter
- With students
  - Emails with questions
  - Supporting students
- Reduced face-to-face time
  - Possible harm/disadvantage
  - Considering activities/assessments
  - Contribute to missed learning
  - Contribute to attrition

Learning Community
- Different from face-to-face needs
- Discussions online
  - Difficult to implement
  - Student resistance
- More peer-to-peer learning

For students
- Instill confidence
- Provide structure
- Clear instructions/directions
- Provide more support
- Multiple learning opportunities
- Positive feedback
- Teacher role more involved
- More peer-to-peer

Professional development (other training)
- Quality Matters (how to apply concepts from rubric)
- Effective Online Discussions
- Online: what works best where
Design
- Revise from term to term
  - Revisions during term
- Instructional design skills required
- Intentional components
- Most valuable/effective for learning
- Structure
  - ABCDE model stressed
  - Clear instructions/directions for students
- New strategies
  - Learned during design/teaching
- Chunking
  - Units
  - Assignments
- Variety for learning

Integration between face-to-face and online
- ABCDE model stage D
- Students not prepared for f2f
  - Not completing reading assignments
- Did not have time to add “replacement” quizzes
- Submitting work
  - In face-to-face class
  - Online
- Learning objectives
- Learning how to teach with different tools
- What works best where?
- Online learning
  - Not familiar with what works/what doesn’t
  - Need more help/training