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I, Megan Paxton Wuebker, hereby submit this original work as part of the requirements for the degree of Doctor of Philosophy in Educational Studies.

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Preparing Leaders in Online Learning: Determining the Impact of a Graduate Certificate Program

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Preparing Leaders in Online Learning: Determining the Impact of a Graduate Certificate Program

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Abstract

Despite the continuous growth of online learning in higher education, research examining the aspect of leadership in an online learning environment has been neglected. This study examined a graduate certificate program focused on leadership in online learning. There were four research questions addressed: students’ motivations for enrolling in the certificate program; structural, cultural, and leadership gaps between program development and implementation; design, technological, and delivery issues faced by faculty during program implementation; and the ability of students to transfer skills learned in the program to a professional setting. An embedded case study method was utilized; this method allowed for data to be collected from program developers, program faculty, student participants, and artifacts to provide a complete representation of the program. The case itself revealed four themes in the data collected: description of the program, motivation for and development of the program, lack of sustainability, and developing leadership. Findings showed that students were motivated by their own professional development goals, the leadership component of the program, and the credential offered by the program. Structural gaps between program development and implementation included collaboration, stakeholders, organizational alignment, program content, and sustainability. Cultural gaps included a need for the program, target audience, community formation, and collaboration. Leadership gaps between program development and implementation included a lack of a formal needs assessment and leadership experience. The faculty faced multiple design, technological, and delivery issues during program implementation. Design issues included the time frame for course development, course content, and the structure of their courses. Technological issues included rubrics in
the learning management system and student access to software. Delivery issues included clear communication with and feedback to students, gaps in student leadership preparation, and overall impressions of their courses. Lastly, students identified knowledge and skills acquired in the program to be transferrable to their professional setting, including experience with different types of software, course assignments and projects, and the modeling of best practices in online learning by the program faculty. Students also identified the courses that were most and least beneficial in their experience as well as characteristics they believed a leader in online learning should possess. These findings have broad implications for the field of online learning, higher education institutions, program developers and faculty, and current and future students.

*Keywords: Online Learning, Leadership, Higher Education, Program Leadership, Adult Learning*
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Chapter One

Background and Context of the Study

Online learning has become a part of the college experience (Sener, 2010). Because of its flexibility, online learning is in a constant state of growth to meet students’ needs (Saba, 2005; Sener, 2010). An increase in the availability of technology has led to the development of online courses that are widely available, including post-secondary courses, graduate courses, and professional development options (Lotti, 2011; Heilman, 2011). Due to the flexibility of these courses, they have increased in popularity among students, particularly among adult learners (Mason, 2006; Park, 2007). Both improved access and the ability to accommodate a variety of learning styles are benefits that have resulted from the increased availability and visibility of higher education through online learning.

While online learning is not new, the institution of higher education has been in existence for a significantly longer period of time. However, online learning in its short-lived duration has managed to have a profound impact on higher education. In fact, the current state of higher education includes a rapidly changing technological presence situated within a predominantly stagnant university culture (Beaudoin, 2002, 2003; Duhaney, 2005; Hill, 2012). Online learning in higher education has grown rapidly, far outpacing the growth of traditional course delivery approaches (Allen & Seaman, 2011; Heilman, 2011; Lotti, 2011; Saba, 2005; Sener, 2010). In fact, online educational programs had significantly more growth (18.3%) than higher education overall (>2%) from 2002 to 2010 (Allen & Seaman, 2011, p. 11). Moreover, although the pace of online growth is slowing slightly, there continues to be expansion throughout higher education (Allen & Seaman, 2011).
One reason for the increase of online learning opportunities within higher education is because online options are attractive for all learners, especially adult learners, as digital delivery mechanisms allow for flexibility while still offering an opportunity for personal and professional growth (Cavanagh, 2012; Heilman, 2011; Lotti, 2011; Mason, 2006; Park, 2007). Online learning formats provide students with the opportunity to take charge of their own learning, making the online delivery format a particularly desirable option for adult learners (Hill, 2012; Knowles, 1973; Mason, 2006; Sener, 2010). The self-directed approach provided by online learning affords students the flexibility to balance their education and life responsibilities (Cercone, 2008; Fini, 2009; Knowles, 1973; Mason 2006; Park, 2007). Hadre (2009) asserted that motivating students by making the learning process relevant to their needs was essential in order for self-directed learning to take place. Zaharias (2009) argued the need to capitalize further on student motivations through the use of instructional design structures that enhanced the self-directed aspect of learning. When adult learners are motivated in an online learning environment, they are more likely to have a positive educational experience (Wuebker, 2013).

One of the goals of higher education is to provide a breadth of access to the college credential (Laitinen, 2013). In 1860, the Morrill Land Grant Act shifted higher education from a commodity for the elite to one for the general public through the creation of land grant universities, expanding access to higher education (Laitinen, 2013). Indeed, a significant benefit of improved availability and visibility of online learning is an even greater accessibility to higher education (Duhaney, 2005; Hill, 2012; Sener, 2010). While the benefit is particularly salient for adult learners, it also provides colleges and universities with access to a broader range of students (Duhaney, 2005; Sener, 2010). With
increased access to higher education as a whole, however, college education has also become very expensive, leading the public to begin the withdrawal of their support for higher education (Bowen, 2012; Ehrenberg, 2002; Laitinen, 2013; Schejbal, 2012) and diminishing the accessibility of higher education (Schejbal, 2012). However, according to Sener (2010), online learning has enabled higher education to provide increased access for students and options to attain credentials at lower costs as compared to a face-to-face higher education setting; this has the potential to increase student enrollment, resulting in a means of institutional sustainability.

The rapid adoption of online learning in higher education has not been without its drawbacks. The movement of higher education into an industrial paradigm, with the focus on quantity over the quality of education, has critics challenging the social mobility aspect of this transition (Beaudoin, 2002, 2003, 2013; Cox, 2005; Labaree, 1997; Schejbal, 2012). In effect, the industrialization of higher education is not promoting the acquisition of credentials (Cox, 2005). While online learning has increased access to higher education as a whole, it has not increased access to the college credential.

Institutions are also facing issues with the successful implementation of online learning. As online learning is not traditionally part of an institution’s strategic plan, there is often no knowledge as to how the implementation and sustained programming will affect the mission of the institution or meet the needs of its stakeholders (Allen & Seaman, 2011; Levy, 2003; Merolle, 2008; Watkins, Kaufman, & Odunlami, 2013). The implementation of online learning must also be adoptable and sustainable in order to be successful over the long term (Diamond, 2008; Rogoza, 2007). There are also financial implications when implementing online learning. Hill (2012) asserted that online education should result in a
decrease of overhead to colleges and universities, due to the fact that implementation of online learning often results in reduced costs while increasing enrollment. However, there is little evidence regarding the cost effectiveness of online learning for colleges and universities (Bowen, 2012).

Preparing faculty members to engage in online learning and lead such programs are also challenges for institutions of higher education. A lack of administrative support for faculty members is a barrier to a successful online learning program (Cox, 2005). Additionally, faculty members do not often have opportunities for professional development related to teaching in an online setting (Sener, 2010). As online teaching requires faculty members to alter their teaching practices and course design to accommodate students in an online setting, faculty are often ill-prepared to transition their practice (Fini, 2009; Kop, Fournier, & Mak, 2011; Tuomi, 2013).

Program leaders are often faculty members and thus face similar issues in that position (Emanuel, Robinson, & Korczak, 2013). A lack of administrative support and managerial power can impede successful program leadership (Ladyshewsky & Flavell, 2012). In addition, many program leaders do not have the necessary knowledge or experience prior to assuming such a role (Ladyshewsky & Flavell, 2012; Whitsett, 2007). Program leadership preparation in higher education should reflect not only the necessary skills for the position but also the structure and value of the institution; however, many institutions do not offer this training to individuals poised to step into leadership roles (Aasen & Stensaker, 2007).

When identifying faculty members to lead online programs, the combination of a lack of preparation to assume the leadership role and minimal professional development
aligned with online learning can set up the program and its leader to fail. Historically, individuals have been chosen for online leadership positions solely because of their technical skills and knowledge. It is essential for online leaders to have the necessary technical skills to demonstrate a complete understanding of how online learning is developed, designed, and delivered. However, leadership in online learning also requires the skills necessary to guide individuals to meet the needs and goals of the institution (Northouse, 2013; Sener, 2010).

Despite the continual growth of online learning and the potential benefit to institutions of higher education, a focus on leadership in an online learning environment within the research or practice fields is lacking (Beaudoin, 2002, 2003). As a matter of fact, there is currently insufficient preparation for those who will lead within online learning (Land & Bright, 2004; Ribble & Miller, 2013). Leadership within education is linked to success of programs and is also crucial in regards to the success of online programs in higher education (Diamond, 2008). As a result, and because online learning has been widely implemented without adequate leadership in place, it is necessary to develop supports within the existing online learning structure to promote leadership development and growth (Diamond, 2008). One potential way to provide the necessary support in program development and management skills, student and faculty support mechanisms, and technological skills to current and potential online leaders, including, is through a credentialing avenue such as a graduate degree or certificate program.

There are programs designed to prepare individuals for leadership in online education, though these programs are few and far between (Land & Bright, 2004). When developing their online program for online leadership, Land and Bright (2004) conducted a
focus group of six distance learning leaders to identify distance learning leader
competencies. Twenty-seven distance-learning leaders from K-12, higher education, and
corporate settings then validated these competencies (Land & Bright, 2004). It was
determined that leaders in distance learning needed to understand the foundations of
distance learning; have knowledge of the tools and technology used in distance learning;
identify the difference between traditional and online curriculum; design online learning
environments; manage programs, individuals, finances, and policies; and have a vision of
the trajectory of online learning (Land & Bright, 2004). Once the certificate program was
developed, it was offered in a hybrid format rather than entirely online as a means to
encourage networking across K-12, higher education, and corporate online learning
communities (Land & Bright, 2004). It is worth noting that the program developed by Land
and Bright (2004) is still in place nine years later, though an evaluation of its effectiveness
in preparing online leaders has yet to be published. In addition to this certificate program,
there are six other programs in leadership in online learning offered through US colleges
and universities.

One of these programs is the Leadership in Online Learning (LDOL) graduate
certificate program, which is the focus of this study. The Leadership in Online Learning
program was designed to prepare “online practitioners [to] understand key pedagogical,
support, design, and legal factors in leading online programs, online education initiatives,
and quality improvement plans” (Graduate Certificate Program Approval Guidelines, 2012).
Upon successful completion of the five courses, program participants receive a graduate-
level credential in online leadership.
Purpose of the Study

Given the continual growth of online learning within higher education, one important component of programs that should be addressed is growing leadership capacity for delivery of online education. It is important that potential leadership be identified (possibly self-selected) and educated to bring together instructional and informational technologies to ensure the success of online learning during this period of industrialization in higher education. Unfortunately, the empirical research is lacking in the realm of leadership within online learning, as well as on the types of effective programs that are necessary to prepare individuals to take on this role. This research study aims to begin addressing the research gap by evaluating an existing graduate certificate program designed to prepare online learning leaders for higher education. This case study focused on a graduate certificate program at a Midwestern Research-I University designed for future online leaders, examining the gaps between program development and implementation as well as faculty issues with implementation. The program and included coursework was analyzed to determine its impact on two students who completed the program and have become online leaders in their careers. Lastly, this study also provided insight into the motivations and experiences participating students had prior to beginning the program, as well as an evaluation of the ability of the program to meet their individual and collective goals.

Research Questions

This study sought to answer the following four research questions:

1. What are the online leadership program students’ motivations for participating in the graduate certificate program?
2. What leadership, structural, and cultural gaps existed between development and implementation in the first year of the certificate program?

3. What design, technological, and delivery issues did the program faculty face in the first year implementation of the certificate program?

4. In what ways have the participants used their new knowledge and skills within their current jobs and how do they anticipate their use to be in the future?

   This purpose of research question 1 was to determine the reason(s) the students opted to participate in the program. By identifying their motivations, the program can be adapted to better meet the needs of their current and potential students. Data from participant interviews was used to answer this question.

   The purpose of research question 2 was to identify challenges associated with the development and implementation of the program as well as the changes that have been or will be made as the program continues. This question also addresses the differences between the theoretical development and the practical implementation of the program. Participant interviews, program faculty interviews, a program developer focus group, and content analyses of artifacts were used to answer this question.

   The purpose of research question 3 was to identify the challenges faced by the program faculty in the first year of the certificate program as they implemented a brand new program with brand new courses. Also, as all of the program faculty members were identified as program developers, they will be able to identify how the courses did or did not meet the goals of the program with their first deployment. Faculty interviews, participant interviews, and content analyses of artifacts were used to answer this question.
The purpose of research question 4 was to address the usefulness of the skills and knowledge acquired from the certificate program and the transition of said skills and knowledge to a professional setting. Again, based on the responses of the participants, the program can be adapted to better meet the needs of their current and potential students. Participant professional work samples and data from participant interviews were used to answer this question.

**Definition of Terms**

For the purposes of this study, online learning was defined as the use of the Internet to facilitate teaching and learning in a higher education setting (Allen & Seaman, 2011; Means, Toyama, Murphy, Baika, & Jones, 2009; Saba, 2005; Sener, 2010). Online learning is not simply the use of technology in education; rather, it is a specific use of technology – the Internet – to facilitate a learning experience (Harriman, 2004). Distance learning and eLearning are both used to refer to online learning throughout the text; these three terms are used interchangeably throughout the literature.

Leadership was defined as “a process whereby an individual influences a group of individuals to achieve a common goal (Northouse, 2013, p. 5). This definition is applicable to both traditional leadership approaches and those within online learning environments. Northouse (2013) acknowledged, “there are almost as many definitions of leadership as there are people who have tried to define it” (p. 2; emphasis in original). For the purposes of this study, Northouse’s (2013) definition will be utilized.

Adult learners were defined as students who “possess one or more of the following characteristics: They are age 25 or older, have delayed entry into higher education after completing high school, did not earn a traditional high school diploma, are married, attend
part time, work full time, or have children” (Eckel and King, 2004, p. 7). This definition was identified as it presents a clear description of the adult learner.

Structural and cultural issues were identified within the theoretical framework and incorporated into research question two. For the purposes of analysis, structural was defined as “of or relating to the arrangement of and relations between the parts or elements of a complex whole” (Structural, Oxford Dictionaries, 2014). Cultural was defined as “of or relating to the ideas, customs, and social behavior of a society” (Cultural, Oxford Dictionaries, 2014). These definitions were used to categorize the findings relevant to the research question.

Theoretical Framework

Transformational leadership was defined by Northouse (2013) as “the process whereby a person engages with others and creates a connection that raises the level of motivation and morality in both the leader and the follower” (p. 186). Bennis and Nanus (1985) distinguished four characteristics of transformational leaders: clear vision, social development, trust, and understanding of self. The clear vision allows the transformational leader to identify and address the needs of the organization (Bennis & Nanus, 1985). In developing the social aspect of their organization, the transformational leader is able to shape the organizational culture and create shared experiences within the group (Bennis & Nanus, 1985). Trust is not defined as being predictable or reliable; rather, trust is when a transformational leader consistently works toward the goals and vision of the organization despite barriers (Bennie & Nanus, 1985). The last characteristic of a transformational leader as identified by Bennis and Nanus is the concept of understanding of self; that is, having an awareness of their strengths and weaknesses. Bennis and Nanus situated their
concept of transformational leadership within an organizational setting. Within the leadership in online learning literature, however, transformational leadership was identified as a strategy that would be beneficial to leaders in an online setting (Beaudoin, 2013; Diamond, 2008; Marcus, 2004).

McPherson and Nunes’ (2006) theoretical framework focuses on the success of online learning in higher education, with leadership a significant focus of this framework. McPherson and Nunes identified sixty-six critical success factors (CSFs) in four clusters for success in online learning in higher education. The four clusters that affect the implementation and sustainability of e-learning are leadership, structural, and cultural issues; design issues; technological issues; and delivery issues (McPherson & Nunes, 2006). These clusters are organized into four quadrants with the CSFs mapped according to their relevance to each cluster. A diagram the four quadrants with the CSFs can be found in Appendix A.

McPherson and Nunes (2006) asserted that the transition from traditional modes of learning to eLearning in an institutional setting “requires strong and supportive leadership and both changes in organizational structure and culture” (p. 551). The leadership, structural and cultural cluster is comprised of CSFs that affect such a transition, including communication, funding, recognition, reward, and of course, leadership (McPherson & Nunes, 2006). The design cluster, comprised of CSFs including “balanced collaborative, multi-skilled design and development; tutor, academic and learner involvement in the design process; and efficient technical support,” emphasizes that e-learning project development needs to align with the needs of the institution (McPherson & Nunes, 2006, p. 552). Within the technological issues cluster, McPherson and Nunes highlight the
importance of technology in the e-learning process. CSFs in the technological issues cluster include “security, data protection, intellectual property protection, ... data transmission, and communication” (McPherson & Nunes, 2006, p. 553). Lastly, the delivery issues cluster focuses on transitioning current modes of teaching into an online learning environment. CSFs within this cluster include “information management, organizational behavior, pedagogical approaches, and staff attitudes” (McPherson & Nunes, 2006).

The theoretical frame provided by McPherson and Nunes (2006) can be extended to the leadership in online learning certificate. The overarching issues identified by McPherson and Nunes have been recognized as barriers to successful online leadership within the literature (Beaudoin, 2002, 2003; Portugal, 2006). The CSFs provide online learning leaders with specific issues within each cluster to address in their own programs, while the clusters guide the overall process. McPherson and Nunes further asserted that the CSFs could be used for “decision-making and strategic thinking about e-learning” (p. 542).

In addition, the framework provided by McPherson and Nunes (2006) can be aligned to some extent with the characteristics of transformational leadership. While transformational leadership is not identified as a specific leadership approach by McPherson and Nunes, the characteristics identified by Bennis and Nanus (1985) can be found throughout. While Bennis and Nanus stated that a transformational leader must have a clear vision, McPherson and Nunes asserted that a leader must be able to align both project development and teaching practices with the organization’s vision. In order for this alignment to occur, the leader must have a clear understanding of what is needed by the organization in order to be successful. The importance of a supportive organizational
culture was also identified as a CSF by McPherson and Nunes. As such, a transformational leader has the capacity to shape the organizational culture in such a way that is beneficial to the organization, reinforcing its norms and values (Bennis & Nanus, 1985). While McPherson and Nunes did not speak directly to the concept of persistence in goal attainment, CSFs such as “carefully considered” and “management of expectations” reflect the idea that leaders in this setting must be persistent but not reckless in achieving their goals. Lastly, the transformational leader’s ability to acknowledge their own strengths and weaknesses is strongly reflected throughout McPherson and Nunes’ framework through the inclusion of stakeholders. By including multiple groups with a variety of knowledge, the transformational leader is able to focus on their own and draw on others’ strengths in pursuit of creating and sustaining successful online learning.

**Significance of the Study**

This study is the first empirical study to determine the effectiveness of a program in preparing individuals for leadership within online learning. To date, there have been zero empirical studies examining leadership preparation for online learning or assessing the leadership needs of those situated in online learning. This study examined the development and implementation of a graduate certificate program designed to prepare online leaders and its impact on students as they transitioned their skills from their courses to a professional setting.

As the first empirical study of its kind, this study makes a critical contribution to the field of leadership in online learning. Much of the literature in the field is dated, with only a few articles published in the last five years. Even a recently published edited text on distance education has only one section devoted to leadership in an online setting. Clearly,
leadership within online learning has not been a priority for the online learning community. Not only does this study update the field of leadership in online learning, but it also provides critical evidence reflecting the needs of online leaders and the programs that can prepare them to assume this role.

**My Role as Researcher**

I have personal experience with the LDOL certificate program. I completed all five certificate courses at the end of the summer 2013 semester and utilized the skills I acquired in a professional setting over the three semesters that I was enrolled in the program. Taylor, one of the program participants, and I were in the same cohort and often discussed our experiences regarding the courses, the faculty, the assignments, and our peers. It is possible that our conversations may have influenced her opinions of the courses; however, there were several months in between our completion of the courses and the interview, which could have minimized the influence of our prior conversations. Additionally, much of our interview focused on her job and those skills, which was not a topic of discussion while we were in the program together because she did not have the job until the end of the program. I was in 3 of the 5 courses (3, 4, and 5) with Buffy, my second program participant, though our interactions were limited to the online course environments.

All of the study participants acknowledged my participation in the certificate program during the interviews and focus groups, and some participants identified how things had changed since I had completed their course. Because of my experience, I have first-hand knowledge of the program and established relationships with the majority of my participants. This is beneficial in that it allows me to have a clear understanding of the
phenomenon being studied; however, it also means that I have my own opinions about the effectiveness of the courses in the certificate program after their first iteration as well as the transferability of skills from the courses to a professional setting. I sought to reduce the potential impact of this bias by employing trustworthiness strategies discussed in Chapter three.

**Organization of the Study**

This study is organized into five chapters. This chapter provides a synopsis of the problem and identifies the purpose and significance of this study. Chapter two presents a review of the relevant literature, including adult online learning, program leadership in higher education, leadership as it pertains to online learning, and barriers to successful leadership in online learning. Chapter three offers a comprehensive explanation of my research methodology as well as a thorough description of the LDOL certificate program to establish the context for my study. In chapter four, I present my findings in alignment with my research questions. Finally, in chapter five, I discuss my findings and their implications for the LDOL certificate program, its students, and leadership in online learning as a whole.

**Summary**

Online learning is growing and transforming higher education, an institution that is otherwise stagnant in many cases. With a focus on flexibility and self-directed learning, online learning is especially advantageous for adult learners, who face different challenges to learning than traditional students. Online learning has not only increased students’ access to higher education but has also provided colleges and universities with access to a larger population of students. With the rising cost of higher education, online learning
provides colleges and universities with the option to provide more students with an online education at a lower cost, promoting the financial sustainability of the institution.

Within the field of online learning, however, research on leadership in an online setting is scarce. Though leadership is vital to the success of online programs, there are few supports in place to promote leadership and growth within online learning. Several authors have identified characteristics that they believe to be important for online leaders to possess; however, there is no empirical research to support their assertions.

The purpose of this study was to evaluate a graduate certificate program designed to prepare individuals for leadership in an online setting after its first iteration. Through four research questions, this study examined the motivations for student participation in the program; leadership, structural, and cultural gaps between program development and implementation; design, technological, and delivery issues faced by faculty members in the first iteration of their certificate courses; and the transferability of skills from the certificate courses to a professional setting. The LDOL certificate program provides students with the opportunity to earn a graduate-level credential upon successful completion of the program.

McPherson and Nunes (2006) identified factors that were critical to the success of online learning in higher education. These factors were combined into four clusters: leadership, structural, and cultural issues; design issues; technological issues, and delivery issues (McPherson & Nunes, 2006). These clusters and their respective CSFs can be extended to the LDOL certificate program, as they provide leaders in online learning with guidance for their own programs’ success. Bennis and Nanus’ (1985) characteristics of a transformational leader are also observed through McPherson and Nunes’ framework.
This study is significant for two reasons. One reason is that it is the first empirical study to determine the needs of leaders in online learning as well as evaluate a program designed to prepare individuals for this role. The other reason this study is significant is that it makes an important contribution for the field of leadership in online learning.
Chapter Two

Literature Review

In order to provide a complete picture of leadership in online learning, there are several areas of literature that can be examined. The first area is adult online learning. Eckel and King (2004) asserted that adult learners make up approximately 75 percent of the student population in higher education. Online learning has presented adult learners with the flexibility necessary to broaden their education and is considered to be a desirable alternative to face-to-face learning options (Heilman, 2011; Lotti, 2011). Because of this, it is important to establish what factors in online learning can help to promote the success of adult learners.

The second area that situates leadership in online learning within the literature is program leadership. Because leadership in online learning is often program-focused, it is important to understand what challenges program leaders face. The very basic role of the program leader is to ensure their program runs smoothly; however, as preparation for the leadership role is rarely provided, achieving this outcome can be challenging (Ladyshewsky & Flavell, 2012; Sadeghi & Pihie, 2012). Establishing the barriers faced by program leaders in higher education can provide insight to those preparing to take leadership roles in online learning, especially with regard to program leadership.

Lastly, the literature surrounding leadership in online learning provides important context for understanding the current state of this topic. While Diamond (2008) identifies four leadership styles that are relevant to leadership in online learning, there is not one single leadership style that includes all of the characteristics deemed necessary for online
leaders. Additionally, there are many barriers in place to the success of online learning in higher education, including organizational, financial and individual-level obstacles.

The purpose of this chapter is to review the literature for the three separate topics: adult online learning, program leadership in higher education, and leadership in online education. Within each review, the alignment of the literature with the critical success factors (CSFs) identified by McPherson and Nunes (2006) is discussed.

**Adult Online Learning**

Online learning is an attractive option for adult learners as it allows for flexibility while still offering an opportunity for personal and professional growth (Heilman, 2011; Lotti, 2011; Mason, 2006; Park, 2007). In higher education, online learning has grown rapidly, far outpacing the growth of traditional higher education (Allen & Seaman, 2011; Saba, 2005; Sener, 2010). However, leadership within online learning has been overlooked. Leadership is essential to online learning, especially in higher education (Beaudoin, 2013; Diamond, 2008; Garrison & Anderson, 2003; Simonson, 2005). It has been asserted that the leadership skills required of distance learning leaders differ from those within general leadership (Diamond, 2008). Leaders in online learning must also be ready to face the barriers to their success, including numerous organizational factors as well as resistance from stakeholders.

In higher education, adult learners make up approximately 75 percent of the student population (Eckel & King, 2004). However, Knowles’ (1973) theory of adult learning posits that adult learners have different educational needs than traditional learners. Further, because of these needs, there are factors that drive their success or failure in online courses. This review defines adult learners and illustrates adult learning
theory. The five factors that drive adult learners’ success in online learning – community formation, social interaction, external factors, individual learning styles, and information technology – are also presented.

Adult Learners

Adult learners, also referred to as non-traditional learners, were defined by Eckel and King (2004) as students who “possess one or more of the following characteristics: They are age 25 or older, have delayed entry into higher education after completing high school, did not earn a traditional high school diploma, are married, attend part time, work full time, or have children” (p. 7). Indeed, Laitinen (2013) asserted that the majority of students in higher education are more likely to possess characteristics of adult learners; that is, they are more likely to be older than traditional college students, have jobs, attend school part-time, and embrace the flexible learning that comes with online education. Eckel and King estimated that approximately 75 percent of students enrolled in higher education were considered adult learners.

Adult Learning Theory

The theory of adult learning, also known as andragogy, was proposed by Malcolm Knowles (1973). Andragogy posits that adult learners have different motivations for learning, and those motivations are not aligned with traditional pedagogy. Knowles (1973, pp. 57-61) offered four assumptions as to why adult learners had needs that were distinct from traditional learners. As self-directed learners, adult learners can control their own learning experiences. Adult learners also have life experiences acquired outside of a classroom that can be utilized to facilitate their learning experience in the classroom. Because of these life experiences, adult learners also have an internal motivation to acquire
new knowledge; this motivation is often related to their role in life, either social or professional. Lastly, adult learners seek an immediate application for the new knowledge; this means that the learning process must be timely and relevant to meet their needs (Knowles, 1973; Merriam, 2001; Edmunds, Lowe, Murray, & Seymour, 2002).

**Search Strategy**

To identify articles for review, resources from the University library and Google Scholar were used. Search terms included “adult learning,” “e-learning,” “online learning,” “adult online learning,” “online learning success,” “online learning persistence,” “online learning dropout,” “adult online learning dropout,” and “online course success.” Ideal articles contained keywords that included “adult learning,” “online learning,” and “dropout.” Eighteen studies were identified. A review of the literature published in 2005 consisting of articles from 2001 and earlier was identified as part of the search results (Jun, 2005). Because of this, the current literature review focuses heavily on articles published after 2005. Only two of the studies used were published prior to 2005 (Lynch, 2001; O’Connor, Scieford, Wang, Foucar-Szocki, & Griffin, 2003), and neither was used by Jun (2005) in his review of the literature.

There are two limitations to the data collection method used. First, only references with full text available online were used. Second, while Knowles’ (1973) text was used to describe his theory of andragogy, there were no books on the topic identified as potential contributions to the current status of the literature on adult online learning persistence.

**Review of the Literature**

The prominent theme across the current literature on adult online learning is not whether or not adult learners are successful in completing their online courses, but rather five factors, at the individual and class level, that have the potential to influence their
success in a particular online course. The factors discussed are (a) the formation of community within the course that promotes social interaction amongst classmates; (b) satisfaction with the course; (c) external influences related and unrelated to the course; (d) individual learning styles; and (e) information technology skills. These factors are similar to those identified by Jun (2005): individual background, motivation, academic integration, social integration, and technological environment. However, the overall more recent body of literature focused on aspects of adult online learning persistence that were not covered in Jun’s review of the literature, specifically individual learning styles and satisfaction with the course. Additionally, Jun’s review provided an overview of the topic but did not discuss contributing factors of success in depth.

Community Formation and Social Interaction. Lave and Wenger (1991) asserted that establishing communities of practice in online learning environments could promote student interaction and participation. When students are engaged in the course, the dialogue, discussion, and collaboration that occurs in the online learning environment can promote connections amongst peers and improve the capacity for success in the course for not just adult online learners but all students (Coryell & Chlup, 2007; Guldberg, 2008; Mason, 2006; O’Connor et al., 2003; Rieck & Crouch, 2007; Slotte & Tynjälä, 2005; Snyder, 2009; Song & Hill, 2009). Because of the potential for widespread success with the formation of online learning communities, it has been recommended that these online communities of practice be developed in all online courses as a mechanism of support and encouragement for all learners (Blair & Hoy, 2006; Coryell & Clark, 2009; Guldberg, 2008).

Establishing a community of practice for adult online learners is not without difficulties. Garrison, Anderson, and Archer (2000) established a model of a community of
practice with three components. The first component is cognitive presence, which is an individual’s ability to learn in a certain setting. Second, social presence is the ability of an individual to be present regardless of the media being utilized. Lastly, teaching presence is a combination of social and cognitive presences and is reserved for the instructor (Garrison et al., 2000, p. 89). In an online learning environment, it can be difficult to establish a social presence, and thus a teaching presence; this difficulty can impede the formation of an online community of practice. Within the element of social presence, Garrison et al. identified three categories: emotional expression, open communication and group cohesion (p. 89). In an online environment, where the primary means of communication is through text on a screen, it can be difficult to be expressive due to the lack of contextual cues. One study found that, among students in an online course, there was a moderate pervasiveness of negativity amongst students; this same study found a strong pervasiveness of negativity between the students and instructors in the course (Rieck & Crouch, 2007). While there was communication amongst the students and between the students and the instructor, there were no social and contextual cues in the online environment to facilitate the understanding of those communications beyond text. Without emotional expression, there is reduced potential for open communication and ultimately group cohesion within the learning environment. Perceptions of rudeness or disrespect due to the lack of contextual cues can impede the development of a community of inquiry in an online environment (Slotte & Tynjälä, 2005).

Teaching presence, the third component in Garrison et al.’s (2000) community of practice model, also faces issues with implementation in an online learning environment. The instructor is an important element in the online learning process. Because of this, their
influence can be either positive or negative on course completion (Eastmond, 2006). One facet of this is instructor feedback. Instructors who provide feedback to their students, regardless of whether it is positive or negative, are more likely positively influence their students to persist and complete the course (Park & Choi, 2009). If students are not able to get feedback from the instructor, they are at an increased risk of withdrawing from the course. This absence of feedback is likely to negatively impact a student’s effort in the course and overall satisfaction (Ruey, 2010). Clear communication from and with instructors in online courses is also important to student satisfaction; when instructors were able to clearly communicate course requirements, students were more likely to be satisfied with the course (Ausburn, 2004; Song & Hill, 2009). Clear communication from an instructor is an important factor in a student’s success in an online course. Without this communication, students’ learning efforts may be negatively impacted, which can eventually lead to withdrawal from the course.

Course Satisfaction. Another common factor throughout the literature on adult online learning is the learner’s satisfaction with the course (Chyung, 2001; Ke, 2010; Ke & Xie, 2009; Levy, 2007; Park & Choi, 2009). Through a variety of research methods, including case study, mixed methods, and quantitative analyses, two outcomes were found. First, the primary influence on an adult learner’s satisfaction in an online course is the amount of social interaction they engage in with their peers (Ke, 2010; Ke & Xie, 2009). Higher levels of social interaction through discussion board postings, chats, or emails led to a higher level of overall learner satisfaction in the course. Ke and Xie found that a combination of closed- and open-ended questions increased the amount of social
interaction in a course because it led to an increased amount of discussion amongst peers; in turn, this led to an increased level of learner satisfaction.

The second outcome is that an adult online learner’s overall satisfaction with the course influences the decision to persist or dropout of the course (Chyung, 2001; Levy, 2007; Park & Choi, 2009). If the learner experiences a higher level of satisfaction within the course, then he or she is less likely to drop out of the course than a less satisfied peer. This is an interesting but not unexpected follow-up to the finding that the amount of social interaction an individual has with their online classmates drives their overall satisfaction. If a student’s needs are being met through the social aspect of the course, then the students are more likely to feel a connection within that course that makes them more likely to persist and finish the course.

**External Factors.** As compared to traditional students, adult learners often have more commitments outside of the classroom, including families and full-time jobs, among other things (Cercone, 2008). These factors influence the performance of an adult learner and their decision to persist or drop out of the online course (O’Connor et al., 2003). There are motivational factors, however, that can lead to persistence in adult online learning. Career development is a motivating factor for several reasons. First, many adult online learners are often enrolled in courses to enhance their career; they stand to reap the professional benefits once the course (or degree program) is completed (Song & Hill, 2009). The anticipated professional success often fosters individual motivation and persistence to completion of the course. Additionally, when the adult online learner is able to relate class information to their everyday experiences, their motivation level increases and they are more likely to stay in the course (Cercone, 2008; Coryell & Chlup, 2007; Ruey,
2010). Along these same lines, if the goals of the online course community can be aligned with individual goals, such as professional development, the entire community is more likely to succeed (Guldberg, 2008).

Support from external forces, such as their families and their employers, also plays a significant role in whether the adult online learner will successfully complete a course. Ultimately, without the support of the external factors in their lives, adult learners in online courses are more likely to drop out of the course (O'Connor et al., 2003; Park & Choi, 2009). As can be expected, when the adult learners receive support from these entities, their chances for persistence and success in the online course increase significantly (Park & Choi, 2009).

**Individual Learning Styles.** There is a general consensus within the literature that adults are self-directed learners. Additionally, the extent of the self-direct learning that takes place is relatively constant over the duration of a given course (Ruey, 2010; Shinkareva & Benson, 2007). It is thought that adult learners’ preference for the self-directed approach is the primary reason that they have embraced online learning (Mason, 2006). However, within the realm of self-directed learning is a narrower focus on individual learning styles. Though all adult learners generally fall under the andragogy umbrella, individual adult learners have their own style of learning that may alter their approach to learning (Ausburn, 2004; Knowles, 1973). For instance, if an adult learner’s learning style is not compatible with the way an online course is designed, the adult learner is more likely to withdraw from the course (O’Connor et al., 2003). A potential reason for this is the reduction in knowledge acquisition; if the course is not aligned with the student’s learning style, they may not acquire all of the necessary information from the course, while
a student whose learning style is aligned with the course design may be significantly more successful in that environment (Rakap, 2010). One means of identifying the different learning styles of adult learners is to provide a learning style survey (Cercone, 2008; Lynch, 2001). The benefits to this would be twofold: students could determine their individual learning style, and instructors could use the results to develop or modify their course to increase accessibility (Lynch, 2001). Learning style surveys are not without issue, however. Validity and reliability of existing inventories is questionable (Cercone, 2008). Additionally, it is possible that instructors would broadly categorize the results rather than address specific results (Cercone, 2008). It is worth mentioning that in a large course, it may not be possible for an instructor to meet all of their students’ individual learning needs based on a learning style survey due to the potential for a wide variety of needs. Broadly speaking, however, learning style surveys can be utilized to generate modules that meet the needs of adult learners and thus increasing their potential for success in the course (Ausburn, 2004; Cercone, 2008; Rivera-Nivar & Pomales-Garcia, 2010)

**Information Technology Skills.** The last factor that is pervasive throughout the literature on adult online learning is the information technology (IT) skills of adult online learners. The majority of the literature asserts that it is important for adult learners to have IT skills to ensure success in an online course (Mason, 2006; Rakap, 2010; Ruey, 2010). An adult learner’s knowledge and understanding of technology, particularly technology used in an educational setting, can promote success in an online course (Mason, 2006). Also facilitating success in an online course is the concept that adult learners generally have a favorable view of technology; this positive perception of technology can reduce the likelihood of withdrawal from the course (Ruey, 2010). Contrary to this, adult
learners who lack the necessary knowledge of technology or who have negative perceptions of technology are less likely to be successful in an online course (O’Connor et al., 2003).

Slotte and Tynjälä (2005) noted that the primary advantage of technology and online learning is that students can partake in an online course with just an internet connection. While most adult online learners do the majority of their learning offline, having the necessary technological skills to complete assignments, interact with peers, and conduct online research is vital to success in an online course. A deficiency in technical abilities can limit the participation of some learners in the online learning environment; this could negatively affect a student’s learning experience (Ruey, 2010). From a social perspective, the lack of context cues in the online environment can lead to miscommunication with classmates and instructors; this could result in negative feelings about the course and its participants (Slotte & Tynjälä, 2005).

Integration with Theoretical Framework

The adult online learning literature supports several of the CSFs presented by McPherson and Nunes (2006). A summary of these relationships is below.

Community Formation. The formation of an online community of practice increases the opportunity for success for adult online learners (Blair & Hoy, 2006; Coryell & Clark, 2009; Guldberg, 2008). Likewise, McPherson and Nunes (2006) identified “creating and fostering online communities” as an important part of online program success (p. 550).

Stakeholders. McPherson and Nunes (2006) identified “inclusion of stakeholders in planning” and “learner involvement in the design process” (p. 550). This aligns with the
concept of individual learning styles as presented in the literature: if students take a learning style survey and their results are incorporated into the design of the course, then they have become a part of the course planning and design process.

**Careful Consideration.** Because adult learners have different needs than traditional learners, their involvement in online learning can be viewed as “carefully considered” (McPherson & Nunes, 2006, p. 550). The influence of the external factors can determine whether they engage in online learning initially, as well as their potential for success in the online course.

**Technology.** One contributing factor of adult learners’ success in online learning is their IT skills: if they have IT skills, they are more likely to be successful. However, it is also up to the institution through which they engage in online learning to have “reliable and up-to-date technological resources and infrastructures” (McPherson & Nunes, 2006, p. 550). Without these factors present in the institution, the IT skills of the learner are irrelevant.

**Summary**

While adult learners make up a large percentage of students in higher education, factors that influence their success in online learning have been generally under researched. This literature review examined five factors that influence the success of adult learners in an online learning environment. The formation of a community of practice and the social interaction it provides increases adult learners’ potential for success in online learning, as does their overall satisfaction with a course. External factors, including career development, support from family and employers, and timely and relevant knowledge, also contribute to the success of adults in online learning. When courses are tied to individual
learning styles, adult students are more likely to be successful. Lastly, adult learners who have IT skills are more likely to be successful in online learning.

Five of the critical success factors identified by McPherson and Nunes (2006) align with adult online learning. While this is only a small number of the overall CSFs, it includes at least one CSF from every cluster; this indicates that the body of knowledge generally demonstrates an acknowledgement of broad categories of success in online learning.

**Program Leadership in Higher Education**

In higher education, academic departments play a vital role in the success of the organization (Sadeghi & Pihie, 2012). The leaders of these departments fulfill many roles that ensure smooth day-to-day operation and allow department faculty members to focus on their own needs (Sadeghi & Pihie, 2012). However, many department leaders never receive formal training prior to assuming these roles (Ladyshewsky & Flavell, 2012). This review of the literature examines the roles of department leaders and how they are situated in the broader context of higher education leadership. Connections between this literature and the theoretical framework of McPherson and Nunes (2006) will be illustrated at the end of the review.

**Search Strategy**

To identify literature for this review, several resources were used. Search terms for both the University library and Google Scholar included “program leadership in higher education,” “program coordinators in higher education,” “program development in higher education,” “coordinating programs in higher education,” “leading programs in higher education,” “program directors in higher education,” “program directors,” and “program leaders.” One article focusing on program leadership in higher education was found. An
additional 19 articles were identified that discussed program leaders, program coordinators, or program directors in higher education in some manner. These resources were compiled to provide an illustration of program leadership in higher education.

There are two limitations to the data collection method used. First, only references with full text available online were used. Second, there were no books on the topic identified as potential contributions to this body of literature.

**Program Leaders**

Throughout the scant leadership on program leadership, leaders in these positions are referred to by several titles: department heads (Sadeghi & Pihie, 2012), program coordinator (Ladyshewsky & Flavell, 2012), program director (Emanuel, Robinson, & Korczak, 2013; Mwangi, Yamashita, Ewen, Manning, & Kunkel, 2013; Whitsett, 2007), academic leaders (Aasen & Stensaker, 2007), department leaders (Rowley & Sherman, 2003), and program leaders (Buss, Zambo, Painter, & Moore, 2013). Indeed, Ladyshewsky & Flavell identify these terms as well as course coordinator as parallel titles to program coordinator, though this can vary across institutions. For the purposes of this review, the phrase program leader will be used to identify an individual in this role.

At the very least, the program leader is responsible for a program or degree (Ladyshewsky & Flavell, 2012). Sadeghi and Pihie (2012) provided a more comprehensive list of potential program leader responsibilities, including:

- managing the department finances, implementing departmental bylaws and rules to duties such as curricular changes, conduction lecturers’ evaluation, promotion and tenure processes, employing new lecturers and staff, maintaining proper records
about supervising grants and agreements, and finally organizing department’s
general activities such as faculty meetings and social events. (p. 187)

Program leaders provide valuable support roles to the faculty members, staff, and students
within the department (Buss et al., 2013). It is also important that program leaders be able
to fulfill both academic and administrative duties (Rowley & Sherman, 2003).

Program leaders often have multiple roles, including faculty positions (Emanuel et
al., 2013). However, Dunn and Whorton (1987) asserted that there is a difference in the
leadership of a program when they are led by individuals with an academic rank, such as a
faculty member, versus individuals identified as professional staff members. This
difference is visible in the program leader’s service to the division or department: those
with an academic rank tend to minimize the amount of support they provide (Dunn &
Whorton, 1987). One reason for this could be the perception of the program leader role.
Leadership in academia is often perceived as a role to be fulfilled rather than a process of
guiding people toward goal achievement and improving their experience (Askling &
Stensaker, 2002). However, it is important for faculty members to embrace leadership
positions, as they are able to help improve student and faculty experience (Rowley &
Sherman, 2003).

There are several issues with program leadership as an entity identified in the
literature. One issue identified by Ladyshewsky & Flavell (2012) is that program leaders
don’t often have managerial power. Because of this, program leaders must build their
relationships through social and more informal channels in order to ensure compliance
(Ladyshewsky & Flavell, 2012). There can be also barriers between knowledge and
implementation of practice for program directors (Mwangi et al., 2013). These barriers can
be formed, in part, by the lack of managerial power afforded to program leaders (Ladyshewsky & Flavell, 2012; Mwangi et al., 2013). The last issue with program leadership identified in the literature is that the position of program leader is not considered to be a desirable position (Askling & Stensaker, 2002). As previously mentioned, program leaders often have other roles in addition to their responsibilities as program leader (Emanuel et al., 2013). This potential for increased service can detract individuals from seeking out the role (Askling & Stensaker, 2002). Additionally, once in the role, program leaders with academic foci may not be as inclined to fulfill their role with regards to service to the department (Dunn & Whorton, 1987).

**Program Leadership in Higher Education**

Aasen and Stensaker (2007, p. 379) identified four refereeing tasks that face academic leaders on a regular basis:

- “Recognize, identify and interpret external needs, demands and expectations;
- Communicate external demands to colleagues;
- Define the institution’s potential and the resources needed to realize this potential; and
- Communicate internal needs and potentials to ... relevant external stakeholders.”

These tasks face program leaders on a regular basis. The need for collaboration with both internal and external stakeholders establishes the program leader as a boundary leader. Boundary leadership was identified as one of the most relevant forms of leadership for program leaders. Burkhardt (2002) defined boundary leadership as the position of a leader “at the boundary between higher education at large and its interface with society” (p. 145). Certainly, higher education is a combination institutional policy and public policy
(Tupper, 2013). Thus, boundary leadership is a combination of leadership within higher education and leadership outside of that setting (Burkhardt, 2002; Tupper, 2013).

From a program leadership perspective, boundary leadership promotes communication and collaboration between the institution and the environment in which it is positioned. This is vital for the engagement of stakeholders (Smith & Wolverton, 2010). Askling and Stensaker (2002) identified the importance of communication and collaboration with stakeholders, both internal and external to the institution, when change occurs. Nikolou-Walker & Curley (2012) also highlighted that institutions of higher education need to be able to collaborate with internal and external stakeholders to ensure that institutional goals are met. These relationships formed by boundary leaders solidify their roles as both agents of higher education and public interest.

Boundary leadership can play a significant role in program leadership. Whether identifying new lecturers or staff, recruiting students, or marketing the program, having established relationships with stakeholders inside and outside of the institution can facilitate these processes (Sadeghi and Pihie, 2012).

**Preparation for Program Leadership**

It is important to prepare individuals to assume leadership roles (Martin & Marion, 2005). There have been leadership training programs in higher education developed to prepare individuals for new roles, including those roles in program leadership (Aasen & Stensaker, 2007). These programs are often designed to reflect both change and stability within the organizational environment (Aasen & Stensaker, 2007). Aasen and Stensaker also asserted the importance that leadership training be linked to both the structure and the culture of the institution. It is worth noting that there is an acknowledged lack of
professional development available for those in boundary leadership positions (Burkhardt, 2002).

Leadership preparation is especially important for those who are planning to assume program coordinator roles. Many program coordinators do not have formal training prior to entering the role (Ladyshewsky & Flavell, 2012; Whitsett, 2007). However, those participating in leadership training seek to acquire technical skills as well as those skills specific to their new position (Aasen & Stensaker, 2007). There are several skills that program leaders must have in order to be successful. One of these skills is the ability to communicate, both orally and in a written format. Smith and Wolverton (2012) identified the ability to communicate as a vital skill for any leader in a higher education setting. Program leaders also need to be able to engage stakeholders internal and external to the institution so as to generate commitment in movement toward organizational goals and the attainment of the organization’s vision (Askling and Stensaker, 2002; Nikolou-Walker & Curley, 2012; Smith & Wolverton, 2010).

More specific to their work setting, program leaders need to be able to balance the voice of the faculty within their department against other stakeholders (Smith & Wolverton, 2010). This is particularly important if the program leader is also a faculty member (Smith & Wolverton, 2010). Within their department and unit, program leaders need to communicate with faculty and students to ensure that problems are addressed quickly and success is ongoing (Weschke & Canipe, 2010).

Advanced degree programs in higher education, while ideal on the surface, may not be adequate preparation for a leadership role. Eddy and Rao (2009) discussed the role of doctoral programs focused on higher education. These programs are designed to prepare
individuals to be successfully employed in an institution of higher education (Eddy & Rao, 2009). However, many doctoral programs focusing on higher education do not have a leadership component, and this often means that students are not exposed to leadership theory (Eddy & Rao, 2009). While it is thought that this pathway can provide an individual with the necessary training to work in a higher education environment, the lack of a leadership component indicates that graduates of these types of programs may not be fully prepared to lead.

Integration with Theoretical Framework

The literature on program leadership in higher education supports many of the critical success factors (CSFs) identified by McPherson and Nunes (2006). A summary of these relationships are categorized below.

**Stakeholders.** Much of the literature on program leadership in higher education focused on the inclusion of internal and external stakeholders via boundary leadership. McPherson and Nunes (2006, p. 550) also identified stakeholders as a critical aspect of program success via the following CSFs:

- Inclusion of stakeholders in planning;
- Commitment from all stakeholders;
- Student and staff involvement and acceptance;
- Supportive administrative system;
- Learner involvement in the design process; and
- Tutor/academic involvement in the design process.
While the last two CSFs specifically identify stakeholder involvement in the design process, this can fall under the purview of the program leader with regards to the curricular changes identified by Sadeghi and Pihie (2012).

**Collaboration.** As previously mentioned, collaboration with internal and external stakeholders is very important for program leaders. McPherson and Nunes (2006) identified “inter-institutional collaboration” as a CSF for program success (p. 550). This CSF acknowledges the importance of collaborating with entities outside of the institution. Additionally, “organizational communication” was identified as a CSF (McPherson & Nunes, 2006, p. 550). The ability of the program leader to communicate with the organization is essential to their success (Smith & Wolverton, 2012).

**Change.** A program leader’s ability to adapt to and facilitate change is also very important to their success (Aasen & Stensaker, 2007; Sadeghi & Pihie, 2012). McPherson and Nunes (2006) identified “change management leadership” and “willingness to accept change” as critical success factors for program success.

**Budget.** McPherson and Nunes (2006) identified “understanding of resource allocation implication” as a CSF. Sadeghi and Pihie (2012) identified a financial aspect of the role of the program leader, specifically managing program finances. It is important for the program leader to have an understanding of resource allocation.

**Administration.** The program leader is responsible for supporting the academic department. In a manner of speaking, the program leader is the "supporting administrative system" identified by McPherson and Nunes (2006, p. 550). The support role they provide to staff, faculty, and students, in addition to whatever additional position they may have, makes them the department's supportive administrative system.
Summary

Program leaders have a range of titles and job responsibilities. Individuals identified as professional staff are more likely to provide service to the department as compared to those who hold academic positions. Program leaders face issues in their position, including a lack of managerial power and additional roles beyond their program leader title.

Program leaders are well positioned to be boundary leaders. These leaders bridge the gap between higher education and the society, working to build relationships with stakeholders on both sides. Communication and collaboration with both internal and external stakeholders is an important part of a program leader’s position.

While higher education often has opportunities for leadership development, most program leaders have no formal training ahead of entering their role. It is important that program leaders have excellent communication skills and the ability to collaborate with stakeholders. They must also be able to balance faculty, staff, and students within their own department. Advanced education in higher education is often deficient in leadership preparation, making it an inadequate preparation or a leadership role.

Though the literature on program leadership in higher education is scarce at best, it still provides an interesting lens through which to view McPherson and Nunes’ (2006) framework. There are eleven CSFs that align with the program leadership literature, with the vast majority falling under the leadership, structural, and cultural issues cluster.

Leadership in Online Learning

This section explores the literature surrounding leadership and online learning. The extant literature on leadership in online learning is sparse (Beaudoin, 2013; Land & Bright, 2004). First, traditional leadership approaches are presented. These leadership approaches
are expanded to include facets of online learning where the literature is supportive. Programs in online learning leadership are also discussed.

**Search Strategy**

To identify literature for this review, several resources were used. Search terms for both the University library and Google Scholar included “leadership in online learning,” “leadership in e-learning,” “leadership in distance education,” “distance education leadership,” “online learning leadership,” and “e-learning leadership.” This search resulted in 16 articles, zero empirical studies, and one edited book on distance education discussing leadership in an online learning environment. The 16 articles were selected because they discussed leadership and online learning in some way, though for the majority of the articles this combination of terms was not the focus. An additional 20 articles were identified from this search based on their discussion of barriers to success in online learning.

There are two limitations to the data collected. First, the literature covering leadership in an online learning environment is sparse. As I previously mentioned, only 16 articles on were found after an exhaustive search of the literature. Second, much of the literature is dated. The literature covers a period from 2002 to 2013; however, many of the 2013 references are from the aforementioned book on distance education and thus provide only one perspective. Despite these limitations, this review provides a solid foundation illustrating the benefits and challenges facing online learning in higher education.

**Leadership**

There have yet to be any specific leadership approaches developed specifically for leaders in an online learning environment. Within the literature, however, several different
traditional approaches to leadership were recognized as being beneficial to leaders in an online learning setting. These traditional approaches include managerial, transformational, political, and ethical leadership (Diamond, 2008). Each of these types of leadership are described below.

Managerial leadership was one approach that was identified as potentially beneficial in an online setting (Diamond, 2008). Uhl-Bien, Marion, and McKelvey (2007) also emphasized the importance of managerial leadership in an online leadership setting. Managerial leadership is incorporated within the style approach of leadership, which examines leaders' behaviors toward both tasks and relationships with their subordinates (Northouse, 2013). A balance is achieved between tasks and relationships when the leader is able to achieve task-related goals while keeping employee moral high (Northouse, 2013). Managerial tasks identified by Uhl-Bien et al. include planning, acquiring resources to support goals, and managing strategy.

Transformational leadership was another strategy identified by Diamond (2008) as important for leadership in online learning. Both Marcus (2004) and Beaudoin (2013) also identified transformational leadership as an important skill for all distance education leaders. Transformational leadership allows the leader to have a vision of and begin to make the necessary changes in order to grow the group or organization (Northouse, 2013). Northouse defined vision as “an image of an attractive, realistic, and believable future” (p. 197). Vision is a characteristic identified within the leadership in online learning literature as essential for success (Almala, 2006; Beaudoin, 2002, 2003; Berge, 2007; Garrison & Anderson, 2003; Land & Bright, 2004; Levy, 2003; Marcus, 2004; Otte & Benke, 2006; Portugal, 2006; Simonson, 2004; Simonson & Schlosser, 2013; Uhl-Bien et al., 2007). A
leader must also be able to guide others toward the achievement of that vision (Almala, 2006; Beaudoin, 2002, 2003; Garrison & Anderson, 2003; Land & Bright, 2004; Simonson, 2004; Uhl-Bien et al., 2007). Beaudoin (2013) asserted that transformational leaders in distance education must be able to guide stakeholders to recognize the vision and engage in the process of change.

The third type of leadership strategy identified by Diamond (2008) is political leadership. Defined by Masciulli, Molchanov, and Knight (2009) as the ability of a leader to attain the support of their perspective, the relationship between political leaders and their subordinates is cyclical in that each needs the cooperation of the other in order to be successful. Bolman and Deal (2008) identified the use of a political approach as essential to an effective organization. Within a higher education setting, this approach encompasses the ability of the distance learning leader to get support not only from within their own department but also from other institutional entities with whom which partnerships could be mutually beneficial.

Ethical leadership is the last leadership strategy by Diamond (2008). Ethical leadership is not a specific type of leadership; rather, the focus is on the conduct and the character of the leader themselves and how these elements interact (Northouse, 2013). Northouse identified three ways leaders could demonstrate these elements. The first way is through ethical egoism, when the leader is focused on obtaining the optimum result for themselves (Northouse, 2013). Utilitarianism, the second way a leader can demonstrate their conduct and character, is the concept of providing the most benefit at the least cost (Northouse, 2013). Lastly, altruism is when a leader maximizes benefits to others at a cost
to themselves (Northouse, 2013). While altruism is most in alignment with transformational leadership, utilitarianism is more aligned with online learning as a whole.

Combined, Diamond (2008) referred to these leadership strategies as strategic leadership theory. Ultimately, leaders in an online learning setting must have a vision, be able to lead others toward said vision, be able to accomplish tasks, keep employee morale high, obtain support from within and outside of their department, and do all of this while maximizing benefits and minimizing costs; these elements are present throughout traditional leadership approaches. However, there is not one traditional leadership approach identified that has all of these elements. This is congruent with the literature, with leader competencies identified as the capacity of knowing, designing, managing, leading, and visioning distance education and doing so in alignment with organizational needs (Land & Bright, 2004; Simonson, 2004; Simonson & Schlosser, 2013).

**Barriers to Successful Leadership in Online Learning**

In addition to having vision and being able to guide others to the achievement of such a vision, online learning leaders must also be able to address and overcome barriers to online learning, as these barriers can impede successful leadership (Dobbins & Berge, 2006). Sener (2010) identified three overarching challenges the adoption and implementation of successful online learning programs throughout higher education: organizational factors, financial constraints, and collaboration with stakeholders. This section examines these issues in detail and their potential impact on distance learning leadership while highlighting the corresponding CSFs presented by McPherson and Nunes (2006) in their theoretical framework.
Organizational Factors

Three organizational factors pose significant barriers to online learning: industrialization, strategic planning, and sustainability. Each is discussed below.

**Industrialization.** Higher education is moving into the industrial paradigm, where growth is rapid and the goal is to provide a quantity of education (Beaudoin, 2002, 2003, 2013; Cox, 2005; Schejbal, 2012). This is in direct conflict with the history of change, as higher education has not undergone significant transformation in over 100 years (Cronin & Bachorz, 2006; Saba, 2005). The current state of higher education is a combination of rapid technological changes and stagnant university culture (Beaudoin, 2013; Duhaney, 2005; Hill, 2012). This foray into industrial approach by higher education seeks to make online education available to as many students as possible at a lower cost to the institution (Diamond, 2008; Olcott, 2006; Saba, 2005). The advances in technology have made this possible, and higher education has progressed toward this philosophy with online learning (Tuomi, 2013).

One of the primary functions of higher education is maintaining democracy and capitalism in American society (Cox, 2005). Labaree (1997) identified social efficiency and social mobility as two of the competing goals in American education. Labaree argued that the goal of social mobility had moved to the forefront of education, with the primary purpose being the importance of the academic credential. The movement to the industrialization of higher education via online learning suggests that the social efficiency movement may be returning, at least in postsecondary education: with increased access, more individuals have the opportunity to participate in advanced learning. However, Cox asserted that the growth of online education promotes access to education but not the
completion of credentials, perpetuating social stratification within society and ensuring that only the upper classes of society can attain educational credentials. With what appears to be forward progress, it is possible that higher education may be simultaneously moving backward.

The movement toward the industrialization of higher education through online learning is being driven by two factors: the desire for colleges and universities to remain competitive in the marketplace and the potential cost savings by using fewer resources to serve more students (Cox, 2005; Cronin & Bachorz, 2006; Jung & Lee, 2013; Schejbal, 2012). By adopting and growing online education, institutions are projecting legitimacy to their potential students by imitating the actions of other institutions (Bolman & Deal, 2008; Cox, 2005). While these large-scale adaptations for online learning provide institutions with increased legitimacy regarding their educational strength, there has been little discussion as to the potential impact on educational quality (Bowen, 2012; Cox, 2005). In some instances, institutions have implemented online learning as a cost-savings mechanism and as a result compromised educational quality (Cox, 2005; Cronin & Bachorz, 2006; Legion, 2013). This reduction in the quality of education poses a challenge to the concept of open access in higher education, specifically in that increased access to a potentially sub-standard product may not benefit learners. Cronin and Bachorz asserted that higher education would retain traditional instruction because of an emphasis on the quality of students; however, the push to increase the quantity of students may lead to an overall reduction in educational quality. Inglis (2013) cautioned that producing a quality online product that facilitates learning is “an endeavor which has far greater cost implications” than are often realized by institutions of higher education (p. 516).
While some administrators in higher education see academia as a venue for risk-taking, particularly with regard to online learning, colleges and universities are being forced to adapt (Cox, 2005; Mathews, 2013). With the rapid development and adoption of various online learning approaches, university administration is facing a more rapid decision-making process (Hill, 2012). A distance learning leader’s ability to make administrative decisions is essential for their success (Almala, 2006; Garrison & Anderson, 2003; Uhl-Bien et al., 2007). Nonetheless, it is also important that the decision-making process does not result in disruption at either the program or institutional level (Sullivan, 2012). The rigid structure of traditional higher education makes the adoption of the less structured online learning into this setting a challenge (Kop, Fournier, & Mak, 2011). In order to be successful, Reimers-Hild and King (2009) and Land and Bright (2004) recommended that distance learning leaders utilize an entrepreneurial approach, including strong leadership, a meaningful vision, and continuous innovation as a means to draw institutional support. Ultimately, without organizational support, online learning cannot be successful (Berge, 2007; Kern, 2010).

**Strategic planning.** It has been revealed that online learning is often not part of an institution’s strategic plan (Allen & Seaman, 2011; Levy, 2003). Strategic planning is essential to determine how changes, both inside and outside of the institution, will affect the institution’s ability to fulfill its mission (Merolle, 2008; Watkins, Kaufman, & Odunlami, 2013). Inclusion of online learning in an institution’s long-term strategic plan allows the institution to not only determine if online learning meets a specific need of the university, but if so, it also provides an opportunity plan for online learning and address recruitment efforts for this group of learners that may be out of their current targeted group (Kern,
2010; Watkins, 2006; Watkins et al., 2013). Conducting a needs assessment would be beneficial to any institution considering developing a new online program or expanding a current online program (Watkins et al., 2013). Institutions need to be clear about what is necessary for them to not just function but also thrive (Winston, 1997).

In addition to directing the institution's actions, the organization's strategic plan also influences the creation, design, and execution of online learning (Watkins, 2004). A successful online learning leader will use the university's mission, goals, and strategic plan as a guide when making decisions regarding their online programs to ensure alignment with the organizational strategy (Land & Bright, 2004; Watkins, 2004). This is supported by McPherson and Nunes (2006): alignment of project development with organizational view, alignment of teaching strategy with organizational view, alignment of technological infrastructure with organizational view, and organizational vision were all identified as CSFs for online programs (p. 550).

**Sustainability.** McPherson and Nunes (2006) identified both the creation of sustainable solutions and a sustainable organizational e-learning strategy as CSFs for a successful online program (p. 550). The literature surrounding sustainability and e-learning offers several different approaches. The first, presented by Merolle (2008), defines sustainable online learning in the form of recruitment and retention. This approach focuses on attracting students to the online programs and generating program enrollments as well as ensuring students stay the course and complete the program in which they are enrolled. As the program is able to recruit and retain students, it will meet the sustainability definition as provide by Merolle.
Diamond (2008) extended Merolle’s (2008) concept of sustainability past recruitment and retention to the change and innovation within the program. With regard to program changes and innovation, Diamond asserted that these aspects of online learning programs must be self-sustaining over time in order to be successful. Further, changes and innovations that are not sustainable will not be adopted by the program or by the institution (Diamond, 2008). While Tice (2011) declared that innovation is an essential component of online programming, it is also important that such innovation is adoptable and sustainable (Rogoza, 2007). An inability to sustain innovative change could reduce the potential for a distance learning leader’s success. Garrison and Anderson (2003) also put forth that while innovation is believed to be an important aspect of online learning, true transformation is rare and must be guided by strong leadership in order to be successful.

Beaudoin (2013) situated Merrolle’s (2008) and Diamond's (2008) concepts of sustainability within a broader higher education context; that is, determination of whether the program is sustainable while positioned within a traditional higher education context. From an institutional perspective, online programs need significantly more support than traditional programs in order to survive and thrive in this setting (Beaudoin, 2013). Institutions of higher education, as previously mentioned, are notoriously stagnant (Cronin & Bachorz, 2006; Saba, 2005). Christensen (2007) asserted that innovation, and thus change, is disruptive. However, this disruption is necessary in order for institutional growth, particularly with regard to online learning (Christensen & Eyring, 2011). With disruptive change, online programs are more likely to survive in higher education (Beaudoin, 2013).
Buchen (2008) put a more ecological spin on the concept of sustainability in online learning. Taking an eco-learning approach, Buchen that because of the reduced commuting required with online courses for both students and faculty, and also the reduced need for on-campus power resources such as electricity, online learning provides institutions with a more environmentally-friendly approach to learning.

Both Merolle’s (2008) and Diamond’s (2006) approaches to sustainability most closely compliment the CSFs provided by McPherson and Nunes (2006). While Buchen’s (2008) slant on the sustainability of online learning does not appear to align with McPherson and Nunes interpretation of sustainability, it does provide another lens through which to view e-learning.

Financial Constraints

One of the primary issues in developing an online education system is addressing student needs while maintaining a level of cost effectiveness (Jung & Lee, 2013; Saba, 2005). Though online learning has been widely implemented as a cost-savings mechanism for higher education, many institutions have not accounted for the costs of establishing such a system and have instead only focused on the potential benefits. McPherson and Nunes (2006) asserted that the organization must not only have an understanding of resource allocation implications but also be willing to provide funding in order to have a successful online learning program (p. 550) A lack of cost-benefit analyses in education are a result of a lack of demand from policy makers, a lack of individuals capable of carrying out the analyses, and a failure to address the effectiveness of alternative practices (Levin, 2001). While online learning does indeed appear to be the most cost-effective way to provide more students with learning opportunities, a failure to assess the costs and
benefits as well as alternatives to this approach is fiscally irresponsible. Both Bowen (2012) and Levin asserted that a cost-benefit analysis is a critical step to determine if change is necessary or beneficial. Bolman and Deal (2008) also identified technology as an uncertainty within an organization; a cost-benefit analysis is one way that an institution can still explore advances in technology while weighing the risks and advantages.

Institutional budget issues related to the growth of online learning are tied to a lack of existing infrastructure (Bowen, 2012; Sener, 2010). An insufficient technological infrastructure is a significant barrier to online learning (Berge, 2007; Sanders, 2011). Bowen asserted that the initial cost of implementing online education is far more than the ongoing maintenance costs, though those are often underestimated as well. However, once the infrastructure is in place, it can support the growth of online learning and generate revenue for institutions (Sener, 2010). Along the same lines, McPherson and Nunes (2006) identified generalized support infrastructures, reliable and up-to-date technological resources and infrastructures, and robust data protection systems as CSFs for successful online learning programs (p. 550). Ultimately, Simonson (2005) asserted that without a strong distance learning leader, it is unlikely that effective technological implementation for online learning would take place.

One cost-effective option for institutions looking to implement online learning includes acquiring pre-developed courses. Schejbal (2012) asserted that rather than utilizing institutional resources to develop online courses, colleges and universities have the option to purchase complete online courses. Hill (2012) added that colleges and universities also have the option of having outside companies run the online programs as well in a school-as-a-service model. These options, however, can be financially draining on
institutions at the same time institutions are trying to lower their costs. Inglis (2013) identified reusable open educational resources (OER) as a mechanism for institutions to offer more cost effective online learning. Yet another option includes collaboration between institutions as a means of broadening offerings without the investment of time and resources of actually developing additional offerings (Bowen, 2012; Duhaney, 2005; Land & Bright, 2004). McPherson and Nunes (2006) identified inter-institutional collaboration as a critical success factor for online learning program success, but cross-institution partnerships also have the potential to allow institutions to expand their e-learning options at a lower cost.

Collaboration with Stakeholders

Within their framework, McPherson & Nunes (2006) identified several CSFs involving stakeholders: inclusion of stakeholders in planning, commitment from all stakeholders, student and staff involvement and acceptance, learner involvement in the design process, tutor/academic involvement in the design process, and supporting administrative system (p. 550). The literature on distance learning leadership further supports these CSFs. Both Amala (2006) and Beaudoin (2013) asserted that distance learning leaders must be able to not only identify stakeholders but identify and address their needs as well. Amala identified the stakeholders in e-learning environments as learners, instructors, technical support staff, and leaders. In order to be successful, distance learning leaders need to have strong relationships with all stakeholders (Amala, 2006). Leaders also need to acknowledge the roles and influences of the stakeholders and incorporate them as a bottom-up approach to policy and decision-making (Berge, 2007;
McPherson & Nunes, 2006). However, there are obstacles in place for stakeholders in e-learning environments, which distance learning leaders need to be prepared to address.

**Faculty and online learning.** Faculty members participating in online programs face several issues as stakeholders. One such issue is the lack of administrative support (Cox, 2005). The decision to implement online learning at an institution is traditionally administrative in nature with the expectation that the faculty will be able to carry out the process (Cox, 2005). Programming decisions for online learning are being made more so with the market in mind rather than the knowledge and experience of the faculty (O’Malley, 2012; Saba, 2005; Schejbal, 2012). Institutions often are unable or unwilling to provide administrative support to faculty who are selected to participate in online learning (Cox, 2005).

Just because they are often selected to participate in online learning endeavors does not mean that faculty are not amenable to the concept. Faculty willingness to engage in online learning varies across groups. Faculty, specifically tenured and tenure-track, are primarily intrinsically motivated to engage in online learning (Shattuck, 2013). Types of intrinsic motivators include “personal or socially derived interactions; personal or professional growth; personal challenge; altruistic; and career-enhancing” (Shattuck, 2013, p. 391). Faculty, specifically non-tenured, full-time, part-time, and adjunct, are more likely to be extrinsically motivated to participate in online learning. Extrinsic motivators include “support services; training opportunities in technology skills; design and instructional support; and awareness of sound student support services” (Shattuck, 2013, p. 391). Faculty who experienced online learning as students are more likely to be agreeable to teaching online (Shattuck, 2013). Conversely, faculty who have more years of teaching
experience are less likely to be agreeable to teaching online (Shattuck, 2013). Mitchell and Geva-May (2009) identified administrative perceptions of faculty attitudes toward online learning as a limitation in implementing or expanding online programs.

Another issue facing the traditional faculty model in online learning is the intellectual ownership of online courses. Once the courses are developed, they are often considered property of the institution (Talab, 2007). This allows the institution to not only repeatedly offer the course but also use adjunct faculty or graduate assistants as less expensive facilitators (Duhaney, 2005; Hill, 2012; Schejbal, 2012; Talab, 2007). Under the industrialization model, this means that higher education institutions are able to reduce their costs while providing increased access to students. It is also notable that this is the same model used by for-profit institutions as well (Hill, 2012; Schejbal, 2012). Talab (2007) suggested that with the increased use of technology, the intellectual property rights of faculty members may change, but policies will likely vary across institutions. McPherson and Nunes (2006) also identified CSFs stating that intellectual property and copyright policies need to be in place so as to clearly illustrate who owns materials and courses developed for online use (p. 550).

Lastly, faculty members are often not provided with professional development in preparation to teach online (Sener, 2010). Developing and teaching online courses is more intensive than preparing a traditional face-to-face course (Sener, 2010; Shattuck, 2013). Faculty members exist in a post-modern culture where technology is plentiful, yet their work in academia has generally not embraced technology at the same rate (Diamond, 2008; Schejbal, 2012). However, when faculty attain online course development and facilitation experience, they become less resistant to online learning as a whole (Hill, 2012; Sener,
2010) and are even more likely to embrace online learning (Shattuck, 2013). There is a difference between putting a face-to-face class online and redeveloping a class for online optimization (Cox, 2005). Having faculty who can design and facilitate online courses is imperative; without them, institutions may not be able to grow or meet the demand of their online programs (Sener, 2010). In order for faculty to fully embrace online learning they will need to change their teaching philosophies, practices, and course design to accommodate a student-centered model of adult learning (Fini, 2009; Kop et al., 2011; Tuomi, 2013). Good communication between practitioners and management can lead to suitably aligned staff development and training and help to establish suitable learning models to enhance the faculty's professional development; these components were all identified as CSFs by McPherson and Nunes (2006, p. 550). Additionally, McPherson and Nunes identified recognition and reward systems as a CSF for an online program (p. 550). Institutions could implement such a system as a means of motivating faculty to enhance their online learning skills.

**Students and online learning.** While faculty buy-in is essential to ensure that online courses are created and taught, student enrollment is crucial for online courses and programs to succeed. Both improved access and the ability to accommodate a variety of learning styles are benefits that have resulted from the increased availability and visibility of higher education. Student enrollment in online courses and programs can be driven by their access to higher education and the necessary technology as well as the perception of online learning to meet their immediate needs.

**Access.** One of the significant benefits of improved availability and visibility of online learning is the increased access to higher education (Hill, 2012; Sener, 2010). While
this benefit of increased access is particularly salient for adult learners, it also provides colleges and universities with access to a broader range of students (Duhaney, 2005; Sener, 2010). Online learning allows institutions to provide more options for more students at a lower cost (Sener, 2010). In turn, this has the potential to significantly increase student enrollment, providing a means of institutional sustainability (Sener, 2010).

An advantage of increasing access to higher education through online learning is the potential cost savings for both students and institutions. While Hill (2012) also asserted that traditional online education should also decrease student costs to colleges and universities, Inglis (2013) and Jung and Lee (2013) were both clear that online learning is not as cost-effective as was initially anticipated. This is in part due to the anticipation by institutions that the implementation of online learning will reduce their costs and concurrently increase enrollment. Even with increases in enrollment, software and hardware must be maintained and upgraded so as to maintain the quality of the online learning experience (Jung & Lee, 2013). Jung and Lee identified some potential cost savings to students, including reduced cost of travel and lower course fees. These cost savings make online learning an attractive alternative to a traditional, classroom-based learning experience.

Just because online education has significantly increased access to higher education does not mean that everyone has access to it. Jung and Lee (2013) acknowledged that while online learning expands options for learners based on access and flexibility, access to online education is still not widespread, especially on a global level.

**Needs.** The appeal of online learning has stemmed from the desire and ability of students to take control of their own learning (Knowles, 1973; Mason, 2006). This self-
directed approach to learning provides students with the flexibility to balance their education and life activities (Cercone, 2008; Fini, 2009; Knowles, 1973; Mason 2006; Park, 2007). Hadre (2009) asserted that motivating students by making the learning process relevant to their needs was essential in order for self-directed learning to take place. Zaharias (2009) further emphasized the importance of motivating students through the instructional design of online courses. When adult learners are motivated in an online learning environment, they are more likely to direct their own learning experience and have a positive experience (Wuebker, 2013). With adult learners comprising more than 75 percent of students in higher education, and with the opportunity provided to them by online learning, ensuring their not only their success but also their satisfaction is vital (Eckel & King, 2004).

In addition to allowing students to focus on their own experience, online learning also provides instructors with the opportunity to address many different learning styles in one setting (Cooper & Sahami, 2013; Matthews, 2013; Tuomi, 2013). Generally, online learning allows faculty to deliver materials to students in a variety of formats (Duhaney, 2005; Hill, 2012). With the ability of online learning to meet a broader range of student learning needs, students are more likely to be successful (Allen, Omori, Burrell, Mabry, & Timmerman, 2013). One way to determine if students’ needs are being met within distance education is to have them evaluate their experience in online learning, whether in individual courses or from a programmatic perspective. McPherson and Nunes (2006) identify both learner involvement in the design process and student/staff involvement and acceptance as CSFs
Gathering and utilizing learner feedback would allow students to have more input in the process and address their role as stakeholders in online learning.

**Alignment with Theoretical Framework**

The literature on leadership in online learning supports several of the elements in the framework provided by McPherson and Nunes (2006). Categorical similarities are discussed below.

**Industrialization.** Industrialization in higher education is in a period of rapid growth and change. Leaders need to be prepared to guide their institutions successfully through the change process. McPherson and Nunes (2006) identify “change management leadership” as a CSF; in order for programs, departments, and institutions to be successful, change management leadership must be a priority (p. 550).

**Strategic Planning.** In order for a program to be successful, it has to be in alignment with the needs and visions of the organization. Several CSFs identified by McPherson and Nunes (2006, p. 550) promote this:

- Alignment of project development with organizational view;
- Alignment of teaching strategy with organizational view;
- Alignment of technological infrastructure with organizational view; and
- Organizational vision.

These CSFs align with the strategic planning needs of higher education institutions.

**Sustainability.** Most of the literature surrounding sustainability in higher education does not refer to the eco-friendliness of the program but instead whether or not the program can sustain itself financially. McPherson and Nunes (2006) identified two CSFs regarding sustainability: “sustainable organizational eLearning strategy” and “creation of
sustainable solutions” (p. 550). Both of these CSFs are important for online programs to be successful.

**Stakeholders.** As identified in the program leadership literature, stakeholders are an imperative part of leadership in online learning. McPherson and Nunes (2006, p. 550) identified several CSFs that included stakeholders:

- Inclusion of stakeholders in planning;
- Commitment from all stakeholders;
- Student and staff involvement and acceptance;
- Supportive administrative system;
- Learner involvement in the design process; and
- Tutor/academic involvement in the design process.

Collaboration with stakeholders is an important factor in the success of online programs. Additionally, it is important for leaders to be able to include stakeholders in their processes to ensure all perspectives are represented.

**Credit.** Within the faculty realm, recognition for the work they do is one barrier to successful online learning. A second barrier is the ownership of the materials created for online courses. Both of these barriers are addressed by McPherson and Nunes (2006) with “recognition and reward systems” and “intellectual property and copyright policy” (p. 550).

**Summary**

Within the leadership in online learning literature, four types of traditional leadership were identified: managerial, transformational, political, and ethical. These leadership models were combined into one strategic leadership theory, which is as close to
one leadership approach as the literature gets, as there is no singular leadership approach that combines all of the traits identified yet unproven as essential for online leadership.

There are several barriers to success in online learning. Organizational barriers include industrialization, strategic planning, and sustainability. Financial constraints are also a barrier to success in online learning. Stakeholders, including faculty and students, are essential in order for online learning to be successful.

This literature contained fifteen of McPherson and Nunes’ (2006) critical success factors. While there were many barriers to success in online learning identified, alignment with the theoretical framework shows that, if addressed, online learning can and will be successful.

**Implications for Future Research**

There are several potential directions for future research. One direction for future research involves determining the leadership styles and traits of successful online leaders. As I previously mentioned, the desired traits of an online leader as identified in the literature are not isolated under any specific leadership approach; rather, the traits are distributed across several different approaches. A second direction involves the analysis and assessment of programs developed to prepare individuals for leadership in online learning. Lastly, further research needs to be conducted on McPherson and Nunes’s (2006) critical success factors for online leadership to ensure that the CSFs are adjusted and remain relevant as online learning continues to grow.

**Conclusion**

Sener (2010) asserts that online learning will completely transform higher education within the next five to ten years. However, in order for that transformation to be
successful, leaders in online learning must be willing and able to guide that process.

Further, leadership preparation is important. Online professionals must be able to guide individuals into leadership roles and ensure that they have the skills and training necessary to ensure not only their own success but also success for all students in online learning.

Much of the focus of research to this point has been on topics relevant to successful online leadership but not inclusive of the leadership aspect of online learning. Moreover, this lack of information on leadership in online learning has been acknowledged throughout the literature. A failure to ensure that adequate leadership is in place may have detrimental effects on the institution and potentially online learning as an entity.
Chapter Three

This chapter is focused on my research design and methods. First, the embedded case study research design is discussed and my research questions are restated. The context for the study is discussed in detail, as well as the approaches I utilized to gain access to the program and my participants. The last section focuses on my research methods, including sampling, study participants, data sources and analysis, limitations, trustworthiness, and data management.

Research Design

The overall qualitative approach to this evaluation was a case study methodology. Known for its ability to provide rich and detailed information on a particular topic, the case study approach was defined by Hatch (2002) as investigating “a contextualized contemporary ... phenomenon within specified boundaries” (p. 30). Merriam (2009) similarly defined the case study approach as an “in depth description and analysis of a bounded system” (p. 38). In this study, the contemporary phenomenon is leadership in online learning. The bounded system, and thus the overall unit of analysis, is the first iteration of the online graduate certificate program, with the single iteration equal to one complete academic year (September to August).

In order to conduct a thorough evaluation and provide compelling answers to the aforementioned research questions, an embedded single case study was utilized. Yin (2014) defined the embedded single case study as a single case with sub-units of analysis. The following units were identified as units within the first iteration of the online graduate certificate program: the program developers (group), the program faculty (group), the program participants (group), and program artifacts. Each of these sub-units was used to
provide a complete picture of the overall unit of analysis. A continuous focus on the overall unit of analysis is important with the embedded case study design; Yin warned against focusing on the sub-units of analysis and losing sight of the overall case study. In conjunction with this, Yin also stated that investigation needed to be conducted at the level of the overall unit of analysis to ensure that the overall unit of analysis does not become a setting for the analysis of the sub-units. Different levels of investigation (program, faculty, participant, artifact) are discussed in the next section.

Merriam (2009) identified strengths and weaknesses associated with a case study research design. Strengths of the case study design include the ability to conduct in depth research of complex phenomena and the ability to generate insight and meaning of said phenomena (pp. 50-51). Case study research has been identified as ideal for educational research, specifically program evaluation (Merriam, 2009). Drawbacks of the case study approach include the ability to generalize findings to other groups or situations (Merriam, 2009). Shenton (2004) identified four strategies for ensuring trustworthiness in qualitative research; these strategies are discussed in the methods section. Overall, the benefits of the case study methodology combined with the strategies to address the weaknesses of this particular methodology made this the best approach for this study.

**Research Questions**

This study sought to answer the following questions:

1. What are the online leadership program students’ motivations for participating in the graduate certificate program?
2. What leadership, structural, and cultural gaps existed between development and implementation?
3. What design, technological, and delivery issues did the program faculty face in the first year implementation of the certificate program?

4. In what ways have the two completers used their new knowledge and skills within their current jobs and how do they anticipate their use to be in the future?

Context and Gaining Access

Context of the Study

The setting for this study was an online graduate certificate program at a Midwest Research-I university. The Leadership in Online Learning (LDOL) certificate program was established in early 2012 and first offered to students in the 2012 fall semester. Despite the growth of online education, leadership preparation has been deficient at best (Land & Bright, 2004). The LDOL certificate aims to fill this void in online leadership preparation with the goal of preparing “online practitioners [to] understand key pedagogical, support, design, and legal factors in leading online programs, online education initiatives, and quality improvement plans” (Graduate Certificate Program Approval Guidelines, 2012). Upon successful completion of the five courses, program participants receive a graduate-level credential in online leadership.

The LDOL certificate has six established learning outcomes. Upon completion of the certificate, it is asserted that students will be able to:

1. “Identify and overcome the primary challenges of leading an online program;
2. Evaluate online learning creation and assessment tools and determine which are useful for various applications;
3. Facilitate collaboration between and support of online faculty and students;
4. Lead the online course design and creation process;
5. Identify and overcome the primary legal issues in online education; and

6. Evaluate resource allocation, program development and sustainability of online education” (Graduate Certificate Program Approval Guidelines, 2012).

In order to facilitate the achievement of these outcomes, five courses were created and aligned with the outcomes: Collaboration and Support in Online Education, Leadership and Administration of Online Education, Methods of Online Course Development, Tools for Online Learning Creation and Assessment, and Legal and Ethical Issues in Online Education. Each course is three semester credit hours. The certificate is 15 semester hours in its entirety. In order to complete the certificate, all five courses must be completed.

While the courses were not designed to be sequential, making their order of completion unimportant, they were designed to be complimentary in content and provide students with a breadth of knowledge.

**Gaining Access**

Shenton and Hayter (2004) identified multiple approaches to gain access to both an organization and study participants in qualitative research. In order to gain access to the LDOL program, I integrated three approaches. One approach was the “known sponsor” approach (Shenton & Hayter, 2004, p. 224). When I approached the program coordinator about my idea, she was enthusiastic to receive feedback and supported my research. I was also able to draw on my participation in the program and the connections I had forged. This was very valuable in gaining access to the program. Additionally, due to my completion of the certificate program in the summer of 2013, I had thoroughly demonstrated my knowledge of online learning to the program coordinator, the faculty, and my two program participants. This contributed to my acceptance by the group.
The approaches I utilized to gain access to the program were also utilized to gain access to my program developer and faculty participants: the sponsorship of the program coordinator, prior participation in the program, and demonstrated knowledge of the field. Established relationships with the faculty from my time in the program enabled my access to all study participants.

In order to gain access to my program participants, I utilized a strategy by Shenton and Hayter (2004) identified as “prolonged engagement” (p. 228). Taylor and I were in all five certificate courses at the same time; this allowed me to “gain the trust of and … develop a rapport” with her through our experience. Buffy and I were in three of the certificate courses together. Though this was a shorter time frame than that with Taylor, I was able to develop a connection with her through our shared experience in the program. Because of the connections I established with Taylor and Buffy while I was in the program, they were willing to participate in my study.

**Research Methods**

This section discusses the specific research methods utilized in this study. Sampling, participants, data sources and analysis, limitations, trustworthiness, and data management are discussed below.

**Sampling**

Purposive sampling was used to identify participants (Merriam, 2009; Mertens, 2010). Due to the embedded nature of the case study, there were three different levels of participants: program developers, program faculty, and students. Program developers were identified by the Program Coordinator and are defined as individuals who played a significant role in the development of the certificate program. There are seven individuals
who were identified as program developers for the LDOL certificate. Of these seven individuals, six are still employed by the University. All seven program developers were asked to participate in one of two focus groups via email. The email text can be found in Appendix C.

The program faculty members were identified as those who were listed as the instructor of record for a minimum of one course in the LDOL certificate program in its first year. Each course had one instructor of record, and no faculty member taught more than one course in the first year of the certificate course offerings; this means there were a total of five program faculty. As someone who enrolled in and completed all five certificate courses, all program faculty were identified based on my experience with the program. Program faculty were asked to participate in one-on-one interviews via email. The email text can be found in Appendix C.

At the student level, the criterion for inclusion in the sample was the completion of all five certificate courses by the end of the Fall 2013 semester. Because the program is new, there were only three individuals, including myself, who met the criteria; however, the small sample was provided insight into the initial pilot of the certificate program. Individuals who were enrolled in the certificate program and had completed all five courses or were in the process of completing the five courses were asked to participate. As someone who enrolled in and completed all five certificate courses, I had access to the course rosters as a prior student. I identified two total students who met this criterion. One student had completed all five courses in the first iteration; the other student had completed three courses and was enrolled in the last two courses. The students were asked
to participate in one-on-one interviews via email. The email text can be found in Appendix C.

**Participants**

Six of the seven individuals who were part of the certificate’s program development were able to participate in the program developer component of the study. This includes five of the six individuals who were employed by the University at the time this study took place as well as the individual who was involved in the development of the LDOL certificate but had since left the University. Table 1 provides an overview of the program developers who were able to participate.

Table 1

*Program Developer Overview*

<table>
<thead>
<tr>
<th><strong>Pseudonym</strong></th>
<th><strong>Role at the University</strong></th>
<th><strong>Participation</strong></th>
<th><strong>Years of Experience in Online Learning</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sally</td>
<td>LDOL Program Coordinator Faculty Member, School of Education</td>
<td>Focus Group</td>
<td>3.5</td>
</tr>
<tr>
<td>Ryan</td>
<td>Faculty Member, School of Education</td>
<td>Focus Group</td>
<td>10</td>
</tr>
<tr>
<td>Lindsey</td>
<td>Academic Director, Online Learning, School of Education</td>
<td>Focus Group</td>
<td>14</td>
</tr>
<tr>
<td>Candace</td>
<td>Instructional Designer outside the School of Education</td>
<td>Focus Group</td>
<td>13</td>
</tr>
<tr>
<td>Samantha</td>
<td>Faculty Member, School of Education</td>
<td>Interview</td>
<td>(Unknown)</td>
</tr>
<tr>
<td>Louise</td>
<td>Assistant Dean, School of Education**</td>
<td>Focus Group</td>
<td>15</td>
</tr>
</tbody>
</table>

**Louise is no longer at the University but was an Assistant Dean during the program development process.**

As previously mentioned, all five program faculty members were initially identified as program developers; their background information will be discussed in the next section.
Two participants were involved only as program developers in the certificate development process: Louise and Samantha. Background information on these individuals is below.

**Louise.** Louise has been involved in online learning since 1999. With a doctorate of education in higher education administration, she started as the director of an online education program within the College of Education. She then became the director for all online programs for the college, including “marketing, student support, and instructional design needs.” Louise has had several leadership roles within the field of online learning. She was the co-chair for an Online Learning Task Force at the University level. On a national level, Louise has also been involved in several initiatives, including the development of a report card for online learning. Prior to leaving her position at the college, Louise was an assistant dean. Though she left the University in 2013, she still works in higher education and online learning. Additionally, she has been teaching online intermittently over the last ten years in both undergraduate and graduate programs.

**Samantha.** Samantha’s background is more specialized, focusing on signed language and technology (University website, 2014). Her technology focus includes videoconferencing, synchronous, and asynchronous online learning environments (University website, 2014). She has program development experience, including the development of a specialization in signed language at the University (University website, 2014). She is a faculty member at the University and has a doctorate in education. Samantha has service and leadership experience at the national level; however, the majority of this experience is focused within her field of specialization rather than online learning as a discipline (University website, 2014). Her leadership experience includes co-chair of a journal in her field and a conference chair position focused on
technology and communications (University website, 2014). Samantha has experience working both with special populations and in multiple types of online environments.

The program faculty participants were the five faculty members who each taught one class in the first cycle of the LDOL certificate. This group overlaps significantly with the program development group: as previously mentioned, five of the seven total certificate program developers were also the program faculty for the certificate courses. Table 2 provides an overview of the program faculty.

Table 2

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Role at the University</th>
<th>Years of Experience in Online Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sally</td>
<td>LDOL Program Coordinator, Faculty Member, School of Education</td>
<td>3.5</td>
</tr>
<tr>
<td>Ryan</td>
<td>Faculty Member, School of Education</td>
<td>10</td>
</tr>
<tr>
<td>Lindsey</td>
<td>Academic Director, Online Learning, School of Education</td>
<td>14</td>
</tr>
<tr>
<td>Candace</td>
<td>Instructional Designer outside the School of Education</td>
<td>13</td>
</tr>
<tr>
<td>Denise</td>
<td>Director of Distance Learning outside the School of Education</td>
<td>10</td>
</tr>
</tbody>
</table>

All of the program faculty members participated in some degree in the program development process. The background information on these individuals is as follows.

**Sally.** Sally started out as a faculty member at another university, where she was for about six years. She “started working with people in [her] program, fellow faculty members ... when they wanted to set up a blog” or set things up in the learning management system. Sally also attended “every workshop that was ever offered,” including those about online
learning. She eventually transitioned into online learning, focusing on instructional design; Sally was actually the first instructional designer at her institution, spending a year there prior to transferring to the University approximately two and a half years ago. Her background in online learning is more practical; she noted that while she does have a masters degree, “most [people who are in online learning] have very little training other than on the job,” as “it’s been relatively recently that there are any degrees in online learning.” Sally’s leadership experience “has mostly been promoting faculty development [and] leading faculty development work teams.” Her administrative experience to this point has been centered on the LDOL certificate program.

Sally’s original thoughts when designing the Methods course was that it was “intended for lead instructional designers that have to lead a team, that have to work with instructional designers, that have to work with librarians, and have to work with subject matter experts.” She has since reimagined the course to focus solely on instructional design, removing the focus from leading a team. The Legal Issues course, she said, “really came out of conversations with several of our faculty members in special education, who teach other legal classes, talking to other professionals in online learning, wondering where [the] gaps in knowledge [are].” One concern with the subject material in the Legal Issues course is that “the issues change constantly, because the law around it changes constantly, the statutes change constantly.” This led Sally to “give the students the tools they need,” rather than providing students information that could change at any time.

**Candace.** Candace has been involved in online learning for about thirteen years and teaching for close to twenty-seven years. She was involved in a program that “had a lot of nontraditional students, people who’d never planned to go to college, and now suddenly
had to, to keep their livelihood ... This online option was pretty much all they had.” Candace was also an instructional designer within the University’s information technology department, developing “courses and learning objects for faculty all over the University.” In terms of leadership within online learning, Candace has “been a forerunner, early adopter of a lot of different technologies, spoken at several conferences, [and] written a couple of articles.” She’s conducted workshops and managed an instructional design and content group as well. She “was the person in [her] department, in [her] unit, that everybody else came to get help with technology.”

With regard to her Tools course, Candace said that she knew what she wanted to share, especially when it came to “walking [students] through a project where [they] design and build learning content.” In addition to the technical components, Candace also “wanted to model the kinds of good teaching practices that [she] had learned over the years that ... [are] important in the leadership certificate program.”

Ryan. Ryan has over ten years of “experience with online learning from very different perspectives.” After becoming a facilitator via a graduate assistantship, he “became involved with organizing and hosting and helping lead facilitator meetings.” After earning his doctorate in education, Ryan then became an Assistant Academic Director of the distance learning program that he had worked in as a facilitator for four years. This formal leadership position provided him with “specific and more detailed responsibilities that included program evaluation, management of course evaluations, [and] assisting faculty in course development and design.” He then transitioned to a faculty position in the summer of 2012, at the start of the LDOL certificate program.
In designing the first iteration of the Leadership course, Ryan noted that there was not a depth of literature to draw from regarding leadership in online learning. Regarding this, he said:

Leaders of online education are dealing with people every day face to face and that inter-personal relationships matter. Those that skill set, there is a management component that is unique and specific to online education. But the core of leadership, which we’ve heard others talk before, even at this table, you’re dealing with people.

The initial offering of the Leadership course focused primarily on leadership with very little discussion of the role of the online learning environment. This explanation clarifies his rationale behind the course content.

Lindsey. Lindsey has about fourteen years of experience in online learning. She is also the only faculty member who taught in the first iteration of the LDOL certificate program to have a credential in online learning; she has a certificate in distance education that she earned in 2001 as well as a masters degree in education. One of the things Lindsey likes about online learning is that “many times, it tends to bring in the non-traditional learners, it gives access to people that need access. It tends to bring in people who have more practical experience as knowledge.” Lindsey started as a videoconferencing specialist, providing professional development in technology to teachers. Lindsey has been at the University for six years, starting as a program coordinator for an online education program and eventually becoming an Academic Director in Education. In her current position, Lindsey has multiple roles related to and within online learning: she is a point of contact with an outside online learning vendor as well as a “liaison between [the vendor and the
programs]” and “making sure faculty have what they need.” She also provides supports to students, works state authorization for online learning, and teaches online.

While Lindsey has an extensive background in online learning and leadership within the field, she did not develop the content for the Methods course; instead, Sally developed the majority of the content as Lindsey taught the course. There was some collaboration between Sally and Lindsey, as Lindsey said that Sally would build a presentation and then she would provide the audio for the narration. Lindsey also said that, because of the way the course was constructed, she did not often see the materials more than a day or two ahead of her students. The development of the methods course was primarily done utilizing “just in time” design.

**Denise.** Denise’s experience began in the corporate field with a company specializing in online learning services. She worked in program management, “focused on the retention end of courses and students, getting them what they needed, getting started” in online learning. Denise’s interest in instructional design began while she was “working with faculty to get their courses developed” within the corporate setting. She then transitioned to an instructional design position within the University, working with a program that was entirely online for about two years. This position involved working “with all the faculty, very closely, in developing their courses, in training faculty.” For the past three years, Denise has been the Director of Distance Learning for a college within the University; this is an administrative role that focuses on “liaison with … vendors, program outcomes, and faculty development.”

In developing her Collaboration and Support course, Denise combined her corporate and higher education experiences. She relied “heavily on [her] experiences and the day-to-
day battles of how hard it can be to support bigger ideal and how at the end of the day, it’s about our students and it’s about our faculty.” She also identified the administrative balance between making sure students and faculty members have what they need and meeting the Dean’s needs as well. Her every day experience, as well as her 10 years of experience, were the basis for the development of her course.

There were two student participants. Taylor (pseudonym) completed all five certificate courses at the end of the summer 2013 semester and at the time the study took place was employed in a job that utilizes the skills acquired in the certificate program. Buffy (pseudonym) completed all five certificate courses at the end of the fall 2013 semester. Buffy was also employed in a position to use the skills acquired in the certificate program at the time the study took place. These individuals were identified because of their ability to provide practical feedback as to the utility and benefit of the certificate program from a workplace setting. Kearsley (2013) asserted that one use of program evaluation is to determine the impact of the program on a graduate’s career; in this study, I used this approach to determine the transferability of skills from the certificate program to the participants’ careers (p. 429). Table 3 provides an overview of the participants.

Table 3

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Occupation</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taylor</td>
<td>Instructional Designer, Higher Education</td>
<td>Took all 5 courses in the first iteration of the LDOL program</td>
</tr>
<tr>
<td>Buffy</td>
<td>Adjunct Faculty Member Intervention Specialist</td>
<td>Took courses 3-5 in the first iteration and courses 1 and 2 in the second iteration of the LDOL program</td>
</tr>
</tbody>
</table>

Background information for each participant is provided below.
Taylor. Taylor became involved in online learning “through the opportunity of being an adjunct” while on staff at the University. While her initial adjunct experience was face to face, she was soon teaching courses that were completely online. Regarding this transition, she said:

The transition from being a face-to-face teacher to an online is really intimidating. In the beginning I thought that it was limiting. I didn’t know how to utilize the online environment, so I wanted to learn as much as I could to try to make my classes as I could make it online.

Taylor was able to transition from face-to-face teaching to online teaching. Ultimately, she embraced online learning:

I found that the online learning environment, if designed and utilized well, using best practices that I’ve learned, it can be a much better learning environment for students and diverse learning. It can be more accessible to all students if it’s designed that way.

At the time of our interview, Taylor was an instructional designer at a college. The instructional design process is very collaborative: “each department has a dean who is also a faculty, so they also teach classes. They come together on committees and boards, and so everything is very well thought out and strategically planned at the college.” In her specific role, Taylor said that she was considered to be “the expert in the whole college for a lot of things” because of the skills she acquired from the program.” She elaborated, stating the “laws of accessibility and copyright are critical, play a huge part. ... I am the one that flagged that as something we need to consider ... so in all of the conversations, I am looked to as the expert.”
At the time she was enrolled in the LDOL program, Taylor was considered to be an adult learner per Eckel and King’s (2004) definition. She was 25 or older, attended school part-time, worked full time, and had children. This also means that the assumptions in Knowles’ (1973) theory of andragogy are applicable to Taylor’s learning experience.

**Buffy.** In her professional life, Buffy has two roles. One role is an adjunct faculty member in an online graduate certificate program at the University. She has been teaching online since the inception of that program more than eight years ago. Buffy is also an intervention specialist for elementary students at a local school district on a part-time basis. While her intervention specialist position does not primarily occur in an online setting, her position as an online adjunct faculty member is very much focused in an online environment.

Buffy became involved in online learning through the creation of the online graduate certificate program she teaches within. Regarding her start in online learning, she said:

The program I teach in was brand new at the time. I was invited to a planning meeting, and we all sat down. They said, we want you to teach this. That’s how I got started with it, and I love it.

She went on to add that her program is one hundred percent online. Within the program, she’s “been asked to do different types of things and lead different meetings,” which places her in a position of leadership within the online program.

In Buffy's part-time position as an intervention specialist, online learning is used as “a supplement ... to the education,” but is not used directly as a means of instruction. Collaboration is also supposed to be a part of her role, as she co-teaches one section;
however, Buffy says that due to the fact that she is only there for a short amount of time, it has been difficult to form the collaborative relationship with her co-teacher. In addition to the co-teaching, she is directly involved in a leadership position, as she is in the process of “initiating and implementing a brand new program.” This program will be discussed further in conjunction with her work sample as part of research question four.

At the time she was enrolled in the LDOL program, Buffy was considered to be an adult learner per Eckel and King’s (2004) definition as she was 25 or older and married. This also means that the assumptions in Knowles’ (1973) theory of andragogy are applicable to Buffy’s learning experience.

In total, there were nine participants. This small sample size is a result of the significant overlap between the program developers and the program faculty. According to Patton (2002) and Merriam (2009), there is no rule for determining the size of a sample in qualitative inquiry as long as the necessary data is acquired. The small sample size allowed for more in-depth data acquisition while still obtaining multiple perspectives.

**Data Sources**

Data were collected from multiple sources in order to provide a more complete evaluation of the program (Creswell, Hanson, Plano Clark, & Morales, 2007; Merriam, 2009). The primary source of data from this study was individual informational interviews with the program participants and program faculty. These interviews were semi-structured. Merriam (2009) characterized semi-structured interviews as having predetermined open-ended questions that are flexible and used to guide the interview. A number of questions in the program participant interview protocol were aligned with critical success factors (CSFs) from McPherson and Nune’s (2006) theoretical framework.
All CSFs were coded, and these were inserted after the pertinent questions in each protocol. In the program participant interview protocol, questions 1-4 were designed to obtain background information. Questions 5, 7, 7a, 8, 11, 12, and 13 were broad enough that any CSF could correspond to the student’s answer and were labeled “all codes possible.” Question 9 asked the participant to describe their work sample; this question was not labeled due to the unknown context of the work sample. Questions 5a, 6, 10, and 10a were aligned with categories of CSFs. A sample of each type of question is presented in Table 4.

Table 4

<table>
<thead>
<tr>
<th>Question</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. How did you find out about the Leadership in Online Learning certificate program?</td>
<td>Background information</td>
</tr>
<tr>
<td>11. Which skills or knowledge from the program have been the most beneficial to you in your job?</td>
<td>All codes possible</td>
</tr>
<tr>
<td>9. You provided a sample of work. Describe what it is and its function in your organization. Did your experience in the certificate program influence this sample?</td>
<td>Work Sample – no label</td>
</tr>
<tr>
<td>10a. How have your peers, stakeholders, and learners influenced your work?</td>
<td>CSF: LSC15, LSC28, LSC29, LSC30, Des6, Des8</td>
</tr>
</tbody>
</table>

It is worth noting that each of the questions associated with CSFs are associated with more than one CSF. This is because the CSFs address different aspects of the question. For instance, with question 10a, different contributors identified within those CSFs include students, staff, practitioners, management, learners, tutors, and stakeholders (McPherson and Nunes, 2006). If tutors did not influence the participant’s work, then the Des8 CSF becomes irrelevant; however, its inclusion acknowledges the potential for that response.
The program faculty interview protocol did not have any questions aligned with specific CSFs for two reasons. First, several questions were broad enough to elicit a range of response. This led to labeling questions 3, 6, 9, 10, 11, and 12 as “all codes possible.” Second, questions 5, 7, and 8 asked the faculty members to reflect on their course development and implementation process. While it was possible that their responses could align with one or more CSFs, any CSF alignment was done during the data analysis process due to the reflective and unpredictable nature of the questions. The remaining questions on the faculty interview protocol (1, 2, and 4) were designed to obtain background information. A sample of each type of question (background, all codes possible, and reflection) is shown below in Table 5.

Table 5

<table>
<thead>
<tr>
<th>Question</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Describe your experience with online learning.</td>
<td>Background information</td>
</tr>
<tr>
<td>3. How did your previous experience influence the development of the course?</td>
<td>All codes possible</td>
</tr>
<tr>
<td>7. How do you think the course went the first time you taught it?</td>
<td>Reflection</td>
</tr>
</tbody>
</table>

A complete list of the CSF codes and their meanings can be found in Appendix B. The student participant interview protocol can be found in Appendix D, while the program faculty interview protocols can be found in Appendix E. Three variations on the program faculty interview protocol were used. As Ryan did not receive course evaluations from the first iteration of his Leadership course, the second program faculty interview protocol omits the question relating to evaluation feedback. The third program faculty interview protocol includes the question modified for Denise.
Interviews were conducted over the first two weeks of December 2013, at the end of the Fall Semester of the 2013-2014 academic year. Each interview lasted approximately 40 minutes and was conducted in the setting of the participant’s choice. Each interview was audio recorded with the participant’s consent and transcribed by an outside source. Each transcript was reviewed for accuracy upon completion. A copy of the consent form for student participants is located in Appendix H. A copy of the consent form for the program faculty is located in Appendix I.

A second source of data was the focus groups that were conducted with the program developers. As the development of the LDOL certificate program was a team endeavor, a focus group was the ideal way to bring the program developers together to discuss the motivations behind the development of the program as well as the development process itself. Open-ended, semi-structured questions were used to guide the discussion of the focus groups. Again, a number of questions were aligned with CSFs from McPherson and Nune’s (2006) framework. Questions 1 and 2 were designed to elicit background information and were identified as such. Questions 7 and 10 were broad enough that any CSF could correspond to the answer; these questions were labeled “all codes possible.” Questions 5, 8, 9, and 11 were specific to the program and the University and thus did not have appropriate corresponding CSFs. Questions 3a-3f, 4, and 6 were aligned with categories of CSFs. A sample of each type of question is illustrated in Table 6.
Table 6

Sample Program Developer Focus Group Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. How did each of you become involved in the process of developing the program?</td>
<td>Background Information</td>
</tr>
<tr>
<td>7. Now that the program has gone through its first iteration, what are some of the strengths of the program?</td>
<td>All codes possible</td>
</tr>
<tr>
<td>9. For those of you who are not teaching courses in the program, what is your continued role, if any?</td>
<td>Program-specific</td>
</tr>
<tr>
<td>4. How were the certificate courses developed to meet [the goals of the program]?</td>
<td>CSF: Des1-12, Del1-6</td>
</tr>
</tbody>
</table>

As with the program participant interview questions with CSFs, multiple CSFs are associated with each question so as to include all of the potential CSFs that specific question addresses. In the instance of question 4, as shown in Table 6, all twelve of the design goals and all six of the delivery goals are included because of their focus on design and delivery. For example, Des3 is “balanced collaborative multi-skilled design and development,” and Del1 is “establishing an ethical delivery roadmap” (McPherson & Nunes, 2006). These, as well as the other design and delivery CSFs, are factors to consider in course and program development, making them relevant to question 4.

As I previously mentioned, a complete list of the CSF codes and their meanings can be found in Appendix B. The focus group protocol can be found in Appendix F. Two focus groups were conducted. The first focus group had two program developers attend. The second focus group had three program developers attend. Each focus group lasted approximately 40 minutes, and both focus groups were conducted in the same location. The focus group was audio recorded with the consent of the participants and transcribed by an outside source. Both transcriptions were reviewed for accuracy upon their
completion. A handout of the program goals taken from the Graduate Certificate Program Approval Guidelines (2012) was provided to the participants to facilitate discussion. This handout can be found in Appendix G. All focus group participants were asked to sign a consent form. A copy of the consent form is located in Appendix J.

Of the seven program developers, two were unable to attend either focus group. One was a program faculty member, and the other was a program developer who did not teach in the program during its first iteration. I interviewed the non-faculty program developer utilizing the focus group protocol in an attempt to obtain a more complete perspective of the program development process from a non-faculty perspective. This interview was recorded with the program developer’s consent and transcribed by an outside source. The transcription was reviewed for accuracy upon its completion.

Denise, the program faculty member who was unable to attend either program developer focus group, was interviewed separately regarding her role as a faculty member in the first iteration of the program. The program faculty interview protocol includes a question regarding the role of program development in their course development; this question was modified slightly to address the program development role of this program faculty member. Table 7 illustrates the difference between the question as poised to the rest of the faculty and the question poised to Denise.

Table 7

<table>
<thead>
<tr>
<th>Program Faculty Interview Protocol Question</th>
<th>Question Modified to Address Denise’s Involvement in Program Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>What role did the program development process play in course development? (Background information)</td>
<td>What did your role in the program development process play in your course development process? (Background information, program development)</td>
</tr>
</tbody>
</table>
Artifacts provided another source of data. Four types of artifacts were collected: course evaluations for the courses offered during the first year of the program, syllabi from each course, work samples from participants, and course information from the University’s eCurriculum system. The course syllabi, eCurriculum content, and course evaluations underwent content analysis, while the work sample was used to demonstrate skills the participants acquired from the program.

With regard to evaluations, each course in the five-course certificate was offered once by the end of Summer Semester 2013. While course evaluations were not made available for course number two due to technical issues, the remaining four courses all have completed student evaluations. With the permission of the program coordinator and the participating faculty members, these evaluations were acquired and analyzed for content for use in the interview process; this was done to elicit feedback from faculty members on their students’ perceptions of the course. This was done as a means of triangulating student feedback on the courses with faculty perceptions of the courses (Merriam, 2009). The data analysis methods will be covered in the next section.

The syllabi from the initial offering of each course, as well as the University-level information for each course were also collected. The syllabi were analyzed for alignment across the course descriptions, course objectives, and unit titles using a set of terms generated through a content analysis of McPherson and Nunes’ (2006) theoretical framework. The syllabi were also examined for their alignment with the course descriptions and objectives established in the University's eCurriculum system. This not only examined the course information for alignment with McPherson and Nunes’ critical success factors for online learning, but it also demonstrated if and how faculty members
deviated from what the program developers initially established. More information on this process follows in the next section.

Lastly, program participants were asked to provide a sample of their work from their current place of employment (with any identifying information removed). During the interview process, the participants were asked to explain how that specific sample of work was influenced by what they learned in the certificate program. This data was also be triangulated as part of the content analysis, described in more detail in the next section.

Data Analysis

Interviews and Focus Groups. The audio recordings of the participant and program faculty interviews, the program developer interview, and the program developer focus groups were transcribed by an outside source to facilitate data analysis. All transcriptions were reviewed for accuracy upon their completion. Two types of analysis were used to analyze the data generated through the interviews and focus groups: interpretive analysis and typological analysis.

Interpretative analysis was used to generate meaning from qualitative data (Hatch, 2002). Impressions of the data were identified through reading and re-reading the data, and these impressions were generated into codes based on the evidence provided (Hatch, 2002). Data, in this case from the focus groups and interviews, were used to support the emergent codes (Hatch, 2002). In this study, interpretive analysis was used to generate and refine codes to create themes from the data. There was no pre-established framework used to generate codes; rather, all codes were derived from the interview and focus group data.

Typological analysis, also referred to as topic coding, utilizes pre-generated codes or topics as lenses through which to view the data (Hatch, 2002; Richards & Morse, 2007).
Supporting or challenging evidence is then identified within the data to determine the validity of the codes. This approach was used to verify the themes generated through the interpretive analysis, providing an additional layer of validity to the findings. In addition to data that support the main ideas, data that contradict the main ideas was coded as well so as to provide a complete representation of the program. Each transcript was coded twice using both interpretive and typological analyses so as to ensure diligence.

After each transcript was coded, any relevant CSFs were identified and attached to each code. The codes were then separated into categories based on the research question that the data was to address. The categories for each research question can be found in Table 8. As both supportive and contradictory evidence was coded, words such as “issues” and “gaps” were omitted from the categories.
Table 8

*Research Question Categories for Coding*

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What are the online leadership program students’ motivations for participating in the graduate certificate program?</td>
<td>• Motivations for participation</td>
</tr>
<tr>
<td>2. In what ways have the participants used their new knowledge and skills within their current jobs and how do they anticipate their use to be in the future?</td>
<td>• Transferability of skills</td>
</tr>
<tr>
<td>3. What leadership, structural, and cultural gaps existed between development and implementation in the first year of the certificate program?</td>
<td>• Leadership</td>
</tr>
<tr>
<td></td>
<td>• Needs Assessment</td>
</tr>
<tr>
<td></td>
<td>• Leadership Experience</td>
</tr>
<tr>
<td></td>
<td>• Structural</td>
</tr>
<tr>
<td></td>
<td>• Collaboration</td>
</tr>
<tr>
<td></td>
<td>• Stakeholders</td>
</tr>
<tr>
<td></td>
<td>• Organizational Alignment</td>
</tr>
<tr>
<td></td>
<td>• Program Content</td>
</tr>
<tr>
<td></td>
<td>• Sustainability</td>
</tr>
<tr>
<td></td>
<td>• Cultural</td>
</tr>
<tr>
<td></td>
<td>• Need for the Program</td>
</tr>
<tr>
<td></td>
<td>• Target Audience</td>
</tr>
<tr>
<td></td>
<td>• Communication</td>
</tr>
<tr>
<td></td>
<td>• Community</td>
</tr>
<tr>
<td></td>
<td>• Collaboration</td>
</tr>
<tr>
<td>4. What design, technological, and delivery issues did the program faculty face in the first year implementation of the certificate program?</td>
<td>• Design</td>
</tr>
<tr>
<td></td>
<td>• Time Frame for Design</td>
</tr>
<tr>
<td></td>
<td>• Creativity or Structure?</td>
</tr>
<tr>
<td></td>
<td>• Technological</td>
</tr>
<tr>
<td></td>
<td>• Access to Software</td>
</tr>
<tr>
<td></td>
<td>• Learning Management System</td>
</tr>
<tr>
<td></td>
<td>• Delivery</td>
</tr>
<tr>
<td></td>
<td>• Clear Communication with Students</td>
</tr>
<tr>
<td></td>
<td>• Overall Impressions</td>
</tr>
<tr>
<td></td>
<td>• Gaps in Student Leadership Preparation</td>
</tr>
</tbody>
</table>

For example, Research Question 4 considers design, technological, and delivery issues that faculty faced in the first year of implementation. Based on the research question, the codes
from the faculty interviews were separated into categories identified as design,
technological, and delivery to facilitate analysis. This allowed for a wider range of codes to be categorized for analysis.

**Codes.** As I previously discussed, interpretive coding was used to generate codes from the focus group and interview data. The interpretive codes were then categorized based on the categories generated from the research questions. Through the typological coding processes, supporting evidence was sought for codes generated from the interpretive coding process.

There were ten codes generated through the analysis of the data from the program developers. Table 9 shows the salient codes generated from the program developer focus group analysis.
Table 9

Program Developer Focus Group Codes

<table>
<thead>
<tr>
<th>Category</th>
<th>Code</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>Needs Assessment</td>
<td>Determining the difference between what is and what should be</td>
<td>&quot;I would be really curious about the initial needs assessment that was done to...Are we meeting these people's needs?&quot;</td>
</tr>
<tr>
<td>Leadership</td>
<td>Leadership Experience</td>
<td>The amount of prior leadership experience of the program coordinator prior to assuming her role</td>
<td>&quot;I mean, the number one challenge I think was putting someone in charge of a graduate certificate that has never created a program before and is learning on the job.&quot;</td>
</tr>
<tr>
<td>Structural</td>
<td>Collaboration</td>
<td>Collaboration that took place amongst program developers in the early stages of program development</td>
<td>&quot;We met on numerous occasions, and I don't know that I recall the methodology, if it was in person or...I know that we broke up into small groups at one point as well...&quot;</td>
</tr>
<tr>
<td>Structural</td>
<td>Stakeholders</td>
<td>Any individual or group affected by the program</td>
<td>&quot;It was more just faculty collaboration.&quot;</td>
</tr>
<tr>
<td>Structural</td>
<td>Organizational Alignment</td>
<td>The ability of the program to align with the needs of the organization</td>
<td>&quot;{[We're] still kind of trying to figure out how this looks, and in many cases we're just trying to figure out how online learning looks at this institution.}&quot;</td>
</tr>
<tr>
<td>Structural</td>
<td>Sustainability</td>
<td>The ability of the program to support itself via enrollments, marketing, and resources</td>
<td>&quot;... The reality is [as] we grow as an institution, the new programs happening are online.&quot;</td>
</tr>
<tr>
<td>Cultural</td>
<td>Need for the Program</td>
<td>A need for the program in the field of online learning as a whole</td>
<td>There are very few “credit bearing credential bearing programs specifically about online leadership.”</td>
</tr>
<tr>
<td>Cultural</td>
<td>Target Audience</td>
<td>The audience for whom the program was intended</td>
<td>&quot;The target audience was both higher ed or K-12 educators who are providing leadership in online courses or fully online programs.”</td>
</tr>
<tr>
<td>Cultural</td>
<td>Community</td>
<td>A group of individuals coming together with shared interests</td>
<td>&quot;And so I know there’s people in the classes that still talk to each other. Even though they’re online students, they may have never physically met, they still talk to each other and feel like they can collaborate and have colleagues now that they can talk to.”</td>
</tr>
<tr>
<td>Cultural</td>
<td>Collaboration</td>
<td>Collaboration that took place amongst faculty members during and after course implementation</td>
<td>&quot;I think it would be helpful if everybody who teaches in the program could maybe sit down and talk together but, you know, [to] - schedules being what they are, that's difficult.&quot;</td>
</tr>
</tbody>
</table>
Additional codes generated included Technology, Synchronous, and Credential. Credential was absorbed into Need for the Program. The other codes were not relevant to the stated research questions and thus were not utilized in the data analysis.

As with the analysis of the program developer data, there were ten codes generated with the analysis of the program faculty interviews. Table 10 shows the significant codes generated from this analysis.

Table 10

**Program Faculty Interview Codes**

<table>
<thead>
<tr>
<th>Category</th>
<th>Code</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>Time Frame</td>
<td>The amount of time faculty members had to design their course</td>
<td>&quot;... it was less than a week before the course started that there was verification that I was actually teaching the class.&quot;</td>
</tr>
<tr>
<td>Design</td>
<td>Course Content</td>
<td>The volume of information contained in the course</td>
<td>&quot;Content comes last. I tried really, really hard not to start with content, which is where we all default to.&quot;</td>
</tr>
<tr>
<td>Design</td>
<td>Course Rigidity</td>
<td>How structured or flexible the course should be</td>
<td>&quot;I want everybody to be super creative because part of the process, getting to the objective is the most important part so you need to achieve this outcome.&quot;</td>
</tr>
<tr>
<td>Technological</td>
<td>Software</td>
<td>Issues with software during a course</td>
<td>&quot;I was concerned, for instance, that you guys would have access to the tools that I knew we'd need to use.&quot;</td>
</tr>
<tr>
<td>Technological</td>
<td>Learning Management System</td>
<td>Issues with the learning management system during a course</td>
<td>&quot;That was the first time I'd actually used the inline rubrics on [the learning management system].&quot;</td>
</tr>
<tr>
<td>Delivery</td>
<td>Communication</td>
<td>Faculty members’ perceptions of communication with students</td>
<td>&quot;I think the biggest [challenge] was when you think you're clear and then you find out that what you think you said isn't what everybody heard.&quot;</td>
</tr>
<tr>
<td>Delivery</td>
<td>Feedback</td>
<td>Formative and summative responses provided to students</td>
<td>&quot;I would say that I was not doing feedback as quickly as I wished I'd have been giving feedback.&quot;</td>
</tr>
<tr>
<td>Delivery</td>
<td>Evaluations</td>
<td>Students’ feedback on the course</td>
<td>&quot;Much like the evaluations [said], I would like to be much more visible in the class.&quot;</td>
</tr>
<tr>
<td>Delivery</td>
<td>Implementation Impressions</td>
<td>How the faculty members perceived the first iterations of their courses</td>
<td>&quot;I was thrilled. Please understand, first of all, my bar for the first time a course runs is pretty low.&quot;</td>
</tr>
<tr>
<td>Delivery</td>
<td>Gaps in Student Leadership Preparation</td>
<td>Faculty members’ perceptions of the ability of their course to prepare students for leadership roles in online learning</td>
<td>&quot;Because the course isn't strictly aimed at leadership, I'm not sure that by itself that you would go out and become an eLearning leader.&quot;</td>
</tr>
</tbody>
</table>
Additional codes generated during the analysis of the program faculty interviews included Changes in the Second Iteration of Courses and Desired Future Changes. However, these codes were not relevant to my research questions and thus were not used. Additionally, while the course evaluations did have their own code, this data were collapsed into the appropriate codes based on the content of the evaluations. Feedback was also collapsed into communication because it is a type of communication the faculty member has with a student.

I identified eleven codes through the analysis of the program participant interview data. The salient codes are identified in Table 11.
<table>
<thead>
<tr>
<th>Category</th>
<th>Code</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation</td>
<td>Experience</td>
<td>How the student became involved in online learning</td>
<td>&quot;That is how I became involved with online learning, through the opportunity of being an adjunct.&quot;</td>
</tr>
<tr>
<td>Motivation</td>
<td>Knowledge of Program</td>
<td>How students came to know about the program</td>
<td>&quot;I just got online and was looking at our own programs that we have.&quot;</td>
</tr>
<tr>
<td>Motivation</td>
<td>Leadership Component</td>
<td>The influence of the leadership aspect of the certificate in the students’ participation</td>
<td>Re: Influence of leadership component: &quot;It really did. It was the only program that was offered, and I was open to any possibilities because I didn't know what I needed or what to do.&quot;</td>
</tr>
<tr>
<td>Motivation</td>
<td>Professional Development</td>
<td>How the students planned to use the skills in a professional setting</td>
<td>&quot;So that was my main goal, was to see what else is out there that I could actually implement to improve my classes, my online courses.&quot;</td>
</tr>
<tr>
<td>Motivation</td>
<td>Credential</td>
<td>Attainment of the graduate certificate</td>
<td>&quot;I did want to receive credentials to enable me to do this type of work.&quot;</td>
</tr>
<tr>
<td>Transferability</td>
<td>Most Beneficial Aspect</td>
<td>The aspect of the certificate that the students found to be most valuable to their experience</td>
<td>&quot;Yeah, that’s been the biggest benefit, actually learning, practicing the technology and then implementing it.&quot;</td>
</tr>
<tr>
<td>Transferability</td>
<td>Least Beneficial Aspect</td>
<td>The aspect of the certificate that the students found to be least valuable to their experience</td>
<td>&quot;I can think of a few different assignments that I’m thinking, ‘Am I ever going to use this again?’&quot;</td>
</tr>
<tr>
<td>Transferability</td>
<td>Safe Learning Environment</td>
<td>The students’ ability to test their skills in an environment without risk</td>
<td>&quot;I didn't feel free to try the stuff, try the materials without...I just didn't feel free to try and experiment with the different things that we were talking about or learning about.&quot;</td>
</tr>
<tr>
<td>Transferability</td>
<td>Skills</td>
<td>Specific skills that students were able to transfer from the certificate to a professional setting</td>
<td>&quot;Definitely learning new technologies to incorporate.&quot;</td>
</tr>
<tr>
<td>Transferability</td>
<td>Work Sample</td>
<td>The students’ ability apply what they learned in the program to their professional setting</td>
<td>&quot;... In the leadership course I created a needs assessment and that’s the work sample, ... this was the first time that I’ve made it a full formal process, so that was something new.&quot;</td>
</tr>
<tr>
<td>Transferability</td>
<td>Leadership Characteristics</td>
<td>Characteristics identified by the students as important for online leaders</td>
<td>&quot;You definitely need to be a people person. You also have to be confident and outspoken.&quot;</td>
</tr>
</tbody>
</table>
Additional codes generated during the analysis of the program participant interviews included collaboration, support, and communication. However, these codes and their supporting evidence concerned primarily the specifics of their professional role and not the use of the program in said role. Because of this, these codes were not part of the analysis.

**Member Checking.** Throughout the analysis process, I utilized respondent validation, also known as member checking (Merriam, 2009). This process entailed asking participants for feedback on themes and codes that emerged during data analysis. Maxwell (2005) stated that member checking is “the most important way of ruling out the possibility of misinterpreting the meaning of what participants say and do and the perspective they have … as well as being an important way of identifying [the researcher’s] own biases and misunderstanding of what [was] observed” (p. 114). While there is no recommendation regarding the frequency of member checking, I contacted participants and program faculty once during the coding process and at the end of the analysis process for their feedback. During the coding process, I created a table of themes and examples from each participant. The themes were codes that appeared more than one time in the data. Table 12 is part of the summary provided to Sally from her interview.
Table 12

_Sally's Interview Summary_

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience</td>
<td>&quot;I was the first instructional designer at [another university].&quot;</td>
</tr>
<tr>
<td>Leadership Experience</td>
<td>&quot;... my leadership experience has mostly been promoting faculty development, leading faculty development work teams.&quot;</td>
</tr>
<tr>
<td>Credential</td>
<td>&quot;It’s been relatively recently that there are any degrees in online learning. The vast majority of us who’ve been in online for a while have no degree in online learning, mostly just on the job training.&quot;</td>
</tr>
</tbody>
</table>

For the focus groups, I generated similar summaries based on reoccurring codes that appeared in the focus group. The themes were generated based on codes that appeared more than once throughout the focus group; in other words, if three people provided one piece of data relevant to a specific code, that code was identified as a theme for the focus group. Table 13 is part of the summary that was provided to Candace from the first focus group.
Table 13

Candace’s Focus Group Summary

<table>
<thead>
<tr>
<th>Theme</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement in Program Development</td>
<td>&quot;I don't know a lot about the background. ... Not really very much [involved in the development of the program] other than my specific course.&quot;</td>
</tr>
<tr>
<td>Target Audience</td>
<td>&quot;Well, my sense is it is, as I said, people who are looking for more administrative, maybe higher level kinds of positions. In other words, leading programs, leading teams. Obviously from the name, the leadership certificate, but administrating online programs.&quot;</td>
</tr>
<tr>
<td>Stakeholders</td>
<td>&quot;But when I was initially designing the course, really there wasn't any stakeholders to - to - to talk with.&quot;</td>
</tr>
</tbody>
</table>

I contacted each participant via email and attached their summary (or summaries) and asked them to verify that my interpretation of their data was accurate. The email text can be found in Appendix K. In total, I emailed eight interview summaries and five focus group summaries. Four of the five participants receiving focus group summaries also received interview summaries. I received feedback from all nine participants stating that they believed my coding accurately reflected the context and meaning of the data provided.

Once the analysis was complete, I contacted each participant again via email to obtain their feedback. The email text is in Appendix L. I provided each participant with at least three instances where I used their words directly and at least three instances where I summarized the data they provided. All instances were pulled randomly from chapter four. Table 14 is a sample of the analysis summary provided to Ryan.
Table 14

Ryan’s Analysis Summary

<table>
<thead>
<tr>
<th>Use of Direct Quote</th>
<th>Summary of Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ryan went on to say that “having time for planning, time for conversation about it, time for working with others” could improve the outcome of both the courses individually and the certificate program as a whole.</td>
<td>Both Candace and Ryan discussed the difficulty of finding time for collaboration, implying that collaboration after the establishment of the certificate was not a priority for the program.</td>
</tr>
</tbody>
</table>

In total, I emailed nine individual analysis summaries, one to each participant. I received responses from Taylor, Buffy, Ryan, Samantha, Denise, Candace, and Louise stating they believed my analysis accurately reflected their intentions. Even after sending a reminder email, I did not receive responses from Sally or Lindsey.

**Evaluations.** Evaluations for four of the certificate courses were obtained from the program faculty. They were compiled first by the specific course and then by evaluation question. As previously mentioned, evaluations were not available for the second course offered due to technical issues. As student feedback for each course was different, the evaluations for each course were kept separate.

As the course evaluations were submitted via an online form and thus were already in text, there was no transcription necessary to prepare the data for coding. As with the interviews, both interpretive analysis and typological analysis were used to generate and analyze themes present in the course evaluations. This was done prior to the interview, when possible, so that the themes identified in the evaluations could be discussed during the interview. I did not have course evaluations from Ryan, as no course evaluations were administered for the first iteration of the Leadership course. I also did not have Denise’s
course evaluations prior to our interview; during our interview, I did ask her to discuss the feedback she received and how she perceived its accuracy. Her response was compared to the evaluations, which I received and coded after our interview. The data generated from the interview based on the faculty members’ responses to the evaluations was not coded differently than any other data.

Because there were few student responses to the course evaluations, there was not much data available to code. Table 15 reflects the themes generated from the analyses of the evaluations.

Table 15

<table>
<thead>
<tr>
<th>Themes from Analyses of Course Evaluations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>Lindsey</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Denise</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Candace</td>
</tr>
<tr>
<td>Sally</td>
</tr>
<tr>
<td></td>
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<td></td>
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<tr>
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<tr>
<td></td>
</tr>
</tbody>
</table>

*Both of these were identified by Denise in our interview

**Content Analysis.** Content analysis is used to examine various means of communication, including text, to determine the meaning behind the message (Macnamara, 2005; Maxfield & Babbie, 2009). Busch et al. (2012) defined content analysis as “a research
tool used to determine the presence of certain words or concepts within texts or sets of texts" (para. 1). There are two types of content analysis: conceptual analysis and relational analysis (Busch et al., 2012). Whereas conceptual analysis is used to identify key words and themes in the text, relational analysis extends the conceptual analysis to determine the relationships among the identified concepts (Busch et al., 2012). Both methods of content analysis were used in this study. A conceptual analysis was first performed on the CSFs in the theoretical framework provided my McPherson and Nunes (2006). The results of this content analysis can be found in Table 16.

Table 16

CSF Content Analysis

<table>
<thead>
<tr>
<th>Term</th>
<th>Occurrences</th>
<th>Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning/eLearning</td>
<td>10</td>
<td>Course Title</td>
</tr>
<tr>
<td>*Technology</td>
<td>5</td>
<td>Literature</td>
</tr>
<tr>
<td>Design</td>
<td>5</td>
<td>Course Title</td>
</tr>
<tr>
<td>Ethical</td>
<td>2</td>
<td>Course Title</td>
</tr>
<tr>
<td>Collaboration</td>
<td>2</td>
<td>Course Title</td>
</tr>
<tr>
<td>Support</td>
<td>7</td>
<td>Course Title</td>
</tr>
<tr>
<td>Stakeholders</td>
<td></td>
<td>Literature</td>
</tr>
<tr>
<td>Administrative</td>
<td>2</td>
<td>Literature</td>
</tr>
<tr>
<td>Student</td>
<td>1</td>
<td>Literature</td>
</tr>
<tr>
<td>Staff</td>
<td>2</td>
<td>Literature</td>
</tr>
<tr>
<td>Practitioners</td>
<td>1</td>
<td>Literature</td>
</tr>
<tr>
<td>Learner</td>
<td>1</td>
<td>Literature</td>
</tr>
<tr>
<td>Tutor</td>
<td>2</td>
<td>Literature</td>
</tr>
<tr>
<td>Organizational</td>
<td>8</td>
<td>Literature</td>
</tr>
<tr>
<td>Sustainable</td>
<td>2</td>
<td>Literature</td>
</tr>
<tr>
<td>Management</td>
<td>4</td>
<td>Literature</td>
</tr>
<tr>
<td>Development</td>
<td>5</td>
<td>Course Title</td>
</tr>
<tr>
<td>*Leadership</td>
<td>2</td>
<td>Course Title</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Literature</td>
</tr>
<tr>
<td>Resources/Funding</td>
<td>3</td>
<td>Literature</td>
</tr>
<tr>
<td>Creation</td>
<td>1</td>
<td>Course Title</td>
</tr>
<tr>
<td>Intellectual Property</td>
<td>1</td>
<td>Literature</td>
</tr>
<tr>
<td>*CSF Cluster</td>
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<td></td>
</tr>
</tbody>
</table>
Variations on the terms were also identified. For instance, technologies, technical, and technological were counted with technology. After the analysis was complete, the identified terms were linked to the literature or the titles of the certificate courses where appropriate. This was done in order to reinforce their relevance to the primary conceptual analysis. The results of this conceptual analysis provided a basis on which to conduct the conceptual analysis of the syllabi and eCurriculum content.

Once the conceptual analysis of the theoretical framework was complete, the results were applied to a conceptual analysis of the course syllabi and the course information from the University’s eCurriculum system. The course descriptions and the learning objectives from eCurriculum and the syllabi were compared to determine if the courses, as presented by the faculty members, were aligned with the University’s expectations for the courses. Using the terms generated via the analysis of the theoretical framework, a subsequent conceptual analysis was conducted on the course description, the learning objectives for the course (both the syllabus and eCurriculum versions, if they differed), and the unit titles for each course. This was done in order to examine conceptual and structural integrity across the different elements of the courses. If the course had been offered more than once and the unit titles had changed, the unit titles for the second iteration were analyzed as well. This was only applicable for the Leadership course. These findings are discussed in chapter four.

In addition to the conceptual analysis, relational analysis was conducted on the syllabi to examine the alignment across the unit titles, course objectives, and course descriptions of all five courses. Relational analysis was also used to determine the alignment of the individual courses in their entirety with McPherson and Nune’s (2006)
critical success factors for online learning. These findings are also discussed in chapter four.

Table 17 provides a summary of the data types and analyses that were performed.

Table 17

*Data Sources and Analysis*

<table>
<thead>
<tr>
<th>Data Collection Tool</th>
<th>Sub-Category</th>
<th>Collection Methods</th>
<th>Analysis Method</th>
<th>Research Questions Addressed</th>
</tr>
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<tbody>
<tr>
<td>Interviews</td>
<td>Participant Interviews</td>
<td>Recording Notes Transcription</td>
<td>Interpretive Typological</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td></td>
<td>Program Faculty Interviews</td>
<td>Recording Notes Transcription</td>
<td>Interpretive Typological</td>
<td>3, 4</td>
</tr>
<tr>
<td></td>
<td>Focus Group Developer Focus Group</td>
<td>Recording Notes Transcription</td>
<td>Interpretive Typological</td>
<td>3, 4</td>
</tr>
<tr>
<td>Artifacts</td>
<td>Course Evaluations</td>
<td>Digital</td>
<td>Interpretive Typological</td>
<td>3, 4</td>
</tr>
<tr>
<td></td>
<td>Participant Professional Work Samples</td>
<td>Digital/Participant-provided</td>
<td>Interpretive Typological (from interview)</td>
<td>2, 3, 4</td>
</tr>
<tr>
<td></td>
<td>Course Syllabi</td>
<td>Digital</td>
<td>Content</td>
<td>3, 4</td>
</tr>
<tr>
<td></td>
<td>eCurriculum Course Information</td>
<td>Digital</td>
<td>Content</td>
<td>3, 4</td>
</tr>
</tbody>
</table>

**Limitations**

This study has two limitations. The first limitation of this study is the sample size. While there is no established minimum for a qualitative sample, the small sample utilized
in this study could restrict the amount of data collected. In an attempt to account for the small sample size, my in-depth interviews and focus groups with participants were structured to provide a sufficient amount of data from which to draw strong conclusions about the participants’ experience in the program. Additionally, artifacts were gathered and analyzed to provide a more complete representation of the program as a whole.

The second limitation of this study is the amount of time that the program has been in existence. The second cycle of the LDOL program started in the Fall Semester of the 2013-2014 academic year, which means that the population of potential study participants is low. Additionally, program faculty are in the process of adjusting the courses after their initial offerings. While this could give Participant 1 and Participant 2 different perspectives on courses 1 and 2, it can also provide the opportunity to examine how the program has changed in a short time. Additionally, the objectives of courses 1 and 2 did not change from the first iteration to the second, indicating that the content of the courses from year to year should not have drastically changed.

**Trustworthiness**

Shenton (2004) discussed four concepts posited by Guba (1981) to ensure trustworthiness in a qualitative research study: credibility, transferability, dependability, and confirmability. Each of these concepts is discussed below as it pertains to my study.

**Credibility.** Shenton (2004) identified thirteen approaches researchers could use to ensure the credibility of their data and their study. Of the thirteen approaches, I employed seven. I utilized a case study approach, which is a research method that is “well established ... in qualitative investigation” (Shenton, 2004, p. 64). Additionally, I was familiar with the culture of the program that I studied as I had completed the certificate in its entirety prior
to the beginning of my study. This familiarity allowed me to provide a thorough description of the context in which the study took place. Multiple data sources, including focus groups, interviews, and artifacts, were triangulated in order to verify the credibility of my data and also acknowledge any potential biases that I brought to the study. All program participants were provided with consent forms that included the opportunity to truncate their participation in the study at any time for any reason. Participants who participated in both a focus group and an interview were provided with multiple consent forms and thus offered multiple opportunities to withdraw from the study. Peer evaluation of research was built into the dissertation review process with the dissertation committee reviewing and providing feedback on this study. Lastly, I conducted two member checks, with one at the end of the coding process and the other at the end of the analysis process. These were done to ensure that my interpretation and analysis of my participants’ words was accurate and reflective of their intentions.

**Transferability.** Both Shenton (2004) and Merriam (2009) identified the concept of transferability in qualitative research. Regarding this, Shenton stated “since the findings of a qualitative project are specific to a small number of particular environments and individuals, it is impossible to demonstrate that the findings and conclusions are applicable to other situations and populations” (p. 69). Because of this, it is important that the author of a qualitative study provide detailed descriptions of methods, participants and findings so the study can be replicated in another setting (Merriam, 2009). Additionally, Shenton asserted that, as the author of this study, I am unable to determine its transferability as I am only familiar with the study from my perspective. In order to enhance the
transferability of my study, I have provided in-depth discussions of the program being studied, the number of participants involved, and data collection and analysis methods.

**Dependability.** Both Shenton (2004) and Lincoln and Guba (1985) asserted that dependability and credibility in qualitative research are closely linked; that is, if the author of the initial is clearly able to articulate the methods used to ensure credibility, the dependability of the study is enhanced. In addition to clearly identifying the approaches taken to ensure credibility, I also provided a thorough presentation of my research design, its implementation, and data collection (Shenton, 2004).

**Confirmability.** Lastly, Shenton (2004) discusses the importance of an audit trail in examining the decision-making process of the researcher. Indeed, an audit log, defined as detailed records of the research process to show how and why decisions were made, was in place throughout the dissertation process and illustrates decision points and justifications (Merriam, 2009). This audit log depicts the step-by step processes I took from the inception of the idea for my study through the presentation of the final product.

**Data Management**

Per Institutional Review Board requirements, all data were secured. Audio recordings were uploaded into a password-protected file on a password-protected computer and then erased from the recording device. Transcriptions also had two layers of password protection and only reflected participants’ pseudonyms. Program participants chose their own pseudonym at the beginning of the interview or focus group, and these pseudonyms were used to identify the data from that individual. A separate list linking the participants to their pseudonyms had two layers of password protection. Consent forms, handwritten notes, and memos were kept in a locked cabinet when not in use. Only I had
access to all files. Upon successful defense of my dissertation, all data were stripped of identifying characteristics and archived by participants’ pseudonyms.
Chapter Four

Case Presentation and Discussion

This chapter presents my case study of the Leadership in Online Learning graduate certificate program. The purpose of this study was to determine if there were gaps between program development and implementation, what issues faculty faced with implementation, student motivations for participating in the program, and the ability of students to transfer the skills from the program to a professional setting. In the description of the case, I discuss the categories generated from my data analysis. In the case study, evidence supporting the aforementioned categories is presented. In the discussion of the case, I provide a synthesis of the findings. Lastly, for concluding remarks, I examine the overarching significance of the case.

Description of the Case

This study examined one case, the Leadership in Online Learning (LDOL) graduate certificate program. Nested within this case were three groups: program developers, program faculty, and program participants. Five categories were identified from the interview, focus group, and artifact data. These categories are as follows.

Description of the program. This category provides an overview of the LDOL certificate program, specifically the content and structure. Descriptions for each course are provided.

Motivation for and development of the program. This category identifies the organizational motivations for developing the program as well as the students' motivations for participating in the program. The program development process is presented here,
including program goals, the initiation of the development process, its structure, and the program’s alignment with the organization.

**Lack of sustainability.** This category focuses on components of sustainability of the program, including the program's alignment with the organization as well as the marketing of the program. Sustainability is defined as the recruitment and retention of students in the program (Merolle, 2008).

**Course content and implementation.** This category examines several factors relating back to the courses: alignment of the course descriptions, learning outcomes, and unit titles with McPherson and Nunes’ (2006) theoretical framework; the faculty members’ responses to the first iteration of the certificate courses, including their impressions of the course implementation, collaboration after implementation, and the rigidity of the courses themselves; and students’ responses, including the most and least beneficial courses, the skills they obtained through the program, and a presentation of a work sample.

**Developing leadership.** This category brings together leadership from all three groups. The program coordinator’s lack of leadership experience, faculty-identified gaps in student leadership preparation, and student-identified online leader characteristics are presented.

**The Case of the Leadership in Online Learning Certificate Program**

**Description of the Program**

The Leadership in Online Learning graduate certificate program was first offered in the fall of 2012. The program’s overarching goal is to “prepare online practitioners [to] understand key pedagogical, support, design, and legal factors in leading online programs, online education initiatives, and quality improvement plans” (Graduate Certificate Program
Comprised of five three-semester hour courses, the LDOL program is designed to be completed in one calendar year. The courses Leadership and Administration of Online Education and Collaboration and Support in Online Education are offered in the fall semester. The courses Methods in Online Course Development and Tools for Online Learning Creation and Assessment are offered each spring semester, and the course Legal and Ethical Issues in Online Education was offered in the summer semester. Students may start the certificate program and/or courses at any time; admission into the program is offered on a continual basis. The courses and their descriptions are as follows:

- **Leadership and Administration in Online Education (course 1).** “In this course, students explore the role of effective leadership and administration in K-12, higher education and other online educational programs. Through the exploration of the intersection of change, data, management and entrepreneurialism, this course develops leaders with the knowledge, skills and dispositions necessary to manage complex entrepreneurial educational programs. Additionally, this course provides students with the exposure to relevant topics including data-driven decision making, business planning, designing for scalability, and decision making about market, revenue, budget and other current topics” (Graduate Certificate Program Approval Guidelines, 2012; University Course Planning Guide, 2012).

- **Collaboration and Support in Online Education (course 2).** “In this course, students investigate management of and best practices in student and faculty support in K-12 and higher education online learning programs. Additionally, this course explores models for promoting effective online collaboration and
communities. As part of this process, students develop their own personal philosophies for community building in online learning and for faculty and student support in online learning” (Graduate Certificate Program Approval Guidelines, 2012; University Course Planning Guide, 2012).

- **Methods for Online Course Development (course 3).** “This course is intended to guide online educators through the process of designing, developing and evaluating online courses through the use of various prescriptive online course development models. Students will examine how these frameworks work to organize and structure the process of creating both online instructional activities and online courses. Students will evaluate various models of online course development as a way of articulating their own process of and philosophy behind online course development. Students will also gain the skills necessary to create design that promotes collaboration, student engagement, and efficient course management. Through collaboration activities such as discussion boards, blogs, and project development, students will gain the skills necessary to develop course maps, lead the online course development process, and evaluate processes used for fully developed online course” (Graduate Certificate Program Approval Guidelines, 2012; University Course Planning Guide, 2012).

- **Tools for Online Learning Creation and Assessment (course 4).** “This course addresses the theory behind online learning module design and creation of online assessments, learning module implementation, and the requisite knowledge to create effective online learning modules and assessments. Students will explore various types of learning module and assessment creation tools including
podcasting tools, lecture-capture tools, e-learning authoring programs, and open source software. The course will move students from an understanding of the context and use of online learning modules to the design and delivery of an effective online learning module including assessments” (Graduate Certificate Program Approval Guidelines, 2012; University Course Planning Guide, 2012).

- **Legal Issues in Online Education (course 5).** “This course addresses the changing legal and ethical issues facing practitioners in online education. These challenges inherent in online learning have important implications for course design, program development, ownership and use of intellectual property, and teaching and learning. Students in this course will examine types of potential copyright infringement, security and privacy issues, and issues relating to accessibility and disability discrimination laws. They will study how these issues challenge online educators and explore how students and their ability to participate and succeed in online education are affected. At the end of this course, students will be able to identify a variety of potential legal, accessibility and ethical issues that can come into play in online education and, through research, discussion and problem-based learning exercises, discover how to overcome these challenges and offer educational opportunities to anyone needing to participate in an online course” (Graduate Certificate Program Approval Guidelines, 2012; University Course Planning Guide, 2012).

As using the full course titles throughout may become cumbersome, Table 18 provides a list of the course names and the shortened titles that I will be using throughout.
Table 18

*Course Titles*

<table>
<thead>
<tr>
<th>Full Title</th>
<th>Shortened Title</th>
</tr>
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<tbody>
<tr>
<td>Collaboration and Support in Online Education</td>
<td>Collaboration and Support</td>
</tr>
<tr>
<td>Leadership and Administration of Online Education</td>
<td>Leadership and Administration</td>
</tr>
<tr>
<td>Methods of Online Course Development</td>
<td>Methods</td>
</tr>
<tr>
<td>Tools for Online Learning Creation and Assessment</td>
<td>Tools</td>
</tr>
<tr>
<td>Legal and Ethical Issues in Online Education</td>
<td>Legal Issues</td>
</tr>
</tbody>
</table>

As mentioned in chapter four, each course is three semester hours and is required to complete the certificate. Though the courses were not designed to be sequential, four of the five courses were designed to be complimentary. Courses 1 and 2 and courses 3 and 4 were designed to be complementary; that is, for students who were enrolled in both courses at the same time, the information in course 1 or course 3 complemented on the content being presented in course 2 or course 4 (Program Director, personal communication). Even with this attribute, the courses could be successfully completed when taken individually as well. Because of the complementary design, courses 1 and 2 were offered in the fall semester, and courses 3 and 4 were offered in the spring semester. Course 5 was offered in the summer semester.

**Motivation for and Development of the Program.**

This section examines both organizational motivations for developing the program and student motivations for enrolling in the program. The program development process is presented in detail.
Motivations. Credentialing for professionals in online learning is of recent vintage. The program coordinator, Sally, discussed the state of the online learning profession, stating “there is this generation of people working in the online learning field when there was no degree in online learning. And so we all just became experts through experience and self-education.” However, now that the field of online learning is evolving, the need for a relevant credential has become apparent. The market for online learning teaching and learning certificates has grown in recent years, but credential options centered on leadership in online learning are still rare. Lindsey supported this, stating that there are very few “credit-bearing credential … programs specifically about online leadership. In her research to determine the demand and need for the program, Sally found that “a lot of [the other online certificate programs] didn't have anything about leadership in them.” She went on to highlight the significance of including the leadership component, stating that they wanted “a competitive certificate … to be able to … say this is unique.”

Given the lack of available credentials for leadership in online learning, this certificate program was designed to fulfill a need in the market. This need was identified by the Dean of Education; he asked for a certificate to be created to meet the need (Sally, focus group, 12/2/2013). Sally stated that he “felt like [there was not] anything specific to … coordinating online programs.” Louise went on to say that she believed the dean “saw that this was [an] opportunity to capture some kind of market, but also … kind of a crown jewel in our … portfolio for online [programs].” The initiation of the certificate development process was able to achieve several objectives, including “playing to faculty's expertise … meeting a need [both institutionally and more broadly in the field] … [and] it was something that [the dean] wanted done.” Lindsey expanded on the concept of meeting a
need, stating that “[the program] really fills the need to make sure the University is training future faculty who may serve our university or serve other institutions, but also serving a field that’s becoming a huge part of higher education.” These objectives provided enough traction to move the development process forward.

The certificate program had a clearly identified target audience. Samantha stated the program was directed toward “people who were already experienced in online programs, not people who were going to become coordinators or administrators … it was developed for people who may have had a context, rather than people without a context.” Candace expanded on this, stating the program targeted “people who are looking for more administrative, maybe higher level kinds of positions … leading programs, leading teams.” The program was not necessarily aimed at individuals seeking instructional design positions; rather, it was designed as a means to “open the pathways … for people who are looking to … work in education in general and higher [education]” specifically. Lindsey identified the target audience as both “higher [education] or K-12 educators who are providing leadership in online courses or fully online programs.” Ultimately, the identified target audience for this program was K-12 and higher education professionals who already had experience working and leading in an online learning environment. However, the breadth of the target audience – local, regional, national, or global – was only addressed from a marketing standpoint rather than as a target for program development.

An audience that was not specifically targeted as part of the certificate development process was the corporate audience. Lindsey stated that corporate trainers had been discussed as part of the development process, and that the program could “potentially work just as well in a corporate training model.” Louise also agreed “it could work very
well in a corporate setting.” However, Louise also identified the ability to market to this audience as an issue: “we don’t know that audience … I don’t know how we market to them to find them.” Lindsey was very clear in asserting “[they are] a school of education and [they] serve higher education.” While it would be unnecessary to renounce the identity as an institution of higher education, embracing a wider market for the certificate program could facilitate cultural expansion within the college.

Student motivations for participating in the LDOL program were threefold. For both students, the potential for professional growth through the certificate was a substantial draw. Buffy spoke of wanting to improve her own practice as one of the primary reasons she explored the LDOL certificate, looking to be “able to actually learn some new techniques to implement” in her online classes. Her “main goal was to see what else was out there,” regarding strategies that could be applied to improve her online classes.

Taylor’s passion for online learning stemmed from an abrupt transition from face-to-face teaching to online teaching. While the initial transition was “intimidating [and] limiting,” she found that “the online learning environment, if designed and utilized well, … can be a much better learning environment for students.” Taylor’s acknowledgement that a well-designed online learning environment could be very beneficial to students drove her goal of becoming a professional instructional designer; this goal “definitely was a factor” in starting the LDOL certificate.

The leadership component of the certificate program was also a draw for both students. Buffy stated that the title of the program was a draw for her. Taylor initially chose the program because it “was the only [one] that was offered,” but in hindsight, the leadership component was “a critical component” that she needed. While Taylor asserted
that the leadership component was an important aspect of the certificate program, Buffy wasn’t influenced by the leadership component until she took the Leadership and Administration in Online Learning course in her last semester in the program.

Lastly, Taylor specifically identified the certificate credential as a motivating factor. She wanted “to receive credentials to enable” her to work in the field of instructional design. She believed that earning the credential would provide her “the opportunity to get into a new field.” The credentialing process was not as important to Buffy, however. She stated that she wasn’t sure she was going to complete the certificate; after all, her initial motivation for taking courses centered on acquiring new strategies to improve her own practice. Thus, the potential for the credential was not a motivating factor for Buffy when she started taking courses in the program.

**Development of the program.** This section describes the program development process prior to the implementation of the certificate in fall 2012. The program developers will be identified, as will the program goals. Initiation and leadership of the program will also be discussed. Lastly, the program development structure will be described.

**Who were the program developers?** Sally, the program coordinator for the LDOL certificate, initially identified seven individuals (including herself) involved in the program development process. Sally described the group of program developers as faculty members from Education, including representatives from the Leadership and Curriculum programs respectively. However, based on the information provided by Sally at the start of this study, two of the program developers, Candace and Denise, were from outside Education but at other colleges within the University. Another program developer, Louise, was a staff member in the Education college Dean’s office at the beginning of the initiative. The four
remaining program developers – Sally, Samantha, Ryan, and Lindsey – were all faculty members in the School of Education.

Though Sally initially identified them as program developers, Candace and Ryan stated that the course development phase was the only role they played in program development. Ryan stated that he “wasn’t part of … any of the preplanning. It was like … here’s what it’s going to be, and … what can you contribute.” Candace stated that she was “not really very much [involved in the development of the program] other than [her] specific course.”

As of this moment, Sally is still the program coordinator for the LDOL certificate. Sally, Candace, Lindsey, Ryan, and Denise are still faculty in the program. Both Ryan and Denise taught their courses in the fall for the second time, and Candace and Lindsey are scheduled to teach their courses for the second time in the spring semester. Samantha was no longer involved with the program after its first iteration; she was not contacted to have an additional role beyond program development. Louise left the University in the summer of 2013.

**Program goals.** As mentioned in Chapter 3, there were six established student learning outcomes for the LDOL certificate:

- “Identify and overcome the primary challenges of leading an online program;
- Evaluate online learning creation and assessment tools and determine which are useful for various applications;
- Facilitate collaboration between and support of online faculty and students;
- Lead the online course design and creation process;
- Identify and overcome the primary legal issues in online education; and
Evaluate resource allocation, program development and sustainability of online education” (Graduate Certificate Program Approval Guidelines, 2012).

In addition to these learning outcomes, some of the program developers shared what they envisioned as personal goals for the LDOL certificate. One of these goals was the formation of a community of like-minded individuals. Louise identified the capacity of online learning to allow the “group of isolated people to come together and learn from each other,” in addition to helping “people identify what the literature and what research has proven are best practices.” Sally and Candace agreed that one of the overarching goals of the program was to create a community of online leaders. Sally said that there are students who still talk after the courses are finished. She said “even though they’re online students, [and] they may have never physically met, they still talk to each other and feel like they can collaborate and have colleagues now that they can talk to.” However, the program itself has yet to facilitate any discussion amongst current or past students. Sally discussed a more structured plan using a professional networking site to connect students, but this online community has not yet been developed. While it is understandable that this step has not yet been taken due to the infancy of the certificate program, it would serve as a resource for those who are not currently enrolled in the courses. McPherson and Nunes (2006) identified “creating and fostering online learning communities” as a CSF (p. 550). Once the structured online community is established, the true community of online learners from the certificate program can collaborate and network with each other.

A second goal identified by program developers was the applicability of the leadership skills. Specifically, Lindsey discussed this goal:
I’m hoping that this … actually does simplify [the leadership] process for people that are getting started in these roles, that they are not starting from scratch … that they have a little more of a toolkit and they have a skillset going into it when they’re in these new roles.

While this goal is very similar to the first student learning outcome, “Identify and overcome the primary challenges of leading an online program,” it proposes that individuals who complete the certificate will have tools and skills at their disposal to both identify and overcome the purported challenges. This outcome is addressed in the Student Responses section below.

**Initiating the program development process.** As previously mentioned, the Dean of Education initiated the LDOL certificate program development process. Sally was chosen by the Dean to coordinate the program as the program was designed so that “people can do what [she does]” as the head of the Learning Design Consortium. One of the challenges Sally immediately faced as the program coordinator was her lack of experience in that area, and she identified this as a challenge: “the number one challenge, I think, was putting someone in charge of a graduate certificate that has never created a program before and is learning on the job.”

One advantage Sally had was the level of interest in the program. Louise asserted that there was “sufficient interest … in the college between … the different pieces of the puzzle for it to all come together.” Sally also identified a Leadership graduate program within the college, which could be leveraged to help develop the certificate program. With the support within the college as well as the existing program to draw from, Sally was able to generate commitment from her colleagues for the program. Samantha stated that “[it’s]
the responsibility of the leader ... to figure how do you do incentivize people to be a part of that change.” Sally was indeed able to obtain the support necessary to initiate program development and ultimately take ownership of the program. Lindsey emphasized the importance of program ownership, stating that the “program has to have a champion, somebody who takes care of it, that really helps make sure all the t’s are crossed and ... the I’s are dotted, those things.”

**Program development structure.** The program development process was conducted in three phases. In the first phase, the program goals, later identified as student learning outcomes for the program, were developed. Sally noted “it was with a group of faculty members, some tenured, some tenure track, some field service, and one staff member ... who also teaches in the program.”

Once the program goals were established, Sally shared how the courses for the certificate were created:

The courses themselves, we came up with again with a team of faculty. We wrote the learning outcomes for – and the descriptions for – the individual courses ... And we made sure that they aligned ... with these goals ... [We] made sure we had teams of people working on each class to develop the learning outcomes and the course descriptions. And then we brought those all back to the group to make sure that they worked together and there wasn’t a lot of overlap in learning outcomes between the courses.

As mentioned in chapter three, the courses were designed to be complementary; that is, the content in one course was developed to complement the other course offered in the same term. Leadership and Administration in Online Learning and Collaboration and Support in
Online Education were developed as complementary courses, as were Methods for Online Course Development and Tools for Online Creation and Assessment. The fifth course, Legal Issues in Online Education, was the sole course offered during the summer term.

Collaboration in the first two phases of program development was a significant component of the process. Samantha indicated that there was a very collaborative approach to the first two phases of program development, stating that the program developers “met on numerous occasions ... [and] broke up into small groups ... as well.” In the second phase of program development, the working groups were “created based on interest, experience, and knowledge.” Sally reiterated this, stating that “teams of people [were] working on each class to develop the learning outcomes and the course descriptions.”

In the third and final phase of the program development, faculty members were identified and asked to develop and teach one of the five certificate courses. It is at this point when both Candace and Ryan became involved in the program development process. Ryan was tapped for the Leadership and Administration course, Denise for the Collaboration and Support Course, Lindsey for the Methods course, Candace for the Tools course, and Sally for the Legal Issues course. Sally and Ryan both identified the time frame in which classes were to be built as an issue. Regarding the Legal Issues course, Sally stated the course was “was built in a month.” Ryan said, “It was less than a week before the [Leadership] course started that there was verification that [he] was actually teaching the class.” The short amount of lead-time prior to the start of the courses did not provide faculty with adequate time to completely build a course, especially in Ryan’s situation. Ryan went on to say that “having time for planning, time for conversation about it, time for
working with others” could improve the outcome of both the courses individually and the certificate program as a whole. McPherson and Nunes (2006) identified “organizational communication” and “good communication between practitioners and management” as critical success factors (p. 550). The shortened time frame that Ryan experienced when asked to design and teach the Leadership course, though possibly a factor of the organization of the program, could also have been the result of a lack of communication within the certificate program. In order to ensure that faculty members have adequate time to prepare their courses, communication needs to be clear.

Sally discussed how she tries to ensure the quality of the online classes that fall under her purview:

I refuse to let a class go up that they're building as they go, as much as I can control it. I can't always control it .... but as much as I can control it. That to me is not OK because you can’t model best practices if you’re building while you teach it.

The Methods course, taught by Lindsey, was actually developed by Sally. Rather than being completely designed and built prior to the start of the course, it “was kind of designed as the term went.” In their interviews, both Lindsey and Sally acknowledged that building courses as they are being taught is not aligned with the best practices of online course design. The Methods course was a course that Sally allowed to be built as students participated in the course. While this was done due to the “realities of life,” the “just-in-time design” posed an issue with the course design. McPherson and Nunes (2006) also identified “clear design and development best practice guidelines” as a critical success factor (p. 550). While Sally clearly has established best guidelines, they were not followed in the instance
of Lindsey’s course. Again, ensuring adequate time for course development could have ensured a more efficient development process.

One omission in the program development process was a formal needs assessment. A needs assessment is defined broadly as a determining the difference between what is and what should be (North Dakota State University, 2013). In his interview, Ryan mentioned that he “would be really curious about the initial needs assessment that was done.” Sally stated no formal needs assessment was completed in the program planning and development process. She said “an assessment of job postings on [career websites]” was conducted and “the most commonly requested skill sets and the types of jobs in online learning that were posted” were examined to determine the demand for the skills included in the certificate program. This informal needs assessment only provided a snapshot of the need for the certificate in the field of online learning. If a formal needs assessment had been conducted, the findings would have likely reflected the needs of the target population and how the program could best serve the college and the University.

The absence of a formal needs assessment also means that there were no formally identified stakeholders in the program and thus no opportunity to include them in the planning process. Sally stated that the program design process was “more just faculty collaboration.” Representatives from other colleges within the University were included in the planning process. However, a clear group of stakeholders was never identified. While Sally said that the program developers had “people in the field look at [the courses] and make sure they were practical,” she did not specifically identify anyone outside of the established group of program developers. Candace said that when she “was initially designing the course, really there [were not] any stakeholders to ... talk with.” Lindsey
elaborated on this, stating that the program developers did not have “any extensive conversations with students or with colleagues outside of [the] institution.” Additionally, Samantha was unaware of any students being included in the program development process. Candace made a good point, however, stating that “there weren’t really a lot of students to talk to” in the early stages of program development. Sally stated that she sought student feedback during her course to determine if it was meeting their goals, but generally, students were not involved in the development process.

McPherson and Nunes (2006) identified several critical success factors surrounding stakeholders. One of these is the “inclusion of stakeholders in planning” (p. 550). By failing to identify a clear group of stakeholders early in the program development process, it was not possible for a representative group of stakeholders to be included in planning. Because of this, it was also not possible to obtain “commitment from all stakeholders” in the program development process, which was another CSF identified by McPherson and Nunes. Two additional critical success factors integrate students’ roles: “learner involvement in the design process” and “student and staff involvement and acceptance” (2006, p. 550). The clear lack of student involvement in the program development process makes it clear that these critical success factors were not achieved.

Though there were not clearly identified stakeholders in the program development process, there was the acknowledgement of potential to include stakeholders in the future of the program. Samantha stated, “There are a lot of people who are really ready and willing to be supportive.” Though input is often collected after the fact, eliminating the “opportunity to be part of the creative process,” Samantha suggested eliciting ongoing feedback from identified stakeholders. On involving students, Sally stated that she “would
love to do a focus group of the students who had actually completed” so as to get their feedback on the courses and the program. Student evaluations were also collected for four of the five courses, and those can be utilized to continuously incorporate student feedback into the design process. Ultimately, there are many ways that stakeholders can be identified and included in the program development process. While they were not involved in the first two phases, their feedback can be incorporated as the program moves forward.

**Organizational alignment.** The development of the LDOL certificate program was aligned with the needs of the organization; after all, it was a Dean’s initiative that started the process. Aside from that directive, however, there was not a specific identified need for the program within the organization. Candace stated that this was “a need in the college and the University.” As one of the only programs of its kind, the development of the LDOL program “[formed] standards, ... a discipline ... [and] infrastructure” for the field. Louise identified the program as a “crown jewel” in the college’s portfolio. However, a lack of marketing, discussed in more detail below, suggests that, at least at some level within the college, simply having the program was enough.

One of the challenges for the program developers was trying to “figure out how online learning looks at [the University].” Determining the leadership and administration aspects of online learning at the University and then transitioning those into content for the program was a new process for the group. To date, however, there is not a universal model of online learning across the University; departments and schools within colleges have their own individual models of online learning. Ultimately, the LDOL program was not able to reflect any University-wide model of online learning as such a model does not exist.
Lack of Sustainability

The sustainability of the LDOL certificate program was discussed in several different contexts. Lindsey took a more holistic approach to sustainability, focusing on the lasting impact the program could have the university and on the field of online learning. She said that the program “serves the institution ... making sure ... that our graduates are relevant ... [and] have the right skills, they can go out and either influence this institution or influence other institutions.” In other words, the certificate program promotes the sustainability of the University’s presence and reputation in a broader context. The program also provides skilled individuals who are prepared to work in online settings. Lindsey stated, “the reality is, [as] we grow as an institution, the new programs are happening online.” This is true for higher education as well, as online learning is in state of continuous growth (Allen & Seaman, 2011). As online learning continues to expand, the demand for skills and experience will be ongoing. From this aspect, the program acts as a sustainable resource for the University and the field of online learning.

Though being able to provide skilled individuals and ensure the University’s presence and reputation are important, sustainability can also be discussed in terms of its ability to “… [use] a resource so that the resource is not depleted” (Sustainability, Merriam-Webster, 2014). In this case, the resource is funding from Education to develop the certificate program. Louise stated that the LDOL certificate program was “projected to be a revenue generator.” As part of her job, Louise “helped faculty put together business plans,” making “sure that, based on the expenses for the program ... and the revenue, that [the program] was going to be a moneymaker.” At the time the program was conceptualized, its ability to generate revenue was considered very important, and appropriate resources
were put in place to ensure that it would be successful. While the program was projected to “be a moneymaker,” as Louise put it, actually generating that revenue was a different story.

One factor that affected the program’s ability to generate revenue was student enrollments. Sally stated, “Getting the enrollments up” has “really been a challenge.” While the classes attained sufficient enrollment so as to not be cancelled the in the first year, Sally noted that many of the students in the courses were University employees. University employees are eligible for tuition remission, which means that the University pays the instructional fee for any courses in which the employee enrolls. Because of the tuition remission system, Sally said the program was “not bringing in tuition dollars.” This lack of revenue illustrates a gap between the program development process, where the program was predicted to generate revenue, and the end of the first implementation, where low enrollments and employee tuition remission resulted in less than a profitable year.

A contributing factor to the low number of non-employee enrollments is likely the marketing strategy applied to the LDOL certificate. Prior to and during its first iteration, the LDOL certificate program was not marketed at all; Sally asserted that there was “zero marketing” in the first year. Sally identified marketing any type of online program as a significant challenge because “... there’s this [glut] in the market for online programs. You have to market the crud out of them.” Marketing an online program is an ongoing challenge as well, as Sally remarked: “how [do] you make your program unique from the [others] because you’re not marketing just to your state. You’re marketing to the world, and so if there [are] eight others, is our tuition competitive? Is our coursework competitive? Do we have something unique we can sell them that’s different from these other programs?” Samantha also identified challenges to marketing the certificate program. On a national
level, the “community … is really a difficult one to access based on the numerous … opportunities that exist.” This lack of marketing is likely why the course enrollments for the first iteration of the program were low and primarily consisted of those inside the University. Consequently, without the outside enrollments and the associated tuition dollars, the program did not generate the expected revenue.

Despite the lack of marketing, Buffy and Taylor still were both able to find out about the program. Both students identified different ways of finding out about the certificate. Taylor became aware of the certificate through Sally, the program coordinator. Taylor “was such a part of all of the professional development that [Sally] offered,” and Sally recommended that she explore the LDOL certificate as additional professional development. Buffy found out about the certificate through the college’s website: “I just got online and was looking at our own programs … and I thought hmm, this one looks good.”

McPherson and Nunes (2006) identified “understanding of resource allocation implication” as a CSF (p. 550). As the program coordinator, Sally has a very clear understanding of what resources have been put into her program and what her program needs to do to be successful from a financial standpoint. While it cannot be causally proven that a lack of marketing led to a lack of enrollments, which then led to a lack of revenue, there is evidence to show that this chain of events is not only plausible but also likely. There was not data available from my interviews or focus groups as to the extent to which marketing was discussed during the program development process. However, in the Graduate Certificate Program Approval Guidelines (GCPAG), the last section was devoted to “plans to market the program” (2012, p. 6). It stated that “a marketing plan is currently
being developed to recruit a cohort of 15 students for [the 2013 spring semester]” (GCPAG, 2012, p. 6). It is clear from the data I collected that this plan did not take effect as planned. In order for the program to be sustainable, it must not exhaust all of its resources. By generating revenue, the program would not exhaust the resources of the School of Education. McPherson and Nunes believed that sustainability was important. Two critical success factors – “sustainable organizational eLearning strategy” and “creation of sustainable solutions” – were identified (McPherson & Nunes, 2006, p. 550). While Lindsey illustrated what a sustainable program looks like from a learner preparedness perspective, the lack of marketing, enrollment, and eventually revenue indicate that the program is not yet fiscally sustainable. The ultimate gap between program development and implementation lies in the failure to market the program, thus affecting the overall sustainability of the program.

**Course Content and Implementation**

A content analysis revealed how closely the five LDOL certificate courses were aligned with McPherson and Nunes’ (2006) theoretical framework. Both faculty and students also had their own opinions as to how successfully they believed the first iteration of the LDOL certificate courses had been implemented.

**Course content analysis.** The individual course descriptions, objectives, and unit titles were analyzed for content as discussed in chapter three. For each course, the course description and the learning objectives from the syllabus were compared to those that were in the University’s eCurriculum system. The Legal and Ethical Issues course had one additional learning objective in the syllabus that was not in the eCurriculum system and one very slightly modified objective. Methods of Online Course Development, however, had
four learning objectives in the syllabus that were unlike those objectives found in eCurriculum. One additional objective was very slightly modified. Aside from these differences, the course descriptions and objectives were identical between the course syllabi and the eCurriculum content.

The unit titles were taken from each syllabus, and these underwent conceptual analysis as well. Because Collaboration and Support in Online Education and Leadership and Administration in Online Education had both completed two iterations at the time the analysis was conducted, the unit titles from each iteration were also examined. Only the unit titles in the Leadership course changed; the unit titles in Collaboration and Support remained the same for both iterations. The second iteration Leadership unit titles were also included in the content analysis.

For all of the content, the fifteen terms generated from the conceptual analysis of the theoretical framework were used to assess alignment across the course description, learning objectives, and unit titles of each course, as well as alignment with the theoretical framework. There was some flexibility to ensure that all pertinent aspects of the course pieces were identified. The most significant allowance was including faculty members as stakeholders. McPherson and Nunes (2006) identify a multitude of stakeholders, including administration, students, staff, practitioners, learners, and tutors. As faculty are indeed stakeholders in online learning and do not fall under any of McPherson and Nunes’ (2006) classifications, an exception was made in the analysis to include them. After the conceptual analysis was completed, a relational analysis was conducted of the conceptual analyses as a whole. The findings are below. The course descriptions, learning objectives, and unit titles used in this analysis can be found in Appendix N.
Collaboration and Support in Online Learning. Overall, the course was generally consistent across the three categories, especially with collaboration, stakeholders, and development. While leadership was mentioned in the course objectives, it was not part of the description or the unit titles. Also, management was mentioned in both the course description and the objectives but not in the unit titles.

Of the fifteen terms generated from the theoretical framework (with stakeholders and all subcategories counting as one term), this course has five terms that are consistent across the three categories: learning, collaboration, support, stakeholders, and development. However, most of the terms are not mentioned frequently; all occurrences are four or less. Based on this, the course is minimally aligned with the theoretical framework. All of the observed terms were appropriate for the course categories; however, the terms were not frequently used, especially in the unit titles. Table 19 illustrates the findings from the conceptual analysis.

Table 19

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Learning Objectives</th>
<th>Unit Titles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term</td>
<td>Frequency</td>
<td>Term</td>
</tr>
<tr>
<td>Learning</td>
<td>3</td>
<td>Learning</td>
</tr>
<tr>
<td>Collaboration</td>
<td>1</td>
<td>Collaboration</td>
</tr>
<tr>
<td>Support</td>
<td>2</td>
<td>Support</td>
</tr>
<tr>
<td>Stakeholders</td>
<td></td>
<td>Stakeholders</td>
</tr>
<tr>
<td>Student</td>
<td>4</td>
<td>Student</td>
</tr>
<tr>
<td>Faculty</td>
<td>2</td>
<td>Faculty</td>
</tr>
<tr>
<td>Management</td>
<td>1</td>
<td>Management</td>
</tr>
<tr>
<td>Development</td>
<td>1</td>
<td>Development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Leadership</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stakeholders</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Student</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Faculty</td>
</tr>
</tbody>
</table>
Leadership and Administration in Online Education. The conceptual analysis revealed there are several terms identified in the course description that were not included in the objectives or unit titles for the Leadership course. These terms included design, student, and revenue/budget (parallel to McPherson and Nunes’ [2006] funding and resources). The 2012 unit titles and the 2013 unit titles are very similar, with the addition of organizational in 2013 and the omission of one each of learning and administrator.

Overall, there is little consistency across the course description, the objectives, and the units aside from mentions of management and leadership. While management and leadership are appropriate terms for the course categories, increased frequency of the terms organization, and revenue/budget would fortify the course categories. While there are nine of the fifteen terms used from the theoretical framework, they are not consistent across the course categories. This course appears to be poorly aligned with the theoretical framework. The findings from the conceptual analysis are illustrated in Table 20.

Table 20

Conceptual Analysis for Leadership

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Learning Objectives</th>
<th>Unit Titles - 2012</th>
<th>Unit Titles - 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term</td>
<td>Frequency</td>
<td>Term</td>
<td>Frequency</td>
</tr>
<tr>
<td>Design</td>
<td>1</td>
<td>Support</td>
<td>1</td>
</tr>
<tr>
<td>Stakeholders</td>
<td>2</td>
<td>Stakeholders</td>
<td>2</td>
</tr>
<tr>
<td>Administration</td>
<td>1</td>
<td>Administrator</td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td>2</td>
<td>Management</td>
<td>2</td>
</tr>
<tr>
<td>Management</td>
<td>2</td>
<td>Leadership</td>
<td>3</td>
</tr>
<tr>
<td>Leadership</td>
<td>2</td>
<td>Development</td>
<td>1</td>
</tr>
<tr>
<td>Revenue/Budget</td>
<td>2</td>
<td>Development</td>
<td>1</td>
</tr>
<tr>
<td>Development</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tools for Online Learning Creation and Assessment. In this course there are very few terms across the course categories. The only two components to carry all the way
across are learning and design; the use is also fairly consistent across the three categories. Students and creation are both mentioned in the description and the objectives but do not carry through to the unit titles.

While there are only four of the fifteen theoretical framework terms present, learning is used with significant frequency; it was identified eleven times in the learning objectives alone. Learning was the most frequent word identified in the analysis of the theoretical framework at ten occurrences. This suggests that the emphasis of the course is on the track but is not yet well aligned with the theoretical framework. This course appears to be minimally aligned with the framework. More frequent use of creation and stakeholders would strengthen the course categories as a whole, specifically the unit titles. Table 21 illustrates the findings from the conceptual analysis.

Table 21

*Conceptual Analysis for Tools*

<table>
<thead>
<tr>
<th>Term</th>
<th>Frequency</th>
<th>Term</th>
<th>Frequency</th>
<th>Term</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning</td>
<td>7</td>
<td>Learning</td>
<td>11</td>
<td>Learning</td>
<td>10</td>
</tr>
<tr>
<td>Design</td>
<td>2</td>
<td>Design</td>
<td>3</td>
<td>Design</td>
<td>2</td>
</tr>
<tr>
<td>Stakeholders</td>
<td>2</td>
<td>Stakeholders</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td></td>
<td>Student</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creation</td>
<td>3</td>
<td>Creation</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Methods of Online Course Development. As previously mentioned, the learning objectives in this course’s syllabus were significantly different than those established within eCurriculum. However, the two sets of learning objectives are similar in terms of the content analysis. The eCurriculum objectives include one occurrence of creation; all other
terms are the same with similar frequencies. The course descriptions omit learning, support, and faculty, while the units only utilize three of the terms. While there is consistency across the objectives, there is not consistency across all three of the course categories. This course utilizes nine of the fifteen terms found in the conceptual framework analysis. Most terms are found more than once within the course categories. While the course is not consistent across categories, alignment with the theoretical framework appears to be moderate or perhaps slightly better. Inclusion of additional terms in the units, specifically collaboration, support, management, development, leadership, and creation, would strengthen the course overall, particularly the aspect of unit titles. The findings of the conceptual analysis are presented in Table 22.

Table 22

*Conceptual Analysis for Methods*

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Objectives – eCurriculum</th>
<th>Objectives - Syllabus</th>
<th>Unit Titles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term</td>
<td>Frequency</td>
<td>Term</td>
<td>Frequency</td>
</tr>
<tr>
<td>Learning</td>
<td>3</td>
<td>Learning</td>
<td>3</td>
</tr>
<tr>
<td>Design</td>
<td>2</td>
<td>Design</td>
<td>3</td>
</tr>
<tr>
<td>Collaboration</td>
<td>2</td>
<td>Collaboration</td>
<td>1</td>
</tr>
<tr>
<td>Support</td>
<td>1</td>
<td>Support</td>
<td>3</td>
</tr>
<tr>
<td>Stakeholders</td>
<td>5</td>
<td>Stakeholders</td>
<td>2</td>
</tr>
<tr>
<td>Student</td>
<td></td>
<td>Student</td>
<td>1</td>
</tr>
<tr>
<td>Faculty</td>
<td></td>
<td>Faculty</td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>1</td>
<td>Management</td>
<td>1</td>
</tr>
<tr>
<td>Development</td>
<td>8</td>
<td>Development</td>
<td>6</td>
</tr>
<tr>
<td>Leadership</td>
<td>1</td>
<td>Leadership</td>
<td>1</td>
</tr>
<tr>
<td>Creation</td>
<td>2</td>
<td>Creation</td>
<td>1</td>
</tr>
</tbody>
</table>

*Legal and Ethical Issues in Online Education.* In this course, the presence of the theoretical framework terms starts strongly in the course description. Moving from the course description to the learning objectives to the units, the terms are used less frequently
and then not at all, including design, ethical, and any mention of stakeholders. Because of this lack of consistency and the occurrence of six of the fifteen terms from the theoretical frame, this course appears to be minimally aligned with the theoretical framework. The inclusion of the omitted terms across the course categories, specifically with regard to unit titles, would strengthen the course. The results of the conceptual analysis for this course can be found in Table 23.

Table 23

<table>
<thead>
<tr>
<th>Conceptual Analysis for Legal and Ethical Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Description</td>
</tr>
<tr>
<td>Term</td>
</tr>
<tr>
<td>Learning</td>
</tr>
<tr>
<td>Design</td>
</tr>
<tr>
<td>Ethical</td>
</tr>
<tr>
<td>Stakeholders</td>
</tr>
<tr>
<td>Student Practitioners</td>
</tr>
<tr>
<td>Development</td>
</tr>
<tr>
<td>Intellectual Property</td>
</tr>
<tr>
<td>Intellectual Property</td>
</tr>
</tbody>
</table>

Relational Analysis. As the conceptual analyses of the course descriptions, learning objectives, and unit titles showed, one course is moderately aligned, three courses are minimally aligned, and one course is poorly aligned with the theoretical framework with the theoretical framework. While the program was not designed based on McPherson and Nunes’ (2006) theoretical framework, the framework does identify CSFs essential for success in online learning. When applying this framework to this program, findings reveal there is little cohesion across intended design and implemented coursework. Alignment findings are summarized in Table 24.
Table 24

Alignment Findings

<table>
<thead>
<tr>
<th>Course</th>
<th>Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>Poor</td>
</tr>
<tr>
<td>Collaboration and Support</td>
<td>Minimal</td>
</tr>
<tr>
<td>Tools</td>
<td>Minimal</td>
</tr>
<tr>
<td>Methods</td>
<td>Moderate</td>
</tr>
<tr>
<td>Legal Issues</td>
<td>Minimal</td>
</tr>
</tbody>
</table>

As alluded to previously, the most prevalent and critical finding was the occurrence of terms found in course descriptions were not included across the learning objectives and the unit titles. This was the case most significantly for Tools, Methods, and Legal Issues, though it occurred only slightly for Collaboration and Support and Leadership. One reason this may have happened in the last three courses is temporal; as they were offered later than the first two courses and thus more removed from the program development process, the faculty members’ ideas of what the course should contain may have shifted.

Ryan suggested that the end of the first iteration of the certificate program provided “an opportunity to revisit not only [the program’s] alignment with the goals but also outcomes within each of the courses ... [to] make sure that [the program] is doing what [it says it’s] wanting to do.” While the entire program faculty mentioned the idea of at least adjusting their courses after the first iteration, if not completely overhauling them, there was little discussion of whether the courses would be realigned with the program goals. Louise stated “if someone were going to go back and say, 'What are the goals of the certificate now?' they might be different than [the established goals].” Lindsey said that
“after a year … most programs reevaluate and look at outcomes and see if they [need] to be adjusted.” To ensure alignment throughout the program, it would be beneficial to revisit the program goals to ensure that the program was reaching anticipated outcomes, given that the first iteration is complete and confirm that the courses are aligned with those program goals.

**Faculty responses.** The faculty member’s impressions of their courses after the first iteration varied. Candace stated that she “was thrilled” with how the first iteration of the Tools course went. She also shared that her “bar for the first time a course runs is pretty low – you just accept that there’ll be a lot of problems and know that it’ll go better the second time.” Denise also thought her Collaboration and Support course went well, “considering it was the first time.” Both Candace and Denise made sure to temper their positive observations with the caveat that their courses were in the first iteration. Nonetheless, their perspectives were generally positive.

Lindsey’s thoughts on the first iteration of her Methods course were less positive than those of Denise and Candace. She said that she “would put it in the average. It wasn’t bad. It wasn’t great. ... it was a functional course.” For the first iteration, Lindsey said her course was “fine.” Sally had the same feelings about her course: “with the first iteration, it went OK.” She added that she is generally “never happy with the way a course goes,” thinking “there are things that can be improved.” Both Sally and Lindsey suggested that their courses would be revamped after the initial offering to address what did and did not work as well as addressing student feedback.

Ryan was the least enthusiastic of the faculty members about the first iteration of his Leadership course:
It was bumpy. There was no doubt it was bumpy. It was rough. The units per se, as they were, were thrown out there. It was prepped right at the very last minute. Instead of having the whole semester laid out at once, it was week-by-week, bit by bit.

In response to the results of the first iteration, the program faculty discussed changes they had made and those they were planning to make. In the second iteration of his Leadership course, Ryan changed the overall structure of his course, including changing all of the activities and assignments. One feature he added to his course was “actually doing [a needs assessment] ... instead of just reading about it” in order to make the course more relevant to students. In the second iteration of her Collaboration and Support course, Denise made modifications based on evaluation feedback. One of the biggest modifications she made was making sure that students understood the value in the work they were doing in the course. She also incorporated a guest speaker into the second iteration and plans to add more in the future. In the second iteration of her course, Denise also added video announcements to be more present in the course. Candace mentioned that she would like to add a guest speaker to her Tools course. She also discussed narrowing the focus of the content in the course. The two improvements that Lindsey noted, aside from completely rebuilding her Methods course, both had to do with course evaluations: “scaffold the final assignment” over the course and improve the timeliness of feedback to students. Sally also discussed several changes she wanted to make to her Legal Issues course, including broadening the expertise of guest speakers, incorporating “more interactive modules in each unit,” and providing more varied types of feedback as a response to her course evaluations.
Faculty members also found it difficult to collaborate once the program implementation began. Collaboration became a logistical issue and was virtually non-existent. Ryan stated “there was one time where we had maybe most [of the] people who were teaching in it in one room having a conversation about it.” Finding the time to collaborate was difficult; this was echoed by several of the faculty members. Candace discussed that while collaboration amongst faculty would be “helpful,” scheduling conflicts made this difficult. Ryan also identified time as a barrier to collaboration across the group. Ryan stated that, at the time the focus group took place, collaboration would consist more of “tightening [the program] up … trying to have more conversations about it” as the program grows.

There was some discussion amongst the faculty indicating that there were increased opportunities for collaboration as the program entered its second iteration. Lindsey discussed meeting with Candace and Sally to ensure that the spring semester courses were meeting students’ needs. Denise also mentioned that she had met with Ryan and Sally to “make sure [the leadership course] paired up with [the collaboration and support course].” Ryan went on to state that it would be “responsible and it should be expected that the faculty who are teaching those courses could work to plan and collaborate there … we just need to take the time to do it and say this is a priority.” While some of the gaps in collaboration have been addressed, particularly ongoing collaboration amongst program faculty, this was still a major deficiency in the program implementation process.

An issue that both Candace and Ryan faced in the first iteration of the program was the amount of content that was to be covered in the semester-long courses. Candace acknowledged that the “breadth of coverage [and] the topics that the course was going to
were challenges she faced during the course design process. Ryan took this issue further, stating that as he reflected “on what the outcomes or the program goals were, there’s too much in the course.” Regarding the variety and volume of the content he was to cover in the Leadership course:

The expectation for this course was to be this one overarching umbrella, which made it a little challenging to get into the level of the depth that you need to really understand and demonstrate understanding of these concepts; [instead] it felt a little more like ... a type of survey course, like “Here’s just a little bit about this, here’s a little bit of these ideas that we feel or believe are part of what leaders in online education should know.

The breadth of the Leadership course definitely presented Ryan with a challenge from a design perspective.

With regard to the rigidity of the courses, Denise presented a more philosophical issue. She discussed the transition not only to problem-based learning and critical thinking models of education, but also the movement away from a textbook that directs students’ actions. Trying to find a balance between allowing students to be creative and ensuring they meet the objective has proven to be challenging, as Denise found:

I want everybody to be super creative because part of the process, getting to the objective is the most important part so you need to achieve this outcome. But how you get there and the path that you create to get there, this is my philosophical question ... Do I create the that path for you by saying this is how I think you should get there, do this, follow this rubric, here’s an example of what it should look like?
Now did I just do a disservice to the folks that may have gotten to the exact same objective but in a very different way? Is the path as important as the objective?

Denise also acknowledged that by allowing students to be creative in their process is a new and scary experience for both faculty and students. Faculty cannot be sure of what they will get from students, while students are not provided much guidance in how to reach the solution. This balance between creativity and predictable outcomes is an ongoing issue in course design.

One idea that Denise mentioned was moving away from the textbook in course design. In a similar vein, Candace discussed her effort to ensure that her course design was not centered on content. By incorporating the content into the design at the end of the process, “the content doesn’t take over, which means that the schedule doesn’t take over either” in order to cover all of the content. Moving away from a content-focused course design allows faculty the opportunity to “make sure the skills are acquired, that the objectives are met.” This freedom from content also provides both faculty and students with the opportunity to take a more creative approach to learning. McPherson and Nunes (2006) identified “learner involvement in the design process” as a CSF (p. 550). While Denise was not referencing allowing students to participate in the development of the course per se, she described a situation in which students would have the opportunity to design their own path to the learning outcome. This type of flexibility could have a positive impact on student learning.

In order to enact the type of approach Denise discussed, clear communication with students is vital. Several of the faculty members highlighted clear communication with students in the online environment as a challenge they faced with the implementation of
their courses. Denise highlighted clear communication with students as one of her biggest challenges, specifically “when you think you’re clear and then you find out that what you think you said isn’t what everybody heard.” Lindsey and Sally highlighted particular aspects of their courses that were unclear to students. Lindsey stated that the final project “was not made clear from the beginning of the course.” This was also reflected in Lindsey’s evaluations; while Lindsey had intended for the final project to be scaffolded throughout the term, this was not clear to students. Sally also said “there were some things about the collaborative assignment that weren’t entirely clear at the beginning that [had to be clarified] quite a bit for students.”

Part of clear communication with students includes providing clear and timely feedback to students. Delayed feedback to students was one of the issues highlighted in the evaluations for both Sally and Lindsey. Lindsey shared “the grading was slower than [she] needed it to be.” This was attributed to the course being built throughout the semester. She also acknowledged that if she had just been teaching from week to week, she would have “more time for feedback.” Sally’s evaluations focused on the lack formative feedback provided during the course. Her style of providing feedback conflicted with what her students were expecting: “I don’t give long, detailed feedback. I give short, concise [feedback] and I also don’t like to tell people what they need to change, because I want them to figure it out.” Sally stated that she would like to be more visible, including providing more frequent feedback, in future courses.

**Student responses.** Both Buffy and Taylor were able to identify aspects of the certificate program that were most and least beneficial to them. While Taylor didn’t identify a specific course that was the most beneficial, she did identify best practices in
online learning as the most important aspect covered by the program. She found best practices to be the most applicable to her professionally, because “that’s the one that comes up constantly, and being well versed in that, in giving strategies on how to teach online, is probably the most important thing for me to tell my faculty.”

Buffy had many positive comments about the Methods course, the Legal Issues course, and the Leadership course. She said she “loved” the methods class. The instructor played a significant role in her positive experience; Buffy “felt very free to be creative in [her] own postings and knew that [the course] was an area just to test things out.” The safe learning environment provided a place for her to try new things without the worry of being reprimanded. Buffy “enjoyed [the Legal Issues] course because there were so many things [she] had no idea about,” and overall, the course was “really insightful.” However, Buffy clearly said that because “basically it comes down to what the judge, or jury, or attorneys can work out ... since there isn't really a lot to stand on right now,” she “didn’t feel like [she] left with succinct knowledge.” The Leadership course was also a very positive experience for Buffy. She said that the Leadership class “was really great and the content in the Leadership class was fantastic.” The Leadership course provided Buffy with the opportunity to “truly reflect on [her] own growth” via the development of “a personal and professional growth plan.” That growth plan was “really helpful for [her] at this stage in [her] life to determine what [she wants] to do next.”

Taylor was not hesitant to identify the least beneficial course, in her opinion, as she shared “the Leadership class ... that has the least connection ... to what [she’s] doing.” Taylor was clear in her expectations of the Leadership course, stating “the content was focused on corporate world leadership and management of people ... it didn't focus on what
leadership looks like in instructional design ... it was missing that connection to what it looked like in the real world in instructional design.” This gap made the leadership class the least relevant, from Taylor’s perspective, to the certificate program overall. It is worth noting that Taylor took the first iteration of the Leadership course, while Buffy was in the second iteration. The redesign of the course may have been one of the reasons the two students had very different opinions of and experiences in the course.

Buffy found the Tools course to be the least beneficial; her thoughts about the course were not positive. She said that she “didn’t feel free to try stuff, try the materials without ... [she] just didn’t feel free to try and experiment with the different things that we were talking about or learning about.” She also identified technical issues with the course, “in term of one program that [the students] were supposed to use, the free version expired before [the] final project was due.” Overall, in terms of the Tools course, Buffy did not feel that it provided a safe environment for her to test out new tools and skills. Additionally, the technology in the course was not structured to allow students to succeed. Buffy suggested that better planning the use of the one program and moving “that later in the course so that [students] still have the free version by the end” would improve the student experience considerably.

**Skills.** Taylor was able to identify several skills that she acquired in the certificate program and was able to transfer to a professional setting. Specific skills and projects highlighted include the strategic plan for professional development; the use of technology to meet learning objectives; experience with Captivate and Articulate software; researching the most up-to-date information on topics; and design and layout of online courses. Beyond the content, however, Taylor highlighted another important learning experience: “A lot of
the classes in the certificate program not only taught us content, they modeled how to teach online."

Taylor stated that the skills and knowledge she acquired in the certificate program "were very practical and applicable training, applicable learning." The courses also allowed her to apply what she was learning; she stated that this practice within the courses made her confident in her skills and abilities. She provided an example of a situation in which she was able to confidently guide her faculty:

One of [the faculty's] biggest complaints about students is that they seem like they're irresponsible, that they don't do what we expect them to do. If you don't tell them what to expect, how do they know what to do? I said, "We need to be explicit in our expectations, and hopefully this will help students be better prepared to meet our expectations in the classroom."

This is an example of how important it is to communicate clearly and explicitly with students. Though it was previously mentioned that some faculty felt that they struggled with this, this action was modeled to the extent that Taylor was able to acknowledge its existence and importance in an online setting.

Taylor provided a sample of work from her current professional position that was influenced by her participation in the program as an example of the skills she acquired. This work sample is illustrated in Figure 1.
Taylor had a lot to share about her work sample:

These pieces of work, they highlight the key policies and practices of the college. It is what I call an e-booklet of important information that students need to learn, or need to know, or have access to, and so it is located in our course in the Navigation menu. It’s called Student Resources, and it highlights all of the things that they need to be successful. ... We did that in one of our classes. We created a survival guide. We also discussed how it is important for these things to be visible and readily accessible to the students to see, not buried and hidden somewhere... Who’s going
to open up the college catalog and read those things? Nobody’s going to do that, so they’re very visual. They’re up front. They’re like an eBook, but it’s like a flipbook, so it’s using Articulate … in one of our classes [we learned] how to use Articulate to create a branching scenario, so all of the information is upfront. They click a button to open and explore that content and area, so it’s explicit information for the students. It’s visible, it’s engaging, it’s appealing, and it’s not meant to be in replacement because we have that little blurb. This doesn’t replace the manual, but this is the most asked information or highlights key information for them, so all of those things were actually highlighted in multiple of the courses. Bits and pieces of that were throughout the whole certificate program, of the importance of having that.

As she mentioned throughout, this work sample highlights several things that she learned while in the certificate program: creating a survival guide, which was done in Collaboration and Support; building branched scenarios in Articulate, which came from Tools; and putting information in multiple locations so it’s widely accessible, stemming from the Legal Issues course. It is clear from this work sample and the wide range of abilities it utilized that Taylor was able to smoothly transfer the skills and knowledge she acquired while in the certificate program into a professional setting. A full-sized version of Taylor’s work sample, along with her discussion about it, can be found in Appendix O.

Similarly to Taylor, Buffy was also able to identify skills from the LDOL program that were transferrable to a professional setting. Generally, Buffy believed that the skills and knowledge she acquired were “strongly” transferrable to her practice. Not only did she learn “a great deal” in the program, but she also appreciated “having the time to practice
them in the class” before she implemented them with her own students. She was able to improve her approach to course design:

I try to, now when I’m setting up my classes, to really provide the information clearly ... I used to have it in multiple places, but now I’m setting up things a little differently in an effort to help my students.

This approach to course design helped her to reduce potential frustration and cognitive load issues for her students.

Another beneficial aspect of the certificate program that Buffy identified was “learning new technologies to incorporate” into her courses. This includes a range of skills and technologies. She was able to incorporate video and audio announcements into her courses, which she identified as “basic” but were new techniques to her. Ultimately, Buffy was able to walk away with the “new strategies and new techniques, new methods to actually implement and utilize” in her online teaching practice.

Buffy did say that she perceived some of the assignments to be unhelpful to her. Specifically, she highlighted “a handbook, a survival guide for students online” created in the Collaboration and Support course. She said that “it was fine, but [she] did that [at the start] of the gifted program because [she] was coordinator in the beginning.” Because she already had experience in the field, this type of assignment was repetitive of what she had previously done.

Buffy provided a sample of work that she created in the LDOL certificate program and utilized in her intervention specialist position. This work sample is illustrated in Figure 2.
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Figure 2. Buffy's Work Sample.

This is what Buffy had to share about her work sample:

In the leadership course I created a needs assessment and that's the work sample, the student sample example that I brought you. I had never created one before like that, to then fully analyze the data. I've collected surveys, but to make it a more formal process, this was the first time that I've made it a full formal process, so that
was something new. ... I used it in my non-online job, so I created this needs assessment because I feel like there is a disconnect for gifted students and the knowledge that they need versus what they’re getting. Academically they’re probably overall doing fine in this specific class that I’m working with, but I feel like there are so many other elements that are lacking, like the social emotional piece, the leadership development, their spiritual and their social needs. I went in to see if other people that are with students saw those same deficiencies, and so that’s the needs assessment I created, and issued that, and got feedback ... from the teachers, what they have seen and observed, and then I also, it was kind of twofold because I wanted to find out what their observations were, but also to see if they were willing to step out and maybe teach a class, extracurricular, do something for the children beyond their regular day.

Buffy’s work sample started as an assignment for the Leadership course but was transformed into a tool that was helpful to her in a professional setting. Though it was not designed to be used as a component in online learning, it reflects the applicability of the work performed in the leadership course of the certificate program. A full-sized version of Buffy’s work sample, along with her discussion about it, can be found in Appendix P.

Overall, both students were very satisfied with the program. Taylor said she would “definitely recommend” the certificate program. Buffy said that the LDOL certificate program “was a really great experience.” She also said that she “learned a lot and [she is] looking forward to actually implementing a lot of the material and information that [she] learned.” Aside from her negative experience in the tools course, “everything else was a good experience.”
Developing Leadership

The concept of leadership was illustrated across all three participant groups. Each is presented below.

**Leadership experience.** In her interview, Sally acknowledged she had never developed a program prior to the LDOL certificate program. While she has leadership experience, it is primarily focused around faculty development and faculty work teams. One instance of this is reflected in the Leadership course. As indicated by the title, the Leadership in Online Learning certificate program was designed to focus on just that: leadership in online learning. However, it was the online learning component that Sally noted was lacking. She stated, “the leadership component definitely needs to be emphasized more in terms of leading in an online environment versus just generic, general kind of leadership.” This is clearly a gap between program development and implementation: one of the student learning outcomes stated that students would be able to “identify and overcome the primary challenges of leading an online program” (GCPAG, 2012, p. 2). With a focus on “generic” leadership, the program did not achieve that specific goal. Sally acknowledged the difficulty in ensuring that students learn how to lead specifically in an online environment, stating “making sure that the students leave [the leadership] course feeling like they understand things that are really specific to the online environment has been a challenge.” It is possible that Ryan was not a good fit to develop and teach the Leadership course, and that identifying and including another faculty member could have averted this issue.

It is worth mentioning that, despite her lack of experience in this venue, Sally, with the help of her team, managed to coordinate and execute a program that was generally
well-received and well-supported by the college and across the University. Sally acknowledged that she was “very open to [her] own gaps in knowledge and bringing people on board, creating a team that can fill those gaps.” Sally’s experience with the LDOL program, along with her recognition of her weaknesses as well as others’ strength, has provided her with the leadership experience in online learning that she can build on in the future.

**Gaps in student leadership preparation.** Each of the program faculty members were asked how well their course prepared students to take on a leadership role in the field of online learning. There was a range of responses from the faculty members. Regarding her tools course, Candace stated “because the course isn’t strictly aimed at leadership, [she is] not sure that by itself [a student] would go out and become an eLearning leader.” However, she did share that it was critical for students “to have at least some background, some experience, some passing knowledge in how these learning objects get built” so as to “understand the content development process” from a leadership perspective.

Lindsey said that her Methods course “actually did a fairly decent job” at preparing students to assume leadership roles. Her perspective was a bit different, however, in that her course focused on “how you lead other people through course design discussions … it’s very different than helping them through having to collaborate on some decisions about what goes in a course.” The leadership focus here was narrower in that it was aimed at leading the course design process rather than the broader concept of leading in online learning. While having an understanding of the content development process and being
able to lead a course design team are important skills for online learning leaders, they are only part of the leadership role.

Ryan believed that his course was more of an introduction to leadership. He said that the course was “a challenge to get people to start thinking about what leadership means for them.” The Leadership course provided students with “an opportunity to reflect on [leadership].” Ryan also stated that there were “leadership skills and some key insights that people may hopefully have gained.” Overall, while the Leadership course had the most leadership content and was the primary leadership focus of the certificate program, Ryan’s comments indicate that there appears to be a gap between intended and perceived student leadership development.

When asked if her Legal Issues course helped prepare students to assume leadership roles, Sally was able to reflect on a conversation with a student who had completed the certificate: “because of her feedback, I feel that it prepared students well.” Sally also stated that teaching students how to ask questions was important in preparing them for leadership roles. She said she believed that “they were able to ask the right questions of their teams, of their institutions that maybe they hadn’t thought to ask before, that they knew where to go if someone asked them a question and they needed resources.”

Both Sally and Ryan had interesting perspectives on whether their courses and the program overall helped their students prepare for leadership roles. Sally pointed out that you cannot “ever really know until you hear from the students if it’s helping them or not.” Ryan inquired as to leadership preparation on a wider scale: “How well is anyone prepared for leadership? People fall into leadership positions all the time.” These sentiments are curious, as the certificate program as developed in order to prepare individuals to assume
leadership roles in the field of online learning. However, they also provide a realistic perspective as to what they, as faculty members, are able to do for students through a single course: until the students are put into a leadership position, and until they provide feedback to the program, the faculty cannot be sure that their efforts in leadership preparation were successful.

**Online leader characteristics.** When asked to identify what characteristics are important for an online leader to possess, Buffy discussed the following:

> Definitely organization, excellent communication skills, and in that regard, I think being able to be the liaison, because ... and also the building rapport for that too, because I talked with every single student that came in our program. I knew something about them, and I felt like that helped to just build the connection and make sure that they were engaged and really were going to stay in the program. I think that those are also very essential.

Buffy was able to draw on her own experience as program coordinator of her graduate certificate program to identify these characteristics. Her focus on her students, through both her course design practices and her needs assessment, highlights how important it is to her to ensure they have a positive experience.

When asked what characteristics an online leader should possess, Taylor also had several recommendations:

> You definitely need to be a people person. You also have to be confident and outspoken. You need to stand up because this knowledge is not common knowledge ... and so you have to go against the grain. You have to have a backbone and stand up. You have to be a true collaborator and understand that you play a part in sharing
important information, but you can’t take it personal if they don’t say what you think.

True collaboration, confidence in knowledge and skills, and having a backbone are all leadership qualities that Taylor has demonstrated in her professional setting, and she credits much of her professional success to her experience in the certificate program.

Discussion of the Case

Creating a new graduate program in higher education is a process, and change occurs across that process. Program developers and/or faculty are responsible for creating new programs. When existing faculty and/or staff are asked to design new programs, these processes may alter the structure of the college/institution as well as the workflow of the individuals involved. There are several themes that emerged from the case regarding the LDOL program, the organization in which it is situated, the program faculty, and the student participants.

Needs Assessment

The LDOL graduate certificate program was created as a Dean’s initiative. As a result, there was no formal needs assessment conducted. A formal needs assessment would have identified the overall appeal of such a program, potential stakeholders, a target audience, and the geographical scope to which it should be marketed. This needs assessment would have also identified whether the program met the needs and the vision of the organization and whether the identified program coordinator had sufficient experience to execute this. Though the Dean determined it was needed, and it was projected to generate revenue, there were no findings to align the program with the needs of current and future stakeholders.
Stakeholders

Involving all stakeholders in collaboration is vital for program success. In fact, McPherson and Nunes (2006) identified multiple CSFs identifying stakeholders as a whole, as well as different groups of stakeholders: inclusion of stakeholders in planning, commitment from all stakeholders, student and staff involvement and acceptance, learner involvement in the design process, and tutor/academic involvement in the design process” (p. 550). Because there was no formal needs assessment conducted, there were no stakeholders identified and associated with the program development process. Candace said that there were not really any stakeholders when the program was initially developed, but that changed with program implementation. Now that the program has been implemented and is well into its second iteration, groups identified as target audiences via a formal needs assessment would be able to provide feedback to ensure the program is able to meet their needs.

In addition to individuals who are considered to be stakeholders in the program, the organization also has a vested interest in the success of the LDOL program. McPherson and Nunes (2006) identified several organization-specific CSFs that were important to program success: organizational willingness to provide funding, supporting administrative system, organizational vision, sustainable organizational eLearning strategy, alignment of project development with organizational view, and organizational communication (p. 550). These factors were present during the development and implementation of the certificate program. The organization – in this case, the University – is a stakeholder in this program. Representatives from the college and University should be identified and solicited to
provide feedback so as to ensure that the program remains in line with the vision of the organization.

**The Organization and Online Learning**

In addition to determining the conveyance of leadership and administration in online learning to students, an additional focus was on the growth of online learning within the college and at the University as a whole. Online learning is “becoming a huge part of higher education,” and “the reality is, [as] we grow as an institution, the new programs are happening online.” The college has “an eLearning momentum ... [and] committees, but [doesn’t] necessarily have a presence like some other universities who started early on.” While some of the online programs within the college provide the opportunity to establish presence in the field, Samantha asserted that the college needed to find “the niche that really matches what [their] goals are.” The creation of the certificate program focusing in leadership in online learning provides the college with the opportunity to establish a niche in a field that is underrepresented. However, it is important that the program remain aligned with the “organizational vision” in order to be successful (McPherson & Nunes, 2006, p. 550).

Within the organization, it is possible that better planning with regard to faculty assignment to courses could improve the overall quality of online education. With regard to their specific certificate courses, both Sally and Ryan indicated short time frames – one month and one week, respectively – between when they were asked to teach and when the courses started. However, this short notice is not limited to Sally and Ryan. Lindsey reported receiving a few days’ notice prior to the start of one online course. Also, as she is a faculty member within the college, Buffy also reported receiving very short notice that she
was teaching prior to the start of an online course. If faculty had more time to design and
develop their online courses, it may enhance the execution of the course as well as increase
student satisfaction. This extended time frame would allow faculty members to engage in
“balanced collaborative multi-skilled design and development” and “clear design and
development for best practice guidelines,” both identified as design-focused CSFs by
McPherson and Nunes (2006, p. 550). Additionally, organizational cooperation on this front
would foster a “supporting administrative system” and a “supportive organizational
culture” by providing faculty with adequate time to prepare their courses (McPherson and

**Program Leadership**

It was previously discussed that the LDOL program was Sally’s first program
leadership experience. Despite her vast knowledge of instructional design and online
learning, Sally identified a significant barrier to success: “putting someone in charge of a
graduate certificate that has never created a program before and is learning on the job.”
Many program leaders never receive formal training prior to being positioned in these
roles (Ladyshewsky & Flavell, 2012). While there are leadership trainings in higher
education that have been designed to prepare individuals for new roles, this was not an
option for Sally.

Sally’s position as program leader puts her in unique position as a boundary leader.
In order to recruit students for the program, Sally has to be able to communicate with both
stakeholders within the college and those populations outside of the college to whom she
would like to enroll in her program. This has the potential to be very beneficial for the
program and the college, as recruiting new students could increase enrollment and
revenue. Both collaboration and stakeholder involvement were part of McPherson and Nunes’ (2006) framework and considered crucial to the success of an online program.

A program leader’s ability to adjust to and enact change is also very important to their success (Aasen & Stensaker, 2007; Sadeghi & Pihie, 2012). Indeed, McPherson and Nunes (2006) identified “change management leadership” as a CSF for program success (p. 550). Developing and implementing a new program constitutes a change within the organization, and a program leader must be able to guide that change. An important aspect of successful change management is collaboration, discussed next (Heyman, 2010).

**Culture of Collaboration**

Collaboration was an important part of the program development process in the first two phases. However, with program implementation, collaboration became a logistical and priority issue. Heyman (2010) asserted that it is important to for effective collaboration to be a focus of groups and organizations in order for goals to be reached. One example where collaboration would have been beneficial is with the development of the last three courses in the first iteration of the certificate program. The content analysis revealed alignment issues across the course description, learning objectives, and unit titles. Two of the courses, Leadership and Tools, were poorly and minimally aligned, respectively. One reason for the misalignment may be that since Ryan and Candace were not involved with the program development process, their understanding of the courses’ content may have been different than what the program developers had envisioned. Collaboration throughout the implementation process may have addressed this issue.

In order to form a culture of collaboration, three components need to be present: communication, accountability, and solution (Heyman, 2010, p. 3). Members of the group
need to communicate in order to collaborate. They also have to be accountable for their individual actions as well as those of the collective. Lastly, collaborators need to be able to problem solve and develop effective solutions. For collaboration to be successful, it must be afforded the necessary time and resources (Heyman, 2010). This indicates to the members of the group that not only is the process valuable, but their participation in the process is valued as well. Faculty members identified time as a significant barrier to collaboration during program implementation. In order to have successful collaboration, the program and the faculty must be willing to make time for it to happen.

**Adult learning**

At the time of their participation in the program, both Buffy and Taylor were considered to be adult learners as defined by Eckel and King (2004). Meeting the needs of adult learners was important to the faculty members in the program: Ryan, Candace, Lindsey, and Denise all mentioned adult learning theory as a significant component of the program. Denise stated that “teaching application” was an important component of her overall course design. Ensuring that the skills and knowledge students acquire during the program are applicable is in direct alignment with Knowles’ (1973) theory of andragogy. Both Taylor and Buffy found the program to be extremely transferable to their professional setting, underscoring the applicability of the program.

One of the design issues that Denise faced was how much creativity to allow students in the learning process while still ensuring that they were able to achieve the course objectives. By allowing “learner involvement in the design process,” or in this case, the learning process, students would be able to direct their own learning to the extent that they achieve the course outcomes (McPherson & Nunes, 2006, p. 550). The self-directed
learning process is important for adult learners, as it allows them to tailor their learning to meet their own needs (Hadre, 2009; Ruey, 2010; Wuebker, 2013).

While there has yet to be a formal community of LDOL program participants and graduates, building communities within and outside of the courses is still an aim of the faculty members. Lindsey spoke of how she believes in a “community of practice model” regardless if she is teaching face-to-face or online. Sally also discussed how her students formed a community within the course and continued to interact after her Legal Issues course was over despite the lack of a formal community option. Denise spoke of wanting to focus on “the interaction in the building of the actually community in the class” in the next iteration of her Support and Collaboration course. Ensuring that there is a community of practice available to adult learners increases their potential for success in online courses (Garrison, Anderson, & Archer, 2000; Lave & Wenger, 1991). Likewise, McPherson and Nunes (2006) identified “creating and fostering online learning communities) as a CSF for delivery (p. 550). Creating communities of practice within the online learning environment is an important contributor to the success of adult learners (Blair and Hoy, 2006; Coryell & Clark, 2009; Guldberg, 2008). Creating these communities of practice as an ongoing forum of collaboration and support outside of the classroom could provide these online leaders, both current and future, with an essential network for professional and personal growth.

**Continuous Quality Improvement**

A concept that was mentioned multiple times by program developers was that of continuous improvement. Lindsey stated, “Program development is a continuous improvement process.” Louise echoed this, stating, “It’s a continuous improvement thing.” This process of continuous improvement is visible throughout the program. In an effort to
improve his Leadership course, Ryan completely redeveloped it between the first and second iterations. Lindsey stated that she “always, always, always [ends] up re designing a course to some degree after [she has] taught it the first time.” Sally shared a similar sentiment:

Any time I teach an online class it’s definitely, go back, look at the final products, did they get it? Did it meet the learning outcomes? No. What do I have to change? You take all of that, and combine it with course evaluations for a re-work.

While Candace and Denise did not specifically mention completely rebuilding their courses between iterations, they both discussed making changes to their courses after their first iteration.

It is worth noting that, particularly with the Leadership course, the redevelopment between the first and second iteration was significant from the students’ perspective. In its first iteration, Taylor identified the Leadership course as the least beneficial course in the program. However, after completing the second iteration, Buffy identified the Leadership course as one of the most beneficial courses in the program. It is likely that the complete overhaul of the course between the first and second iterations caused Taylor and Buffy to have very different experiences.

The concept of continuous quality improvement applies to the program as well as the courses within it. Ryan stated, “this would be an opportunity to revisit not only its alignment with the goals [for the program] but also outcomes within each of the courses” to ensure everything is aligned as it should be now that the first iteration of the course has been completed. The results of the conceptual analysis of the course categories reinforce
that the program goals and course outcomes should be revisited to ensure that everything is aligned the way it is intended.

The LDOL certificate program’s process of continuous quality improvement highlights several of the CSFs identified by McPherson and Nunes (2006). First and foremost, the student experience is “carefully considered” by the program faculty; communications with students, course evaluations, and their overall perception of the course execution is taken into consideration after every iteration (McPherson & Nunes, 2006, p. 550). This careful consideration allows the faculty members to manage their expectations with their course outcomes (McPherson & Nunes, 2006, p. 550). For instance, Candace said that she was “thrilled” with how her Tools course went in its first iteration, with the caveat that her expectations were low because it was the first iteration. A program-wide philosophy of continuous quality improvement also enhances the “good communication between practitioners and management” (McPherson & Nunes, 2006, p. 550). Faculty members, if they do not take the initiative themselves, will not be surprised when the program coordinator suggests improvements to strengthen their course; after its first iteration, Sally approached Ryan about the Leadership course and suggested improvements to make the course better. This culture of continuous improvement has been in place since the beginning of the program. The college is also in a place to provide “efficient learning and teaching support” when faculty members need assistance (McPherson & Nunes, 2006, p. 550). “Developing learning objects” and “sharing or revisioning learning objects” were both mentioned specifically by Sally and Denise as design changes they wanted to or had used to enhance their courses (McPherson & Nunes, 2006, p. 550).
Sustainability

The ability of the program to financially sustain itself is questionable after the first iteration. The low enrollments and subsequent low revenue as a result of low enrollments and tuition remission situations indicate that the program is not meeting its goal of being a “moneymaker.” While the organization is willing to provide funding, a CSF identified by McPherson and Nunes (2006), the program is also expected to generate its own revenue as a means of support and sustainability.

One way to improve the sustainability of the program is to increase enrollments. While the restructuring of the program is designed to accommodate this, marketing has to occur in order to attract students. Sally’s views on marketing online programs were made very clear: because there are so many programs out there, there is more effort required to make one program stand out. The lack of marketing is evident in how both student participants found out about the certificate program: Taylor by word of mouth and Buffy while browsing the college website. A thorough marketing strategy was proposed as part of the Graduate Certificate Program Approval Guidelines. The implementation of a marketing strategy designed to reach the target audience would most likely bring more students into the program, increasing enrollment and revenue. This would improve the overall sustainability of the LDOL certificate program. McPherson and Nunes (2006) are clear to identify the importance of a “sustainable organizational eLearning strategy” as well as the “creation of sustainable solutions” (p. 550). Creating an effective marketing plan would indeed contribute to the establishment of a sustainability strategy for the program.

In order to identify a target audience for the LDOL program, a formal needs assessment would be beneficial. A specific target audience would help to focus the
marketing of the program as well as ensure its relevancy to prospective students. While the
skills in the job postings provide valuable insight as to what employers are looking for, it is
possible that the program as designed is not meeting the needs of the students it is
targeting or is not as beneficial to the college as it could be. The culture of the organization
drove the start of the program development process; after all, the Dean identified a need
for the program. However, the lack of an initial formal needs assessment could be
negatively affecting the program and its potential participants by not addressing their
specific needs.

Concluding Remarks

The case of the LDOL certificate program examined the development and
implementation of the program from the perspectives of program developers, program
faculty, and student participants. My findings reveal several aspects of the program, its
implementation, and its participants. First, program participants were motivated by
professional development, the leadership component, and the credential the program
offered. Second, the sustainability of the program is questionable without the use of
marketing to recruit students. The lack of a formal needs assessment restricted the
program from effectively identifying a need for the program, stakeholders, and a target
audience. Third, while the courses are not generally aligned with McPherson and Nunes’
(2006) theoretical framework regarding success in online learning, the program faculty
and students have a wide range of perceptions as to the delivery of the courses. Although
there were issues of leadership, collaboration, and course implementation, the program
was overall well-received by the student participants. An effort of continuous quality
improvement has strengthened the program since its first iteration. Lastly, though the
concept of leadership was threaded throughout the nested groups, there was wide variation as to the meaning and expression of that quality. In chapter five, I present the answers to my research questions, the implications of my findings, and suggestions for future research.
Chapter Five

Summary of the Study

The purpose of this study was to determine if the Leadership in Online Learning (LDOL) graduate certificate program prepared individuals to lead in an online setting. This study used a qualitative nested case study approach.

This research study sought to answer the following research questions:

1. What are the online leadership program students' motivations for participating in the graduate certificate program?
2. What leadership, structural, and cultural gaps existed between development and implementation?
3. What design, technological, and delivery issues did the program faculty face in the first year implementation of the certificate program?
4. In what ways have the two program completers used their new knowledge and skills within their current jobs, and how do they anticipate their use to be in the future?

Interviews were conducted with program participants, program faculty members, and one program developer. Two focus groups were conducted with all but one of the remaining six program developers. The data generated from these interactions underwent both interpretive and typological analysis. Course syllabi, evaluations, and course-specific information in the eCurriculum were also collected and analyzed for content. Results from the analysis of course evaluations were incorporated into the faculty interviews when possible. Findings from the analysis of the course syllabi and eCurriculum information were used to triangulate data collected from interviews.
Findings

This section provides a summary of the findings presented in chapter four. The findings are categorized by research question.

Research Question 1: What are the online leadership program students' motivations for participating in the graduate certificate program?

The motivations for participants Taylor and Buffy were distinctly similar, though they both came to the program from different perspectives. Taylor found out about the LDOL certificate directly from Sally, the program coordinator. Buffy came across the program information on the college’s website. The mechanisms of finding out about the program may have driven their initial interest in completing the program: Taylor’s goal was completion of the certificate from the beginning, while Buffy initially planned on only taking a few courses to improve her online teaching skills.

Buffy was motivated to start taking courses and eventually complete the certificate by the professional development and leadership aspects of the program. Her over-arching goal was to improve her practice. The professional development and leadership aspects of the program were also motivating factors for Taylor. However, she was also significantly motivated by the credential that the LDOL program offered.

Research Question 2: What leadership, structural, and cultural gaps existed between development and implementation?

The LDOL certificate program was a Dean’s initiative with Sally designated as the program coordinator. There was a lot of interest in the program, both within the college and across the University. Development of the program occurred in three phases: development of program goals, development of certificate coursework, and development of
the program courses. While Candace and Ryan were identified as part of the program development team, they were only involved in the last phase of program development.

There were two identified leadership gaps between program development and implementation. A lack of a needs assessment was one of these gaps. A formal needs assessment may have reflected the needs of both the target population for the certificate, as well as those of the college and University. The program could then have been tailored to meet those needs. A second gap was Sally’s lack of program coordination experience. While she acknowledged this gap, there were still issues, specifically with the Leadership course and its implementation. This can be attributed largely to the faculty member who designed the course; however, it is possible that selecting a different faculty member would have avoided this issue.

There were five structural gaps identified between program development and implementation, with structural defined as the organization and interactions among parts of one entity. In the beginning of the program development process, collaboration took place amongst the program developers; however, this was not the case with course development and implementation. Outside of the identified program developers, there were no stakeholders involved in the program development process. However, now that the program has been implemented, there is more opportunity to involve stakeholders in program growth and redesign. With regard to organizational alignment, the program was unable to reflect the model of online learning at the University as there is no such model.

A conceptual analysis of the course descriptions, learning objectives, and learning titles show that there is a disparity in alignment across these categories with regard to the theoretical framework. A relational analysis posited whether the amount of time between
course development at the program level and faculty development of the courses was a cause of misalignment. Another factor could also be a disconnect between some faculty members and the program development process, as Candace and Ryan were not involved in the program development process until the final stage. Lastly, the program was projected to be a “moneymaker.” However, the program struggled with low enrollments, and many students were employees at the University receiving tuition remission. The combination of these factors resulted in low revenue generation. A complete absence of marketing leading up to and within the first year of the program may have also adversely affected the program and put into question the sustainability of the program.

Four cultural gaps were identified between program development and implementation, with cultural defined as the “relating to the ideas, customs, and social behavior of a society” (Oxford Dictionaries, 2014). One cultural gap was an identified need for the program. There are few programs like the LDOL program in existence, especially with the leadership component. Additionally, the program was projected to meet the needs of the college. However, there was no formal needs assessment conducted. The target audience was identified by the program developers as K-12 and higher education professionals with experience in leadership and online learning, but there was no agreement as to what the breadth of the audience should be - local, regional, or global. Additionally, the corporate audience was not targeted, despite the acknowledgement of the applicability of the program in that setting. Several program developers identified the formation of a community of learners and professionals to be an important component of the program; however, no formal community has been developed outside of the classroom environment. Lastly, though collaboration was identified as a structural gap, it is also a
cultural gap. Collaboration among faculty members was not a priority as the implementation process began as there was no programmatic culture to reinforce the importance of the process.

**Research Question 3: What design, technological, and delivery issues did the program faculty face in the first year implementation of the certificate program?**

There were three design issues identified. The first was the time frame for course design. Both Ryan and Sally identified that they had a short amount of notice that they would be teaching a course prior to the start of the course, and this affected the design and development. Ryan indicated that more advanced notice would likely have a positive impact on the course and perhaps the program in general. Candace and Ryan also stated that they believed their course had too much content to effectively cover in one course. Ryan indicated that some of the topics his course was to cover had entire courses dedicated to them, thus making his coverage of those topics inadequate for more than an overview. Lastly, Denise mentioned the concept of creativity versus structure, specifically asking how to ensure that students meet the learning objectives and achieve the outcomes while still allowing them to be creative with their own learning process. Candace and Denise also mentioned shifting the focus away from content to allow students to have the flexibility they needed to meet the objectives.

There were two technological issues identified, and Candace experienced both of them. The first was ensuring that students had access to the necessary software to complete assignments; the length of the course meant that the trial periods of the otherwise very expensive software expired before the final project was due. Candace also had issues with the rubrics in the learning management system, as they did not become
active upon creation. As this was her first time using the rubric function, she has addressed that issue since the first iteration of the Tools course.

With regard to delivery issues, there were three identified by the program faculty. One of the biggest challenges faculty members faced was clear communication with students. One aspect of this was ongoing communication; Denise said that often she believed she was clear but students felt otherwise. A second aspect of communication was providing timely feedback to students. This was identified in the evaluations for both Lindsey and Sally, and both faculty members acknowledged that this was an issue in their course. A second delivery issue was student preparation. As this was not the specific focus of some courses, those faculty members were unable to ascertain if their course prepared students for leadership in online learning. Sally, Ryan, and Lindsey all felt that their courses did a decent job of preparing students for leadership. Sally noted that this was difficult to assess without obtaining feedback from students who obtained leadership positions in online learning. Lastly, the faculty members had a range of impressions as to the success of the first iteration of their course. Both Denise and Candace felt their courses went well, especially considering it was the first time that either was taught. Lindsey and Sally believed that their classes were OK and discussed the potential for a complete overhaul of each prior to the second iteration. Ryan said that the first iteration of the leadership course was “bumpy,” and he actually completely rebuilt the course prior to the second iteration.
Research Question 4: In what ways have the two program completers used their new knowledge and skills within their current jobs, and how do they anticipate their use to be in the future?

Taylor came to be involved in online learning as an adjunct faculty member at the University, making a rapid transition from face-to-face teaching to the online learning environment. At the time of our interview, she was an instructional designer at a college outside of the University. Her primary motivation for enrolling in the certificate program was to obtain the credential; she believed the credential itself would help her obtain a job in the field of online instructional design. Taylor completed the certificate in its entirety in the first iteration of the program, and she was considered to be an adult learner per Eckel and King (2004) while she was enrolled in the program. Overall, Taylor said, in her experience, the skills she acquired in the LDOL certificate program were highly transferable to a professional setting. She identified knowledge she acquired through projects and assignments as well as software experience as relevant to her current job. The work sample she provided, an e-booklet, was developed using a combination of skills from across the certificate program. Taylor was unable to identify one course that was the most beneficial to her, instead identifying concepts such as modeling and best practices as the most beneficial aspects of the program. However, she readily identified the Leadership course as being the least applicable to her current position due to its lack of focus on online learning and instructional design from a leadership perspective. Overall, Taylor’s experience with the program was a positive one. Taylor identified several characteristics that she believed online leaders should possess based on her experience, including
confidence in their knowledge and skills, the ability for true collaboration, and having a backbone.

Similarly, Buffy also became involved in online learning as an adjunct faculty member at the University, a role she still held at the time of the study. While she was also an intervention specialist, online learning was not a focus of that position. Buffy’s primary motivations for enrolling in the certificate program included improving her practice as an online instructor and broadening her skillset; additional motivators were the short duration of the program and her eligibility for tuition remission as a faculty member. The credential aspect of the program was not a motivating factor for her; she did not initially anticipate completing the program. Buffy started the certificate course in the spring semester; this means that she took Tools, Methods, and Legal Issues in their first iteration, and Leadership and Collaboration and Support in their second iterations. Overall, Buffy found the skills from the certificate program to be very transferrable to her professional setting, both as an online faculty member as well as her intervention specialist position. She appreciated having a space to practice her new skills and the new technology prior to implementing them in her own courses. The work sample Buffy provided, a needs assessment, was created in the Leadership course and was beneficial to her in an offline setting. Methods, Leadership, and Legal Issues were recognized as the three courses she found to be the most beneficial. Buffy identified the Tools course to be the least beneficial course in the certificate program. This was due to the fact that she did not find it to be a safe environment to try out new skills. Additionally, the aforementioned software difficulties also had a negative impact on her experience in the Tools course. Overall, her experience with the certificate was positive. When asked to identify characteristics of
online leaders based on her experience, Buffy identified organization, strong communication skills, and the ability to liaise across different groups.

Implications

The results of the case study of the Leadership in Online Learning program have implications for many groups of stakeholders, including online learning as a field, higher education organizations interested in implementing this type of program, program developers and faculty, and students. Implications for each of these groups are presented below.

Online Learning

The results of this case study have important implications for the field of online learning as a whole. At the time this study was conducted, there were six programs identified that served to prepare individuals to lead in an online learning environment. As online learning continues to grow, it is anticipated that attention will shift toward ensuring individuals are indeed prepared to assume these leadership roles. One way to improve access to adequate leadership preparation would be to increase the number of programs available. As one of the few programs of its kind and the first to be evaluated, the LDOL program can be a model for other institutions looking to implement a similar type of program. While Ryan made the point that individuals who are not prepared are often put into leadership positions, this does not necessarily have to be the case moving forward in online learning. With adequate leadership preparation, individuals can be prepared to assume these roles with the skills and characteristics required of an online leader.

A second implication for the field of online learning is that the leadership in online learning credential is one sought out by individuals looking to expand their professional
knowledge in online learning. The leadership focus fills a professional development gap in the field as a whole. It was mentioned by several of the program developers and faculty members that credentialing within the field of online learning is relatively new; however, with the increase in access to online education, the allure of the credential in this continuously growing field is strong. It would greatly benefit the field of online learning to come together to determine what qualities are essential for a leader in the field to possess and establish a model of best practices. It is not far-fetched to think that concepts of online leadership, including transformational leadership, could be integrated into curricula designed to prepare individuals to assume roles in online learning,

Organizations

This study also has several implications for organizations, specifically higher education organizations, with regard to leadership in online learning. Regarding online learning as a whole, it is important that the implementation of any program, especially an online program, be aligned with the mission and vision of the institution. If online learning is not part of the institutional mission and vision, whether through increased access to students or diversity of faculty function, there is no reason to implement a new program or expand an existing program. Both the strategic plan of the institution as well as a formal needs assessment can help determine if online learning is an appropriate fit for the institution.

The second implication for higher education organizations is the importance of a formal needs assessment. A formal needs assessment for any new program should be conducted prior to its development and implementation. This needs assessment will help the organization determine if there is a need for the program, who the potential
stakeholders are, and the scope of marketability should there be a need for the program. Ensuring that the program is aligned with the needs of the organization is important to its success, and these data points can help the organization ensure that the program will be successful. Once a need for the program is established and the program is in place, it is also important to ensure that a viable marketing strategy is in place for student recruitment; this will promote the sustainability of the program.

The last implication has to do with program leadership. When choosing an individual to coordinate an online program, it is beneficial if that individual has leadership experience, though not required if the institution is willing to provide training. Providing the new program leader with training related to the position and leadership could facilitate their success and the success of the program they are leading. Additionally, when choosing a program leader for an online program, especially a leadership in online learning program, it is important to select someone with a background in online learning. It is important to ensure that the new program leader has a working knowledge of online learning, as the field is different than that of traditional education. If the selected program coordinator is a faculty member, prior professional development and experience in online learning would be preferred.

**Program Developers and Faculty**

In the case of the LDOL program under study, there was significant overlap between the program developers and the program faculty. This generally allowed the faculty to participate in the development of the program and then build the classes that were created during the development process. There are several implications as a result of this model.
One implication for program developers and faculty lies in collaboration. In order to ensure that both the program development process and the implementation of the courses is aligned with the goals of the program, it is important for both groups to come together and share their ideas. In the LDOL certificate program, collaboration was frequent during the program development process. However, once the course implementation began, collaboration amongst the program faculty was not a priority. Especially in a program where concurrent courses were designed to be complimentary, collaboration amongst faculty members is important to ensure that students receive all necessary skills and information. As shown in the content analysis, the courses that were furthest removed from the program development process with regard to time were less aligned than those that were implemented immediately after the program was developed. Changes within the field of online learning and technology may have contributed to those differences, though the real reason for misalignment may never be known.

A second implication for program developers and program faculty is that of continuous quality improvement. As discussed in chapter four, the LDOL faculty had embraced the process of continuous quality improvement to make sure that their courses met the needs of their students. With some faculty members, this consisted of minor adjustments between iterations; other faculty members completely rebuilt their courses from one offering to the next. The adjustments were made based on feedback from course evaluations and also what the faculty believed did or did not work in their course. Having a culture of continuous improvement ensures that the courses and the program are always growing to meet the ever-changing needs of stakeholders in online learning. Additionally, it
is important that the program remain flexible enough to embrace new discoveries in technology and online learning while still adhering to its goals.

Lastly, it is important that both program developers and faculty, whether or not there is overlap, keep in mind the needs of their stakeholders and student population when developing their programs and courses. As Eckel and King (2004) identified, more than 75 percent of students in higher education are considered to be adult learners. Knowles (1973) asserted that adult learners have needs that are different from those of traditional learners, and it is important that not only the course materials but also the program itself is relevant to the adult learning population. Ultimately, this means that the knowledge offered must be timely and relevant to meet their needs.

Students

The student perspective from the LDOL program was an interesting one: while both students had negative experiences within the program, their overall feelings about their program experience were very positive. The case study of the LDOL program has two implications for not only the enrolled students, but prospective students as well. The first implication is that there is a market for the credential the LDOL certificate provides. Taylor stated that she firmly believed having the credential helped her to get a job in the field of online instructional design. The skills that both Taylor and Buffy acquired in the program were very transferrable to both their professional settings. With the growth and acceptance of online learning, it is inevitable that individuals will seek professional growth, and the programs focusing on leadership in online learning provide such opportunities.

The second implication for past, current, and future students of programs focused on leadership in online learning is that because of the constant changes in technology, well-
executed programs will always be changing to adapt to those needs. That means that a leadership in online learning certificate in 2012 may cover significantly different topics than the same program in 2015. The graduate certificate is not the end of one’s professional growth, but the start of the process. It is important for those in leadership positions in the field of online learning to continue to expand their skillsets through professional development experiences.

**Recommendations for Online Leadership Programs**

Based on the findings from the case study, I have six recommendations for those seeking to implement leadership in online learning programs. These recommendations include leadership training, needs assessment, priority collaboration for faculty, increasing communication with stakeholders, marketing the program, and continuous quality improvement. Each is presented below.

**Leadership Training**

Sally was not offered an opportunity through the institution to prepare for her role as program leader prior to assuming the responsibility. It is important to prepare individuals to ascend to leadership positions (Aasen & Stensaker, 2007). Many program leaders do not have any formal training prior to entering their position (Ladyshewsky & Flavell, 2012; Whitsett, 2007). Training in boundary leadership would provide program coordinators with the ability to collaborate with stakeholders internal and external to the higher education setting (Burkhardt, 2002; Tupper, 2013). While all program leaders will have a first-time experience, proper training prior to the start of the position can prepare them for what that experience will resemble.
Conducting a Needs Assessment

With the implementation of the LDOL program, a formal needs assessment was never conducted to determine the target audience of the program, their needs, or what the needs of the college and University were. It is important for any college or university looking to implement a program to conduct a formal needs analysis so as to determine whether there is a need for the program. If there is a need for the program, the needs analysis will provide fundamental details so as to guide program development and implementation, such as identifying the target audience, determining their needs from a programmatic perspective, and helping to ensure that the program is aligned with the needs and vision of the organization. A needs assessment could also inform the marketing strategy for the program, including a geographical market.

Prioritizing Collaboration

Several LDOL program faculty members identified that collaboration was not a priority once the course implementation began. Faculty members did indicate, however, that they were able to engage in more collaboration for the second iteration of the program. Finding time when all faculty members could meet was identified as one of the primary barriers to collaboration. Collaboration is essential when developing and implementing a new program, as well as for maintaining program quality, as it secures the engagement of the faculty (Smith & Wolverton, 2010). Identifying one time for all faculty members to meet prior to the start of each semester would increase collaboration and conversation amongst faculty members. This would allow them to discuss their upcoming courses and any changes that could affect the other courses. Designating one meeting time before the start of each semester would allow the program faculty to come together a
minimum of three times per academic year. Additional meetings could be scheduled as necessary on a smaller scale to avoid scheduling conflicts. Having pre-planned collaboration time would also show the faculty that their continued effort and input was valued by the program, thus establishing a culture of collaboration (Heyman, 2010).

**Involving Stakeholders in Planning and Program Administration**

Though faculty members generally receive course evaluations each term, students are not often afforded additional opportunities to provide feedback. Reaching out to students enrolled in courses once during the term would allow them to provide more formative feedback. This would be beneficial to the faculty teaching the course as well as to the program overall. Additionally, it would promote student involvement in the learning process. Another aspect of communicating with students is providing more timely feedback. In doing this, faculty members can increase the student’s satisfaction with and success in the course (Park & Choi, 2009).

Program completers are another group of stakeholders that could provide valuable feedback to the program, particularly regarding the transferability and applicability of skills. Conducting focus groups or survey research to solicit this information could provide the program with critical feedback as to how their skills are being used, what challenges they have encountered since leaving the program with regard to online leadership, and what may be important to incorporate for future students as the field evolves. This feedback could help shape future iterations of the program to ensure that it stays relevant and is able to meet the needs of both students and the field as a whole.

Online learning programs should also engage the organizational stakeholders periodically, perhaps when changes in the program occur, to ensure that the program
remains aligned with the needs and vision of the organization. This would also serve the function of keeping the institution engaged and invested in the program. Additionally, this recurring interaction might enable or encourage the institution to develop a universal best practices model of online learning.

Lastly, programs should be sure to communicate with stakeholders outside of the University. It was discussed in chapter four that corporate entities were not a target of the LDOL certificate program even though the skills were acknowledged to be significantly transferable. Program coordinators are in unique positions as boundary leaders, enabling them to communicate with entities outside of the institution. Making connections with this and other potential relevant populations could provide the program with significant insight as to the needs of the market. By communicating with these groups, their knowledge and experience in a different marketplace using the same skillsets in the program could be very valuable.

Marketing the Program

A thorough marketing plan was created as part of the Graduate Program Approval Guidelines (2012), though it was never implemented. As previously mentioned, increasing enrollments and generating revenue is essential to the sustainability of programs. The findings of the formal needs analysis could help determine the appropriate audience for marketing the program. It is important that online programs are marketed thoroughly, as they are expected to reach and attract a wider audience than traditional college or university programs. Without a sufficient marketing strategy, it is unlikely that potential stakeholders will become aware of the program’s existence, jeopardizing its long-term sustainability.
Continuous Quality Improvement

Continuous quality improvement was discussed in chapter four as an approach taken by the program developers and faculty to ensure that the program is the best it can be at that time. The continuous quality improvement approach involves program developers and faculty members addressing questions and issues as they arise and making the necessary adjustments to their courses or the program as a whole. Leadership training, conducting a needs assessment, prioritizing collaboration, increasing communication and feedback from stakeholders, and marketing the program all contribute to this approach. By engaging in these actions regularly, leadership in online learning programs can strive to ensure that both the courses and the program as a whole are meeting the needs of the stakeholders.

Recommendations for Future Research

This study examined the development and implementation of one graduate certificate program designed to prepare individuals to assume leadership roles in online learning and assessed the transferability of skills from the program to a professional setting by students who had completed the program. As the first study of its kind, this research shows that we are still learning about what online leaders need to know in order to succeed and how programs should be developed in order to meet that need. There is most certainly a need for future research on both the leadership needs of online leaders as well as the types of programs that prepare individuals to assume these positions. Some suggestions for future research include:

- A longitudinal study of individuals in online leadership positions to determine their most important or most critically necessary skills;
A comparison study between higher education and a corporate environment to determine if and how their online learning leadership needs differ between the two settings to inform the leadership in online learning literature and student skill development;

- Development of tools that assess student knowledge and skills both at baseline and at the end of a leadership in online learning program that can be used to research program ability to support students in mastering desired content and skills; and

- A longitudinal study of graduates of any online leadership preparation program to determine if they obtain positions within the field and to determine the program's influence on their position within the field of online learning.

Note that the last suggestion is strikingly similar to one aspect of this study. While both Buffy and Taylor are working in online learning and have leadership roles, the same may not be true for all students who complete the LDOL program or other similar programs. Determining the transferability of skills from program to professional is one of many approaches that a program can take as part of a quality improvement process.

**Conclusion**

This study examined the ability of the Leadership in Online Learning Program to prepare its participants to be successful leaders in online learning. While there were gaps between program development and implementation and delivery issues with the first iteration of course, students still had the ability to complete the program. Buffy and Taylor both found that the knowledge and skills they acquired in the certificate program were very transferrable and applicable to a professional setting, enabling them to be leaders within their online learning programs. In one of the focus groups, Ryan asked, "What does
it mean to prepare someone to be a leader?” Though the literature is lacking this study has provided a starting point for learning more about how to effectively develop leaders in online learning.
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Appendix A

Appendix B
CSF Codes and Meanings

Table B1
Leadership, Structural, and Cultural Issues Codes

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<thead>
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<th>Code</th>
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<tbody>
<tr>
<td>LSC1</td>
<td>Open view of learning technologies</td>
<td>LSC12</td>
<td>Willingness to accept change</td>
<td>LSC23</td>
<td>Change management leadership</td>
</tr>
<tr>
<td>LSC2</td>
<td>Design ethical roadmap</td>
<td>LSC13</td>
<td>Good business and learning case</td>
<td>LSC24</td>
<td>Management of expectations</td>
</tr>
<tr>
<td>LSC3</td>
<td>Intellectual property/copyright policy</td>
<td>LSC14</td>
<td>Carefully considered</td>
<td>LSC25</td>
<td>Establishing suitable learning models</td>
</tr>
<tr>
<td>LSC4</td>
<td>Inter-institutional collaboration</td>
<td>LSC15</td>
<td>Inclusion of stakeholders in planning</td>
<td>LSC26</td>
<td>Alignment of teaching strategy with organizational view</td>
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<td>LSC5</td>
<td>Supporting administrative system</td>
<td>LSC16</td>
<td>Institutional leadership</td>
<td>LSC27</td>
<td>e-learning champions</td>
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<td>LSC6</td>
<td>National and international policies</td>
<td>LSC17</td>
<td>Support infrastructures</td>
<td>LSC28</td>
<td>Commitment from all stakeholders</td>
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<td>LSC7</td>
<td>Organizational willingness to provide funding</td>
<td>LSC18</td>
<td>Organizational communication</td>
<td>LSC29</td>
<td>Student/staff involvement and acceptance</td>
</tr>
<tr>
<td>LSC8</td>
<td>Organizational vision</td>
<td>LSC19</td>
<td>Bottom-up influence in policy and decision making</td>
<td>LSC30</td>
<td>Good communication between practitioners and management</td>
</tr>
<tr>
<td>LSC9</td>
<td>Sustainable organizational eLearning strategy</td>
<td>LSC20</td>
<td>Creation of sustainable solutions</td>
<td>LSC31</td>
<td>Suitably aligned staff development and training</td>
</tr>
<tr>
<td>LSC10</td>
<td>Supportive organizational culture</td>
<td>LSC21</td>
<td>Understanding of resource allocation implication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSC11</td>
<td>Alignment of project development with organizational view</td>
<td>LSC22</td>
<td>Recognition and reward systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>CSF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>---------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Des1</td>
<td>Efficient learning and teaching unit support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Des2</td>
<td>Multimedia production support unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Des3</td>
<td>Balanced collaborative multi-skilled design/development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Des4</td>
<td>Good project management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Des5</td>
<td>Clear accessibility and usability guidelines</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Des6</td>
<td>Learner involvement in the design process</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Des7</td>
<td>Good testing/piloting before release</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Des8</td>
<td>Tutor/academic involvement in the design process</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Des9</td>
<td>Development of learning objects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Des10</td>
<td>Clear design and development for best practice guidelines</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Des11</td>
<td>Alignment of technological infrastructure with organizational view</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Des12</td>
<td>Sharing and revisioning of learning objects</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
### Table B3
**Technological Issues Codes**

<table>
<thead>
<tr>
<th>Code</th>
<th>CSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>Robust Security System</td>
</tr>
<tr>
<td>T2</td>
<td>Reliable and up-to-date technological resources and infrastructures</td>
</tr>
<tr>
<td>T3</td>
<td>Effective MLE</td>
</tr>
<tr>
<td>T4</td>
<td>Efficient technical support and maintenance</td>
</tr>
<tr>
<td>T5</td>
<td>Clear distinction between technology and elearning</td>
</tr>
<tr>
<td>T6</td>
<td>Robust data protection systems</td>
</tr>
<tr>
<td>T7</td>
<td>Robust high speed networks</td>
</tr>
</tbody>
</table>

### Table B4
**Delivery Issues Codes**

<table>
<thead>
<tr>
<th>Code</th>
<th>CSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Del1</td>
<td>Establishing an ethical delivery roadmap</td>
</tr>
<tr>
<td>Del2</td>
<td>Delivery best practice guidelines</td>
</tr>
<tr>
<td>Del3</td>
<td>Student support</td>
</tr>
<tr>
<td>Del4</td>
<td>Creating and fostering online learning communities</td>
</tr>
<tr>
<td>Del5</td>
<td>Established educational standards</td>
</tr>
<tr>
<td>Del6</td>
<td>Balanced online tutors workload</td>
</tr>
</tbody>
</table>
Email to Program Participant 1 (already contacted)

Subject: Interview regarding the Leadership in Online Learning Certificate

Dear Taylor,

Thank you for agreeing to be interviewed as part of my research. At your earliest convenience, please contact me with a time and location that is convenient for you. The interview should take approximately one hour.

Before the interview goes ahead, I would like to confirm that:

- With your permission, the interview will be recorded.
- Your anonymity will be maintained and no comments will be ascribed to you by name in any written document or verbal presentation. Nor will any data be used from the interview that might identify you to a third party.
- You are free to withdraw from the research at anytime and/or request that your transcript not be used.
- I will contact you once during and at the end of the analysis process to ensure that my findings are an accurate representation of your experience.

Also, as part of the interview, I was wondering if you would be willing to provide a sample of work from your current place of employment with any identifying information removed. I would like to use this sample to discuss how the certificate program influenced your work in this instance. Please let me know if you are agreeable to this.

If you have any queries concerning the nature of the research or are unclear about anything, please contact me at megan.wuebker@abcd.edu or (XXX)XXX-XXXX.

Finally, thank you for taking the time to help me with my research. It really is much appreciated.

Sincerely,
Megan Wuebker

1 Email text was modified from sample interview solicitation emails found at http://wps.pearsoned.co.uk/ema_uk_he_coles_youredprojhdbk_1/130/33342/8535806.cw/content/index.html.
Email to Program Participant 2 (not yet contacted)
Subject: Interview regarding the Leadership in Online Learning Certificate

Dear Buffy,

I am currently conducting my dissertation research examining the effectiveness of the Leadership in Online Learning certificate and how program participants are using the knowledge acquired through the certificate courses. I was wondering if you would be willing to be interviewed, at a time and place convenient to you, as part of my research. The interview should take approximately one hour.

Through this research, I am looking to answer the following questions:

1. What are the online leadership program students’ motivations for participating in the graduate certificate program?
2. In what ways have the participants used their new knowledge and skills within their current jobs and how do they anticipate their use to be in the future?
3. What leadership, structural, and cultural gaps existed between development and implementation in the first year of the certificate program?
4. What design, technological, and delivery issues did the program faculty face in the first year implementation of the certificate program?

Before you agree to the interview I can confirm that:

- With your permission, the interview will be recorded.
- Your anonymity will be maintained and no comments will be ascribed to you by name in any written document or verbal presentation. Nor will any data be used from the interview that might identify you to a third party.
- You are free to withdraw from the research at anytime and/or request that your transcript not be used.
- I will contact you once during and at the end of the analysis process to ensure that my findings are an accurate representation of your experience.

I sincerely hope that you will be able to help me with my research. If you have any queries concerning the nature of the research or are unclear about the extent of your involvement in it, please contact me at megan.wuebker@abcd.edu or (XXX)XXX-XXXX.

Finally, thank you for taking the time to consider my request and I look forward to your reply.

Sincerely,
Megan Wuebker
Email to Program Developers (not yet contacted)
Subject: Focus Group regarding the Leadership in Online Learning Certificate

Dear [Program Developer],

I am currently conducting my dissertation research examining the effectiveness of the Leadership in Online Learning certificate after its first iteration. I was wondering if you would be willing to participate in a focus group, at a time and place to be determined, as part of my research. The focus group should take approximately one hour.

Through this research, I am looking to answer the following questions:

1. What are the online leadership program students’ motivations for participating in the graduate certificate program?
2. In what ways have the participants used their new knowledge and skills within their current jobs and how do they anticipate their use to be in the future?
3. What leadership, structural, and cultural gaps existed between development and implementation in the first year of the certificate program?
4. What design, technological, and delivery issues did the program faculty face in the first year implementation of the certificate program?

Before you agree to the focus group, I can confirm that:

- With your permission, the focus group will be recorded.
- Your anonymity will be maintained and no comments will be ascribed to you by name in any written document or verbal presentation. Nor will any data be used from the interview that might identify you to a third party.
- You are free to withdraw from the research at anytime and/or request that your transcript not be used.
- I will contact you once during and at the end of the analysis process to ensure that my findings are an accurate representation of your experience.

I sincerely hope that you will be able to help me with my research. If you have any queries concerning the nature of the research or are unclear about the extent of your involvement in it, please contact me at megan.wuebker@abcd.edu.

Finally, thank you for taking the time to consider my request and I look forward to your reply.

Sincerely,
Megan Wuebker
Email to Faculty (not yet contacted)
Subject: Interview regarding the Leadership in Online Learning Certificate

Dear [Faculty Member],

I am currently conducting my dissertation research examining the effectiveness of the Leadership in Online Learning certificate after its first iteration. I was wondering if you would be willing to be interviewed, at a time and place convenient to you, as part of my research. The interview should take approximately one hour.

Through this research, I am looking to answer the following questions:

1. What are the online leadership program students’ motivations for participating in the graduate certificate program?
2. In what ways have the participants used their new knowledge and skills within their current jobs and how do they anticipate their use to be in the future?
3. What leadership, structural, and cultural gaps existed between development and implementation in the first year of the certificate program?
4. What design, technological, and delivery issues did the program faculty face in the first year implementation of the certificate program?

Before you agree to the interview I can confirm that:

- With your permission, the interview will be recorded.
- Your anonymity will be maintained and no comments will be ascribed to you by name in any written document or verbal presentation. Nor will any data be used from the interview that might identify you to a third party.
- You are free to withdraw from the research at anytime and/or request that your transcript not be used.
- I will contact you once during and at the end of the analysis process to ensure that my findings are an accurate representation of your experience.

I sincerely hope that you will be able to help me with my research. If you have any queries concerning the nature of the research or are unclear about the extent of your involvement in it, please contact me at megan.wuebker@abcd.edu or (XXX)XXX-XXXX.

Finally, thank you for taking the time to consider my request and I look forward to your reply.

Sincerely,
Megan Wuebker
Appendix D
Participant Interview Protocol

1. How did you become professionally involved in online learning? (Background information)

2. How did you find out about the Leadership in Online Learning certificate program? (Background information)

3. What interested you most about the program? (Background information)
   a. How did the leadership aspect of the certificate influence you?

4. Are you currently in a leadership position at your job? (Background information)
   a. If not, is there or will there be an opportunity for you to move into such a position?

5. What role does online learning play in your organization? (All codes possible)
   a. What efforts have been made to ensure that online learning is aligned with the organization’s needs and mission? (LSC8, LSC11, LSC26, Des11)

6. What supports are provided to you from the management and the organization? (LSC5, LSC7, LSC10, LSC16, LSC17, LSC30, Des1, Des10, T1, T4, Del1, Del5)

7. What were your goals when you started the program? (All codes possible)
   a. How did the program help you to achieve those goals? (All codes possible)

8. How have you used the skills and knowledge you acquired through this certificate in your job? (All codes possible)
   a. How transferrable have the skills and knowledge from the certificate been?

9. You provided a sample of work. Describe what it is and its function in your organization. Did your experience in the certificate program influence this sample?

10. What role has collaboration played in your current role? (LSC4, LC15, LSC29, LSC30, Des3, Des6)
a. How have your peers, stakeholders, and learners influenced your work? (LSC15, LSC28, LSC29, LSC30, Des6, Des8)

11. Which skills or knowledge from the program have been most beneficial to you in your job? (All codes possible)

12. Which skills or knowledge from the program have been the least beneficial to you in your job? (All codes possible)

13. Reflecting on both the courses you took and your professional experience, what traits do you think are most important for a distance learning leader to possess? (All codes possible)
Appendix E
Program Faculty Interview Protocols

**Faculty Interview Protocol**
With Evaluation Question

1. Describe your experience with online learning. (Background information)

2. What has your leadership experience consisted of in online learning? (Background information; All codes possible)

3. How did your previous experience influence the development of the course? (All codes possible)

4. What role did the program development process play in course development? (Background information)

5. What strategy or strategies (i.e., backward design, etc.) did you use to develop your course?

6. What challenges did you face with implementing your course? (All codes possible)

7. How do you think the course went the first time you taught it?

8. Based on course evaluations, students said ________________. What do you think led to this feedback?

9. What changes have you made or are you planning to make for the next time you teach this course? (All codes possible)
   a. What is the catalyst for these changes?
   b. Did the evaluation feedback trigger any of these changes?

10. How well do you think your course prepared your students to assume leadership roles in online learning? Why? (All codes possible)

11. What do you want students to take away from your course with regard to leadership in an online learning environment? (All codes possible)
12. How do you think this certificate program will impact the field of online learning? (All codes possible)
1. Describe your experience with online learning. (Background information)

2. What has your leadership experience consisted of in online learning? (Background information; All codes possible)

3. How did your previous experience influence the development of the course? (All codes possible)

4. What role did the program development process play in course development? (Background information)

5. What strategy or strategies (i.e., backward design, etc.) did you use to develop your course?

6. What challenges did you face with implementing your course? (All codes possible)

7. How do you think the course went the first time you taught it?

8. What changes have you made or are you planning to make for the next time you teach this course? (All codes possible)
   a. What is the catalyst for these changes?
   b. Did the evaluation feedback trigger any of these changes?

9. How well do you think your course prepared your students to assume leadership roles in online learning? Why? (All codes possible)

10. What do you want students to take away from your course with regard to leadership in an online learning environment? (All codes possible)

11. How do you think this certificate program will impact the field of online learning? (All codes possible)
Faculty/Program Developer Interview Protocol

1. Describe your experience with online learning. (Background information)

2. What has your leadership experience consisted of in online learning? (Background information; All codes possible)

3. How did your previous experience influence the development of the course? (All codes possible)

4. What did your role in the program development process play in your course development process? (Background information, program development)

5. What strategy or strategies (i.e., backward design, etc.) did you use to develop your course?

6. What challenges did you face with implementing your course? (All codes possible)

7. How do you think the course went the first time you taught it?

8. Based on course evaluations, students said __________________________. What do you think led to this feedback?

9. What changes have you made or are you planning to make for the next time you teach this course? (All codes possible)
   a. What is the catalyst for these changes?
   b. Did the evaluation feedback trigger any of these changes?

10. How well do you think your course prepared your students to assume leadership roles in online learning? Why? (All codes possible)

11. What do you want students to take away from your course with regard to leadership in an online learning environment? (All codes possible)

12. How do you think this certificate program will impact the field of online learning? (All codes possible)
Appendix F
Program Developer Focus Group Protocol

Program Developer Focus Group Protocol

1. From your perspectives, what was the catalyst for creating the Leadership in Online Learning certificate program? (Background information)

2. How did each of you become involved in the process of developing the program? (Background information)

3. How were the program goals determined? Goals per the Program Approval Guidelines:
   a. Identify and overcome the primary challenges of leading an online program
      (LSC5, LSC12, LSC13, LSC16, LSC17, LSC18, LSC19, LSC21, LSC23, LSC24, LSC27, LSC30, LSC31, Des4, Des10, Des11, T2, T4, Del2, Del5)
   b. Evaluate online learning creation and assessment tools and determine which are useful for various applications (LSC1, LSC25, Des7, Des9, Des12)
   c. Facilitate collaboration between and support of online faculty and students (LSC4, LSC15, LSC28, LSC29, LSC30, Des6, Des8)
   d. Lead the online course design and creation process (LSC1, LSC2, LSC5, LSC11, LSC14, LSC15, LSC18, LSC24, LSC25, LSC26, LSC29, LSC30, Des2, Des3, Des4, Des5, Des6, Des7, Des8, Des9, Des12, Del1, Del2, Del5)
   e. Identify and overcome the primary legal issues in online education (LSC3, LSC6, Des5, T1)
   f. Evaluate resource allocation, program development, and sustainability of online education (LSC7, LSC9, LSC11, LSC17, LSC20, LSC21, LSC25, Des4, Des7, Des10, Del2, Del5)
4. How were the certificate courses developed to meet these goals? (Des 1-12, Del 1-6)

5. Who is the target audience for this certificate program? Why?

6. Were any stakeholders – students, etc – involved in the design process? Why or why not?
   (LSC15, LSC28, LSC29, LSC30, Des 6, Des 8)

7. Now that the program has gone through its first iteration, what are some of the strengths of the program? (All codes possible)

8. What are some areas needing improvement that you have identified after this first iteration?
   a. Are there any plans in place to address these issues from a programmatic perspective?

9. For those of you who are not teaching courses in the program, what is your continued role, if any?

10. Based on what you have seen in the first year and the planned improvements, what impact do you think this program will have on the field of online learning? (All codes possible)

11. How does the program meet the needs of the College? The University?

12. Is there anything else you would like to add?
Appendix G
Program Developer Focus Group Handout

Goals of the Certificate Program (from the Program Approval Guidelines):
1. Identify and overcome the primary challenges of leading an online program

2. Evaluate online learning creation and assessment tools and determine which are useful for various applications

3. Facilitate collaboration between and support of online faculty and students

4. Lead the online course design and creation process

5. Identify and overcome the primary legal issues in online education

6. Evaluate resource allocation, program development, and sustainability of online education
Title of Study: Preparing Leaders in Online Learning: Determining the Effectiveness of a Graduate Certificate Program

Introduction:
You are being asked to take part in a research study. Please read this paper carefully and ask questions about anything that you do not understand.

Who is doing this research study?
The person in charge of this research study is Megan Paxton Wuebker of the ABCD University, Department of Educational Studies.

What is the purpose of this research study?
The purpose of this research study is to determine the effectiveness of the Leadership in Online Learning certificate and how program participants are using the knowledge acquired through the certificate courses.

Who will be in this research study?
Program developers, program faculty, and students who have completed or are in the process of completing the Leadership in Online Learning certificate will be asked to take part in this study. You may be in this study if you have already or are currently in the process of completing all 5 courses for the Leadership in Online Learning certificate program.

What will you be asked to do in this research study, and how long will it take?
You will be asked to participate in an interview regarding your motivations to participate in the Leadership in Online Learning certificate program and the influence the certificate program has had on your career.

It will take about one hour to conduct the interview.

The research will take place in a setting of your choice.

With your consent, the interview will be recorded. Please initial if you agree to have the interview recorded: ____________

Are there any risks to being in this research study?
No.
Are there any benefits from being in this research study?
While there are no direct benefits to you from participating in this study, you may have the benefit of reflection on your educational and professional experiences.

What will you get because of being in this research study?
There are no incentives being offered for participation.

Do you have choices about taking part in this research study?
If you do not want to take part in this research study you may decline to participate.

How will your research information be kept confidential?
Information about you will be kept private by assigning a pseudonym of your choosing to your information. Additionally, the raw data will only be accessible by the PI and her dissertation committee.

Your information will be kept confidential for the duration of the dissertation process. Upon successful defense of the dissertation, data will be stripped of any identifying characteristics and archived by the pseudonym you chose.

Agents of ABCD University may inspect study records for audit or quality assurance purposes.

What are your legal rights in this research study?
Nothing in this consent form waives any legal rights you may have. This consent form also does not release the investigator, the institution, or its agents from liability for negligence.

What if you have questions about this research study?
If you have any questions or concerns about this research study, you should contact Megan Paxton Wuebker at megan.wuebker@abcd.edu.

The UC Institutional Review Board reviews all research projects that involve human participants to be sure the rights and welfare of participants are protected.

If you have questions about your rights as a participant or complaints about the study, you may contact the ABCD University IRB at (XXX)XXX-XXXX. Or, you may call the ABCD University Research Compliance Hotline at (800) XXX-XXXX, or write to the IRB, [address omitted for dissemination purposes], or email the IRB office at irb@abcd.edu.

Do you HAVE to take part in this research study?
No one has to be in this research study. Refusing to take part will NOT cause any penalty or loss of benefits that you would otherwise have. You may start and then change your mind and stop at any time. To stop being in the study, you should tell the PI at your earliest convenience.
**Agreement:**
I have read this information and have received answers to any questions I asked. I give my consent to participate in this research study. I will receive a copy of this signed and dated consent form to keep.

Participant Name (please print) __________________________________________

Participant Signature ___________________________ Date ______

Signature of Person Obtaining Consent __________________ Date ______
Appendix I
Program Faculty Consent Form

Adult Consent Form for Research
ABCD University
Department: Educational Studies
Principal Investigator: Megan Paxton Wuebker
Faculty Advisor: Carla Johnson

Title of Study: Preparing Leaders in Online Learning: Determining the Effectiveness of a Graduate Certificate Program

Introduction:
You are being asked to take part in a research study. Please read this paper carefully and ask questions about anything that you do not understand.

Who is doing this research study?
The person in charge of this research study is Megan Paxton Wuebker of the ABCD University, Department of Educational Studies

What is the purpose of this research study?
The purpose of this research study is to determine the effectiveness of the Leadership in Online Learning certificate and how program participants are using the knowledge acquired through the certificate courses.

Who will be in this research study?
Program developers, program faculty, and students who have completed or are in the process of completing the Leadership in Online Learning certificate will be asked to take part in this study. You may be in this study if you were the instructor of record for at least one course in the first year of the Leadership in Online Learning certificate program.

What will you be asked to do in this research study, and how long will it take?
You will be asked to participate in an interview regarding your experience as an instructor in the first year of the Leadership in Online Learning certificate program.

It will take about one hour to conduct the interview.

The research will take place in a setting of your choice.

With your consent, the interview will be recorded. Please initial if you agree to have the interview recorded: ____________

Are there any risks to being in this research study?
No.
Are there any benefits from being in this research study?
While there are no direct benefits to you from participating in this study, you may have the benefit of reflection on your educational and professional experiences.

What will you get because of being in this research study?
There are no incentives being offered for participation.

Do you have choices about taking part in this research study?
If you do not want to take part in this research study you may decline to participate.

How will your research information be kept confidential?
Information about you will be kept private by assigning a pseudonym of your choosing to your information. Additionally, the raw data will only be accessible by the PI and her dissertation committee.

Your information will be kept confidential for the duration of the dissertation process. Upon successful defense of the dissertation, data will be stripped of any identifying characteristics and archived by the pseudonym you chose.

Agents of ABCD University may inspect study records for audit or quality assurance purposes.

What are your legal rights in this research study?
Nothing in this consent form waives any legal rights you may have. This consent form also does not release the investigator, the institution, or its agents from liability for negligence.

What if you have questions about this research study?
If you have any questions or concerns about this research study, you should contact Megan Paxton Wuebker at megan.wuebker@abcd.edu.

The ABCD University Institutional Review Board reviews all research projects that involve human participants to be sure the rights and welfare of participants are protected.

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Do you HAVE to take part in this research study?
No one has to be in this research study. Refusing to take part will NOT cause any penalty or loss of benefits that you would otherwise have. You may start and then change your mind and stop at any time. To stop being in the study, you should tell the PI at your earliest convenience.
Agreement:
I have read this information and have received answers to any questions I asked. I give my consent to participate in this research study. I will receive a copy of this signed and dated consent form to keep.

Participant Name (please print) __________________________________________

Participant Signature __________________________ Date _________

Signature of Person Obtaining Consent __________________________ Date _________
Title of Study: Preparing Leaders in Online Learning: Determining the Effectiveness of a Graduate Certificate Program

Introduction:
You are being asked to take part in a research study. Please read this paper carefully and ask questions about anything that you do not understand.

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The person in charge of this research study is Megan Paxton Wuebker of the ABCD University, Department of Educational Studies

What is the purpose of this research study?
The purpose of this research study is to determine the effectiveness of the Leadership in Online Learning certificate and how program participants are using the knowledge acquired through the certificate courses.

Who will be in this research study?
Program developers, program faculty and students who have completed the certificate will take part in this study. You may be in this study if you were part of the team charged with developing the Leadership in Online Learning Certificate.

What will you be asked to do in this research study, and how long will it take?
You will be asked to participate in a focus group regarding the development process for the Leadership in Online Learning certificate program, your opinions on the first full iteration of the program, and any changes that have been or will be made to the program.

The focus group will take approximately one hour.

The focus group will take palace in a classroom or conference room in A Building (to be determined).

With your consent, the interview will be recorded. Please initial if you agree to have the interview recorded: __________

Are there any risks to being in this research study?
No.
Are there any benefits from being in this research study?
While there are no direct benefits to you from participating in this study, you may have the benefit of reflection on your professional experiences.

What will you get because of being in this research study?
There are no incentives being offered for participation.

Do you have choices about taking part in this research study?
If you do not want to take part in this research study you may decline to participate.

How will your research information be kept confidential?
Information about you will be kept private by assigning a pseudonym of your choosing to your information. Additionally, the raw data will only be accessible by the PI and her dissertation committee.

Your information will be kept confidential for the duration of the dissertation process. Upon successful defense of the dissertation, data will be stripped of any identifying characteristics and archived by the pseudonym you chose.

Agents of ABCD University may inspect study records for audit or quality assurance purposes.

What are your legal rights in this research study?
Nothing in this consent form waives any legal rights you may have. This consent form also does not release the investigator, the institution, or its agents from liability for negligence.

What if you have questions about this research study?
If you have any questions or concerns about this research study, you should contact Megan Paxton Wuebker at megan.wuebker@uc.edu.

The ABCD University Institutional Review Board reviews all research projects that involve human participants to be sure the rights and welfare of participants are protected.

If you have questions about your rights as a participant or complaints about the study, you may contact the ABCD University IRB at (XXX)XXX-XXXX. Or, you may call the ABCD University Research Compliance Hotline at (800) XXX-XXXX, or write to the IRB, [address omitted for dissemination purposes], or email the IRB office at irb@abcd.edu.

Do you HAVE to take part in this research study?
No one has to be in this research study. Refusing to take part will NOT cause any penalty or loss of benefits that you would otherwise have. You may start and then change your mind and stop at any time. To stop being in the study, you should tell the PI at your earliest convenience.

Agreement:
I have read this information and have received answers to any questions I asked. I give my
consent to participate in this research study. I will receive a copy of this signed and dated consent form to keep.

Participant Name (please print) ________________________________

Participant Signature ___________________ Date _________

Signature of Person Obtaining Consent _______________ Date ______
Appendix K
Email Text to Participants During the Coding Process

**Email to Program Participants**
Buffy and Taylor both received this email.

Subject: LDOL Interview Follow-Up

Hi [Taylor],

As we discussed previously, I would appreciate any input on the analysis of the data you provided during our interview. I've attached a document (using your pseudonym) that illustrates themes that were identified more than one time in the data. Additionally, I've provided a sample excerpt of what evidence I believe supports that code. Please review the document and let me know if you see any discrepancies between what we discussed and how the data was coded. If you would like to see additional samples of text or would like more explanation as to my coding process, I am happy to provide that.

If there are no discrepancies, I would appreciate it if you would share that as well.

Thank you for your time and participation.

Megan

**Email to Program Faculty (Interview)**
Denise received this email.

Subject: LDOL Interview Follow-Up

Hi [Denise],

As we discussed previously, I would appreciate any input on the analysis of the data you provided during our interview. I've attached a document (using your pseudonym) that illustrates themes that were identified more than one time in the data. Additionally, I've provided a sample excerpt of what evidence I believe supports that code. Please review the document and let me know if you see any discrepancies between what we discussed and how the data was coded. If you would like to see additional samples of text or would like more explanation as to my coding process, I am happy to provide that.

If there are no discrepancies, I would appreciate it if you would share that as well.

Thank you for your time and participation.

Megan
Email to Program Faculty (Interview and Focus Group)
Sally, Candace, Lindsey, and Ryan received this email.

Subject: LDOL Interview/Focus Group Follow-Up

Hi [Sally],

As we discussed previously, I would appreciate any input on the analysis of the data you provided during our interview and focus group. I’ve attached a document (using your pseudonym) that illustrates themes that were identified more than one time in the data. Additionally, I’ve provided a sample excerpt of what evidence I believe supports that code. Please review the document and let me know if you see any discrepancies between what we discussed and how the data was coded. If you would like to see additional samples of text or would like more explanation as to my coding process, I am happy to provide that.

If there are no discrepancies, I would appreciate it if you would share that as well.

Thank you for your time and participation.

Megan

Email to Program Developers (Focus Group)
Louise received this email.

Subject: LDOL Focus Group Follow-Up

Hi [Louise],

As we discussed previously, I would appreciate any input on the analysis of the data you provided during our interview and focus group. I’ve attached a document (using your pseudonym) that illustrates themes that were identified more than one time in the data. Additionally, I’ve provided a sample excerpt of what evidence I believe supports that code. Please review the document and let me know if you see any discrepancies between what we discussed and how the data was coded. If you would like to see additional samples of text or would like more explanation as to my coding process, I am happy to provide that.

If there are no discrepancies, I would appreciate it if you would share that as well.

Thank you for your time and participation.

Megan
Email to Program Developers (Interview)
Samantha received this email.

Subject: LDOL Interview Follow-Up

Hi [Samantha],

As we discussed previously, I would appreciate any input on the analysis of the data you provided during our interview. I've attached a document (using your pseudonym) that illustrates themes that were identified more than one time in the data. Additionally, I've provided a sample excerpt of what evidence I believe supports that code. Please review the document and let me know if you see any discrepancies between what we discussed and how the data was coded. If you would like to see additional samples of text or would like more explanation as to my coding process, I am happy to provide that.

If there are no discrepancies, I would appreciate it if you would share that as well.

Thank you for your time and participation.

Megan
Email to All Participants

Subject: LDOL Analysis Follow-Up

Hi [Participant],

As we discussed previously, I would appreciate any input on the final analysis of the data you provided during our interview. I’ve attached a document (using your pseudonym) that provides samples of how direct quotes were used in my analysis as well as samples of how I paraphrased or summarized your words. Please review the document and let me know if you see any discrepancies between what we discussed and how the data was analyzed. If you would like to see additional samples of text or would like more explanation as to my analysis process, I am happy to provide that.

If there are no discrepancies, I would appreciate it if you would share that as well.

Thank you for your time and participation.

Megan
## Appendix M
Conceptual Analysis of the Theoretical Framework

### Table M1
*Leadership, Structural, and Cultural Issues CSFs*

<table>
<thead>
<tr>
<th>Leadership, Structural, and Cultural Issues</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Open view of <em>learning technologies</em></td>
<td><em>Support</em> infrastructures</td>
</tr>
<tr>
<td><em>Design ethical roadmap</em></td>
<td><em>Organizational</em> communication</td>
</tr>
<tr>
<td><em>Intellectual property/copyright policy</em></td>
<td>Bottom-up influence in policy and decision making</td>
</tr>
<tr>
<td>Inter-institutional <em>collaboration</em></td>
<td><em>Creation of sustainability solutions</em></td>
</tr>
<tr>
<td><em>Supporting administrative system</em></td>
<td>Understanding of <em>resource allocation implication</em></td>
</tr>
<tr>
<td>National and international policies</td>
<td>Recognition and reward systems</td>
</tr>
<tr>
<td><em>Organizational willingness to provide funding</em></td>
<td>Change <em>management leadership</em></td>
</tr>
<tr>
<td><em>Organizational vision</em></td>
<td><em>Management of expectations</em></td>
</tr>
<tr>
<td><em>Sustainable organizational eLearning strategy</em></td>
<td>Establishing suitable <em>learning models</em></td>
</tr>
<tr>
<td><em>Supportive organizational culture</em></td>
<td>Alignment of teaching strategy with <em>organizational view</em></td>
</tr>
<tr>
<td>Alignment of project <em>development with organizational view</em></td>
<td><em>e-learning</em> champions</td>
</tr>
<tr>
<td>Willingness to accept change</td>
<td>Commitment from all <em>stakeholders</em></td>
</tr>
<tr>
<td>Good business and <em>learning case</em></td>
<td><em>Student/staff</em> involvement and acceptance</td>
</tr>
<tr>
<td>Carefully considered</td>
<td>Good communication between <em>practitioners</em> and <em>management</em></td>
</tr>
<tr>
<td>Inclusion of <em>stakeholders</em> in planning</td>
<td>Suitably aligned <em>staff development</em> and training</td>
</tr>
<tr>
<td>Institutional <em>leadership</em></td>
<td></td>
</tr>
</tbody>
</table>

---

228
Table M2
*Design Issues CSFs*

<table>
<thead>
<tr>
<th>Design Issues</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficient <em>learning</em> and teaching unit <em>support</em></td>
<td>Good testing/piloting before release</td>
</tr>
<tr>
<td>Multimedia production <em>support</em> unit</td>
<td><em>Tutor</em>/academic involvement in the <em>design</em> process</td>
</tr>
<tr>
<td>Balanced <em>collaborative</em> multi-skilled <em>design</em>/<em>development</em></td>
<td><em>Development of learning objects</em></td>
</tr>
<tr>
<td>Good project <em>management</em></td>
<td>Clear <em>design</em> and <em>development</em> for best practice guidelines</td>
</tr>
<tr>
<td>Clear accessibility and usability guidelines</td>
<td>Alignment of <em>technological</em> infrastructure with <em>organizational</em> view</td>
</tr>
<tr>
<td><em>Learner</em> involvement in the <em>design</em> process</td>
<td>Sharing and revisioning of <em>learning</em> objects</td>
</tr>
</tbody>
</table>

Table M3
*Technological Issues CSFs*

<table>
<thead>
<tr>
<th>Technological Issues</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Robust Security System</td>
<td>Clear distinction between <em>technology</em> and <em>elearning</em></td>
</tr>
<tr>
<td>Reliable and up-to-date <em>technological resources</em> and infrastructures</td>
<td>Robust data protection systems</td>
</tr>
<tr>
<td>Effective MLE</td>
<td>Robust high speed networks</td>
</tr>
<tr>
<td>Efficient <em>technical support</em> and maintenance</td>
<td></td>
</tr>
</tbody>
</table>

Table M4
*Delivery Issues CSFs*

<table>
<thead>
<tr>
<th>Delivery Issues</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishing an <em>ethical</em> delivery roadmap</td>
<td>Creating and fostering online <em>learning</em> communities</td>
</tr>
<tr>
<td>Delivery best practice guidelines</td>
<td>Established educational standards</td>
</tr>
<tr>
<td><em>Student support</em></td>
<td>Balanced online <em>tutors</em> workload</td>
</tr>
</tbody>
</table>

---

229
<table>
<thead>
<tr>
<th>Term</th>
<th>Occurrences</th>
<th>Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning/elearning</td>
<td>10</td>
<td>Course Title</td>
</tr>
<tr>
<td>**Technology/Technologies/Technical/Technological</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Design</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Ethical</td>
<td>2</td>
<td>Course Title</td>
</tr>
<tr>
<td>Collaboration/Collaborative</td>
<td>2</td>
<td>Course Title</td>
</tr>
<tr>
<td>Support/Supporting/Supportive</td>
<td>7</td>
<td>Course Title</td>
</tr>
<tr>
<td>Stakeholders</td>
<td>2</td>
<td>Literature</td>
</tr>
<tr>
<td>Administrative</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Staff</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Practitioners</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Learner</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Tutor/Tutors</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Organizational</td>
<td>8</td>
<td>Literature</td>
</tr>
<tr>
<td>Sustainable/Sustainability</td>
<td>2</td>
<td>Literature</td>
</tr>
<tr>
<td>Management</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Development</td>
<td>5</td>
<td>Course Title</td>
</tr>
<tr>
<td>**Leadership</td>
<td>2</td>
<td>Course Title</td>
</tr>
<tr>
<td>Funding/Resources</td>
<td>3</td>
<td>Literature</td>
</tr>
<tr>
<td>Creation</td>
<td>1</td>
<td>Course Title</td>
</tr>
<tr>
<td>Intellectual Property</td>
<td>1</td>
<td>Literature</td>
</tr>
</tbody>
</table>
Appendix N
Course Descriptions, Learning Objectives, and Unit Titles for Conceptual Analysis

Terms identified in the content analysis are italicized.

Table O1
CI7087: Collaboration and Support in Online Education

<table>
<thead>
<tr>
<th>Course Description</th>
<th>In this course, students investigate management of and best practices in student and faculty support in K-12 and higher education online learning programs. Additionally, this course explores models for promoting effective online collaboration and communities. As part of this process, students develop their own personal philosophies for community building in online learning and for faculty and student support in online learning.</th>
</tr>
</thead>
</table>
| Objectives        | • Analyze potential student support problems unique to online learning programs.  
|                   | • Identify partners in student support at an institution and develop a plan for implementing online student support services.  
|                   | • Evaluate tools and methods for online collaboration.  
|                   | • Develop a personal philosophy including a rationale and suggestions for building community in online settings.  
|                   | • Describe management strategies and performance expectations for online faculty.  
|                   | • Apply best practices in supporting online faculty and teaching teams through communication and leadership strategies. |
| Unit Titles 2012  | • Introduction to Online Learning  
|                   | • Online Student Audience  
|                   | • Online Student Support  
|                   | • Faculty and Online Teaching  
|                   | • Faculty Development  
|                   | • Building an Online Community  
|                   | • Online Collaboration  
|                   | • Final Project |
| Unit Titles 2013  | Identical to 2012 Unit Titles |
### Course Description

In this course, *students* explore the role of effective *leadership* and *administration* in K-12, higher education and other online educational programs. Through the exploration of the intersection of change, data, *management* and entrepreneurship, this course *develops leaders* with the knowledge, skills and dispositions necessary to *manage* complex entrepreneurial educational programs. Additionally, this course provides *students* with the exposure to relevant topics including data-driven decision making, business planning, *designing* for scalability, and decision making about market, *revenue, budget* and other current topics.

### Objectives

- Analyze *leadership* theories and the qualities of effective *leadership* in online education programs.
- Describe the change process and the role of *leadership* in managing change and innovations in entrepreneurial online education programs.
- Evaluate and analyze data sources to inform the decision making process related to *management* and entrepreneurship in online education programs.
- Explore and apply the unique *management* strategies which *support* continuous improvement of online education programs.
- *Develop* a business plan that aligns with the vision and the mission of online education programs.
- Analyze current market trends, program offerings and delivery formats which meet the needs of consumers in the continually evolving landscape of online education programs.

<table>
<thead>
<tr>
<th>Unit Titles 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction; Contexts of Online Education</td>
</tr>
<tr>
<td>Introduction to <em>Leadership</em>; Key <em>Leadership</em> Theories</td>
</tr>
<tr>
<td><em>Leadership</em> Approaches; <em>Leadership</em> Analysis; Contextualizing Distance <em>Learning Administrator</em> Work, Interview of a Distance <em>Learning Administrator</em></td>
</tr>
<tr>
<td><em>Leadership</em> Theories continued; Introduction to <em>Management</em>; <em>Leadership</em> Analysis</td>
</tr>
<tr>
<td>Change; Introduction to <em>Management</em></td>
</tr>
<tr>
<td>Introduction to Data-Driven Decision Making</td>
</tr>
<tr>
<td>Final Project</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit Titles 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction; Personal <em>Leadership</em> Exploration; Online <em>Leadership</em></td>
</tr>
<tr>
<td>Visioning; <em>Leadership</em> Role in Communicating a Vision in Online Education; <em>Organizational</em> Influences on <em>Leadership</em> and Vision</td>
</tr>
<tr>
<td><em>Leadership</em> versus <em>Management</em>; Roles and Responsibilities of Distance <em>Learning Administrators</em></td>
</tr>
<tr>
<td>Change; <em>Leadership</em> Function of <em>Managing</em> Change; Innovations in Online Education</td>
</tr>
<tr>
<td>Preparing and Conducting Needs Assessments in Online Education</td>
</tr>
<tr>
<td>Data Driven Decision-Making</td>
</tr>
<tr>
<td>Program Evaluation and Strategic Planning</td>
</tr>
<tr>
<td>Final Project</td>
</tr>
</tbody>
</table>
### Course Description

This course addresses the theory behind online *learning* module *design* and *creation* of online assessments, *learning* module implementation, and the requisite knowledge to *create* effective online *learning* modules and assessments. *Students* will explore various types of *learning* module and assessment *creation* tools including podcasting tools, lecture-capture tools, *e-learning* authoring programs, and open source software. The course will move *students* from an understanding of the context and use of online *learning* modules to the *design* and delivery of an effective online *learning* module including assessments.

### Objectives

- Explain the importance of using course modules, the purpose of course modules, and how they are integrated in various *learning* environments.
- Demonstrate relevant *learning* theory as the foundation for the *creation* of *learning* modules.
- *Create* effective *learning* modules and online assessments using various tools including podcasting tools, *e-learning* authoring programs, lecture-capture tools and open sources software.
- Apply principles of Universal *Design* for *Learning* in the *design* of *learning* modules and assessments.
- Evaluate *learning* modules and assessments for alignment with *student* *learning* outcomes, accessibility, and promotion of active *learning*.
- Evaluate *learning* modules using existing standards of online course *design*.

### Unit Titles

- Introduction to *Learning* Modules
- Theory Behind *Learning* Modules
- *Learning* Modules and Universal *Design*
- *Learning* Modules and Quality Matters ™
- *Designing* *Learning* Module Content
- Building *Learning* Objects in PowerPoint
- Building *Learning* Objects in Articulate
- Building *Learning* Objects in Captivate
- Building *Learning* Objects in Open-Source Options
- Podcasts, Lecture Capture, and Kahn Academy
- Evaluating *Learning* Module Effectiveness
### Course Description
This course is intended to guide online educators through the process of designing, developing and evaluating online courses through the use of various prescriptive online course development models. Students will examine how these frameworks work to organize and structure the process of creating both online instructional activities and online courses. Students will evaluate various models of online course development as a way of articulating their own process of and philosophy behind online course development. Students will also gain the skills necessary to create design that promotes collaboration, student engagement, and efficient course management. Through collaboration activities such as discussion boards, blogs, and project development, students will gain the skills necessary to develop course maps, lead the online course development process, and evaluate processes used for fully developed online course.

### Objectives from eCurriculum
- Evaluate and apply models of online course development and design
- Evaluate and implement various Web 2.0 tools for facilitating student-centered, active, collaborative learning in an online environment
- Implement course design elements that support faculty and peer facilitation, student engagement, and efficient course management
- Design and effectively employ course maps in online course development
- Implement course design elements that support faculty and peer facilitation, student engagement, and efficient course management
- Design and effectively employ course maps in online course development
- Design and effectively employ course maps in online course development
- Design and effectively employ course maps in online course development
- Explain and apply the circular nature of online course development to the concepts of continuous improvement and alignment
- Compare the driving factors behind identified models of course development
- Compare and analyze what it means to provide content, create learning environments, and deliver online courses
- Apply the skills and processes needed to effectively lead a course development team

### Objectives from Syllabus
- Identify and apply the skills and processes needed to effectively lead a course development team
- Identify and develop plans to overcome the challenges of building quality online courses
- Evaluate and apply models of online course development and design
- Explain the importance of and write measurable, student centered course learning objectives
- Design and effectively employ course maps in online course development
- Support faculty in aligning course materials, activities and assessments with course learning outcomes
- Implement course design elements that support faculty and peer facilitation and efficient online course management
- Implement course design elements that support student success, engagement, and collaboration in online courses
- Apply relevant learning theory to online course development

### Unit Titles
- Understanding Learners and Setting Learning Objectives/Outcomes
- Faculty/Content Experts as Team Players
- How do we reach our goal?
- Simple, Successful Design
- Making Modules Work
- Evaluating Outcomes
- Reviewing and Improving
### Course Description

This course will address the changing legal and ethical issues facing practitioners in online education. These challenges inherent in online learning have important implications for course design, program development, ownership and use of intellectual property, and teaching and learning. Students in this course will examine types of potential copyright infringement, security and privacy issues, and issues relating to accessibility and disability discrimination laws. They will study how these issues challenge online educators and explore how students and their ability to participate and succeed in online education are affected. At the end of this course, students will be able to identify a variety of potential legal, accessibility and ethical issues that can come into play in online education and, through research, discussion and problem-based learning exercises, discover how to overcome these challenges and offer educational opportunities to anyone needing to participate in an online course.

### Objectives

- Define and* explain intellectual property rights, work-for-hire doctrine, and copyright infringement, defamation, and Fair Use in online education.
- Identify concerns with copyright ownership, academic freedom and educational quality in course content and delivery.
- Analyze examples of copyright and Fair Use in online education and identify alternatives to meet Fair Use and intellectual property rights guidelines.
- Identify issues of access and equity facing online learners.
- Evaluate and apply principles of Universal Design for Learning and ensure that course content comply with relevant disability discrimination law.
- Analyze issues of privacy, professional ethics, and FERPA compliance facing online educators.
- Determine key considerations in ethical decision making and apply them to ethical case studies.

### Unit Titles

- Getting Started and Surveying the Field
- Decision Making Models
- Copyright, Fair Use and Teach Act
- Intellectual Property Rights and Work-for-Hire Doctrine in Online Environments
- Accessibility in Online and Blended Learning Environments
- Privacy and Protection in Online and Blended Learning Environments
- Final Project

*Underlined text was added in the course syllabus.*
Figure P1. Page One of Taylor’s Work Sample.
Figure P2. Page 2 of Taylor’s Work Sample.

Figure P3. Page 3 of Taylor’s Work Sample.
Taylor had a lot to share about her work sample:

These pieces of work, they highlight the key policies and practices of the college. It is what I call an e-booklet of important information that students need to learn, or need to know, or have access to, and so it is located in our course in the Navigation menu. It's called Student Resources, and it highlights all of the things that they need to be successful. ... We did that in one of our classes. We created a survival guide. We also discussed how it is important for these things to be visible and readily accessible to the students to see, not buried and hidden somewhere... Who's going to open up the college catalog and read those things? Nobody's going to do that, so they're very visual. They're up front. They're like an eBook, but it's like a flipbook, so it's using Articulate ... in one of our classes [we learned] how to use Articulate to
create a branching scenario, so all of the information is upfront. They click a button to open and explore that content and area, so it’s explicit information for the students. It’s visible, it’s engaging, it’s appealing, and it’s not meant to be in replacement because we have that little blurb. This doesn’t replace the manual, but this is the most asked information or highlights key information for them, so all of those things were actually highlighted in multiple of the courses. Bits and pieces of that were throughout the whole certificate program, of the importance of having that.
Appendix P
Buffy’s Work Sample

needs assessment for extra opportunity for gifted students

Do you think gifted students are being challenged in the general classroom to their fullest potential on a regular basis?

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Do you notice gifted students struggling with social/emotional needs on a regular basis?

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Do you think gifted students would benefit from a series of classes designed for them outside of the school day?

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Do you think parents would support this opportunity for their students?

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Do you think parents would drive their students to a destination?

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Do you think parents would be willing to pay for these classes?

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Would you be willing to teach a class (outside of school time)?

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Do you think an online option for enrichment classes would be supported (by parents, student interest)?

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Comments:

Thank you!

Figure Q1. Buffy’s Work Sample.
This is what Buffy had to share about her work sample:

In the leadership course I created a needs assessment and that’s the work sample, the student sample example that I brought you. I had never created one before like that, to then fully analyze the data. I’ve collected surveys, but to make it a more formal process, this was the first time that I’ve made it a full formal process, so that was something new. ... I used it in my non-online job, so I created this needs assessment because I feel like there is a disconnect for gifted students and the knowledge that they need versus what they’re getting. Academically they’re probably overall doing fine in this specific class that I’m working with, but I feel like there are so many other elements that are lacking, like the social emotional piece, the leadership development, their spiritual and their social needs. I went in to see if other people that are with students saw those same deficiencies, and so that’s the needs assessment I created, and issued that, and got feedback ... from the teachers, what they have seen and observed, and then I also, it was kind of twofold because I wanted to find out what their observations were, but also to see if they were willing to step out and maybe teach a class, extracurricular, do something for the children beyond their regular day.